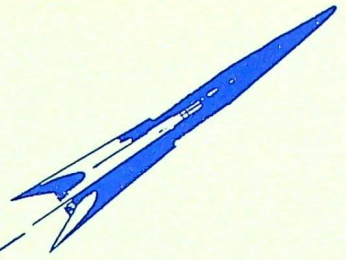




THE

# Roundel



NOVEMBER 1959



THE

# Roundel

Published on the authority of the Chief of the Air Staff, Royal Canadian Air Force

VOL. 11, No. 9

NOVEMBER 1959

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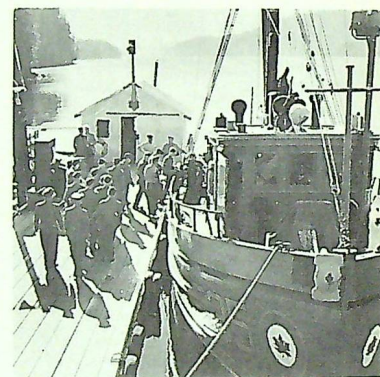
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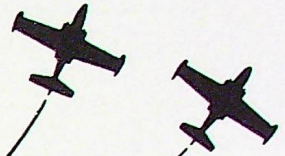


### THIS MONTH'S COVER

Passengers board the RCAF motor vessel Nimpkish at Holberg prior to departure for Coal Harbour. A typical day in the life of the Nimpkish (a West Coast Indian word meaning fabulous fish) is recorded by photographer Cpl. G. E. Picard on pages 2 and 3.

Views expressed in THE ROUNDDEL are those of the writers expressing them. They do not necessarily reflect the official opinions of the Royal Canadian Air Force.

# On the Break



THEY rolled out the red carpet for a machine this month at Air Materiel Command Headquarters, Rockcliffe. Unveiled before the visiting dignitaries was the IBM Type 705 Mark III electronic computer, destined to revolutionize RCAF logistics management (see page 5). Host at the gala affair was Air Vice-Marshal C. L. Annis, who in his capacity as Air Officer Commanding AMC is certainly well-qualified to be the author of our lead article.

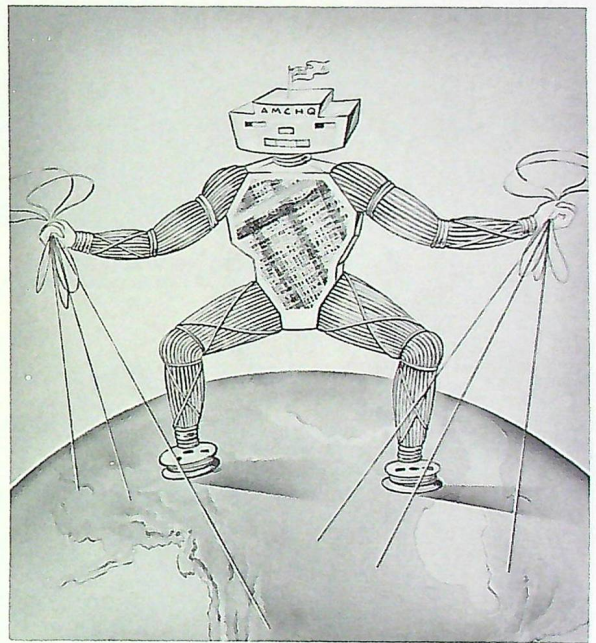
\* \* \*

DON'T blame us if the order of teams in the cartoon on page 10 isn't exactly according to the final standings in Canada's two major football leagues. We had to pick them in September to make our November deadline.

We ran into a bit of opposition from the editorial committee on this one — but finally won our point that this month, even in the air force, the main topic of interest is the Grey Cup Game. For several years now, the RCAF has staged its own version of the fall classic in Europe, thereby introducing the natives to more Canadian culture and helping the medical staffs of No. 1 Air Division stations earn their pay.

\* \* \*

THIS month, for the third in our series on Air Forces of the Commonwealth, we travel to the mystical East to learn about the Pakistan Air Force (page 20). In this ancient world of Maharajahs and minarets where, since time immemorial, the loudest noise has been the discordant babble of the bazaars, young airmen are daily making their presence known as the Commonwealth's newest air force moves along with the jet age. Although relatively small in size and short in terms of service, the PAF is a military organization of which Pakistan can feel justly proud.



THROUGHOUT 1959 we have been publishing features on the Golden Anniversary of Powered Flight in Canada. You may recall we began the year by devoting an entire issue to this milestone, and next month we plan to end it with a round-up of anniversary year highlights, in pictures and the written word.

One story we think you'll want to read will deal with the formation, development and cross-country tour of the Golden Hawks, the RCAF aerobatic team which created so much favourable comment from one coast to the other. During 65 shows in 34 different locations the Hawks were seen by an estimated 2,419,000 people, not counting those who watched their daring exploits on television.

*The Editor*

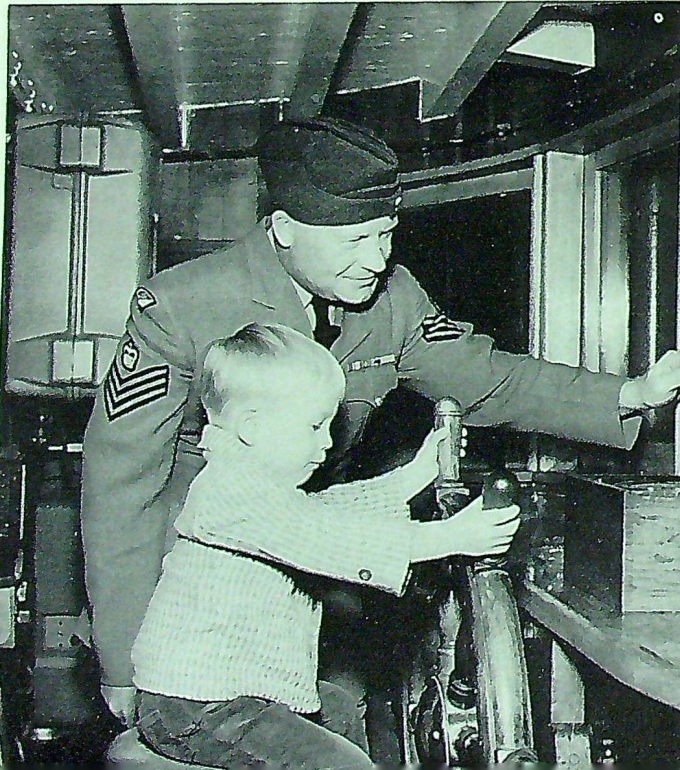
# Odyssey of the

PHOTOSTORY by



*The Nimpkish is the largest of the dozen marine vessels still operated by the RCAF. Others are high-speed range boats stationed near airfields.*

*One of the younger passengers Rickey Picard, age four, tries his hand at the wheel.*



*In the chart room the skipper of the Nimpkish, FS O. C. Begley, plots a course through the channel.*



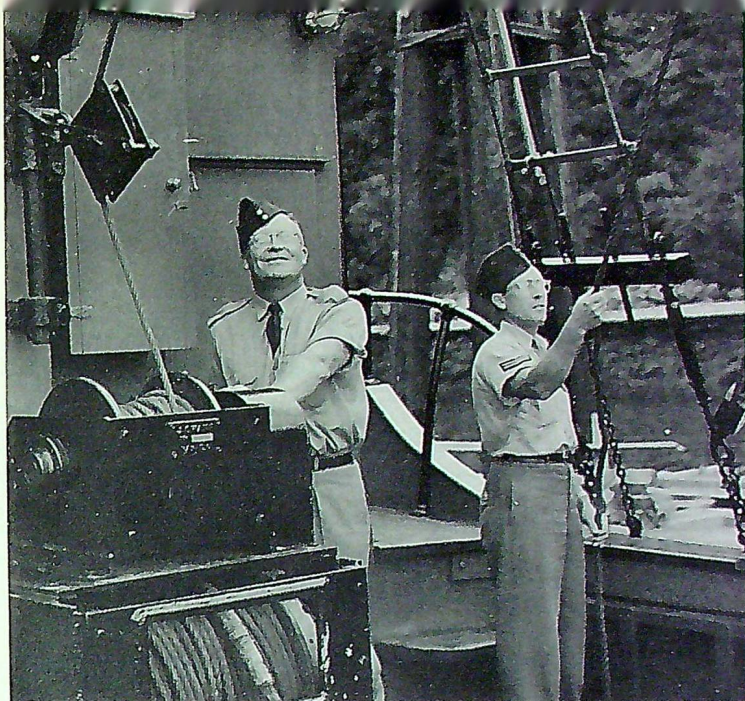
# Fabulous Fish

CORPORAL G. E. PICARD

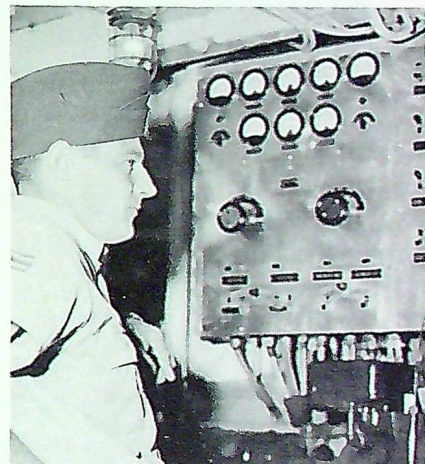
tion is made with a service aircraft to the final destination, Vancouver. Northbound passengers and cargo go through the same three-stage journey in reverse.

In her present role, the *Nimpkish*, under the command of her skipper Flight Sergeant O. C. Begley, is rendering yeoman's service on the two and a half hour run between Holberg and Coal Harbour. During eight months of 1958, for instance, the vessel made 205 trips—travelling a total of 7,000 miles and carrying 2,557 passengers, more than 123,000 lbs. of freight and 1,600 sacks of mail. In addition to her workhorse role of hauling supplies and duty passengers, the *Nimpkish* also provides the radar station's personnel with the opportunity of occasionally leaving their isolated location for a look at the lights of the big city.

Over the years the *Nimpkish* has become one of the better known vessels in British Columbia's coastal waters. She has frequently participated in search and rescue missions at the request of Vancouver's Rescue Co-ordination Centre, and several distressed mariners owe their lives to the timely assistance of the RCAF's seafaring airmen.

