The CROUNDEL

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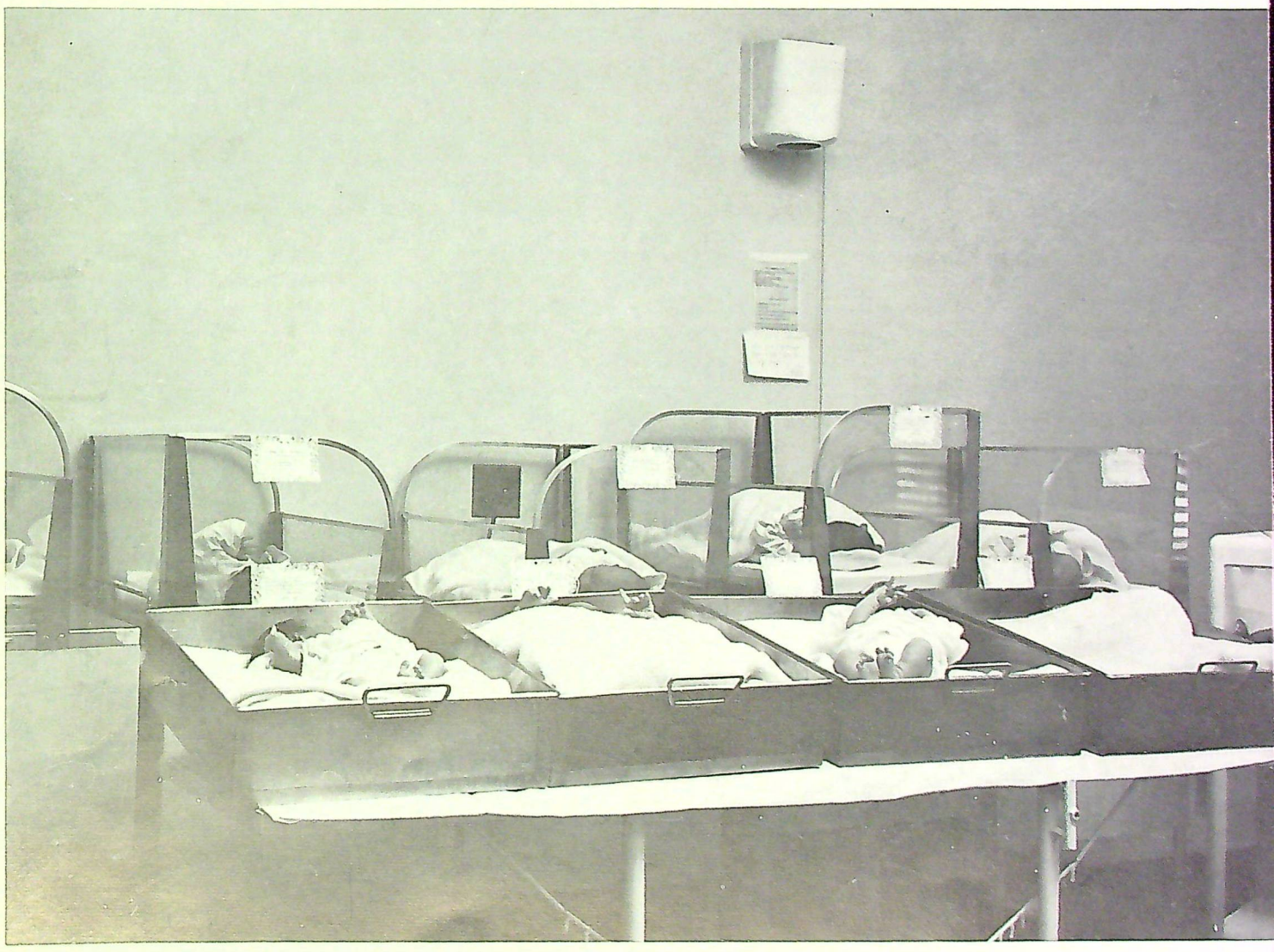
APRIL 1957



ROYAL CANADIAN AIR FORCE

THE Roundel

Issued on the authority of
THE CHIEF OF THE AIR STAFF
Royal Canadian Air Force

Vol. 9, No. 3

APRIL 1957

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This Month's Cover

In November 1956 the air above R.C.A.F. tion Cold Lake was vibrant with the beati storks' wings. At one time there were many as ten new-born infants in the hosp Since the latter was equipped with only bassinets, one of the babies was housed in incubator while four more were bedded in baking-pans borrowed from the kitchen. hundred and fifty babies have been bo the station since its establishment in

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MEN IN ARMS

A History of Warfare and its Interrelationships with Western Society

A review-article
BY SQUADRON LEADER D. G. BELL-IRVING,
Directing Staff, R.C.A.F. Staff College.

Cross-bowmen, (From "Men in A

COMMENTING on men and war, Toynbee speaks of the military virtues as being diamonds found in dross. This book, "Men in Arms",* which has been called a "major new work on the history of warfare", is not so much about individual men as about forces and weapons; hence, in Toynbean terms, it is mostly about the dross of war. But this is a refined dross, involving mechanisms rather than blood.

The book is written with the aim of informing not only the student of military history, but also the general reader who seeks to understand the relationship between military developments and social evolution. The fact that its three authors have been able to organize and compress into one volume the data they have gathered is evidence enough of their professional knowledge and dexterity. R. A. Preston, who before the war taught history at the University of Toronto and at the University College in Cardiff, Wales, served during the war in the R.A.F. Since 1948 he has been Professor of History at the Royal Military College, Kingston, Ontario. S. F. Wise saw war-time service in the R.C.A.F., was an Alexander Mackenzie Research Fellow at the University of Toronto, and, after a period of teaching history at R.M.C., joined the faculty of Queen's, where his speciality is military and political aspects of the American Revolution. H. O. Werner, a commander in the U.S. Naval Reserve, teaches naval history at the U.S. Naval Academy and is Senior Associate Editor of the U.S. Naval Institute. He is co-author of the book, "The United States and World Sea Power".

After outlining the principles of war, "Men in Arm" goes back to the near beginnings of accurately recorded military history and shows how social and economic circumstances combined to make the phalanx the logical unit of fighting power for ancient Greece. However, the limitations of the phalanx led, in time, to formalized tactics which were ineffective against the flexible Macedonian combination of phalanx and cavalry. A synthesis of Macedonian vigour and Greek creative ability then led to the broadcasting of Hellenic culture and the building of a foundation for Western civilization.

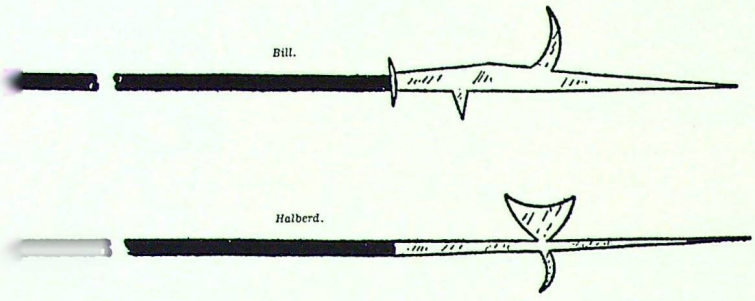
Following the eclipse of the Greeks and Macedonians, the Romans, helped by infantry legions of citizen soldiers, built an empire and developed a genius for government. But again, barbarian forces composed largely of cavalry forced changes in the armies of the more civilized world. Before the R Empire of the West Collapsed, typical Roman soldier (who w that time a non-Roman me ary) was the cataphract, an oured mounted lancer. Since Northern European adversary also mounted and armoured, basis for the age of chivalry feudalism was established.

In the Byzantine empire developed from the Roman of the East, sea power was the ical unit of force because economy of the empire dep on marine trade. A suc developments in naval the dromon with Greek Venetian galley, and, in stages, the galleass with heavy nance, held back for a time forces of Islam and establish realm of unprecedent wealth.

But in spite of the applic of the various techniques for vival which the authors Byzantium was first sac crusaders (or barbarians?) then absorbed by Turks.

Europe, on being released the influence of the West man Empire, developed tribal social system to a sys nation-states. While their ons were more effective, the up of European armies duri

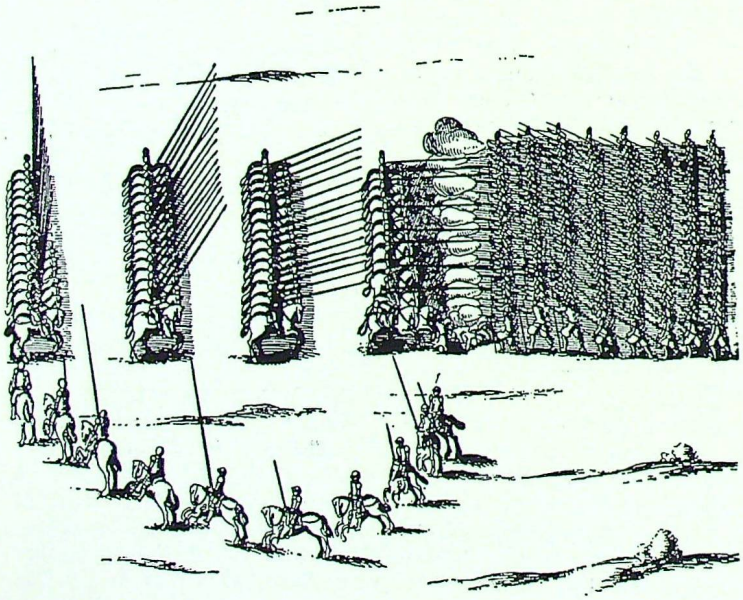
* "Men in Arms", by R. A. Preston, S. F. Wise, and H. O. Werner. Published by Frederick A. Praeger, New York. Distributed in Canada by Burns and MacEachern, 165 Elizabeth St., Toronto. Pp. 392; illustrated. $7.50.



Mediaeval arms. (From "Men in Arms".)

evolution showed parallels with those of the time of the Graeco-Macedonian conflict. The phlanx reappeared, notably in Switzerland. Shock-cavalry held the field for a while, but was eventually humbled by combinations of cavalry and Venetian cross-bowmen or English long-bowmen. (In Alexander's army there were similar ethnic specialities.) Something new was the application of codes of ethical behaviour in warfare. In Italy the methods of fighting which resulted from the use of mercenaries by rivals in commerce made for collusions between the combatants. As a result, the *condottieri* of Italy were overwhelmed by the less inhibited French under Charles VIII. Within Christendom, where excommunication was, for a time, the penalty for fighting between Thursday night and Monday morning (the "Lord's truce"), the use of the cross-bow was nominally prohibited by the Church. (Because it rendered more conventional arms obsolete, it tended to upset the *status quo*.) But its use against the Saracen "infidel" was condoned.

Cavalry versus infantry, 1621. (From "Men in Arms".)



The development of siegecraft, the replacing of the trebuchet by the artillery piece, and the dislocation of the feudal baron from his fortified castle, proceeded as new inventions made for armies composed of soldiers with specialized skills and armed with constantly improving weapons. By the eighteenth century:

"The defence was too formidable to allow frontal assaults by irreplaceable soldiers, while unrestricted artillery bombardment of civilian houses was not indulged in, since it did nothing to assist the prosecution of the attack, and was wasteful if and when the town fell. Instead, the attack was placed in the hands of engineers, who, through the precise application of mathematics, brought their trench network and batteries to such a position that the defending commander, caught in the toils of Euclid, could honourably yield up his fortress."

It is sobering to reflect that the Intercontinental Ballistics Missile, when it becomes a reality, may represent the ultimate application of Euclid to warfare.

During the religious wars in Europe of the 16th and 17th centuries, armies were composed citizen soldiers. A trend away fr the citizen army reached a cu' mination in the eighteenth centu when battles were fought by rela tively small numbers of pro sional soldiers and mercenar Warfare became something of sport, and armies could rightly called the toys of kings. Nev theless, a premium was placed fine generalship, and intelle qualities rather than dash ma the successful commander.

Napoleon's success can be

tributed to the combining of the most potent features of the "nation in arms" and the professional army, each of which had appeared from time to time in earlier centuries. Fine generalship applied to a citizen army inspired with revolutionary fervour and well armed by reason of new methods of producing arms in huge quantities, held the field until circumstances combined to overthrow Napoleon. But the basis for the General Staff system, which could provide efficient leadership for large forces, was established; a trend towards total war had begun. The American Civil War was evidence of this trend, but at the time it was dismissed by most European military theorists as a fracas between unwieldly numbers of amateurs.

The growth of sea power for the Atlantic nations was stimulated, as it had been earlier in the Mediterranean, by the growth of merchant fleets. From the 11th century, as rival nations tended more and more to depend on overseas trade, the rôle played by navies, composed at first of converted merchantmen and later of specialized ships-of-the-line and smaller vessels, became more vital. While navies played no important part in the European wars of religion, in the wars for economic advantage which followed they came to be decisive so far as the maritime nations were concerned. Moreover, they made it possible for a small maritime nation to impose its will on a large continental power. The fact that the dynamic expansion of Western European civilization occurred to a great extent through the medium of relatively small maritime powers may be the basis for the assertion by the authors of this book that geopolitics, based on the theories of Mackinder, is a pseudo-science. However, this point is not explained.

In naval engagements between the maritime powers the discrediting for a time of the "*mêlée* school" of tactics in favour of the more formal "conterminous-line" school led to a tradition of conservatism which, one suspects, has conditioned naval history since that time. Once champion, England was able to hold its position because the specialized skills which were a prerequisite of naval warfare in the age of sail could only be maintained by an active navy, and the only navy which could be really active was the dominant one. Not until the *status quo* was upset by such innovations as steam and ironclads was England's hold of the sea challenged.

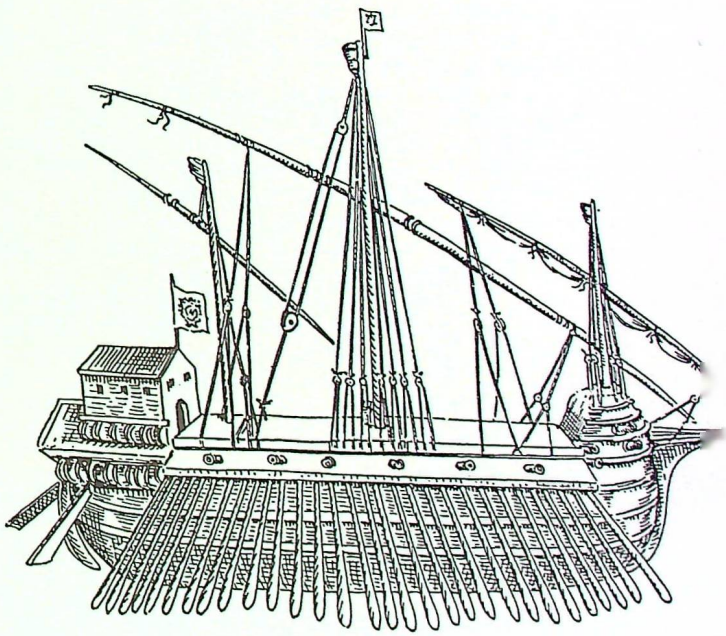
The naval building-contest between the two industrial giants, Great Britain and Germany, which preceded the Great War, was dominated by the concept of the battleship, the logical successor to the ship-of-the-line. But, even for rich nations, battle-ships represented tremendous investments and could only be committed to battle with prudence. The doctrine of the "fleet-in-being", which had characterized earlier naval strategy, seemed valid in the 20th century.

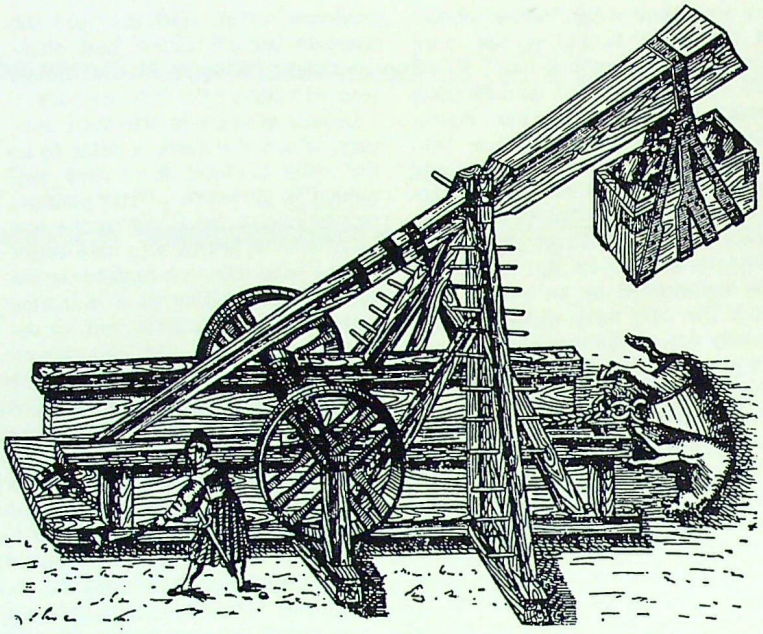
Details of wars in the 20th century, which the authors refer to as the "age of total war", are well known to all readers. The political developments which led to the two outbreaks of world war, the effect of the submarine on naval warfare and the blockading of a maritime nation by a continental one (a reversal of rôles), the sanguinary trench battles which in 1914-1918 resulted from the misapplication of outdated military doctrines, the effect of the tank on land warfare, the beginnings of air power, its use in direct support of armies, the outcome of the Battle of Britain, and the results of allied bombing in Europe and the Pacific, are all recounted. The book ends with an analysis of the situation in the cold war.

* * *

The fact that no particularly ra-

The galleass, as used at Lepanto in 1570. (From "Men in Arms".)





The trebuchet throwing a dead horse into a besieged town. (From "Men in Arms".)

tional patterns of history emerge from this book may be due to the absence of well-defined patterns or to inaccuracies in recorded history. On the other hand, in their study the authors have treated Western civilization as one entity which has evolved continuously from the time of the ancient Greeks. It could well be that more meaningful patterns would have emerged if the facts had been related to not one but at least three distinct civilizations (Graeco-Roman, Eastern and Western Christendom). Events and circumstances which seem merely repetitious might then have appeared in perspective.

There appears to be a relationship between the degree of development of a civilization and the shape of the armed forces which exist in its *milieu*. The shape has little to do with the effectiveness of the weapons used. On the other hand, there is a definite relationship between the size of political units and the effectiveness of weapons. The city-state faced the ram and the torsion-catapult. The continent-state faces the hydrogen bomb. The authors have not attempted either to define or answer the questions which these facts raise.

Indeed, such questions cannot be answered by a study of military history which only cursorily examines the implications of air power. Readers will be disappointed if they look for comparisons between Douhet's theories which, in pre-war years, shaped the basically offensive air forces of Germany and Japan, and the theories of the R.A.F. school of strategists which, by implying the need for a balance between offensive and defensive power, led to the development of a workable air defence system. Nor is the doctrine of the bomber-force-in-being seriously considered. Perhaps there is a natural reluctance by the authors to involve themselves in these theories; they are comparatively new and thus not likely to be seen clearly in retrospect by historians.

Notwithstanding these omissions, "Men in Arms" is of genuine value and interest to professional officers. If one is to view contemporary military problems in perspective, one must have an understanding of the chain of military circumstances which history records. This book goes a long way towards providing such understanding.

So far as the general reader is concerned, one cannot escape the feeling that something elusive but vital is missing from "Men in Arms". Surely economic circumstances and differences of opinion have not been the only forces driving men to war? Toynbee, when he speaks of military virtues as diamonds, goes on to say that if man is to rise above war — as he must soon if he is to survive — these virtues must be sublimated to the extent that war becomes as outdated as the religious rite of blood sacrifice. A book which concerns itself as much with dross as does this one cannot provide a key to solving the question about war which confronts mankind today.

If you must hold yourself up to your children as an object lesson (which is not at all necessary), hold yourself up as a warning and not as an example. (*G. B. Shaw.*)

BADGES OF THE R.C.A.F.: 3

Black-and-white reproductions of the badges shown may be obtained by writing to: Director of Public Relations, Air Force Headquarters, Ottawa, Ont. Glossy or matt prints are available in two sizes: 8" × 10" (50c.) and 11" × 14" ($1.00). Cheques or money orders (not cash) must be made payable to the Receiver General of Canada.

R.C.A.F. STATION CAMP BORDEN

(November 1952)

Four eaglets displayed.

E Principio
(From the very beginning)

The four eaglets represent the Royal Flying Corps, Royal Air Force, Canadian Air Force, and Royal Canadian Air Force, all of which used Camp Borden as a training centre.

The airfield at Camp Borden was first developed early in 1917 by the Royal Flying Corps and remained in use as the major air training centre in Canada until the end of the Great War. In July 1920 the airfield was taken over by the newly formed Canadian Air Force and through the next 15 years all pilots trained by the C.A.F. and R.C.A.F. received their initial flying instruction at Camp Borden It was also the base for various ground training schools. During the Second World War, No. 1 Service Fying Training School was located there. The station is today a centre for technical and supervisor training.

AIR DEFENCE COMMAND

(November 1954)

In front of two bolts of lightning, a long-tailed jaeger volant.

Detegere et Destruere
(To detect and to destroy)

The jaeger, a bird noted for its tenacious fighting spirit, represents the rôle of the Command in the defence of Canada, while the lightning flashes symbolize the radar and other electronic devices used in defence operations.

Air Defence Command is derived from Air Defence Group, which was formed at Air Force Headquarters on 1 December 1948. Relocated at St. Hubert on 1 November 1949, the Group was elevated to Command status on 1 June 1951.

NO. 440 SQUADRON

(October 1955)

A bat in front of clouds.

Ka Ganawaitak Saguenay
(He who protects the Saguenay)

The bat flies by night and uses a type of "radar" — two characteristics which make it an appropriate emblem for this squadron. The clouds also suggest the unit's rôle as an all-weather squadron, capable of operating under conditions of poor visibility.

The squadron originated as No. 11 (later No. 111) which was formed at Vancouver on 5 October 1932 as one of the first three Auxiliary squadrons in the R.C.A.F. After some operational service on the Pacific coast early in the war, it was disbanded at Patricia Bay on 1 February 1941 and reformed at Rockcliffe on 3 November 1941 as a fighter squadron. Transferred a month later to the Pacific coast, it served in the Aleutian campaign, June 1942 to August 1943, and shot down the only enemy aircraft destroyed by the R.C.A.F. in the home war theatre. In January 1944 the squadron was sent overseas, renumbered 440, and became part of an R.C.A.F. *Typhoon* wing which supported the British Army

in the invasion of Normandy and the subsequent advance to the Baltic. The squadron was disbanded at Flensburg, Germany, on 26 August 1945. No. 440 was reactivated again on 1 October 1953 as an all-weather squadron in Air Defence Command, equipped with CF-100s.

* * *

WARRANT OFFICERS' REUNION

After fifteen years, the four sons of Mrs. Mary Gamman were finally able to get together last February for a week-end with their mother in Ottawa. Shown here with Mrs. Gamman, they are (left to right): W.O.2 H. Gamman (R.C.E.M.E., Quebec City), W.O.2 C. Gamman (R.C.A.F., Lachine, P.Q.), W.O.2 E. Gamman (R.C.E., Ottawa), and W.O.1 W. Gamman (R.C.E., Winnipeg).

ESSAY CONTEST

R.C.A.F. Staff College Journal

AN award of $250.00 will be made to the member or former member of the Canadian armed forces or Civil Service who writes the best unsolicited essay, not exceeding 5,000 words, likely to stimulate thought on military, and particularly air force, matters. Such matters include strategy, operations, training, logistics, personnel administration, technical activities, research, production, or any other field.

In addition to the prize money, the writer of the winning essay will be paid at the rate of three cents per word if his work is published in the Journal. Moreover, all entries will be considered for publication and those selected will be paid for at the basic rate of three cents a word.

Entries are not to contain classified information or views that may give rise to political controversy. Manuscripts must reach the Editor of the Journal by 1 July 1957.

The Board of Directors of the Journal will appoint the judges, whose decision will be final. Arrangements for the presentation of the award will be made known when the winner is announced. If no essay meets the standard of excellence set by the judges, the right to make no award will be reserved to them.

Send manuscripts to:

The Editor,
R.C.A.F. Staff College Journal,
Armour Heights,
Toronto 12, Ont.

* * *

THE NORTH-WEST STAGING ROUTE

BY FLYING OFFICER S. G. FRENCH

PART THREE

(Part Two brought the writer by air from Namao to Whitehorse, and then by road to R.C.A.F. Detachment Aishihik.—Editor.)

AFTER lunch, the corporal who was second in command of the Detachment told me something of the unit's history.

Construction began in 1942, when bulldozers, pulling supply-sleighs, drove a makeshift road along the Aishihik River. At Jamieson's Village, an Indian encampment beside Otter Lake, it was decided to build a barge on the spot and to take the men and supplies the rest of the way by water, up the fifty-mile long Aishihik Lake. The barge was pulled by an inboard engine which, in turn, was powered by a 4 h.p. motor. The water-trail ended at a camp of Siwash Indians at the northern end of the lake; and a gravel airstrip was laid out on a flat expanse of land immediately above the camp. To start with, two log cabins were built right by the shore of the lake; then, later, the British Yukon Navigation Company, which was carrying out the preliminary construction work, put up the control tower, barracks, and a few other buildings — all out of logs. These were painted the rust-red colour they wear today. The two original log cabins were eventually moved up to the plain, where they now serve as "emergency married quarters", supplementing the two regular P.M.Q.s.

I asked the corporal how the average Service family took to such isolated locations and the long winter nights.

"Most of the Service families that I've met," he said, "enjoy the life very much. Of course, it requires a certain type of personality to be happy in the North. For those who are lucky enough to have it, though, this is a wonderful existence."

He went on to tell me that the R.C.A.F. only sends up families who have no children or whose children are under school-age. "But", he added thoughtfully, "the families without any always seem to acquire some fairly soon, and those with a few usually get more."

There is a regular film-run in the North. Each week, one film passes down the line, spending one night at each settlement. It is generally projected on to a home-made screen like the one at Aishihik — a strip of canvas, painted white and attached to the wall. Since our car had brought the film in with us from Canyon Creek, our night at Aishihik was also film-night.

Later, I went over to the small canteen where the movie was being shown. A number of Indians had, as usual, been invited in to see the picture; and, when it was over, I met Chief Isaac, his brother Ed, and their wives and children. I asked the Chief if I might come down to his cabin and talk with him the next morning. He said that I would be welcome.

Chief Isaac, named after a sour-dough of the gold-rush days, is 78 years old, and he has lived by Aishihik Lake all his life. In the winter he tends a trap-line, and in the summer he fishes for a living. I asked him when he had seen his first aeroplane. His eyes lit up as he replied:

"In 1929 we have cruel winter. Trapping poor, cold and snow so much they keep us all the time inside our cabins. I send one man by dog-sled to Whitehorse to ask for food. One or two weeks later comes wonderful buzzing in the air. Iron goose lands on skis in middle of snow-storm, and two M.P.s climb out. . ."

Unfortunately for my vision of gallant politicos risking their lives

Indian village, Aishihik.

Chief Isaac and his wife.

for their constituents, the Chief's next few sentences revealed the fact that "M.P." was his term for "Mounty".

Presently he went on to tell me about a certain winter day in 1951. It had been another cruel winter, and the Chief was sledding to Burwash Landing for supplies. Just as he was crossing Sekulmun Lake, a little west of Aishihik, a twin-engined aircraft flew low over his head through the blizzard. A short while later he heard a crash. The Chief proceeded in the direction of the sound, which had seemed to come from Sekulmun Mountain. There he found a fresh landslide, and at the foot of the slide lay ten dead wild sheep, which appeared either to have been tumbled by the avalanche or to have been hit by an aircraft. Seeing no other signs of a 'plane, he hurried on to report to the R.C.M.P. Two policemen come to investigate, but they too found nothing. They told Chief Isaac about a C-54 which had been reported missing that day, while taking troops and their families home for Christmas — but, they added, a C-54 has four engines. To this day neither the C-54 nor the unidentified aircraft reported by the Chief has been found.

While on the subject of Indians, I should mention that nowadays the R.C.A.F. keeps a watchful eye on the Siwash tribe, supplying its members with medical assistance and, in emergencies, with food. The road over which we travelled, and over which most of the supplies reach these isolated people, is washed out every spring when the glaciers melt; and, during this period, much-needed supplies are flown in from Whitehorse.