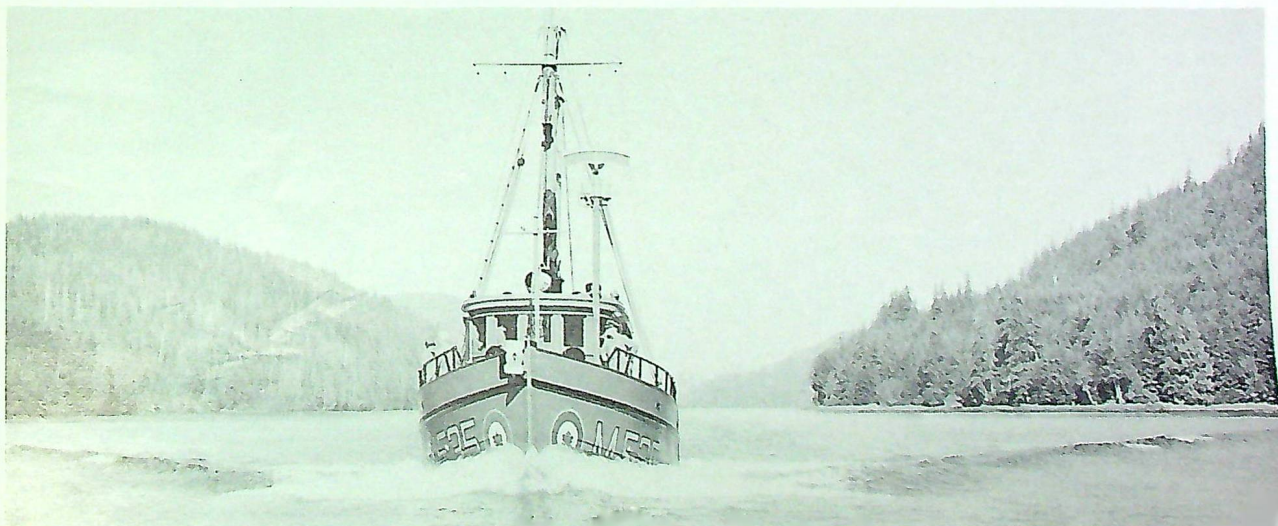


*The skipper and crewman Cpl. R. W. Waugh check the winch used to load freight.*

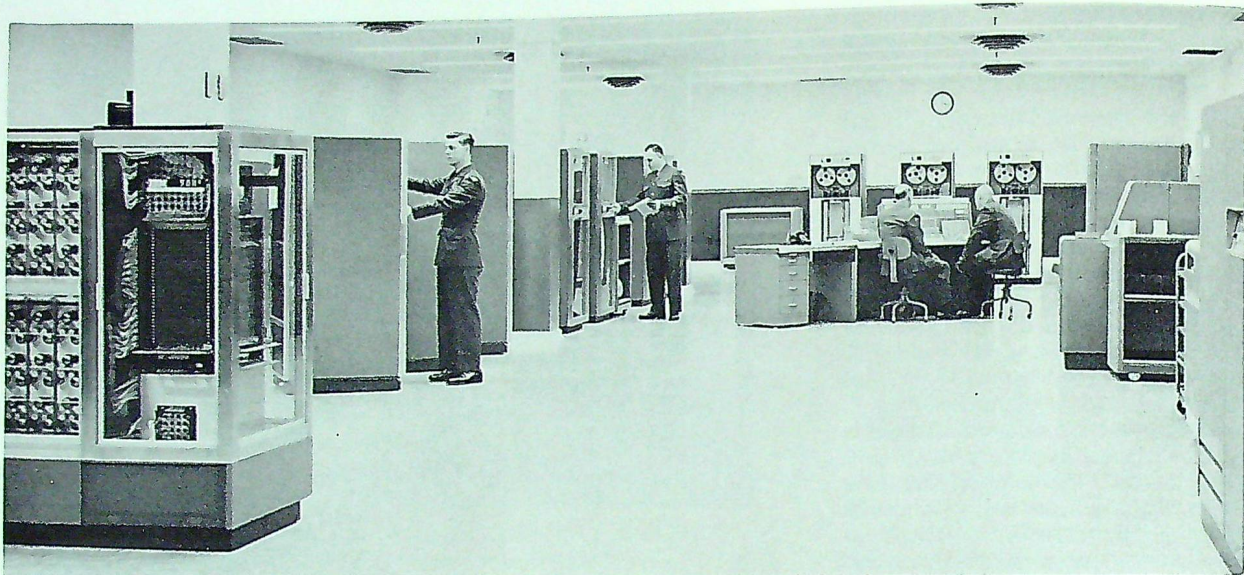


*Cpl. G. C. Marshall ensures that all is well in the engine room.*

*Homeward bound.*



# The electronic computer is at the heart of modernization in

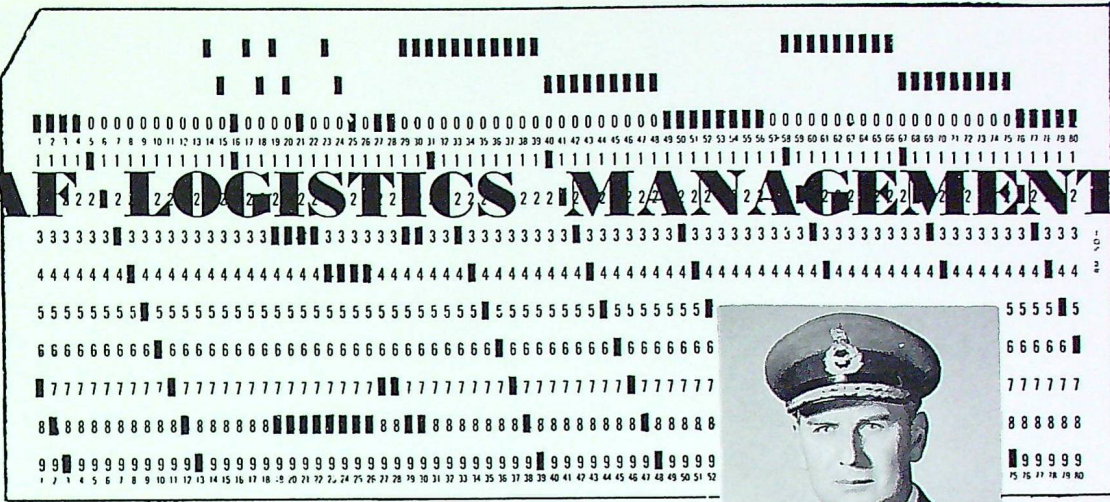


*A special building was erected at AMCHQ to house this electronic computer system, known as the IBM Type 705 Mk. III.*

*Control of the whole 705 data processing system is handled at this console by Mrs. P. Braathen and WO G. Bloor.*



# RCAF LOGISTICS MANAGEMENT



by  
 AIR VICE-MARSHAL C. L. ANNIS, OBE  
 Air Officer Commanding, Air Materiel Command

SOMEONE has predicted that when the history of the 20th century is written the electronic computer will be credited with making the greatest single technical contribution. Certainly electronic data handling equipments are about to revolutionize the management of RCAF materiel logistics.

During the last five years the annual procurement by AFHQ of major equipment for the RCAF, such as aeroplanes, engines, vehicles, radars, etc., has averaged about \$250 millions. The provision of the support equipment inventory and the maintenance and repair of equipment, two of our prime AMC responsibilities, have averaged about another \$240 millions each year.

These are huge sums of money; and their expenditure results in vast quantities and varieties of materiel entering our RCAF inventory. In fact, the RCAF has accumulated an inventory of nearly half a million different catalogue items. The number of units held in each catalogue item may range from a few to thousands. About 30,000 new catalogue items have been entering our inventory each

year. The RCAF has about 225 user units of its own and there are also about 200 repair and overhaul contractors who draw on RCAF-held stocks of spare parts.

To the majority in the RCAF an *Argus* aeroplane may perhaps be just one item, but to us in AMC it also represents about 25,000 individual parts which must be bought individually, each according to its computed requirements. Thereafter quantities, rates of usage, distribution in detail, serviceabilities and repairs must be gathered and recorded.

### ORDERLY CONTROL

You will realize, then, that management of the RCAF's materiel logistics involves orderly control of immense amounts of detail and of making huge numbers of decisions about all the bits and pieces that go to make up the RCAF's total inventory. The rate at which the complexity and numbers of components in military equipment have been growing in recent years has been gradually swamping the capabilities of electrical accounting equipments to handle the task at all efficiently;

and the great jump ahead made possible by the new electronic devices has appeared on the scene only in the nick of time.

In the preceding sentence I have used the terms "electrical accounting equipments" and "electronic devices". Most people seem to be unaware of how significant is the difference between the two types of equipment. As good an analogy for comparison as any I can think of is that the electrical accounting machine is comparable to a movie projector and the electronic computer to a TV set. Both show pictures. But the movie projector changes its picture about 20 times a second while the TV picture is changing at hundreds of thousands of times a second! Unlike the movie projector, the TV picture is not limited by mechanical speeds such as electric motors, gears or film. To all intents and purposes there is no mechanical motion in the TV set. The only motion is that of the electron beam moving and varying at the vast speeds of electronics.

### HUGE STEP FORWARD

Our huge IBM Type 705 Model III electronic computer recently



*The results of the supply depots' daily operations are received in punched card form at the AMCHQ data transceiver by LAW W. M. Harvey.*



*LAW M. E. Sinasac places punched cards into a card reader for conversion to magnetic tape.*

installed at AMC Headquarters represents a jump forward in computing/accounting capacity many thousands of times beyond that of human beings or of electrical accounting equipment. For example, to make a million ordinary multiplications of a sort which would take human beings a minute each to do with pencil and paper would take 16,667 man-hours and cost us at least \$30,000. Our Type 705 computer can run these off at 120,000 per minute; and the million multiplications would cost us less than \$35! However, of equal or even greater importance is the fact that the computer can be programmed to make logical decisions, and having taken them, can issue orders (to other machines or to humans) like any executive!

The large scale computer, possessing as it does a great capacity for processing raw data into a finished product, has naturally a huge appetite for input data. Owning a big computer is like having an enormously hungry giant on one's hands. One of the first and biggest tasks is to make the arrangements for gathering the raw data at source and transmitting it to AMCHQ. Here, again, electronic devices and communications are immensely simplifying,

speeding and reducing the costs of this process.

So far we in AMCHQ have plans for five separate but interrelated major programmes for our computer. These are:

1. Stock Control.
2. Re-provisioning.
3. Cataloguing.
4. Technical Failure Reporting and Control.
5. Fiscal and Budget.

For each of these programmes a raw data gathering system has to be organized and set up; the computer has to be programmed in the desired way and sequence; and distribution and use of the processed output has to be arranged.

#### STOCK CONTROL PHASE A

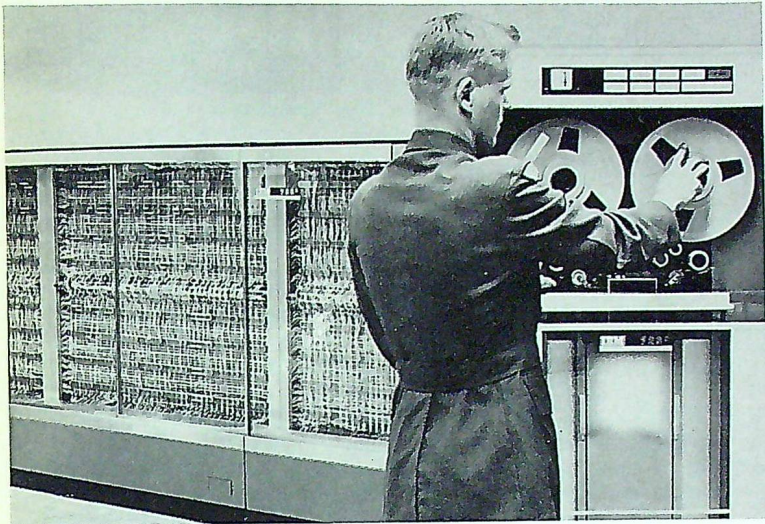
We have as yet only the Stock Control Programme far enough implemented to be near going into operation. The Stock Control Programme, however, is already in limited test operation and is planned to go into Phase A operation early in 1960.

The instituting of Phase A of the Stock Control Programme will be preceded by an instruction to all users of RCAF materiel that after a stated date they are to submit their materiel demands:

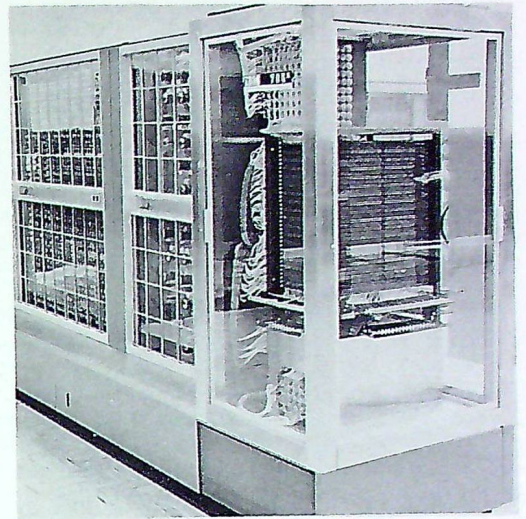
- (a) by message (instead of by mail as at present) and,
- (b) direct to AMCHQ (instead of the nearest Supply or Explosives Depot as at present.)

What will have gone before this simple instruction is this. Each of our AMC Supply Depots (SDs) has for long been updating its total inventory daily using electrical accounting machines. The results of this updating process have been transmitted by mail to AMCHQ in punched card form. But by installing some newly developed equipment at our SDs it is now possible to convert these updatings into codes which can be transmitted by telecommunications network at high speed to AMCHQ. On arrival these are converted automatically on to magnetic tape and fed into the computer. The computer, working at electronic speeds, consolidates these individual SD returns, item by item, into a single consolidated inventory.

We in AMCHQ, thus having a daily updated record not less than 24 hours old (instead of about two weeks as at present) of the total AMC inventory, will be able to handle materiel demands received direct by message from our individual customers.



*LAC K. Coleman feeds magnetic tape reels into the machine. Two types of tape units are used — one handling 62,000 characters per second, the other 15,000.*



*The heart of the computer system is the magnetic core memory, where the computer instructions and data are stored. It has some 40,000 memories, can multiply five digit numbers at the rate of 100,000 per second.*

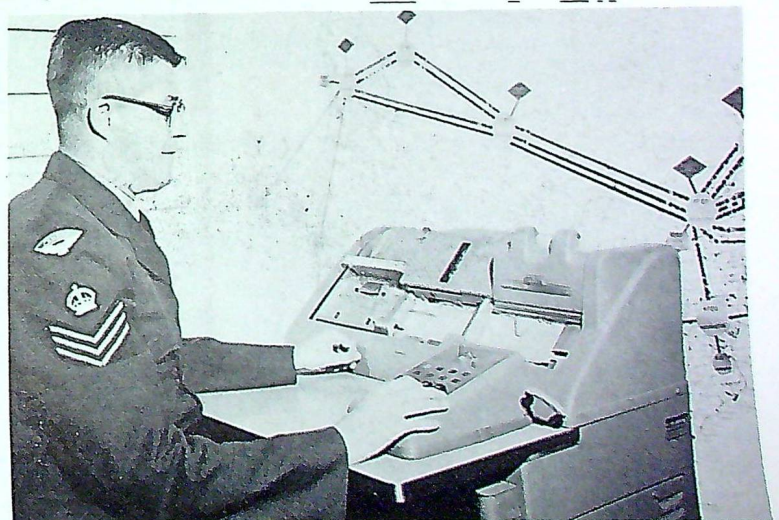
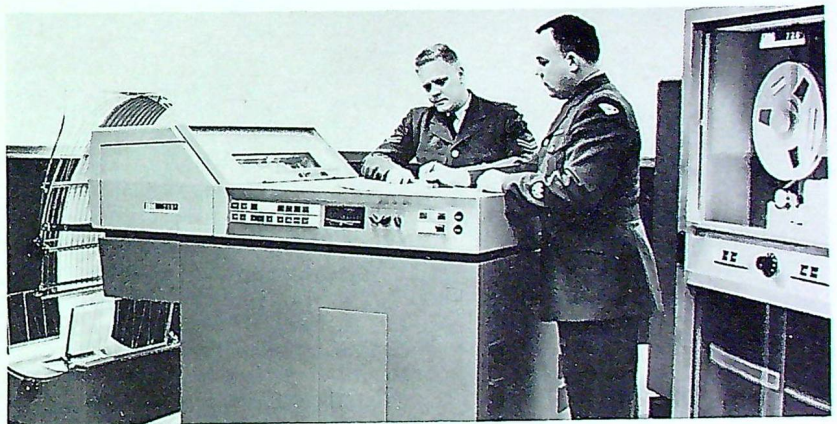
*Cpl. M. L. Newberry and WO S. Molinski read supply reports, printed by this machine from tape at the rate of 1000 characters per second, at the end of the computer production run.*

On receipt of such demands their data will be converted on to magnetic tape and fed into the computer. In this part of the operation the computer's powers of logical decision will be exercised. Our Type 705 will search its memory containing our total materiel inventory, select the most appropriate SD to satisfy the demand and will, itself, draw up and send an issue order to the SD it has selected! We expect, right from the start, to have issue orders in the hands of SDs before dawn of the day following the sending of the demand from the demanding unit.

#### PHASES B AND C

The next stage of the Stock Control modernization programme will be Phase B. In this phase a

*FS W. Fox feeds issue orders into the communications centre transceiver to be despatched to destinations decided on by the machine.*



system is planned for Repair Depots and Technical Services Units and will be arranged for in our repair and overhaul contractors and our materiel suppliers, as necessary, which will enable them to make daily returns of their holdings of RCAF materiel of the same nature as I described for our SDs and XDs in Phase A. Then, when our computer makes its daily updating of the consolidated inventory file, its totals will include also the holdings at these additional sources. And when the computer is looking through this file to select the best source of supply to satisfy a demand, it will more and more select original or repair sources and thus eliminate much of the double handling entailed in routing materiel via a Supply Depot.

If our Stations had to depend solely on their own observations to detect Phase C, they would probably do so by noting that an

increasing (though never large) proportion of their materiel demands were being satisfied in whole or in part by shipments from other Stations; and occasionally they would themselves receive issue orders from AMCHQ to ship quantities of specified materiel to a given destination. It would be obvious that to be able to issue such instructions AMCHQ already had a very complete and up-to-date picture of Station inventories.

To implement Phase C will entail providing RCAF stations with unit accounting machines. These are really small computers; and by their use not only will stations maintain and print for their own use daily updated inventories, but concurrently and automatically will forward this data to us at AMCHQ the same as our AMC Depots from Phase A onwards. Also in Phase C minimum stock levels will be maintained by

automatic issue, without the necessity of unit demanding.

When the time comes for the implementation of programmes following after Stock Control (for example: Technical Failure Reporting, Analysis and Control), the unit accounting machines will have tasks additional to maintaining and forwarding data on materiel inventories; and trades other than supply will by then be drawn into the data processing network.

Inasmuch as the impacts of modernizing the RCAF's logistics management system by automating it will affect not only AMC but all the RCAF, and beyond, our programme should be regarded by everyone in the RCAF as his legitimate business and concern. Certainly that is how we in AMC hope it will be accepted and we are anxious that every element of the RCAF will take and maintain a possessive interest in its form and progress.

## U.N.E.F. ARMY AIRLIFT

Last month the RCAF completed the fourth annual airlift of Canadian Army troops to and from the United Nations Emergency Force in the Middle East.

*North Stars* operated by No. 426 Sqn., Air Transport Command, flew more than 500 soldiers from Canada to Egypt and brought back the same number on rotation.

*Canadian soldiers load baggage at Dorval prior to flying for U.N.E.F. service in Egypt.*

Departing from Dorval, the flights were routed via Gander, Lajes in the Azores, Nouasseur in French Morocco, Whelus in Libya, and terminated at El Arish.

El Arish, an Egyptian airfield located just west of the Gaza strip, is the operational base for No. 115 Air Transport Unit, the RCAF's contribution to U.N.E.F. aerial support.

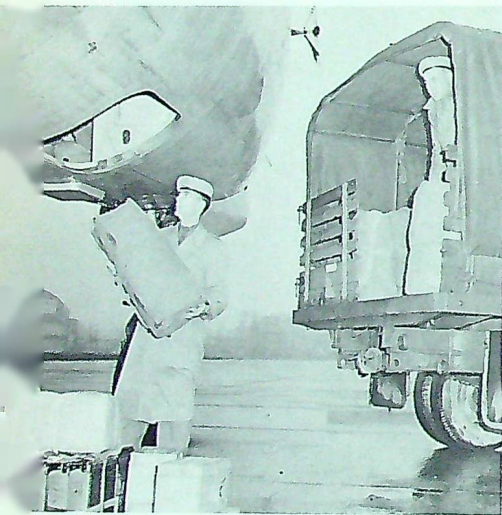
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We hardly find any persons of good sense save those who agree with us.