* * *

When we drove out again towards the Alaska Highway, the rain had stopped and the trail had dried up enough to make the trip more enjoyable. As we skirted Aishihik Lake, I recalled the story of a rather irregular flight that "Packie" MacFarlane* had told me about while I was in Edmonton. At one point early in the last war, he and Ted Holmes** were in Fairbanks, Alaska. They wished to take off for Anchorage, but they had warned by the tower that the weather between the two points was poor. At length, since their mission was fairly urgent, they decided to go anyway.

They followed the railroad tracks which join the two towns, Ted flying and Packie poring over the map. Visibility was extremely bad, and the conversation was entirely one-sided:

"O.K. Ted. Turn left for mountain in two minutes . . . about fifteen miles and the tracks go through a narrow pass . . . better get some altitude. . ."

They arrived over Anchorage without any mishaps, although they had only enough fuel for a few more minutes of flight; then they called the tower asking for permis-

*Released after the war as a group captain, R.C.A.F. War-time C.O. of one of the Staging Route units.

**Famous pre-war bush pilot. Released from R.C.A.F. as a squadron leader.

Copper Jack and his wife.

sion to land. The reply came back: "Proceed to Point One for landing." With the fuel-gauge registering zero, Ted told the tower that this was an R.C.A.F. aircraft and that its pilots had no idea where Point One was. The tower called back and advised them that, if they didn't know the secret code, they couldn't land at Anchorage.

It was rather like saying "You can't be sick here!" to someone in the middle of a bilious attack; so Packy and Ted landed, did their business, and spent the night in an American PX (Post Exchange store). In it they bought silk stockings, sugar, and various other items which were pretty scarce in Canada at that time, and took off again for home. Over Northway they were told to give the code-word if they wanted to learn what weather lay ahead, so perforce they flew on in ignorance and eventually forced-landed at Aishihik because of engine-trouble. They spent a few days working on the engine in bitterly cold weather, their only protection from the wind a rough canvas lean-to. Then they flew on down the Staging Route to Edmonton.

* * *

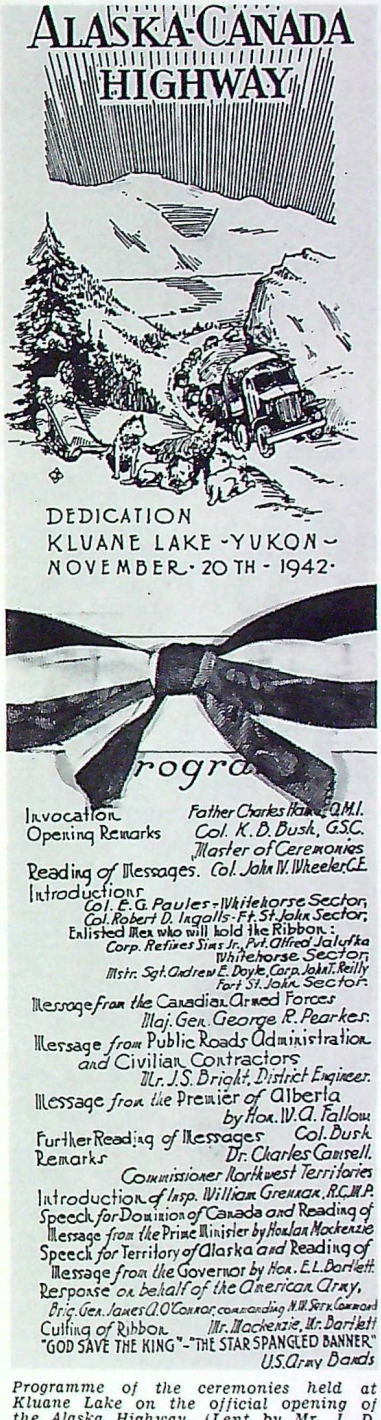
We had covered most of the road to the highway; we had passed Otter Falls, the 20-mile 'phone, and the hill of our historic push. Only one obstacle remained: a culvert which was on the point of being washed away by the stream that raced through and around the pipe. We got out of the car, placed beams and old boards over the rapidly disappearing ground, and drove over. Just as the rear wheels cleared our bridge, the earth beneath it dropped into the water. When we returned down the Alaska Highway three days later, we were told that the wash-out on the Aishihik road had not yet been repaired. Such is isolation.

After lunch at Haines Junction, we stopped for a few minutes at the neighbouring experimental farm, which is one of two operated in the North by the Federal Government. Agricultural possibilities in the Yukon are, it seems, fairly good. Vegetables grow well, and many species of flowers can be cultivated. The experimental farms are developing varieties of grains which will mature in a very short growing-season, and they are also producing new breeds of cattle from such hardy strains as those of the Scottish Hebrides. At present, of course, all farm produce must be brought in from outside, a necessity which results in pretty exorbitant prices.

It was getting quite late when we started our drive around Lake Kluane. Completely surrounded by towering snow-peaked mountains, every detail of which is mirrored in the green water below, Kluane is, to my mind, a far lovelier lake than any of those at the Rocky Mountain resorts. Mountain goats and Doll sheep abound on the encircling slopes: I saw many of them as we drove by.

All beds being spoken for at the Army Maintenance Camp at Destruction Bay, we passed the night at Burwash Landing, a settlement at the northern tip of the lake. Here there is a log-cabin pub. The proprietor, an eighty-six-year-old gentleman named Bert, sports a long flowing white beard which covers his knees. Bert came from the Old Country in 1896, answering the call of the gold-rush. While we enjoyed a drink together, I learned (listening carefully as the words made their way through his beard) that in the fall of 1927 he had been flown on a prospecting trip by Clyde Wann in the latter's *Queen of the Yukon*, the sister-ship of Lindbergh's *Spirit of St. Louis*.

The following morning we pressed rapidly on towards our destination, Snag. Snag's chief claim to distinction is that on 7 February 1947, its thermometers dropped to 83.4 degrees below zero — the



Programme of the ceremonies held at Kluane Lake on the official opening of the Alaska Highway. (Lent by Mr. J. D. Hunter, Sup't. of Flight Operations, Dept. of Transport.)

The author.

lowest temperature ever officially recorded on the North American continent. The rust-coloured buildings of the R.C.A.F. detachment present much the same appearance as those at Aishihik, and an Indian camp squats near the airfield, beside the White River. In this camp may be seen the remains of Bill Blair's Trading Post, which attained its business peak some years ago. Bill married into the tribe and is now considered to be its chief. While he and I, together with two Indians, Copper Jack and Tom-Tom, were out in a boat hauling in their catches, I learned that Snag was a busy spot back in 1913. That was the year of the Chisana Gold Rush, during which Bill James found $20,000 in one day's panning. Gold was discovered about sixty miles up the White River from Snag, and it brought thousands of fortune-seekers to the area. Starting from either Dawson City or Whitehorse, they followed the Yukon River to Stewart City, whence a long portage took them to the junction of the Donjek and White Rivers. From here they proceeded up the White, past Snag, to the gold-fields.

When Detachment Snag was first started, the "cats" followed part of the trail which had been blazed by the sourdoughs in 1913. These bulldozers hauled the supplies in, but the first cat to reach Snag was flown to a small unnamed lake about three miles north of the site.

THE Roundel

There it was reassembled, driven down, and work on the runways was begun. When these were cleared, steel for the towers was flown in — "in old *Daks*", as Bill Blair's beautiful young daughter called them. Rose added that "some of the equipment was so large that they often had to leave the doors open and part of the cargo sticking out during flight." She could not have been more than five when she saw "those mad flyers".

Talk of the extreme temperatures at Snag made me think of the part played in early northern flying by the groundcrew. They were, it seems to me, a bit like the linemen on a football team. Every game, they play their hearts out; but, in the newspaper write-ups, it is the backfielders of whom the public hears most. A mechanic frequently accompanied the bush-pilot on his flights, but I wonder how often the word "intrepid" was applied to him.

Actually, he often worked longer hours than the flyer, and under shocking conditions. Seldom were there any hangars, and in winter the oil was drained from the engine upon landing. Before take-off, hours were spent in heating oil and keeping blow-torches playing, somewhat hazardously, on the engine. In the summer, if the 'plane was equipped with pontoons, the mechanic often worked for long periods half-submerged in the frigid northern waters. And, whether he was in water or on land, mosquitoes, bull-dogs, and black flies caroused unchecked upon his helpless body.

* * *

The return journey to Whitehorse was uneventful. Just before we got there, we took a little side-trip to Takhini Hotsprings, the only swimming-pool available to the personnel of the station. Here, in temperatures lower than forty below, airmen and airwomen sport merrily in the warm water.

Back in the city, I called again on Mr. McBride and resumed my perusal of his priceless historical scrap-book. It would, as I have stated earlier, be impossible even to begin to do it justice here, but the reader may be interested in a few of my gleanings.

The high plateau on which the airport is situated, looking down upon the city bounded by the Yukon River and "Whiskey Flats", was

Old Anglican church, Whitehorse.

used as a frontier golf-course and village parade-ground in 1920. In August of that year word was received that four D.H.4 biplanes wished to land at Whitehorse.* Volunteer citizens turned out to cut down trees and clear a landing-area 1,675 feet long; and, when they had completed their task, the U.S. Army Air Service's first Alaska Expedition, led by Captain (later General) St. Clair Streett, flew from Long Island's Mitchell Field to Nome, and back through Edmonton and Whitehorse.

From this time on many aircraft came and went from Whitehorse. In 1922, Prest arrived from Skagway *en route* to Siberia via Dawson City, but he cracked up near Eagle, Alaska. Then, in the years around 1927, Clyde Wann's *Queen of the Yukon I* and *II* were familiar sights; and in 1928 Klondike Airways operated a Fairchild in those northern regions.

In December 1930, Captain E. J. A. (Paddy) Burke was interred at Atlin, beside Atlin Lake, at the foot of beautiful Cathedral Mountain. A veteran pilot of the First Great World War, he, together with his mechanic and a passenger, took off in October from Atlin to fly to Liard Post via Surprise, Gladys, and Teslin Lakes. They completed the trip successfully, but on their way back they were forced down by a blinding snow-storm, and the pontoons of their Junkers stuck in the ice. They left the aircraft in order to try to find a settlement. Forty days after the crash, the last twenty-three of them spent without food, Paddy Burke died from hunger. Emil Kaeling (the mechanic) and Robert Martin (the passenger) cached his body in a tree and continued on their way. Finally, fifty-eight days after the crash, the two survivors were found by Walsh and Wasson, two pilots who had spent two months flying ceaselessly back and forth over the suspected crash area. It was to Paddy Burke that Kathleen Keats White dedicated her poem, "The Northland Speaks", of which I quote two verses:

Even at the last I gave diamonds of
frost for his breath,
Exquisite crystals to garland the
wings of his 'plane;
Blankets of pearl where they kept
rendezvous with grim death,
Caught in the meshes of Fate and
the strong hands of pain.

He who swept up from my waters
as birds in their flight,
Or glided as gracefully as gulls on
the crest of a wave,
Folded his wings now, at rest on
the breast of the night,
Never his name shall depart from
the North of the brave.

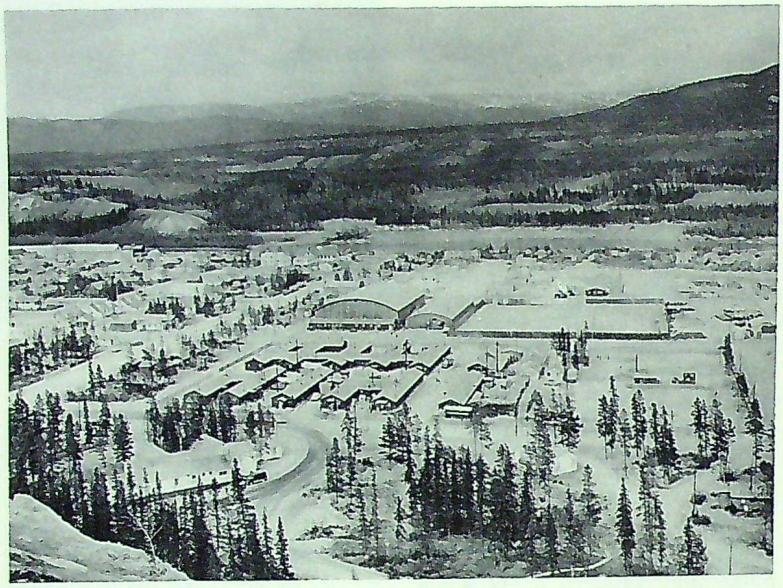
Everett Wasson beside Burke's 'plane, 2 Dec. 1930.

At Takhini Hotsprings.

It was in similar circumstances, a few years later, that another famous pilot, Les Cooke, was forced down not far north of Whitehorse. On that occasion, he maintained after his rescue that "the only thing that kept me alive was the ticks in the furs I was carrying." Cooke, however, was also destined for a tragic end. In the early days of the war he took off from the airfield at Whitehorse with hoar-frost on his wings. Barely had he become airborne before one wing began to drop. Nothing he could do would bring it up again, and the aircraft swung into a diving turn and crashed in the middle of the city, where it instantly burst into flames.

In the early years of the Second World War, D.O.T. engineers made vast improvements to the field at Whitehorse. In 1941, before any hangars had been built, the aircraft had to be run 24 hours a day to keep their engines warm. After the attack on Pearl Harbour, thousands of United States troops and civilians came to construct the Alaska Highway. The rush was on;

*See photograph in Part Two of this series.—Editor.



Whitehorse, seen from the airfield plateau.

Whitehorse bulged at the seams, and transportation facilities were jammed. The tempo of construction was stepped up, and, by the end of 1941, the landing-strip had been given an asphalt surface 4500 feet long and 150 feet wide. From then till the end of the war, R.C.A.F. and U.S.A.A.F. construction crews built the airport up to its present size. It now has four large hangars, a concrete runway of 7200 feet, 6600 feet of parallel asphalt runway, 3400 feet of cross-runway, all rimmed and interconnected by taxi-strips and packing-aprons.

(To be continued)

NO. 4016 M.U. (AUX.)

A valuable contribution to the effectiveness of the R.C.A.F. regular force on Canada's west coast is provided by civilian nurses who, as members of No. 4016 (Aux.) Medical Unit, are on stand-by duty every week-end.

One of them is on call every week-end to assist on any mercy flight the Air Force may be called to carry out, and her services are put to good use whenever *Cansos* of No. 121 Communications and Rescue Flight are sent to pick up emergency hospital-cases such as injured loggers, victims of polio, or sick mariners hundreds of miles at sea. The C. & R. Flight, which is based at Sea Island and is responsible for mercy flights that cannot be carried out by commercial aircraft, receives all emergency calls directly from the Air Force Rescue Co-ordination Centre in Vancouver.

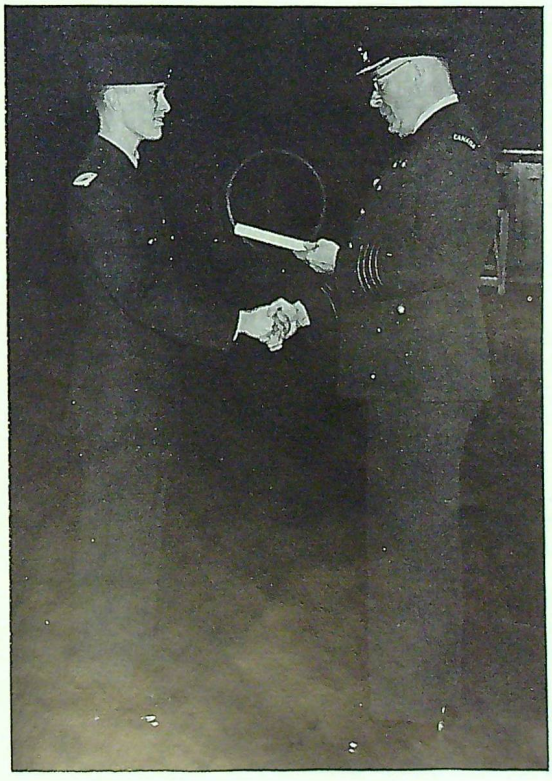
Flying Officers R. Fisher and M. Rattray beside a Canso.

UNIQUE RECORD

WHEN Group Captain J. D. Syme, M.B.E., retired from the Air Force last year, he did so with a record of service that was, in addition to being distinguished, in certain respects unique. Having joined the R.C.A.F. in 1926, he first served as an airman at Camp Borden. Thirty years and numerous transfers later, and not long after he had officiated at the graduation of his son Bob from his own starting-point, he was retired as the station's commanding officer.

Flight Sergeant J. D. Syme, drum major of Camp Borden's volunteer brass band.

Group Capt. Syme presents graduation certificate to A.C.2 Bob Syme on the latter's completion of the Armament Systems Technician course at Borden.



Group Capt. J. D. Syme watches his successor, Group Capt. F. R. West, signing the documents before taking over command of R.C.A.F. Station Camp Borden.

BY SQUADRON LEADER C.L. HEIDE, D.F.C.

(Squadron Leader Heide, who has written several excellent articles for us in the past, here utters a few home truths to which every member of the R.C.A.F. should give his or her most serious consideration.—Editor.)

In a recent television broadcast Bishop Fulton Sheen invited his more sensitive viewers, and mothers with small children, to leave the room while he discussed an unmentionable word — "soul". For, he said, it appeared to be a subject that was discussed only behind closed doors and not referred to in polite society. Into the same category, in R.C.A.F. circles today, fall the words "tradition" and its brothers, "honour" and "courage". Squeamish readers are advised to stop at this point.

* * *

What exactly is tradition? What does it do? What place has tradition in a fighting Service?

It seems reasonable to define tradition as the remembrance of deeds done and words expressed. Obviously the deeds must be courageous or unusual, otherwise they would not be remembered. The words may be oral or written, spontaneous or premeditated, but they must be phrased in such a way as not to be forgotten.

This being so, the air forces are at a definite disadvantage when compared with the armies and navies, who have had so much longer to contruct, brick by brick, their houses of tradition. Nevertheless, the material is available if only we choose to start building.

The British Army, with its regimental system more than 300 years old, offers perhaps the best example of tradition being nourished and fostered over the years until it is now a living and vital part of a Service. Each regiment has its own distinctive dress, motto, march, and colours. Not too long ago the standard was carried into battle, and the right to carry it was a sought-after privilege although the bearer was always a choice target for the enemy. Relics and mementos of former battles and honours are cherished and kept on display. The Canadian Army follows closely the same pattern.

Few if any military Services are more renowned for their fighting qualities than the U.S. Marines; few if any place more emphasis on tradition. In all wars in which the United States has participated, in foreign countries from China to Haiti and Mexico, the Marines have fought. Their stories of gallantry have not been allowed to die on the battlefields of the world, but have been kept alive and have grown over the years until now the Corps is laden with tradition.

The R.C.A.F. is not lacking in the deeds of tradition in spite of its youthful age. What battle remembrances of any Service can excel those of Bishop and McLeod, of Beurling and Hornell? It is in bringing those memories back to life that we are remiss. Even today we do not possess a National Aviation Museum in which to display the aerial souvenirs that are rusting away in forgotten places. Those of our present squadrons which bear illustrious names and numbers of former squadrons that won glory for themselves in war, take few steps to keep these memories alive.

The words that could make R.C.A.F. tradition are noticeably absent. Voluminous accounts have been and are still being written of Army and Navy history. Land and sea battles and campaigns are analysed, dissected, compared, and criticized in minute and agonizing detail. How pitifully small is the accumulation of writing about airmen and aerial warfare!

In addition, the other Services seem to have instilled into their officers the sense of speaking for tradition rather than just for the occasion. It was deliberate tradition-building on the part of General Montgomery that all the officers of his Desert Army were made aware of his remark to outgoing members of his staff: "You are a good officer, but you are not good enough for me."[1]

It was for the tradition of the 101st Airborne Division that General McAuliffe spoke when the Germans called for the surrender of Bastogne in 1944. He might have said, "We shall never surrender!"; he could have said, "We shall fight to the death." Instead, he said: "Nuts!" This single word stirred the imagination of all the world, and the 101st Division had a foundation stone of tradition.

The Royal Navy also recognizes the importance of speaking for tradition, and seems to specialize in producing officers with the wit and audacity to make remarks that live thereafter as a part of the tradition of the ship on which they are serving. During maneouvres in the Atlantic in 1953, the destroyer *Diamond* and the cruiser *Swiftsure* collided in an accident that was patently the fault of the destroyer. After some considerable time had been spent in sorting themselves out, and when the destroyer was

1—Sources of quotations appear at end of article.

slowly backing away from the scene of the collision, the *Swiftsure* signalled: "What do you intend to do now?" Came the legendary reply from the captain of the *Diamond:* "Buy a farm."[2]

The Royal Canadian Navy has inherited from its older brother this gift of producing the remark that becomes a legend. When preparations for the invasion of North Africa were taking place there was little time for proper training of some of the ship's crews in the revised tactics imposed by new conditions. Mistakes were made and some ships drew peremptory rebukes. "Very sorry", one Canadian captain signalled to his annoyed senior officer, "but please remember I'm only a poor bloody stockbroker."[3]

This is not to condone the facetious or insolent remark but to applaud the sudden flash of true humour that, spoken at the appropriate time, often becomes a part of tradition. Naval history is so rife with such examples that they have been gathered into a book. They are virtually absent in such R.C.A.F. history as exists today.

Tradition builds *esprit de corps; esprit de corps* breeds morale.

The Marine Corps makes no secret of the fact that it uses tradition to instill into its soldiers such terrific pride in the Corps that they are willing to fight against any odds and never commit an action that would bring disgrace on their Service. "Fire in the belly", writes one author, "is essential to the profession of arms, and tradition is the proper fuel with which to stoke it."[4] Fighting men of all ages have been fired by the glorious actions of their predecessors. We, as professional airmen, have behind us the inspiration of two generations of fighting aircrew whose deeds have left us a goldmine of tradition. It is up to us to mint it into the coin of *esprit de corps.*

The efficiency of any military force is dependent on morale. Uppermost in the mind of every commander is the problem of keeping his men in good mental fighting condition. General Eisenhower has said: "Morale is the greatest single factor in successful war."[5] The door to morale is *esprit de corps,* and the key is tradition. The door can be opened at any time, without effort or danger on our part, because our predecessors gave their lives to make us the key.

For some reason the R.C.A.F. seems to regard tradition as old-fashioned and sentimental, and of course any display of sentimentality is somewhat bad taste. We need to recognize tradition for what it is — a vital factor in any military organization that directly leads to success in war. We need to be conscious of our individual duty to contribute any small bricks we can towards building R.C.A.F. tradition. A house built with care and consideration, and into which the finest materials have gone, will not collapse with a mere change of tenants.

1 Parker: "Famous British Generals."
2 Broome: "Make a Signal."
3 Schull: "The Far Distant Ships."
4 "The Forces Magazine."
5 Eisenhower: "Crusade in Europe."

* * *

EARLY ISSUES NEEDED

We have been requested by the Librarian of the National Defence Library to insert a note to the effect that the Library requires the following issues of "The Roundel" to complete its files:

Vol. 1: Nos. 1 to 6 inclusive.

Should any of our readers have surplus copies of the above issues, the Librarian would be most grateful if they would address a card, mentioning the issues available, to:

Miss Bourgault,
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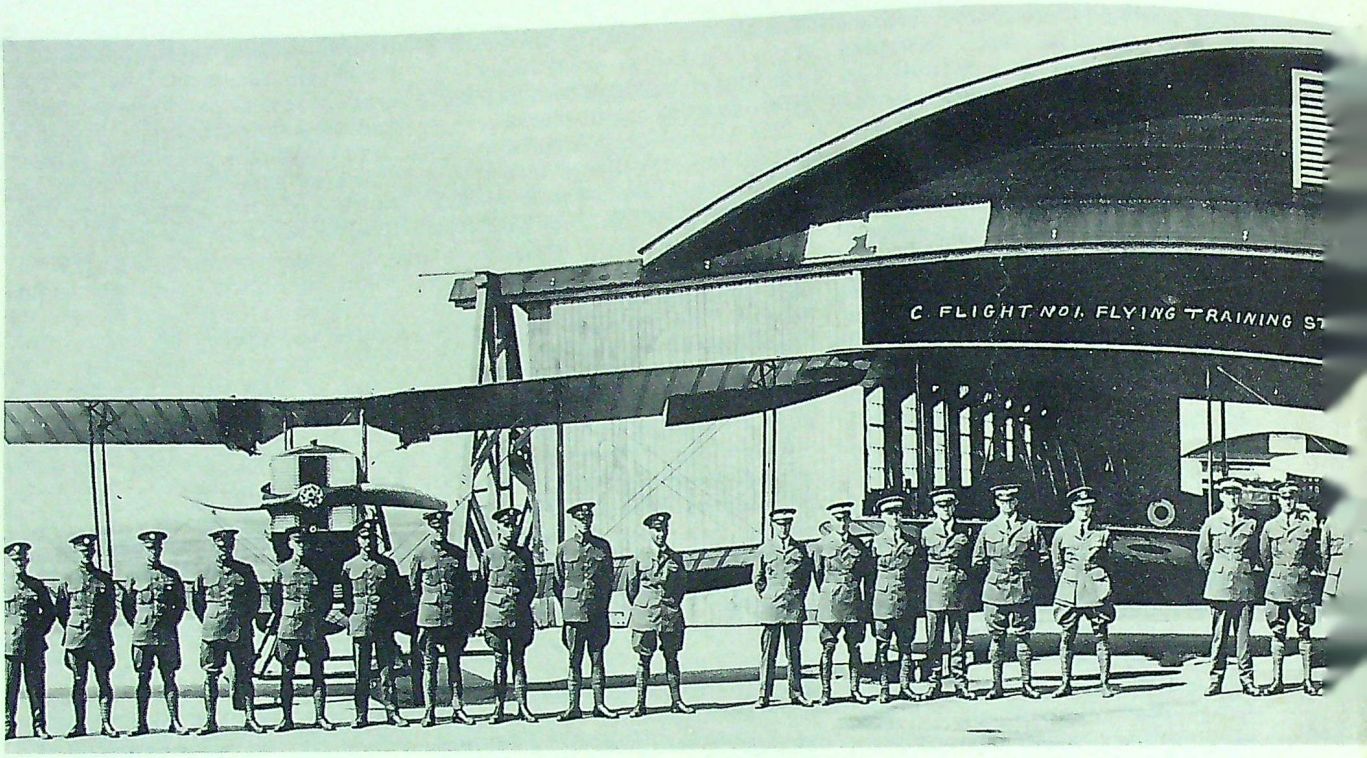
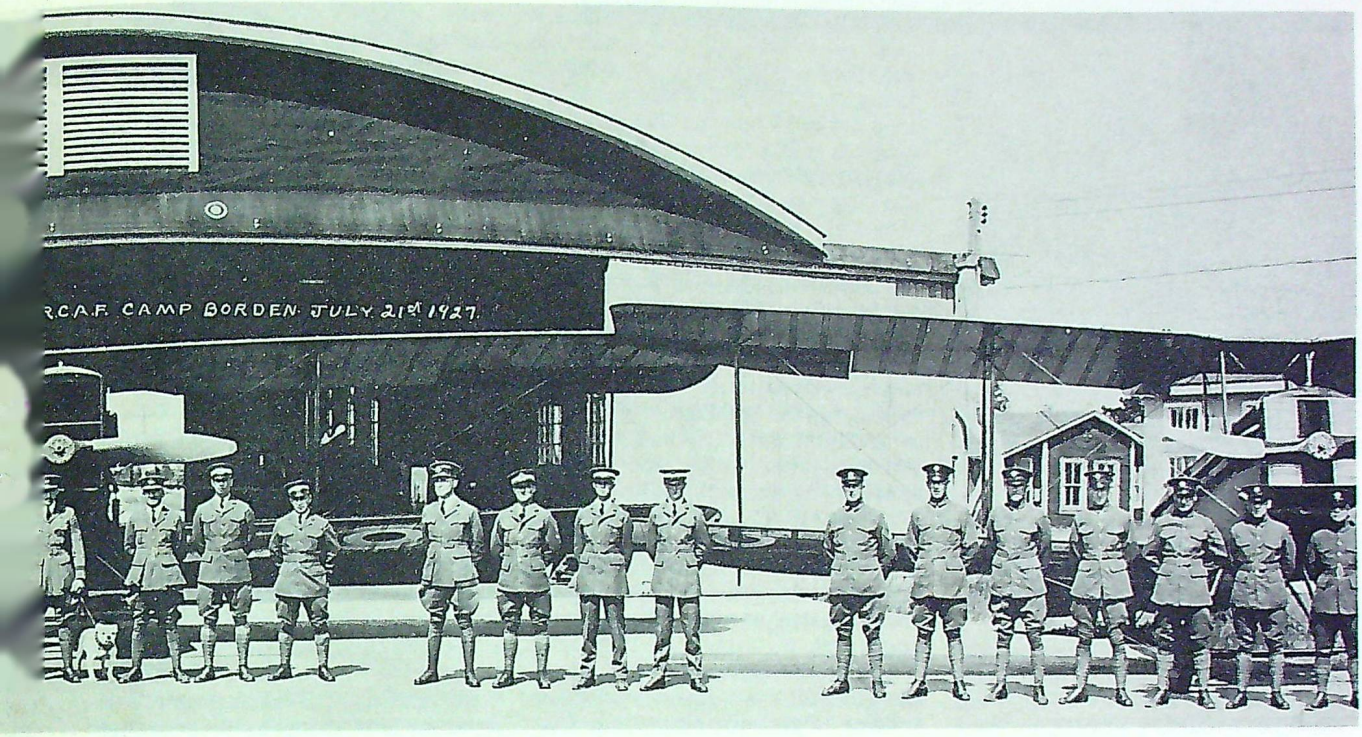
Ottawa, Ont.