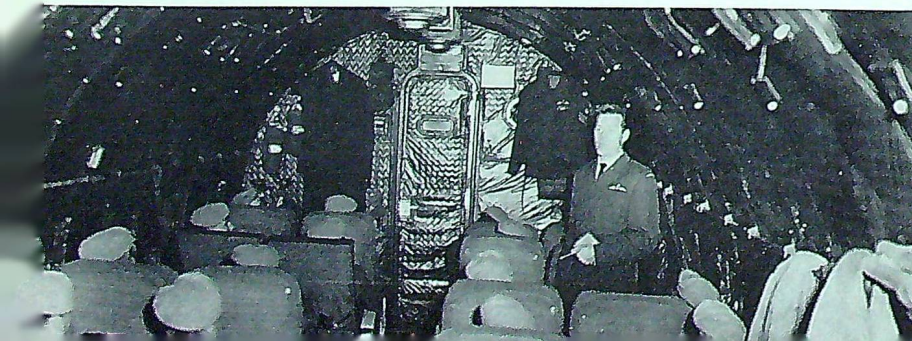
*La Rochefoucauld.*

The more originality you have in yourself, the more you see in others.

*Pascal.*



*Pre-flight briefing is given U.N.E.F. replacements by F/O J. R. Pelletier.*



# Aid for Allies

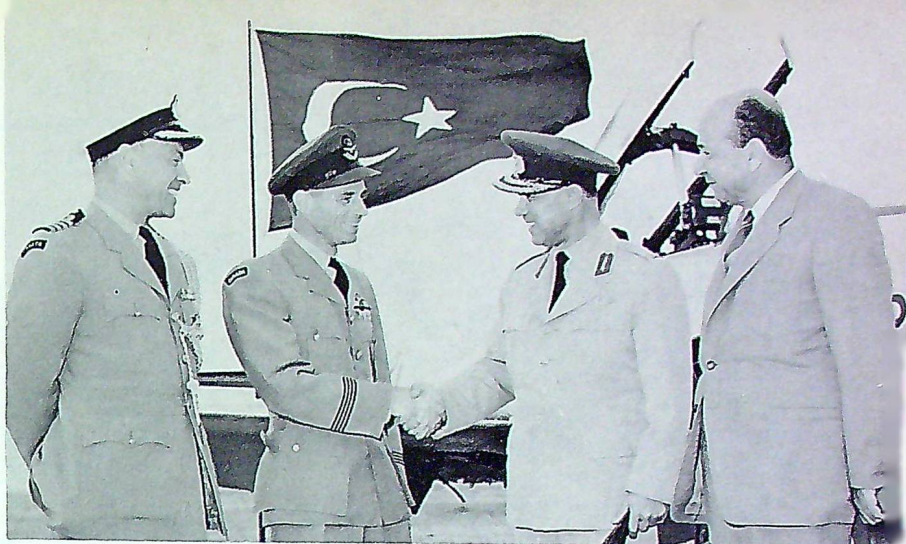
THE Canadian ensign and the Turkish star and crescent flag flew side by side at Eskisehir Air Base recently as RCAF and Turkish Air Force personnel stood stiffly at attention.

The ceremony marked the arrival and turning over of 22 T-33 jet trainers to the Turkish Air Force. The T-33s, a Canadian contribution to Turkey under mutual aid, were flown into the Turkish air base by RCAF pilots who had made the long ferry flight from Trenton, Ont.

An hour after arrival the T-33s, still bearing their RCAF roundels, were drawn up in formation on the tarmac, with the Canadian and Turkish flags flying as a backdrop. As the Canadian pilots lined up in front of the aircraft the civil governor of Eskisehir, His Excellency Ibranam Kutlar, and the commander of the Turkish First Tactical Air Force, General B. Kirectepe, passed down the line, welcoming and thanking them.

Earlier this year 25 *Expeditor* aircraft were given to the French and Portuguese Air Forces by Canada under mutual aid arrangements. Following a trans-Atlantic ferry flight from Canada, 19 of the aircraft were flown by RCAF pilots to Chateaudun, about 80 miles southwest of Paris, and six were delivered to Lisbon, Portugal.

The twin-engine transports put down at RCAF Station Marville after making the Atlantic crossing without incident. The flight began at RCAF Station Trenton and made staging stops at Goose Bay, Frobisher, Sondstrom, Keflavik and Prestwick.

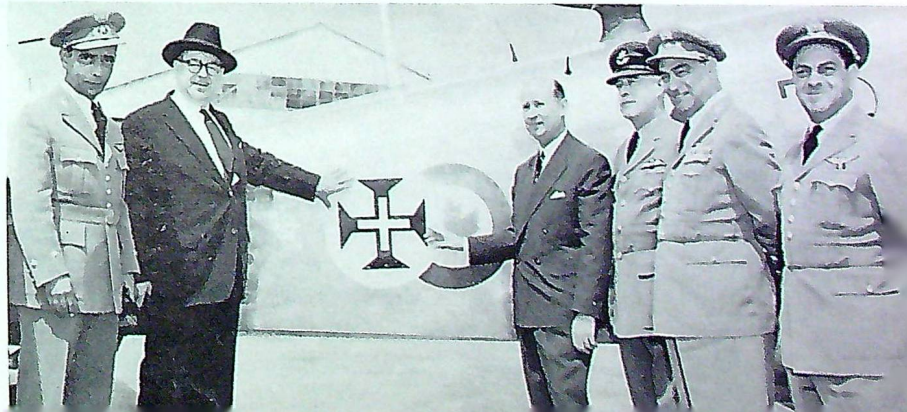


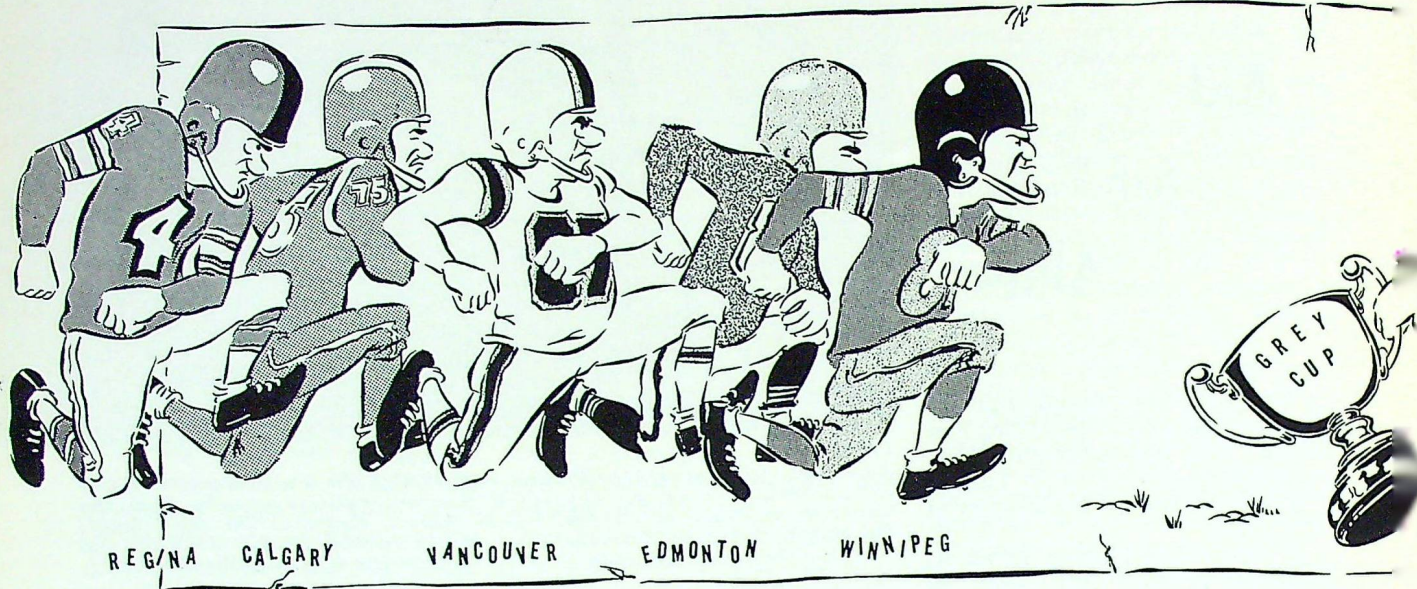
A Canadian mutual aid contribution of 22 RCAF T-33s is turned over to Turkish authorities. (l. to r.) Captain D. Lantier, military attache from the Canadian Embassy at Ankara; F/L H. Elliott, leader of the ferry flight; General B. Kirectepe, Commander of the 1st Turkish Tactical Air Force and His Excellency I. Kutler, Civil Governor of the district of Eskisehir.



Following a 5,000-mile ferry flight from Canada the log books of 19 RCAF *Expeditors* are handed to the Commandant of the French Air Force base at Chateaudun, France. (l. to r.) W/C H. Forbell and Colonel G. Sermet.

The Portuguese insignia which will replace the RCAF roundel is held in a trial run at Lisbon by (l. to r.) the Canadian Ambassador to Portugal, Doctor Phillipe Panneton, and the Portuguese Under Secretary of State for Aeronautics, Colonel K. Arriaga.





## *the way I see it*

BY FLIGHT LIEUTENANT J. R. BOUCHER\*

*or  
who said  
canadian football  
referees can't  
read or write?*

THEY say it all started when the Romans cut off an opponent's head and kicked it down the village streets. Besides being hard on heads, this game annoyed the village street cleaners, who promptly went on strike muttering "In vinci credo omnes equestra"—a free translation being "After the horses, this is too much"!