Pin-Points in the Past

We are indebted for this month's pin-point to Squadron Leader J. G. McManus, of Air Material Command. It shows "C" Flight of No. 1 F.T.S. at Camp Borden in July 1927. Standing in front of two Avro *Vipers* which flank a D.H. 9A are 12 Provisional Pilot Officers who were part of the third, fourth, and fifth courses of new pilots to be trained since the Great War. Training of P.P.O.s was a scheme to bring "new blood" into the Air Force by drawing potential aircrew officers from the Universities and Royal Military College. The training course consisted of three summer-terms.

Shown in our photograph are (left to right): Aircraftman Desbien (Sergeant, deceased), Corporal R. Laidlaw (Squadron Leader, M.B.E., retired), A.C. P. V. Fletcher (released), Leading Aircraftman W. Wilcox (Flight Lieutenant, ret.), A.C. J. G. McManus (Sqd. Ldr.), A. C. Barker (rel.), A. C. Clark (Warrant Officer, ret.), A.C. I. Devine (Cpl., rel.), A.C. C. D. McLean (Wing Commander, ret.), Sgt. J. H. Palmer (Flt. Lt., ret.), P.P.O.s L. E. Cook (Flying Officer, rel.), E. Goodspeed, E. Hickson (Flying Officer, rel.), G. W. Jacobi (Wing Cdr., rel.), W. F. Hilchie (rel.), Flying Officer E. E. Middleton (Air Vice-Marshal, CB.E., ret.), P.P.O. J. H. Ferguson (Group Captain, C.B.E., ret.), unidentified, Flying Officer A. D. MacLean (Flying Officer, rel.), Flt. Lt. C. M. McEwen (Air Vice-Marshal, C.B., M.C., D.F.C., ret.), Flying Officer C. C. Walker (Group Capt., dec.), P.P.O.s J. T. Dyment (Pilot Officer, rel.), E. A. McNab (Group Capt., O.B.E., D.F.C.), Flying Officer W. I. Riddell (Wing Cdr., ret.), P.P.O. L. A. Matheson, unidentified, P.P.O. P.B. Box (Wing Cdr., rel.) Sgt. F. Lund (Wing Cdr., M.B.E., ret.), A.C. Kilburn (Cpl., rel.), A.C. R. M. Patterson (Wing Cdr., M.B.E., ret.), A.C. T. Doane (Sgt., dec.), Cpl. G. T. Elliot (Wing Cdr., D.C.M., ret.), A. C. O'Connor (Sgt., dec.), L.A.C. J. Lapointe (Flight Sergeant, dec.).



ARGUS THE FIRST

The first *Argus*, the latest combined long-range submarine-hunter and -killer aircraft to be built for the R.C.A.F., has been completed by Canadair.

The *Argus* (so named after the 100-eyed character in Greek mythology) was redesigned by Canadair from the Bristol *Britannia* and is the largest aircraft ever built in this country. In order to ensure that the aircraft can be produced and maintained in Canada under war-time conditions, all modifications have been made in accordance with North American standards.

Some idea of the size of the aircraft can be seen in the *Argus'* fuel-load, which weighs almost as much as two fully loaded *Dakotas*. Its equipment will include torpedoes, depth-bombs, and other weapons, in addition to more than two tons of complex electronic equipment which receive their energy through some 60 miles of electrical wiring. The *Argus* will carry a crew of 15 who will operate on a watch system quite similar to that used on a ship.

No. 425 Squadron

PART ONE

BY FLIGHT LIEUTENANT A. P. HEATHCOTE,
Air Historical Branch.

ON 22 June 1942 an organization order was issued authorizing the formation of a fifth R.C.A.F. heavy-bomber squadron. The order carried unprecedented significance in that its heading included, after the squadron number, the words "French-Canadian". This made the unit unique in R.C.A.F. history. Designated No. 425, it actually came into existence three days later at R.A.F. Station Dishforth, Yorkshire, as a unit of No. 4 Group, Bomber Command.

Within a matter of days an advance party of officers and airmen were busying themselves with all the unavoidable necessary evils usually attendant upon a flying unit's formative stages. Chief among the early arrivals were Wing Commander J. M. W. St. Pierre, 425's first C.O., and Squadron Leaders G. A. Roy and J. L. Savard, the Flight Commanders. While the officers concerned themselves mostly with minutiae of administrative and organizational problems, which, by the squadron's very nature, were more numerous and complex than usual, the airmen wrestled with maintenance and modification of aircraft (*Wellingtons Mark III*). Flying began in August, attention being given to all phases of operational training permitted by the weather, plus testing of aircraft.

Wing Commander J. St. Pierre. (Photograph taken later in N. Africa.)

In October Wing Cdr. St. Pierre accepted on the squadron's behalf a name to go with "425", and how completely fitting it was! Many centuries before, the *alouette*, or skylark, had been the tribal bird and official emblem of the French-Canadian's ancestors, the Gauls, who engraved its image on their battle-helmets. More recently, the strains of *"Alouette, gentille alouette"* had identified French-Canada to the world perhaps more than anything else. Specially significant to a flying squadron, however, were the characteristics of the lark, which always flies at great heights and seldom comes to rest. Thus, a word which to French-Canadians has long borne the triple connotation of symbol, song, and skylark, now connoted a heavy-bomber squadron. As the unit's official motto, what could have been more appropriate than the familiar refrain, *"Je te plumerai"*?

Although the French-Canadian strain predominated among the unit's air and ground personnel, the nominal roll was to carry a long list of names whose owners were descended from other racial stocks. While so many Alouettes hailed from Quebec, the Ottawa Valley area, and other French-Canadian centres across the Dominion, others came from Toronto and Texas; London, Ontario, and London, England; Newfoundland and New York; Saskatoon and South Africa; Calgary and California; Dalhousie and Dundee . . . But, regardless of geographical or racial origin, all shared a strong unit pride. All were, first and foremost, Alouettes.

* * *

Comprising the squadron's original aircrew strength were twenty 5-man crews. At roughly 1830 hours on 5 October 1942, eight of those crews began taking off for 425's first operational assignment, a bombing attack on Aachen, Germany. One *Wellington* crashed in Essex *en route* to the objective, and its crew perished. Two more, encountering heavy icing, returned early. Concerning the actual bombing of Aachen, no comments were given by any of the successful crews other than that the target was found and bombed. One captain did, however, come up with a masterpiece of understatement when he volunteered that the flak over the continent was "annoyingly persistent". Other annoyances with which the raiders had to contend were a violent electrical storm and its habitual accompaniment, icing. Thus the Aachen raid was, for the Alouettes, a baptism by fire and water.

Bigger and more formidable targets were then given to the eager

young squadron. Though more than two thirds of the next 31-day period were rendered unfeasible for operations by foul weather, the unit managed to send delegations to Osnabrück, Kiel, Cologne, Krefeld, Emden, and Wilhelmshaven, the first three bombed by night, the last three by day. Kiel took its heaviest pounding to date, whereas Cologne absorbed its first major punishment since the 1000-bomber raid of the previous May. It should be noted that, at this stage of the war, heavy-bomber attacks were largely strategical and nocturnal, aimed at "destroying the industrial capacity and the will of the German people to continue the struggle." It should also be noted that radar aids to navigation did not come into general use in Bomber Command until 1943. The Alouettes' *Wellingtons* did carry a radio aid, but, being in its comparatively early stages of development, it was not completely reliable and was easily jammed. In these circumstances, when it came to finding the target, so much therefore depended on the skill and co-operation of the pilot-navigator team. A heavy load was shouldered by the navigator, who had to rely on basic navigational techniques, including astro-navigation, assisted perhaps by the odd radio-bearing from the wireless operator or tip from the gunner. Unfavourable weather, in which was usually incorporated the impediment of industrial haze, all too often proved a major obstacle. Under these conditions, day or night, it was no easy task to find the objective, let alone bomb it accurately.

By far the toughest problem of Command was, of course, the enemy himself, who naturally had much to say when it came to the bombing of his Fatherland or acquired *Raum*. His *Luftwaffe*, assisted by an efficient radar screen, was fast becoming well organized against the incursions of Harris' marauders; and the high quality of his flak-purveyors had long been realized. It was on 425's third successive daylight operation (against Wilhelmshaven, on 6 November) that an Alouette crew first sampled the full fury of those defences. Thanks to a low overcast, the two crews representing this squadron had to bomb the hotly defended naval base from a height of less than 2,000 feet, which would put them within range of every flak gun and fire-arm imaginable. But, for one of the crews, trouble began well before the target was reached. *Wellington* "V"-Victor, manned by the first French-Canadian bomber crew organized overseas, was jumped from the cloud and given a going-over by three distinctly hostile fighters. In the course of one of the attacks, the wireless operator, Sergeant G. J. R. Bruyère, sustained a smashed leg and wounds in the chest, arms, forehead, and left hand. While going to his aid, Pilot Officer J. L. Desroches (nav.) happened to step on the escape hatch, which opened. He would have fallen completely through but for the prompt action of Bruyère, who, despite his wounds, caught him and hauled him to safety. All the while, the skipper, Pilot Officer A. T. (Ted) Doucette, was wrestling with "Victor" in evasive action, and Sgt. P. P. Trudeau was potting at the tormenters from his rear turret. After shaking off the fighters, Doucette took "Victor" on to bomb the primary objective. Throughout the remainder of the flight the seriously wounded Bruyère stood by his position and coached his companions on the operation of the wireless set until the *Wimpy* made it safely home. Upon being decorated in December, Doucette with the D.F.C. and Bruyère with the D.F.M., both were cited for their "indomitable courage and unswerving devotion to duty under extremely difficult conditions". They were the squadron's

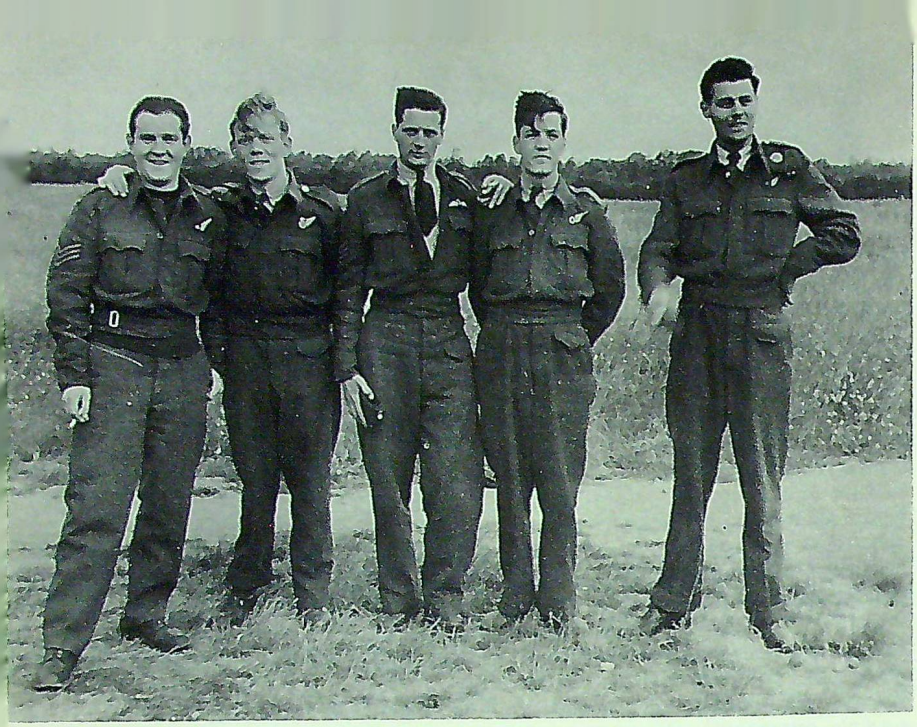
Squadron Leader G. Roy. (Photograph taken later in N. Africa.)

first to be so honoured. Four months later, Doucette, Desroches, and Trudeau did not return from a raid on Stuttgart.

* * *

If aircrew of Bomber Command or the U.S.A.A.F.'s Eighth Air Force could have been polled on the question of what were the toughest targets in Europe, while the capital city of Berlin would doubtless have topped the list, the port city of Hamburg would probably have run a close second. The latter was to be one of 425's two most-bombed objectives. One of eight crews delivering the squadron's first raid on Hamburg (9/10 November) was its first to be listed as missing. A second, landing at a diversionary 'drome, crashed with fatal consequences.

Throughout the next nine weeks or so, the emphasis was on mine-laying, or "gardening", mostly in the areas of Brest and the Frisians. In that time, (discounting one single-plane reconnaissance operation) the Alouettes sallied out on 21 operations, and on only five occasions did their business lead them elsewhere than enemy harbour approaches or shipping lanes. During November and December theirs was one of the only two Canadian



Left to right: Sergeants P. P. Trudeau, R. Bruyère, A. T. Doucet, L. Desroches, and J. Cholette.

heavy-bomber squadrons which were fully operational.

Inasmuch as their gardening attempts were not overly successful, this was a particularly frustrating period for the Alouettes. The chief spoilers were the weather (which, more often than not, was "impossible") and technical troubles. Only 68 out of 101 sorties were considered even marginally successful, but at least there were no casualties. Another difficulty arose from the fact that mines still had to be dropped from a low altitude, often from only a few hundred feet above the wave-tops.

During this predominantly maritime interlude the unit managed to include in its operational output five bombing attacks. These involved Turin (twice), Stuttgart, Mannheim, and Duisburg. From the point of view of opposition encountered, both Turin trips were little more than scenic jaunts over the Alps. On both occasions the Italian centre of heavy industry was bombed under almost ideal conditions, and two concentrated attacks resulted. Turin was the most distant target attacked by the squadron while it was based in England. By virtue of its subsequent raids on Italy from bases in North Africa, it was one of only two Canadian heavy-bomber units that attacked that country through both the front and back doors.

The Duisburg operation was 425's introduction to the infamous Ruhr. Added to the weight of high explosives and incendiaries that were released on the city was the weight of words written on many thousands of leaflets, or "nickels". Each of the Duisburg and Mannheim raids saw the loss of an Alouette crew. The former case showed how important to survival was the element of luck when a crew was shot down on operations. Shortly after bombing, *Wellington* "T"-Tare was attacked by a fighter and hit by cannon fire. The *Wimpy* immediately dived, and the captain, Flight Sergeant L. F. Causley (R.A.F.), yanked hard on the controls without appreciable results. When "Tare" had dropped about 2,000 feet, the fighter attacked again, setting the port engine and wing root afire. Efforts to quell the blaze were in vain, and Causley, at an indicated height of 4,000 feet, gave the order to bail out. He had barely clipped on one hook of his 'chute when the *Wellington* rolled over, precipitating him on to the ceiling of the cockpit. The pilot then blacked out, his next hazy sensation being that of falling through space. Pulling his 'chute cord more by instinct than by anything else, he landed within a few seconds in the Dutch village of Bruneval, near Eindhoven. The only other crew member to get out was Sgt. Mohin. After the second fighter attack, he had left his position and was proceeding toward the rear hatch when he fell into the front hatch, which, because of smoke, he did not notice was open. Barely stopping himself from falling completely through, he hauled himself up to a half-in, half-out position, then struggled to reach his parachute which was lying nearby. In so doing he managed to pull the rip-cord, but succeeded in keeping the precious silk reasonably compact even while fastening it to his harness. He then dropped out, and was quite surprised to find that the 'chute fulfilled its intended function. He was quickly captured, as was his skipper. They were the crew's only survivors.

* * *

On 1 January 1943 the squadron inherited a new formation. It then came under the jurisdiction of the newly-formed No. 6 (R.C.A.F.) Group.

Early in 1943, Bomber Command lent part of its growing might to the task of helping to keep open the precious lines of supply from America to Britain, which were then being so gravely threatened. From mid-January until near the end of April, Alouette bombing energy was directed largely against coastal centres that were directly concerned with the U-boat, either in the building or the sheltering thereof. Further extending the maritime theme, the Alouettes also made several mining expeditions to enemy shipping-routes in the North Sea. All in all, they were given

ample opportunity to vent their spleen against things marine.

Bearing the brunt of 425's blows against the submarine was the port of Lorient, which boasted U-boat pens with roofs twelve feet thick. In their seven raids thereon, while the Alouettes may not have breached a single roof (their bombs, many being the incendiary type, were not intended for that purpose), they did assist in the destruction of submarine fuel, ammunition, and supplies stocked along the quayside, and they did create considerable disruption of harbour facilities. Time and again each shore of the River Scorff in the target area was left a vivid streak of fire, visible up to 150 miles away. On two occasions crews were sure they had seen ammunition dumps blow up. No less impressive were results obtained on three attempts at St. Nazaire, two at Wilhelmshaven, and one at Kiel. On the latter target the squadron put on its biggest show of all while on *Wellingtons*, seventeen of its crews taking part.

The Kiel raid was the Alouettes' final contribution to the Battle of the Atlantic, 1942-43. In the period from mid-October 1942 to 4 April 1943, they had made 16 raids on submarine production. In so doing they had flown 151 sorties and suffered no casualties. Though they sunk not a single submarine at sea, shepherded not a single convoy, and flew not a single reconnaissance mission over the North Atlantic, they did, through these many raids, figure prominently, albeit indirectly, in the campaign against an undersea menace that then posed perhaps the biggest threat to the war's successful conclusion.

Still constituting the chief responsibility of heavy-bomber squadrons, however, was the ruination of German industry. To this end the Alouettes interspersed among their raids on U-boat bases fifteen raids on some of the leading industrial cities of the Ruhr and Rhine regions. At this stage of the bombing campaign, with Germany's defences at or near their peak of efficiency, to bomb the Fatherland by day might have been considered the essence of audacity. Alouette crews successfully pulled off such a stunt more than once, and without a loss. Their tactics during intrusion and withdrawal were based on a technique that employed the maximum use of cloud cover. It was known as "moling". Late in January two crews (captains, Pilot Officers S. L. Murrell and R. A. Stutt), taking every advantage of low cloud with ragged edges hanging as low as 700 feet "indicated", moled their way to the town of Esens, and bombed their targets from roughly 1,000 feet. Both got away with it, one bomb-aimer, Flt. Sgt. J. H. Lemieux, scoring a bull-eye on a fat marshalling-yard.

A week later it was not as easy for four crews briefed for Oldenburg. Three turned back because of insufficient cloud-cover. Sid Murrell, an Alouette who had migrated all the way from Bainsville, Texas, got around the difficulty simply by decreeing that if the cloud wouldn't come to him, he'd go to it. He wound up bombing Westerstede, fifteen miles northwest of the primary, along the approaches to which there lay a cooperative cloud bank. Tearing home, throttles wide open, through a block of space that was annoyingly free of cloud, he was accosted by two Me. 109-Fs that first made cross-over attacks from opposite rear quarters, then switched to curve-of-pursuit. On the twelth attack, fifteen or twenty minutes later, Murrell's manoeuvring enabled his two gunners, Sgts. R. L. Robinson (rear) and B. B. Gray (nose), to score with their Brownings. One of the Messerschmitts finally peeled off with white smoke pouring from its engine. It didn't come back for more, nor did the other. All had not been in the *Wimpy's* favour, however, for about mid-way through the scrap, a cannon shell pierced the fuselage behind the navigator, and fire broke out. Prompt action brought it under control, and one more bomb-

Squadron Leader L. Savard.

er and its crew got home to fight another day. Thereby did Murrell, for his keenness, determination, and fine fighting spirit, earn a D.F.C.

* * *

Hamburg twice, Cologne twice, Essen twice, Duisburg three times, Bochum, Frankfurt, Stuttgart, Mannheim — so did 425's strategical list lengthen during February, March, and April of 1943. But so also did its casualty list. In one eight-day stretch in April, five crews were listed as missing by a squadron that, during the previous six months, had posted only six in that category.

In two cases a combination of cool heads, good crew-drill, and again, luck, enabled crews to avoid casualties. Essen had been the objective of one 425 *Wellington* which, having successfully bombed, was going all-out for home. Over the one-time Dutch border, it was attacked from below and behind by an unidentified night-fighter. Flt. Sgt. J. A. V. Gauthier, bomb-aimer, rushed forward to see if his skipper, Sgt. J. G. G. C. Lamontagne, was all right. He was unhurt and still had control. Gauthier then set about extinguishing a fire in the cockpit and at the bomb-aimer's position. A second attack started a new fire amidships. This time the extinguisher-fluid ran out, but he managed to beat out the fire with his hands. The enemy then administered the *coup de grace* with a third attack which left the *Wellington* blazing furiously amidships and with crippled elevator controls. Lamontagne ordered a bail-out. As all too often happened, the escape hatch jammed, and Flt. Sgt. A. W. Brown, the navigator, had to hack it open with an axe. Nevertheless, the entire crew bailed out without a further hitch, and all were apprehended the next day. Lamontagne, Brown and Gauthier remained fellow prisoners for more than two years. Flt. Sgt. M. J. A. J. Aumond, gunner, and Sgt. J. R. A. Goulet, wireless operator, who had both been severely wounded, were repatriated before the war's end.

Shortly after "Bombs away" over Stuttgart, Sgt. G. A. F. Griffin checked his wireless equipment and the fuel supply of "S"-Sugar. Unbelievingly he saw that the port tank fuel-gauge read almost zero and the starboard only a quarter full. Seconds after he had informed the pilot, Sgt. R. B. Dingman, the port engine began to grumble and kick up a fuss, finally catching fire. Dingman cut the engine and the flames subsided. After more than an hour of single-engine flying, during which time height was gradually lost, the starboard engine began to over-rev, the tachometer showing 2800 r.p.m. The captain brought it back under control, but it was a ticklish business, as it was the *Wellington's* only means of remaining airborne above an earth that was now a scant 1200 feet below. Approximately an hour and a half after time-on-target, the starboard engine cut completely. Judging the altitude to be insufficient for a safe bail-out, the skipper ordered the crew to their crash positions, then concentrated on riding the kite down to a deadstick landing. During the descent, part of the rear turret was knocked off by what was believed to be a church spire, but its occupant, Sgt. E. C. Guyatt, stayed with the aircraft and suffered ony a broken ankle. "Sugar" belly-landed reasonably smoothly in a swamp area, and its forward progress was more or less gradually halted by a group of saplings. All the crew emerged safely, and, except for Guyatt, unhurt. Their capture followed soon after.

(To be continued)

"The First Fifty Years"

A publication of which we should have made mention long ago is "The First Fifty Years",* a booklet published by "Flight" to commemorate the golden jubilee of powered flight in December 1953.

In 36 pages Mr. King has assembled 270 photographs of noteworthy aircraft, from the Wright "Flyer" to the Douglas X-3, selected from the archives of "Flight"; and to supplement the pictures he has provided a chronological narrative which points out the part played by each type in man's progress through the air. The booklet also includes a scale drawing of the Wright "Flyer" of 1903 with a detailed description of its technical features.

* "The First Fifty Years of Powered Flight": H. F. King, M.B.E. Distributed by British Book Service (Canada) Ltd., 1068 Broadview Ave., Toronto 6, Ont. Price 45c.

R.C.A.F. Association

WING NEWS

No. 251 (Madawaska) Wing, Edmundston.

A Memorial trophy, in memory of the late R.N. Landry, is being donated by No. 251 for competition within No. 313 Air Cadet Squadron. The cadet obtaining the highest degree of proficiency during the year will be adjudged the winner. The trophy is now on display at the local clubrooms.

No. 302 (Quebec) Wing.

We are pleased to be able to report that, at the time of writing, Pat Haberlin is making good recovery from the heart attack which he suffered some weeks ago.

Pat has been a terrific worker for the Association, especially in connection with *Bon Voyage* parties at Quebec. He is well known to members of our Association across Canada, and all will join in wishing him a speedy and complete recovery.

No. 700 (Edmonton) Wing.

More than 100 members and guests gathered at the Association's lounge to observe the eighth anniversary of the presentation of the Group's Charter. Guest speaker was Group Captain J. P. McCarthy, D.F.C., Commanding Officer of R.C.A.F. Station Claresholm. Edmonton is our third largest Wing, with a membership of over 350.

No. 314 (Trois-Rivières) Wing.

On 9 February the National President, Air Vice-Marshal F. G. Wait, C.B.E., presented the newest Association Wing with its Charter. The occasion was a gala one. The R.C.A.F. Central band was in attendance and the evening concert was attended by some 700 citizens of Trois-Rivières. The concert was followed by a dance. Members of the Quebec Group were instrumental in forming this Wing. In

Air Vice-Marshal G. E. Brookes, C.B., O.B.E., Grand President (centre), talks with Miss Geraldine Turcotte and R. Harrison, secretary and president respectively of No. 406 (N. Bay) Wing. ("Daily Nugget" photo.)

No. 314 Wing. Presentation of Charter. Left to right: Group Captain J. A. B. D. Richer, D.F.C.; M. Bellerive; Mrs. Rachel Labbé-Desjardins; F. Lacroix; Air Vice-Marshal F. G. Wait, C.B.E.; Miss Elaine Jenssen; G. Garrett; Miss Huguette Cossette. (Le Nouvelliste)

Dr. C. H. Jarvis, provincial vice-president of R.C.A.F.A. for N.B., presents a cheque to Mrs. W. H. Galloway, vice-president of the Miramichi Sanatoria Entertainment Club. The money was contributed by members of No. 254 (Miramichi) Wing. On left is V. A. Moar, president of the Entertainment Club, and on right D. McLean, pres. of No. 254.

attendance at the reception were Air Vice-Marshal and Mrs. Wait, Mayor Laurent Paradis, and Association members from practically every Wing in the Quebec Group.

ANNUAL GROUP CONVENTIONS

Provincial Groups of the Association held their Annual Meetings during the month of February. According to the reports submitted, these meetings were most successful and well attended. A consolidated report of the Group Conventions will appear in the next issue of "Wings at Home".

Group Executives for 1957-58 are:

Maritime Group.

President:
P. Connell, Saint John, N.B.
Secretary.
Miss Aleta Gould, Saint John, N.B.
Treasurer:
P. Magee, Moncton, N.B.
Immediate Past-President:
T. Fraser, Stellarton, N.S.
Provincial Vice-Presidents:
J. MacElwaine, N.B.
G. MacDougall, N. S.
C. Hickey, P.E.I.
(Nfld. not yet announced.)

Quebec Group.

President:
L. E. Fulton, Ville St. Laurent.
Chairman:
G. McLarnon, Montreal.
Secretary.
Miss M. Pineo, Montreal.
Treasurer:
M. J. Simon, Montreal.
Provincial Vice-Presidents:
G. Ellis, Montreal.
H. Monahan, La Tuque.
B. Paré, Quebec.
F. Hill, Sherbrooke.
Miss Anne Black, Montreal.