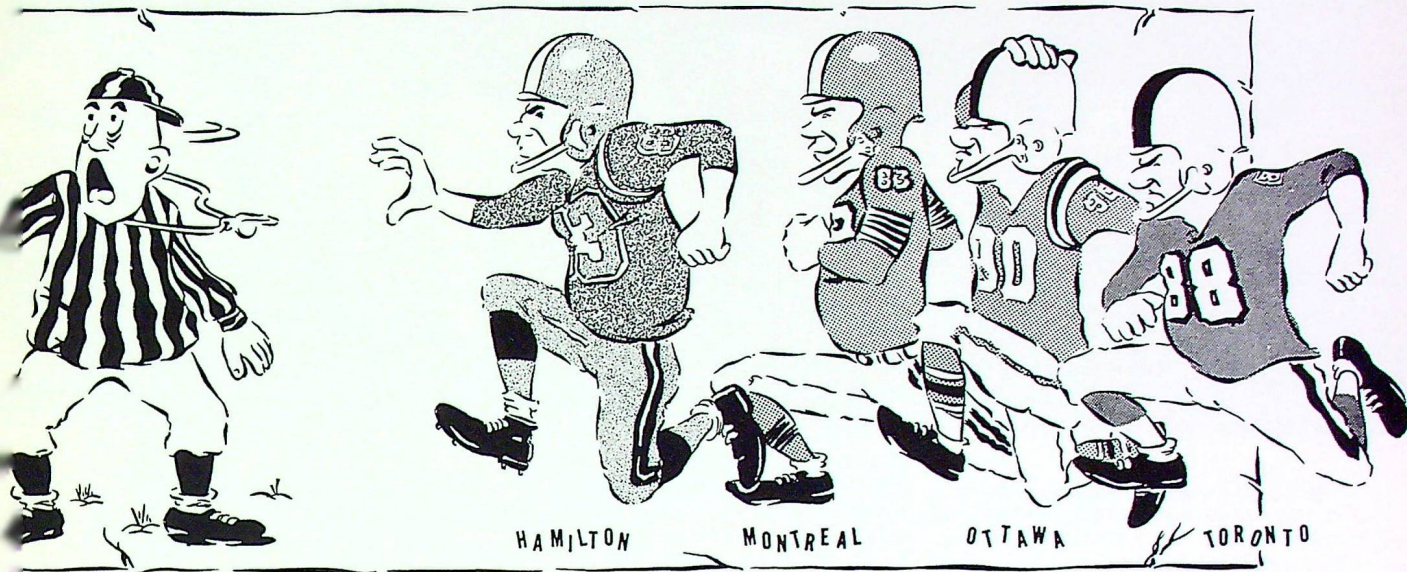
Eventually, an enterprising Briton filled a bladder, origin unspecified, with air and kicked it. Soon the game was being played

across vast distances with whole villages participating. There were no rules and very few refinements, but it was a darn good way to get in shape for the next invasion of the Celts. The wear and tear on gardens and farms was a little rough, however, what with 30,000 Stonehenge Tiger Cats opposing 31,000 Nova Castra Rough Riders over a playing area of 10,000 square miles. The village elders, Jake the Goader and Peahead the Kindly, finally decided on a play-

*\*The author, who has spent 19 years in uniform both as groundcrew airman and aircrew officer, is currently Sports Co-ordinator for the RCAF in the Recreation Branch at AFHQ. He is better known to the public as an official in the Big Four Canadian Football League since 1954.*

*"For years I have taken my annual leave in October to devote full time to my job as chief referee for Ottawa and district," says Ray. "This involves the administration of officials for 18 leagues."*

*Before the Second World War he played the game in high school and college, taking up his officiating side-line in 1945. As a navigator, he officiated at the plotting table of transport aircraft during the war.*



CARTOON BY CPL. P. LAROCHE

ing field or pitch of 50 square miles and a team strength of 72 players.

Many, many years later in the town of Rugby a boy, named Throckmorton Karpuk the third, picked up the bladder and started to run with it. This horrified the elders—but not to the extent that they couldn't see the possibilities inherent in a game that provided kicking and running in about equal parts.

By 1890, at Harvard University, in the U.S.A., the game of rugby was quite popular. It was also being played at McGill University in Montreal. However, rugby was confined to an intra-mural basis. An invitation from a Western school asking Harvard to play a game resulted in these immortal words from the President of Harvard: "I do not propose to allow 30 young men to travel 300 miles in order to agitate a bag of wind".

#### REFINEMENTS ADDED

Football was so rough, in its early days, that it was in danger of passing from the sports scene. There were so many serious injuries and fatalities that no less a personage than President "Teddy" Roosevelt appealed to Walter Camp, an

early expert, to modify the rules. Out of this presidential plea the modern game of football evolved. Refinements have been added, such as the forward pass, but in the main the game is the same one that was played in the early 20th century.

In Canada the game grew up slowly. From straight English ruggar, there emerged a game that combined part American, part British rules. We did not adopt the forward pass in our early years, but when we eventually did (in 1939) we also adopted hordes of American cousins who have added a great deal to the glamour of Canadian professional football.

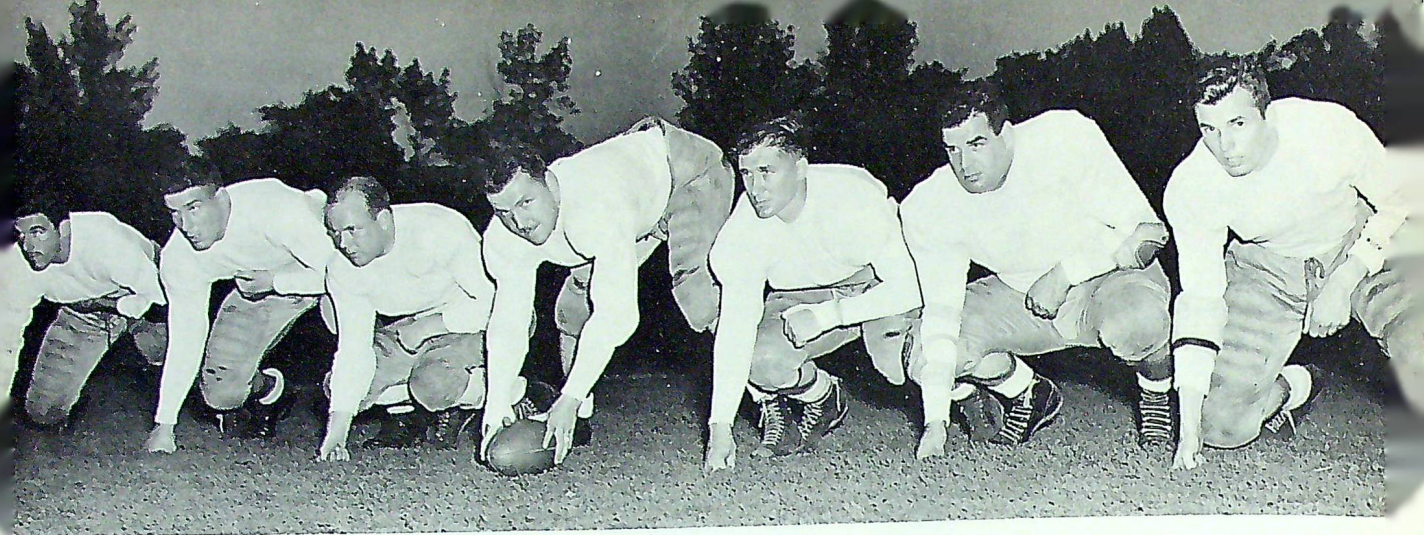
The era of the early imports provided some of the more hilarious items in football history. The game was still supposed to be amateur and the machinations and intrigues used by the "Moguls" to hide the fact that American players were being paid were interesting, to say the least. Forty-year old, bald-headed American men registered at Canadian Universities to study the French language, it was claimed. There was even a case of false registration, which was uncovered by an astute report-

er, who noted that the player going as Roy Berry had neglected to change the name on his luggage, which loudly proclaimed him to be Bohn Hilliard. Large Americans from Minnesota landed in Winnipeg to play football for fun but wound up driving home in Buicks. Something had to give and eventually football in Canada broke away from the AAU of C and professional Canadian football was born.

#### BUSH LEAGUE CALIBRE

This was during the depression years and budgets were low, as were ticket prices. The game was a long way from being major league. Homebrews were given jobs in the city, resulting in fire and police departments being largely populated by wide-shouldered young men. In addition, players received \$15 per game; \$20 if their team won. This was the era that spawned the story, possibly apocryphal, of the nervous manager who refused two chiclets to a player before a Grey Cup game, saying: "What are you doing, eating them? You know there's only one chiclet per player."

The imports didn't fare much better. One former All-American



*The 1943 RCAF Hurricanes was the only service team to win the Grey Cup. The champions' line included (l. to r.): Harry Booth, Tom Glen, Gerry Hooper, Milt Conroy, Jim Cessford, Paul McGary, Ken Sluman.*

drew \$400 for a complete season. There were compensations in other forms, however. It was a barrel of fun to travel with a team and some of the incidents have now become football legend. Like the time the slightly-oiled manager of a team (who was also the president of the league) ran out of the stands, planted a firm kick on the head linesman's backside and retired again to his seat amid general confusion. The next day the newspapers blared "Unknown spectator assaults officials".

The Grey Cup championship was played every year but variations in Eastern and Western rules resulted in much protest and confusion. The game didn't draw too well and was by no means a national spectacle. The Second World War halted pro football temporarily, but provided the padded warriors of the gridiron with opportunities to engage in a serious fight, and they did very well, indeed, with war records second to none.

#### POST-WAR BOOM

1945 saw the rebirth of pro football. Times were good and with higher budgets the game really improved. In 1948 Calgary came to Toronto for the Grey Cup and football became Big Time. The Grey Cup parade, the dinner, the beauty contest—all

resulted from the "whoop de do" kicked up by a wild crowd of Calgarians who wanted to have a good time, along with watching a game.

Possibly the best of all Grey Cup stories is the one concerning Len Back, the manager of the Hamilton Tiger-Cat winning team of 1957. Len was presented with the Grey Cup at Varsity Stadium and after due clubhouse celebration, packed the cup in a large wooden case and headed back to the civic reception at the Royal York Hotel. As is usual, the lobby was packed with celebrants and Len, complete with container, got to an elevator with great difficulty. The elevator was jammed with fans, none of whom could be cited for sobriety. Eventually one of the fans asked Len, "What have you got in the big box, Mac?" Len answered quite innocently, "The Grey Cup". The fan snarled, "Oh, a wise guy, eh", and promptly belted Back soundly on the chops!

Believe it or not, this actually happened: the day *after* the Grey Cup game of 1955, a group of us rang for the elevator in the Royal York. When it stopped, the doors opened to reveal two men dressed in parkas and carrying blankets, pennants and bottles. They were in a holiday mood and as we left the elevator one of them said to

us, "It's a great day for the game". I've often wondered what happened when they reached the empty Varsity Stadium.

#### BIG BUSINESS NOW

The game has never looked back but has grown in stature to its present position. Television has made football fans of a large segment of the population of Canada. Not only has the TV contract added to the treasuries of the various clubs, but it has produced living-room addicts who can quote statistics at the drop of a hat. Where will it end? The view of Commissioner G. Sydney Halter is expressed in the following words: "Horizons are unlimited for professional football".

Through the years the professional game in Canada has improved in administration and performance. The rollicking days have been over for some time and it has become a big business proposition. Television has heightened interest in the game and the Grey Cup has become the nation's annual Mardi Gras.