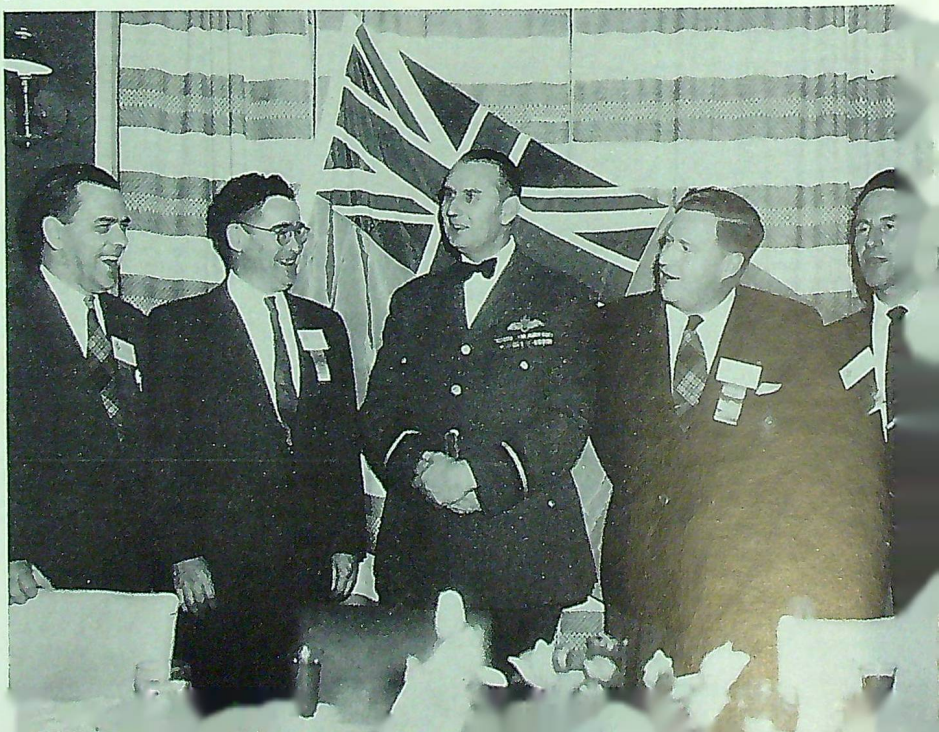
Ontario Group.

President:
G. E. Penfold, Toronto.
1st Vice-President:
D. Budd, Kitchener.
2nd Vice-President:
J. Newall, Ottawa.
Secretary:
P. Frame, Toronto.
Treasurer:
W. G. Cherry, Kingston.
Immediate Past-President:
D. Cain, Kingston.
Regional Vice-Presidents:
W. Caverly, Quinte.
C. Raymond, Eastern.
R. Swartz, Western.
L. Schedlin, Central.
P. Bedard, Northern.
R. Fairs, Border.

Manitoba-N.W. Ontario Group.

President:
F. Carlyle, Winnipeg, Man.
1st Vice-President:
J. Moore, Brandon, Man.
2nd Vice-President:
W. Lehto, Fort William, Ont.
Secretary-Treasurer:
S. Coote, Winnipeg, Man.
Immediate Past-President:
H. Ogden, Port Arthur, Ont.
Prov. Reps:
R. Johnson, Winnipeg.
A. Ficek, Port Arthur.
R. Bourke, Brandon.
Miss E. Halliday, Fort William.

Quebec Group annual dinner. Left to right: E. Martin, pres. No. 303 Wing; Squadron Leader G. O'Boyle, C.O. No. 2450 A.C. & W. Sqn. (Aux.); Air Commodore C. L. Annis, O.B.E., guest speaker; L. E. Fulton, pres. of Quebec Group; J. P. Morgan. (Gerry Lemay photo.)



Saskatchewan Group

President:
Miss Marion Graham, Saskatoon.
Secretary-Treasurer:
Miss Elizabeth Raeside, Saskatoon.
Immediate Past-President:
E. W. Campbell, Regina.
Provincial Directors:
R. C. Harris, Lloydminster.
J. Ambler, Moose Jaw.
A. J. T. Boyd, Regina.
L. Hoskins, Saskatoon.
Miss Elizabeth Stewart, Regina.

Reports of Alberta and B.C. meeting have not been received:

ADDRESSES SOUGHT

Group Captain Mathewson, a medical officer with the R.C.A.F. during the war, enrolled a number of Air Force personnel as subjects for a long-term study of electrocardiograph interpretation. He is unable to locate four of these volunteers. Their names, together with their last known addresses, are given below.

G. J. Keeper:
Dept. of National Defence.
E. G. Cameron:
2264 West 34th., Vancouver, B.C.
W. A. Bolton:
526 Carlaw Ave., Toronto, Ont.
E. W. Eaton:
5600 Kerr Ave., Victoria, B.C.

Will any reader who knows their present whereabouts please notify the Secretary, R.C.A.F. Association, 424 Metcalfe St., Ottawa, Ont.

winter morning at portage

BY CORPORAL B. J. PAULS,
R.C.A.F. Station Camp Borden.

A WINTER'S morning on the prairie, serene and utterly clear, with a temperature of more than thirty below.

The Station was just beginning to challenge the stillness of the frozen dawn with the roar and scream of its jet trainers. The fast-rising sun sparkled in glistening specks of gold and silver on the frosted windows and web of radio aerials of the control tower, and presented a technicolour preview of a wonderful day for flying. The last of the night lay in purple shadows between the hangars and barrack blocks, and tall plumes of smoke from breakfast fires stood at attention over the Permanent Married Quarters.

The orderly sergeant, cocooned for the season in his bulky greatcoat, snorted and puffed his way to the front of the administration building, where he raised a tired flag and coaxed it unsuccessfully to remain alert. Groups of airmen, suffering from early-morning sluggishness, tested the frigid air from barrack doors with diagnostic noses; then, convinced of an even chance of survival, they braved the elements to converge on the mess hall. The ailing bus from town coughed and complained its way to the guard-house, where it pulled up in semi-collapse to disgorge a string of blue-clad bodies.

Slowly at first, but with increasing tempo, the station came to life. Hundreds of pairs of frost-nipped feet jigged impatiently at outside doors while mittened hands fumbled with keys. On the hangar line a flock of jets, wearing nothing more than they had worn during the summer, stretched their wings with exaggerated nonchalance as if to tease their handlers. A young pilot, anxious for a romp in his aerial playground, whistled himself happily to the briefing room. In one of the awakening offices an airwoman tapped with exploratory fingers at the keys of her typewriter, rubbed her hands briskly, then resumed the job in urgent staccato.

At the gate, a jovial commissionaire greeted the arrival of the C.O.'s car with a friendly salute and a wide grin. At the same moment a trio of jets streaked low across the Station, dragging their sound behind them. Also at the same moment, an airman was issued with a new pair of boots, the Accounts Officer settled an outstanding claim, a teletype machine miraculously announced the transfer of the photo corporal, and a civilian employee fed breakfast dishes to a steaming automatic dishwasher.

Everything was clicking now. The gears were meshing and the place was producing. The entire Station shook itself free of its reluctance and took on the day with gusto. Even at this early hour it showed every sign of successfully adapting itself to the rigours of the winter day.

R.C.A.F. Station Portage la Prairie was back at the grind.

"This is Canadian Air Force..."

BY SQUADRON LEADER J. D. HARVEY, D.F.C.,
Staff Officer Public Relations, Air Defence Command.

Singapore International Airport.

"SINGAPORE radio, Singapore radio. This is Canadian Air Force 525. Do you read? Over."

"Canadian Air Force 525. This is Singapore radio. Go ahead."

Flying Officer Anderson proceeded to report his height, position, and estimated time of arrival over the next check-point. Singapore radio then told him to descend immediately to 6,000 feet and to report when he crossed the King Kong beacon.

Turning to Flight Sergeant Trethowan, the engineer, Anderson called: "Boost forty and twenty-three hundred revs." A moment later the *North Star* began its descent to the International Airport, past towering thunder-heads, as safely as though approaching its home base at Dorval, more than 11,000 miles away.

* * *

We were on our way to Australia, the half-way point in another round-the-world flight undertaken in order to familiarize R.C.A.F. crews with the air routes of the world and, on this occasion, to deliver some of the latest Canadian-built radiation-detection instruments. More than forty countries have now heard the R.C.A.F. call-sign as Transport Command's aircraft roar their way around the globe, delivering freight and personnel for the Government of Canada.

"This is Canadian Air Force . . ."

I felt rather proud to hear the words boom out over the airways. Other air forces do not mention their nationality when calling; they simply say "Air Force" followed by their aircraft's number.

Air Transport Command has made many round-the-world flights since the end of the war. Most notable, of course, was the trip of Prime Minister St. Laurent, who travelled in one of No. 412 Squadron's aircraft on his goodwill mission in 1954. The Minister of External Affairs, Mr. L. B. Pearson, who has flown with the R.C.A.F. on many occasions and who made his first world-trip in 1950, not very long ago visited Russia and the Far East on Air Force wings

Although their duties include the hauling of freight to within 500 miles of the North Pole, the dropping of Army paratroopers, the supplying of Canadian units in Europe, and spraying airfields with insecticide, both aircrew and groundcrew prefer the world flights to all others. Our flight to Australia extracted the maximum amount of training-value from the 25,000-mile, 28-day flight, which included eighteen countries and put another 126 hours in the crew's log-books.

Air Commodore H. M. Carscallen, then Air Officer Commanding Air Transport Command, remarked: "We're showing the flag around the world — a job formerly handled solely by the Navy." He added: "As well as being amateur ambassadors, we have reached the point, by means of such training, where we're able to take-off at any time for anywhere in the world — knowing that we'll get there safely and on time." He pointed out the record made by No. 426 (Transport) Squadron on the Korean airlift,

Airborne Neptune (Warrant Officer G. Jackson) ready to officiate as 'plane crosses Equator.

when, with two days' notice, the squadron began lifting critically needed men and supplies across the Pacific. In all, it made 599 round trips over the moody north Pacific without the loss of a man or a single pound of cargo.

Although Transport Command's ambassadorial rôle is usually confined to official dinners, such as the one given us by Mr. J. Hurley, Canadian High Commissioner to Ceylon, when we landed in Negombo, other opportunities for practising it do present themselves.

In Sydney we visited the Lord Mayor to deliver a letter of greeting from Mayor Jean Drapeau, of Montreal. This gave the crew an opportunity of meeting many interesting Australians — though meeting Australians is never difficult. Anyone who walks about in an R.C.A.F. uniform is unlikely to get far before he is stopped by friendly enquiries of all sorts.

The crew who flew Mr. Pearson to Russia had the unique experience of travelling just about everywhere the official party went. They wined and dined with the higher echelon of Russian society, watched the ballet from the official box, were driven about town in official limousines, and housed in the best hotel in Moscow. The flight was particularly interesting in that this was the first R.C.A.F. aircraft to land in the U.S.S.R. The crew were met in Berlin by three Russians in civilian clothes who acted as guides throughout the flight. The Russians plotted the course and handled the radio communications.

* * *

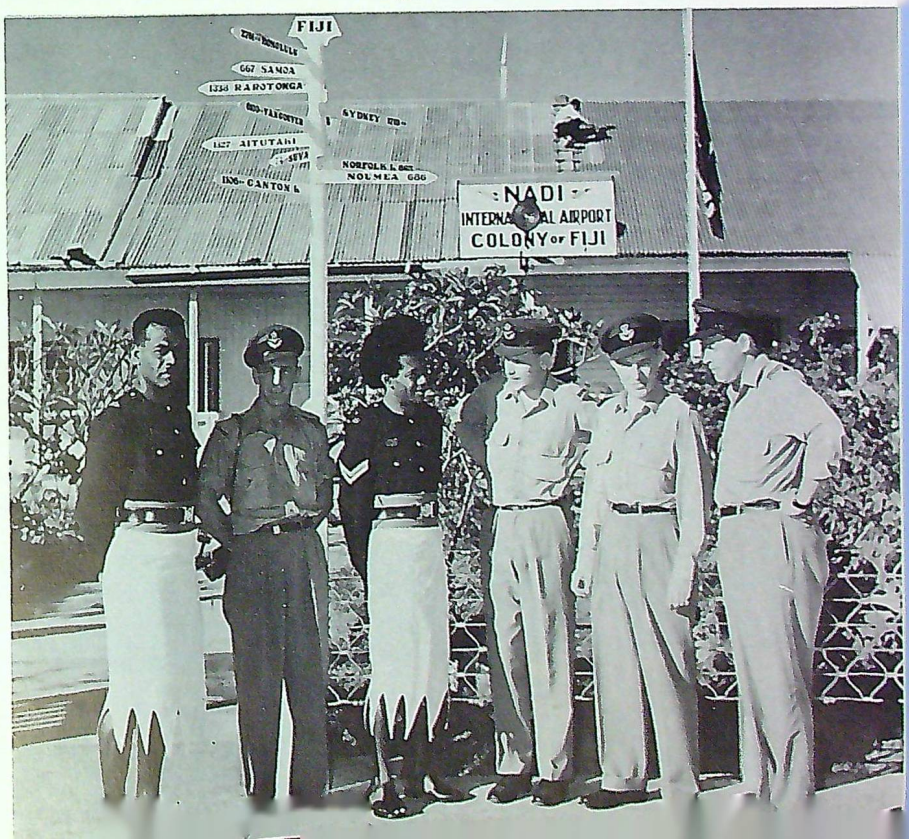
Since every airport has different landing procedures which must be strictly adhered to, the world flights provide very valuable training. Although all major aerodromes are listed in the pilots' instruction books, there is no substitute for making an actual landing and experiencing the many different aerodrome landing-patterns.

At Hong Kong, for instance, the airport nestles between hills in a saucer-shaped valley. Such a situation makes for an extremely difficult approach. The aircraft must skim the hills before descending rapidly to the runway. In clear weather this is not too difficult, but when low cloud, fog, or rain lies over the field, it takes good judgement and split-second throttle-handling to ensure a successful landing the first time.

In hot climates, the extreme temperatures and breathless air make long runs necessary before the aircraft will rise from the ground. Fortunately, most of the world's aerodromes have been considerably expanded since the war in order to handle the larger machines. In fact, at the majority of the aerodromes we visited, construction was in progress day and night. The contrast between the construction methods of east and west was striking. The coolie labourers of the east still move the earth with baskets suspended from their shoulders, but many hands seem to compensate satisfactorily for the lack of our own giant earth-moving machines.