Some great performers have graced the playing fields of Canada. Edmonton's Jackie Parker, Montreal's Hal Patterson and Sam Etcheverry, Toronto's Dick Shatto, Hamilton's Bernie Faloney and the big "Mover" MacDougall, are a few of the present top players.

But memory goes back to the "old timers": Fritzie Hanson, Jeff Nicklin, "Bunny" Wadsworth, Orville Burke, Joe Krol, and many others.

One of the senior referees in the East, John Munro, often refers to a great fullback of this era, a star in college ranks named "Speedy" Stephenson. Research reveals that he is referring to Air Commodore J. G. Stephenson, the present RCAF Chief of Personnel Services.

But after quite a few years of watching and officiating, I keep coming up with the same name as the all-time greatest. Without referring to the fact that he was my room-mate in England, that he is a fellow officer and a fine person, I have to say that the old "Golden Boy", Squadron Leader Anthony Golab, was the best of them all. I recall him as a 19-year old breaking in with Sarnia, moving along to Ottawa for his golden years, and his tremendous comeback after the Second World War.

#### GOOD OLD OFFICIALS

Just a word about officials. These boys in the striped suits are serious students of the game. They are respected members of their communities who do this job as a sideline and do it, at all times, to the best of their ability. They have long ago learned to accept criticism as part of the task and really don't mind the abuse they take too much. Game movies and television have increased the pressure on officials but strong backing by the Canadian Football League executives has made conditions very much better, latterly.

The toughest "call" I ever saw? The present Commissioners' Eastern representative Hap Shouldice's handling of the controversial fumble by Chuck Hunsinger in the 1954 Grey Cup Game. "Hap" called it right; I know, because he and I screened the film about 25 times one afternoon in my living room.

The greatest character of them all? Ralph "The Terrible" Toohy, the last of the rough and ready



*Tony Golab, who forsook a football for an RCAF career, begins one of his famous rushes in Ottawa's Lansdowne Park, 1941.*

characters. One fall day in Toronto a few years ago the Hamilton quarterback faded back to throw a forward pass. He faded and faded and swerved and danced until he fell over the referee's feet and

ended up in a heap below the official. While 25,000 spectators howled, Ralph Toohy, the captain of the Ti-Cats, rushed onto the field and up to the official, Mr. Hap Shouldice. Mr. Toohy said: "Mr. Referee, what are you going to do about that, sir". Mr. Shouldice replied: "Mr. Toohy, this field is 110 yards long and 65 yards wide. If your quarterback is so stupid that he falls over my size 8's, I'm not going to do anything about it". Mr. Toohy's classic reply was, "Geez, that's a good answer, I'll go and tell the coach".

One final paragraph. The editor of THE ROUNDEL has asked for a prediction. Here it is, and you can bet on it! On the last Saturday afternoon in November at the C.N.E. grounds in Toronto, a team from the East will play a team from the West in front of 35,000 people, many of them carrying king-sized hangovers. And another great football season will have come to a tumultuous climax.

*Coach H. P. "Bud" Grant, of the 1958 Grey Cup Champion Winnipeg Blue Bombers, reminisces at the annual "Blue Bomber night" in the RCAF Stn. Winnipeg officers' mess. Left to right: A/C H. H. C. Rutledge, Winnipeg football club president R. Parliament, G/C J. F. Mitchell, Coach Grant, G/C E. B. Hale.*

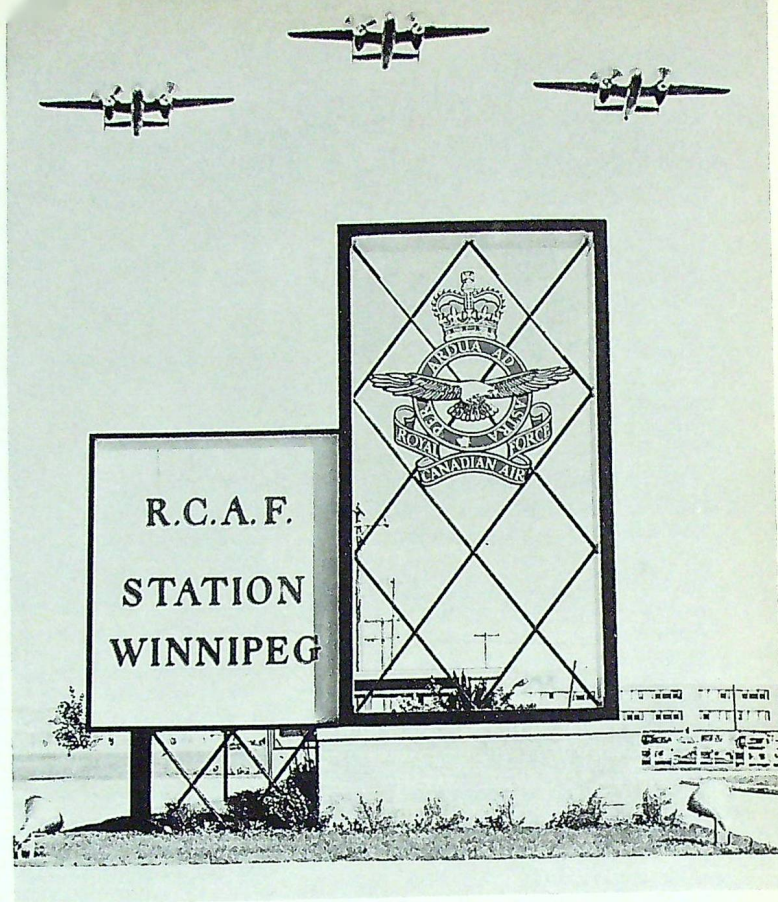


## Stations Of The RCAF:

In the heart of the continent, Canada's fourth largest city produces championship-calibre air observers as well as football teams.

BY

SQUADRON LEADER N. W. EMMOTT, DFC



EARLY in the Second World War, just when the British Commonwealth Air Training Plan was getting into its stride, an official report was made on the standard of Canadian-trained aircrew flying in Europe. The report was complimentary throughout, and one major portion of it began, "In particular, the high quality of the observers . . ."

Almost two decades have passed since then, but the standard of Canadian observers has remained consistently high. Today the torch of aerial navigation, which has lighted so many corners of the world, is kept burning at RCAF Station Winnipeg. There, at No. 2 Air Observers School, all the navigators, radio officers, and air interception observers in the RCAF receive their basic and advanced training; while at Central Navigation School observers who have been in the field for some years

receive post-graduate courses to make them instructors or specialists.

Station Winnipeg, as it exists today, is devoted very largely to observer training. This, however, has not always been the case. RCAF units in Winnipeg have had a long, varied and honourable history, which spans almost the whole era of flying in Canada.

### THE ROARING TWENTIES

Even before the RCAF was formed, a unit of the Air Board existed as a winter overhaul base for water-based aircraft—ancient, slow and stately *F3* and *HS2L* flying boats which flew fire-watching patrols out of sub-stations at Victoria Beach and Norway House on Lake Winnipeg, and from The Pas, beginning in 1922. Later, detachments were formed at Lac du Bonnet, Cormorant Lake, Lad-

der Lake, Lake Winnipegosis, Ile a la Crosse, and other northern bodies of water as operational needs dictated. The unit, called "No. 1 Wing" when the RCAF was formed in 1924, became "Winnipeg Air Station" in 1927.

In Winnipeg, rather crude facilities were available at the foot of Brandon Avenue, where the aircraft landed on the Red River, for the changing of floats and minor repairs. The RCAF station proper, which was devoted mainly to maintenance, was located downtown on Maryland Avenue. Winnipeg also served as an operational centre for the early photographic detachments. In 1925 a building on Notre Dame Avenue was taken over, to replace accommodation for headquarters staff previously located at Fort Osborne Barracks.

Most of the northern stations were closed during the depression, and so was the overhaul base.

However, in 1933 it moved to an old warehouse on Empress Street, then on the outskirts of the city. In 1937 the unit was re-designated No. 2 Equipment Depot, and part of the stock of No. 1 Aircraft Depot in Ottawa was shipped out to Winnipeg, to give the new unit a start

In 1934 No. 112 Army Co-operation Squadron (of what was then termed the Non-Permanent Air Force) had been formed, with a hanger at Stevenson Field and five *Gypsy Moths*. Tacked to the walls of the crew-rooms were posters showing *Camels* exuberantly stunting while black-crossed *Fokkers* spun down in flames, with the admonition, "Don't stunt after a victory; bullet-weakened wings often come off".

#### SECOND WORLD WAR

With the outbreak of war, however, immense changes were made. No. 112 Sqn went overseas almost at once to be blooded in the Battle of Britain and later to become 402 (Fighter) Sqn. It was disbanded in 1945, reformed in 1946 as an auxiliary unit, and is still based in Winnipeg.

When the British Commonwealth Air Training Plan was established, Winnipeg at once became a prairie training focal point. In 1940, No. 2 Training Command was established with headquarters in downtown Winnipeg. At Stevenson field No. 14 Elementary Flying

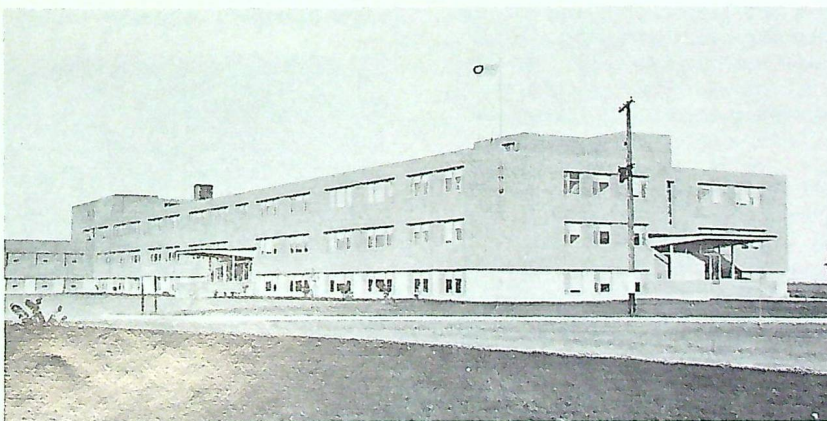
Training School was set up with its *Tiger Moths*; as forerunners of the observer-training units for which Winnipeg was destined to become so widely known. No. 3 Wireless School operated *Fleet Forts* from the east side of the field, while No. 5 Air Observer School flew its *Ansons* from the present civilian terminal area, and later from the south side. Both the EFTS and the AOS were operated by civilian companies.