The navigators, like the other crew members, receive a real test

Fiji.



Flight Sergeant J. Trethowan with Arab guard at Bahrein.

THE Roundel

on round-the-world flights. In Australia we noticed that, as we walked south, our shadows fell before instead of behind us. The weather systems, too, are different. The winds blow around a pressure system in directions opposite to those with which we are familiar. Since the navigator, like the mariner of old, continually works with his sextant, "shooting" the stars to determine his position, he must carry star-charts never used in our country. No Pole Star shines in those southern skies.

The groundcrews work long hours, both on the ground and in the air, to keep the aircraft in good condition. While the aircrew fight their way through customs and make for the hotel, the groundcrew pitch in, by day or night, in dry season or monsoon, and inspect, refuel, and bed the aircraft down before looking after themselves. Since the R.C.A.F. has not established bases around the world, spare parts must be packed and taken along for emergencies. If the aircraft goes unserviceable, the groundcrew will work until the 'plane is ready to fly, even though they may have been in the air for ten or twelve hours that day.

During our Australian trip, long as it was, no replacement of parts other than spark-plugs was necessary. Full daily inspections were carried out at each stop, and the crews swarmed over the aircraft almost before the wheels had stopped turning. I was struck by the evident pride of ownership with which they escorted technicians of other nations through their aircraft.

Wherever we went, we found that our *North Star*, with its "Royal Canadian Air Force" printed in large red letters along the sides, brought stares and questions from curious spectators. An R.C.A.F. aircraft had never before landed at several of the airports we visited. On numerous occasions airmen of other countries asked what Canada was like, if our immigration policy would allow them to enter Canada, and if they could join the R.C.A.F. when they got there.

Flight Lieutenant H. Maxwell, Australian-born member of the R.C.A.F., with two R.A.A.F. groundcrew at Edinburgh Field, near Adelaide.

* * *

Flying experience is not the only benefit derived from such flights as ours. Equally important, perhaps, is the widening of the outlooks of those who engage in them. They come to realize that, regardless of race or creed, people the world over are moulded of stuff that is basically the same. Such realization is the beginning of true understanding, humility, and — paradoxically enough — pride of nation.

Manistique, Mich., 17th November: Chesley J. Crites started the engine of his four-seater 'plane at Blaney Park Airport, Mich., today without realizing the throttle was wide open. The pilotless 'plane sped down the runway and took off. While the plane flew around, C. J. Crites grabbed a deer-rifle and fired eight shots into the engine. The 'plane crashed, burned, and became a total loss. (*From "Lloyds List and Shipping Gazette": 22 Nov. '56*)

The Bagotville Rifle Club

BY FLIGHT LIEUTENANT E. F. EATON

The Corporals' Club Team. Kneeling (l. to r.): T. D. Pledge, L. G. Hinds, L. S. Zeigler, E. Lawrence, J. A. Fontaine (Captain), W. R. Rowles, J. A. C. Gagnon, D. E. McDougal, G. B. Slater, Standing: R. J. Desbourough, F. L. Pearson, J. A. Watt, W. E. Fricker, J. E. Winter, G. E. Dean, R. A. Henderson, D. J. Ferrel, A. O. Hampel, and J. Walker.

RIFLE-SHOOTING has played an important rôle in the development of North America ever since Captain John Smith stepped ashore from the *Mayflower* bearing his sixteen-pound musket, rest, bandolier, and bag. In fact, during the first two centuries of the white man's settlement here, the retention of his hair frequently depended on his skill with fire-arms. Thus, although today his hair is seldom threatened by any enemy other than alopecia, it is not surprising that shooting has become a major sport in Canada. Canadian small-bore (.22) shooting is the equal of that of any country in the world, as was fairly evidenced at the 1956 Olympic Games.

Among the hundreds of clubs across Canada, R.C.A.F. Station Bagotville's is one of the most active. It started in a small way in 1953, and it has expanded to the point where it now has 130 members who fire regularly each week in team competitions.

The club is affiliated with the ruling bodies of Canadian Shooting, Dominion Marksmen Inc., the Canadian Civilian Association of Marksmen, and the Dominion of Canada Rifle Association. It is also associated with the Province of Quebec Rifle Association, and fires regularly in D.M., C.C.A.M., D.C.R.A., and P.Q.R.A. competitions.

When first formed, the club fired for R.C.A.F. awards and in D.C.R.A. shoots, using the Lee-Enfield C7 .22 rifle. Interest was only mild, but the arrival in November 1954 of Sergeant J. G. Despatie, of the Ground Defence Section, livened matters up. Sgt. Despatie is a sporting-rifle enthusiast, and he soon persuaded Station Fund to buy a pair of Mossberg 146B rifles with which club members could enter D.M. competitions. These weapons quickly became favourites, and a number of members bought their own. Station Fund added two more 146Bs and two Colt *Woodsman* pistols in the fall of 1956.

The indoor range at Bagotville is open five afternoons and evenings per week. This allows shift-workers to avail themselves of it, and a member of the Ground Defence Section is always present to act as Range Officer and to coach shooters. The system has paid off. More than 100 awards for rifle-shooting were won in 1956. The standard of shooting may be gauged by the fact that, in the last Inter-Mess Shoot, the Corporals' Club won with a score of 991 out of a possible 1000 points, firing on a ⅛" bull at 25 yards. The lowest score in the match was 975. These Inter-Mess shoots are held monthly and the winners retain the handsome silver cup, donated by A. V. Roe and Co., for one month.

In the last issue of "Aim", the C.C.A.M. commented on the fact that interest in sporting-rifle competitions was on the rise while interest in the match target-rifle was waning alarmingly. The same thing holds true at Bagotville, and has been the subject of much discussion among club members. One of the major factors has been that good sporting-rifles cost much less than good target-rifles and can be used for a greater variety of sport. At the risk of enraging the Chief of Armament, it must be reported that the majority of members do not like the C7 rifle. It is regarded as a clumsy weapon, not in the same class as modern target weapons; and its use is therefore limited to military rifle competitions.

Full-bore shooting has been limited in past years by the lack of a long range and, in the case of pistol enthusiasts, by the size of the ammunition allotment. .380 ammunition is expensive, and few members of the R.C.A.F. can afford to buy enough of it to bring them up to competition standards. None the less, our hand-gunners are taking enthusiastically to the Colt *Woodsman* pistols, and good results are expected from them in 1957.

The "Gooney Bird"

On 18 December 1935 a new type of aircraft flew from a factory in California on its maiden flight. Far in advance of any comparable aircraft of its day, it was the first of the 10,926 Douglas DC-3s which have since come off the assembly line.

The DC-3, designated *Dakota* by the R.A.F., C-47 *Skytrain* or C-53 *Skytrooper* by the U.S.A.F., and R4D by the US. Navy, is affectionately known to Canadian fliers as the "Gooney Bird".

During the Second World War the DC-3 earned a reputation for itself which was eclipsed only by the most glamorous of combat aircraft. Converted to military use, the aircraft which had been for years the stand-by of airlines became the most widely used military transport in existence. It was used variously for dropping paratroopers, towing targets and gliders, evacuating wounded, transporting troops, carrying freight, search and rescue, and the instruction of aircrew. This extremely versatile aircraft, often referred to as the workhorse of the air, could be found everywhere.

From the many variations developed from the basic DC-3 transport, there were five civil types and a variety of custom-made executive aircraft, plus a great number of non-standard converted military transports. Although the standard accommodation in the DC-3 was for 21 passengers, variations ranged from privately owned aircraft outfitted for carrying eight or ten passengers to airline versions designed for thirty-two. Over the years its power plant changed three times: from Wright *Cyclones* to Pratt and Whitney *Wasps*, and then to Pratt and Whitney twin *Wasps*, with the engines increasing in horsepower with each change.

The *Dakota* first came into regular service with the R.C.A.F. in March 1943, when one DC-3 was added to the strength of No. 412 Squadron. As the war progressed, an ever-increasing number of *Dakotas* were taken on strength and squadrons were formed which flew them exclusively. As larger, faster, and more modern aircraft were built, the "Gooney Bird" began to give way to them. At present, however, there are still more than 100 *Dakotas* in the R.C.A.F. and, with one exception, the *Dakota* is the only aircraft that can be found in every Command. The fact that the DC-3 is still going strong after 21 years of service is living proof that, given proper maintenance, an aircraft can be kept flying indefinitely. Parts for this seemingly ageless aircraft are still being manufactured.

In 1949, in order to delay the inevitable obsolesence of the DC-3, the Douglas Aircraft Company produced a super-DC-3 designated YC-47F by the U.S.A.F. and R4D-8 by the U.S.N. This "Super-Gooney" was fitted with more powerful engines to improve its performance, had accommodation for up to 38 passengers, used cross-wind landing gear, automatic airscrew-feathering, J.A.T.O. take-off rockets, and a braking parachute. Nevertheless, the handwriting was on the wall, and the old DC-3 is beginning to fade from the scene. Major airlines have replaced their DC-3s with more modern aircraft. No "Super-Gooneys" were purchased by the R.C.A.F.; and, although many *Dakotas* are still rendering yeoman service to the Air Force, their demise is only a matter of time. When that day arrives, a truly remarkable aircraft will be gone, and, for the hundreds of Canadian fliers who have flown the "Gooney-Bird", it will be a sad farewell.

EX-AIR CADETS AT ROYAL ROADS

Of the 172 cadets now undergoing training at Royal Roads, the 24 shown in our photograph are all former Air Cadets.

Rear row (l. to r.): Cadets T. J. Grinnel, D. H. Morrow, W. R. Cotie, J M. Cooling, R. B. Donald, D. R. Cundall, G. R. Ellerbeck, R. S. Billings, H. G. Kalk, W. C. Moore, J. D. Rowe. Centre row: Cadets J. E. Wilson, B. A. Buvyer, W. J. Sharkey, D. B. Smith, R.J.G.A. Houston, K. B. Sinclair. Front row: Senior Cadets T. S. Neill, G. G. Hopp, D. F. Demerse, J. McMeekin, M. W. Stedman, H. H. Sherwood, and Junior Cadet R. J. Lawson.

The Suggestion Box

The C.A.S. has written letters of thanks to the undermentioned N.C.O.s for original suggestions which have been officially adopted by the R.C.A.F.

Cpl. A. J. Schreiner, of Station Clinton, devised an installation for use with *Expeditor* aircraft which makes it possible for a single technician to test the radio transmitter and receivers from the rear compartment of the aircraft. Previously the testing of this equipment required two technicians. (Photograph not available.)

Cpl. D. H. Phillips, of Station Trenton, submitted specifications for converting the T-33's wing-tip fuel tank support dolly so that it can be also be used as a support cradle for the cockpit canopy during maintenance work. The dolly also provides an excellent storage facility for the canopy as well as a means of moving it with the minimum risk of damage.

Cpl. D. H. Phillips.

C.J.A.T.C.

From Flying Officer J. Tucker, of Canadian Joint Air Training Centre, we have received the following résumé of awards won by C.J.A.T.C. teams during 1956:

The Tactical Air Command Hockey Championships, throughout the playing of which the C.J.A.T.C. team remained undefeated.
The Riding Mountain League Trophy (hockey).
The Kerry Shield (hockey), for annual competition between the station and the town of Rivers.
The T.A.C. Basketball, Bowling, and Volleyball Trophies.
The Grand Aggregate Trophy, presented by the Air Officer Commanding (first year of award).
The Brandon and District League Championship (soccer).
The Brandon Charity Cup (soccer).

Station trophies were won by the units indicated:

The Intramural Bowling Trophy: C-119 pilots of the Transport Support Section.
The Grand Aggregate Trophy (track and field): Ground Training Wing.
The Tug-of-War Trophy: Administration Wing.
The Grand Aggregate Trophy and Relay Trophy (swimming meet): Administration Wing.
The Volleyball Trophies (inter-Section): Airborne School, and Army flyers from the Light Aircraft School.
The Softball Shield (inter-Wing): Administration Wing.

Adoption in Metz

A little more than a year ago Flying Officer and Mrs. F. C. Passmore, of No. 1 Air Division H.Q., were so taken with two small brothers whom they saw at the German welfare pavilion that they made application to adopt them both. They were, at that time, only permitted to take the older, Richard, then aged two. They continued their efforts, however, and at last 20-month-old Eric has been allowed to join his brother under the Passmore roof. Adoption proceedings for both boys will be made final before Flying Officer Passmore completes his European tour of duty.

Letters to the Editor

SUGGESTIONS AND INVENTIONS

Dear Sir:

Would you please inform me of the correct procedure to be followed in the submission of original suggestions (technical).
L.A.C.—

(The foregoing letter, recently received from an airman in No. 4 Wing, is one of several that have been sent to us on the same subject. Full particulars regarding the submission of original ideas are contained in A.F.A.O. 99.00/01 (suggestions) and A.F.A.O. 99.00/02 (inventions).—Editor.)

BACK ISSUES AVAILABLE

Dear Sir:

We have heard that back issues of "The Roundel" are sometimes in demand, and we thought that we would let you know that we have some for disposal.

We at present have the following available:

1955: January (2 copies), February to June, July-August (2 copies), September (2 copies), October, November (2 copies), December (2 copies).
1956: July-August.

We also have clipped the series entitled "Memoirs of a Canadian in the R.A.F.", by Wing Commander A. L. Booking, if you know of anyone interested in this series.

Patricia Janson,
Reference Dept.,
Public Library and Art Museum,
London, Ont.

(Readers who wish to avail themselves of Miss Janson's kind offer are asked to write to her direct.—Editor.)

If you pick up a starving dog and make him prosperous, he will not bite you. This is the principal difference between a dog and a man. *(Mark Twain.)*

THE R.C.A.F. BENEVOLENT FUND

The Royal Canadian Air Force Benevolent Fund was established in order to assist serving and former members of the R.C.A.F. and their dependents in time of financial distress.

SERVING PERSONNEL can obtain full information from their units' Orderly Rooms.
FORMER MEMBERS can obtain it from:

- The local Benevolent Fund Committee.*
- Any Wing of the R.C.A.F. Association.
- Any District Office of D.V.A.
- Royal Canadian Air Force Benevolent Fund (Inc.), 424 Metcalfe St., Ottawa, Ont.

*This address is obtainable from any of the other three sources.