Wartime logistic units at Winnipeg included No. 7 Equipment Depot, formed to cater for the BCATP units as No. 2 ED did for units of the Home War Establishment, No. 8 Repair Depot, No. 15 Technical Detachment, No. 2 Construction and Maintenance Unit, No. 170 Ferry Squadron, and three units on the University of Manitoba campus. Some other units contained their quota of individualists—one wing commander from No. 7 ED, feeling that detailing a staff car to take him to an official reception at the Royal Alexandra Hotel was an unjustified expenditure of public funds in wartime, rode there on a bicycle which he handed to an astonished doorman. The BCATP finished its job in 1945 and its units were disbanded.

#### POST WAR CHANGES

In March 1947, RCAF Station Winnipeg was formed, consisting of No. 111 Composite Flight, with

*Mawdesley Hall, home of air observer training in the RCAF.*



NOVEMBER 1959



*G/C J. F. Mitchell, DFC, AFC.  
CO Stn. Winnipeg.*



*W/C D. C. Evans, DFC,  
OC Air Observer School.*



*W/C K. R. Greenaway,  
OC Central Navigation School.*

*S/L H. T. Galen,  
OC 111 Composite Unit.*



its mixed bag of communications and rescue aircraft, and 402 (Auxiliary) Sqn. No. 11 Group of Northwest Air Command was located in Winnipeg briefly until it moved to Edmonton in 1951 as Tactical Air Command. No. 14 Training Group took its place in that year to administer the western training stations that were coming back to life as the Korean War put a new emphasis on military activities. No. 14 Group was absorbed in the fall of 1959, when Training Command Headquarters moved from Trenton to Winnipeg.

The actual buildings and plant of Station Winnipeg in 1947 were those inherited from the wartime units, and were grouped on the south side of Stevenson Field. At the outbreak of the Korean War it was decided to remove basic training units from both coasts, and to concentrate air training schools in the prairie provinces. Winnipeg was chosen as the centre for observer training. Navigator training, which in the post-war years had taken place at Summerside, P.E.I., commenced once more at Winnipeg in 1951, to cope with the flood of trainees from a dozen NATO countries.

This called for a great expansion of all buildings and facilities. 1952 saw the construction of three hangars at a cost of a million and a quarter dollars each, instructional buildings, and all the necessary ancillary buildings such as messes, quarters, fire-halls, heating plants and guard houses, which form part of a modern air station. By the time instruction at Summerside had been phased out and all navigators were being trained in Winnipeg, No. 2 Air Observer School was the largest aircrew training in the RCAF.

#### OBSERVER TRAINING

The first Winnipeg-trained observers were long-range navigators, but before long, with the advent of the CF-100, a requirement arose for air interception observers to operate the radar set in the back seat of all-weather fighters. Using USA-trained instructors, a section of the AOS was devoted

to turning out AI-observers in numbers sufficient to man the nine RCAF all-weather fighter squadrons in Canada, plus four others in Europe. When the Air Radio Officers' School at Clinton, Ont. (which had trained the aircrew charged with running the electronic devices carried aboard modern transport or maritime aircraft), was transferred to Winnipeg, all observer training thus was done at one station, and indeed in one building.

After their basic training has been completed and they have done tours of duty in the field, observers qualify themselves for post-graduate training. This also is done at Winnipeg, at Central Navigation School. Originally called Specialist Wing of the Air Navigation School at Summerside, it was elevated to the dignity of a school in its own right when it was moved to Winnipeg.

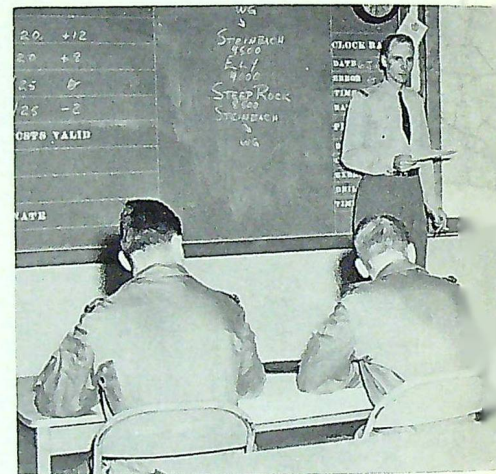
Instruction at Winnipeg is centered in Mawdesley Hall,\* the ground instructional school. There cadets fresh from Primary Training School at Centralia embark upon their observer training. The present system at AOS calls for a three-prong programme of instruction; all students take an initial basic course lasting 22 weeks. During this time they receive instruction in the basics of navigation, maps, meteorology, instruments, airmanship, magnetism and compasses, with heavy emphasis on electronics and radio, together with training in leadership and officer development. At the end of this phase of their training they are selected for advanced training in one of the three observer specialties: Radio, Long-range Navigation, or Air Interception. After a period of leave they return to Mawdesley Hall for the applied portion of their course, which lasts for 25 weeks in the case of radio officers, 23 weeks for long-range navigators, and 18 weeks for those chosen for air interception duties.

Long-range navigators learn how to guide aircraft anywhere in the

\*Named for Group Captain F. J. Mawdesley, AFC, ret.

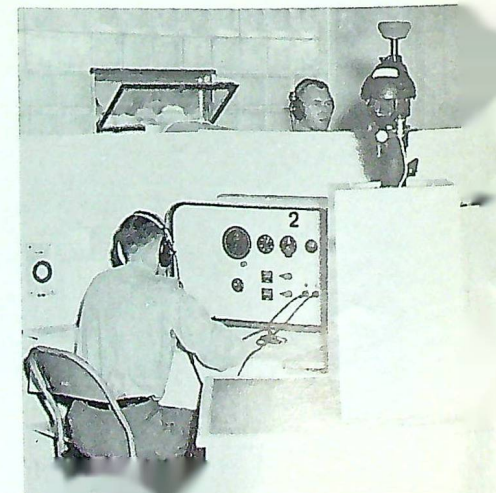


*Future CF100 navigators use air*



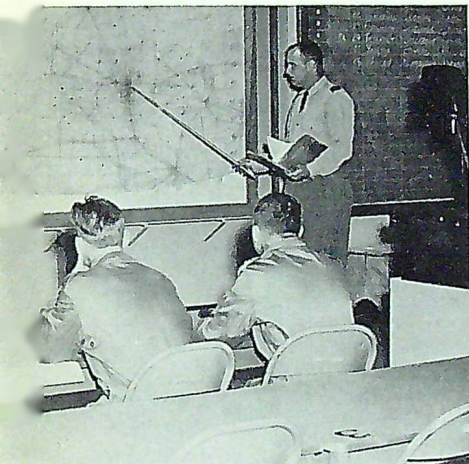
*An AOS crew is briefed for a radar*

*Preparing for airborne exercises, AOS*



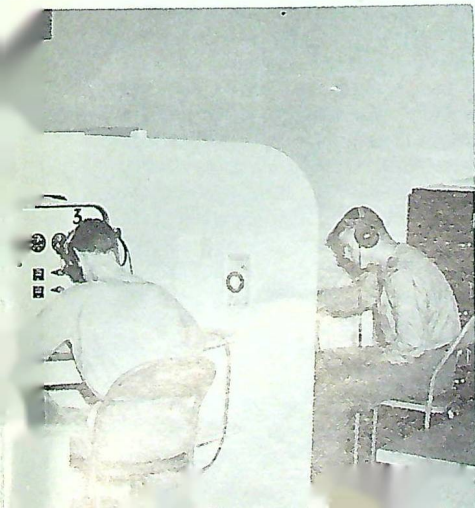


air interception trainer at AOS.



training trip by student radio officers.

students practise in dead-reckoning trainer.



world, using any one of a multiplicity of techniques and aids: from polar navigation techniques over the Arctic to maritime navigation methods suitable for the Indian Ocean, and from the manipulation of German-developed "Consol" over the North Atlantic to American "Loran" over the Pacific. AI observers learn how to direct their all-weather fighters on radar intercepts and to navigate jets using aids like the radio compass. Radio observers learn to operate any one of a dozen different kinds of radio sets, to send and receive morse code at 22 words a minute or faster, and to make sense out of the complicated procedure—almost a language in itself—which has been devised to cram the maximum of information into the minimum number of message letters.

#### IN THE AIR

Training, of course, is by no means confined to the classrooms of Mawdesley Hall. AOS uses three types of aircraft—*Expeditors*, *Dakotas* and *Mitchells*. The *Expeditors* are used for air exercises during the basic portion of the course, while *Dakotas* in two configurations—navigation trainers and radio trainers—are used on the applied portion. *Mitchells* are used exclusively for AI training.

Flying Wing of AOS has a larger strength of pilots (approx. 140) than any other single unit in Canada. While transporting embryo observers may not be the most exciting type of flying, the nature of the task does provide a degree of variety. Flying for the post-graduate courses is more advanced to that performed during the basic and applied courses. Besides training missions, a certain amount of flying involves evaluation of new equipment.

#### SPECIALISTS

Central Navigation School is responsible for all post-graduate training and courses given there include the Staff Officer Navigation Instructor Course (SONI), the Staff Officer Radio Instructor Course (SORI) and Staff Officer

Air Interception Course (SO(AI)I). The object of these courses, which last 17 weeks each, is to qualify officers to act as instructors or take charge of sections at squadrons or stations.

The most advanced course given at CNS is the Specialist Navigation Course, of 40 weeks duration. Graduates are qualified to hold as responsible navigation posts as anybody in the world. Only one course is held each year composed of six students, usually including one USAF officer. The syllabus includes a thorough grounding in higher mathematics, physics and aerodynamics, with an intense study in all navigation subjects, electronics, meteorology and English. The course includes visits to important aviation centres, factories and research centres in Canada, the United States and the United Kingdom. Although failures are very few, this is only because of the rigid selection of the candidates, and the pressure of the course is extreme as long as it lasts. There is a rumour, indeed, that students should not pick up pencils dropped on the floor until the end of the period; one student did so, and missed a year of college algebra as he bent over.

The period during which AOS worked at its highest capacity was June, July and August 1955 when the RCAF was reaching its full establishment and the NATO buildup was going on. Before NATO training stopped,\* observer training had been given to men from Denmark, Norway, Italy, France, Turkey, Belgium, Holland, Germany, Greece, Portugal and the United Kingdom, concurrently with the regular flow of RCAF candidates.

Station Winnipeg, because of its location, is home for a wide variety of RCAF activities. As mentioned previously, its most recently arrived formation is Training Command Headquarters, which

\*Its termination was marked on 19 July 1958 by the most impressive military parade Station Winnipeg had ever seen.



*Para-rescue team from No. 111 KU prepares to leap to the aid of a downed flier in Northern Manitoba.*

and TV, and have twice gained that supreme accolade of today's world: moving-picture treatment. The para-rescue teams, with their mediaeval-looking armour and their willingness to jump to the rescue of the unfortunate, and No. 111 *Otter* aircraft, resplendent in red fluorescent paint, were featured in the picture "Last Chance", filmed at Jasper during the summer of 1959. The KU also operates helicopters, *Dakotas*, *Expeditors*, *Lancasters* and *T-33* jets. With every pilot required, for safety's sake, to restrict his flying activities to not more than two types of aircraft, finding the right pilot for the right aircraft is often by no means an easy task.

#### VARIETY OF ROLES

One duty facing Station Winnipeg, because it sits at the aerial crossroads of Canada, is the provision of servicing for the dozens of transient aircraft which funnel through Stevenson Field on their way east or west. In the summer, this involves merely effort; but in the winter, with the mercury down to 20 or 30 below zero, the job becomes a difficult one indeed. One perennial trouble lies simply in keeping lubricating oil liquid enough to allow it to be fed into oil tanks.

Winnipeg's central location makes it the logical site for No. 3 Communications Unit, which serves as the main central relay point for messages being sent from one end of Canada to the other, and also re-routes messages to the four points of the compass as they are received. No. 3 CU maintains a communications link with aircraft in flight in the general Winnipeg area.

Also based here is No. 51 Ground Observer Corps Detachment, whose task is maintaining liaison with ground observers scattered across the whole north of Canada. Most of No. 51 GobC personnel are on the road, visiting Hudson's Bay posts, trappers, RCMP posts, prospectors and traders, bringing them up to date on what types of aircraft to look for

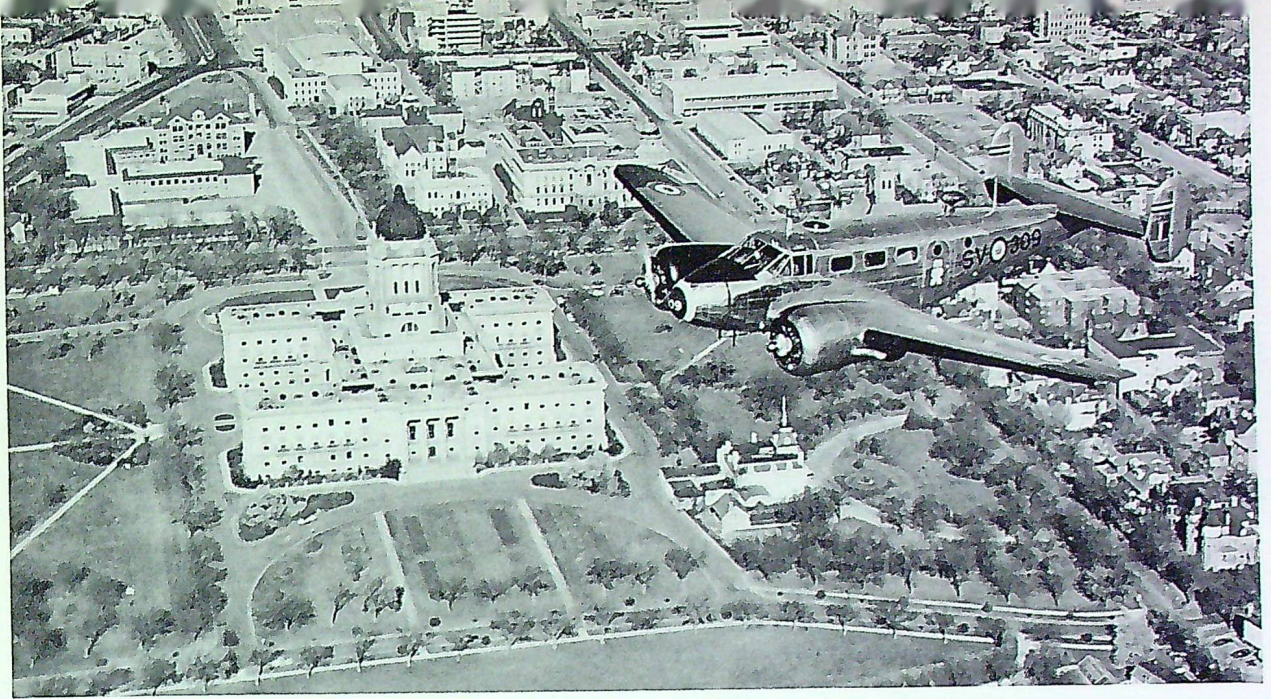
moved there last September from Trenton. TCHQ occupies the building which began its career as the ground instructional school for No. 5 AOS during the war, later accommodated No. 2 TCHQ, then in the post-war period TACHQ and 14 Grp HQ before it became the home of CNS. When CNS moved under the same roof as AOS, TCHQ moved in. This chain of events proves conclusively that there is nothing so permanent as a temporary building.

#### SEARCH AND RESCUE

The most photogenic unit, and the one which has the most varied and interesting duties, is No. 111 Composite Unit—charged with the duties of search and rescue, transport and communications for TCHQ, and provision of a practice flight for staff officers whose normal jobs put them at the controls of walnut four-inkwell bombers. In its search and rescue role, 111 KU looks after the largest area of its kind in the world—2½ million square miles of some of the most desolate country in the world.

For over a decade it has been the focal point for searches and mercy trips which have made headlines all over the world: the *Dakota* trip to Arctic Bay on Baffin Island to bring out Canon John H. Turner in 1947, and "Operation Attache", the search for a United States and a British Naval Attache lost along with a United States coastguard pilot in a light aircraft near The Pas in September 1948, are only two. A steady stream of sick Eskimos and Indians (usually suffering from tuberculosis) from the Military Hospital at Fort Churchill to Deer Lodge Hospital in Winnipeg keeps a *Dakota* busy flying air-evacuation trips from Churchill to Winnipeg, although the primary task of the flight is to provide a service for military personnel at that sub-arctic base.

No. 111 crews, ready at half-an-hour's notice to take off to look for a lost aircraft, fishing boat or traveller, or to transport a sick or injured man or woman, have attracted considerable attention from newspapers, magazines, radio



*A 402 (Auxiliary) Squadron Expeditor over the Manitoba Legislative Buildings.*

and report. Journeying by rail (including speeder), road, water and by air, detachment members see a great deal of Canada that is not too often surveyed by human eyes.

Another group of men who spend a good deal of their time travelling are the members of the Western Special Investigation Detachment. All air force policemen, they go wherever on the prairies duty calls them, usually on confidential missions.

Besides regular units, Station Winnipeg plays host to and provides housekeeping facilities for several auxiliary units. Best known is 402 (Aux.) Sqn, equipped with *Expeditors* and ready for a civil-defence role in case of war. In addition, No. 2402 Aircraft Control and Warning Sqn operates radar and trains its personnel to operate ground radars and control all-weather fighters. No. 3052 Technical Training Unit operates during the summer months to train youthful auxiliary personnel (mostly high-school boys and girls) to be technicians.

#### EXTRA-CURRICULAR ACTIVITIES

Recreation has not been neglected at Station Winnipeg. In its modern recreation centre, complete

*Reserve technical Training Plan trainees from 3052 TTU inspect tailpipe of T33 at RCAF Stn. Winnipeg.*



with a bowling alley, a swimming pool, a rifle range and a well-equipped gym, facilities are available for almost any kind of physical exercise. Curling, which is almost a disease at Winnipeg, is played by all ages of both sexes in a steelox building erected and equipped at non-public funds expense during the winter of 1956-7. A drama group, which has led an extremely successful life over the past few years, carries on its activities from the former cinema on the south side. A well-equipped hobby shop, a car club, an archery club, model aircraft club, stamp clubs, rifle clubs and skin-diving clubs are just a few of the many extra-curricular activities participated in by the station's growing population.

After nearly 40 years of life, Station Winnipeg is more vital and more active than ever. Actually a small city in its own right, it is home for more than 3000 service and civilian personnel — whose monthly payroll of close to one million dollars is a significant factor in the economy of the area as a whole.

# THE PAKISTAN AIR FORCE

(Third in a Series on  
Air Forces of the Commonwealth)



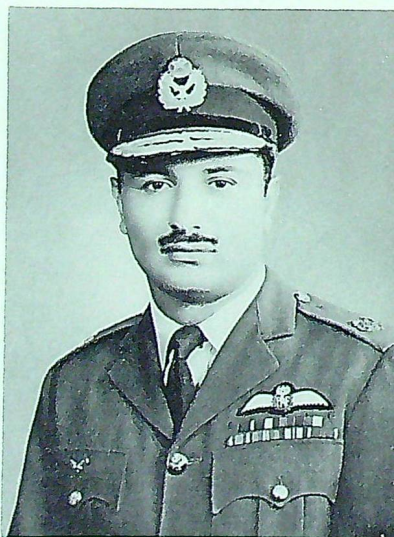
HIGH above the historic Khyber Pass, where for many years rebellious tribesmen kept the area in turmoil, a section of *Sabre* aircraft flies in flawless formation. These 20th century peacemakers are but part of the modern equipment employed by the Pakistan Air Force—the youngest air force in the Commonwealth of Nations.

The PAF has the unusual honour of having its birthday on the same day as its country's founding. On 15th August, 1947, the sub-continent of India was divided between Pakistan and India. On that same day the Pakistan Air Force came into existence.

It began with a strength of 200 officers and 2,000 airmen, a small number of aircraft including *Harvards*, *Dakotas*, and *Tempests* and virtually no training establishments or repair facilities. Clearly, the task ahead was one of building up the force in men and equipment. How successful this building programme was can be seen by the results. In 10 years the PAF had grown nearly 10 times in size. Airfields were extended and modernized for jet operation and *Sabre* aircraft were acquired from the United States under a military aid agreement. Transport and supply-dropping units were organized and the new air force was backed by training squadrons, maintenance units and technical schools.

This youthful service is composed of young men united in the task of establishing new traditions. Its spirit is clearly exemplified by the Commander in Chief, Air Marshal M. Asghar Khan, who at 37 is the youngest chief of a Commonwealth Air Force. Youthfulness characterizes many senior posts in the PAF. This situation exists largely because the majority of senior officers in the Indian Air Force were Hindus and Sikhs. When

*Air Marshal M. Asghar Khan H.Q.A.,  
Commander-in-Chief,  
Pakistan Air Force.*



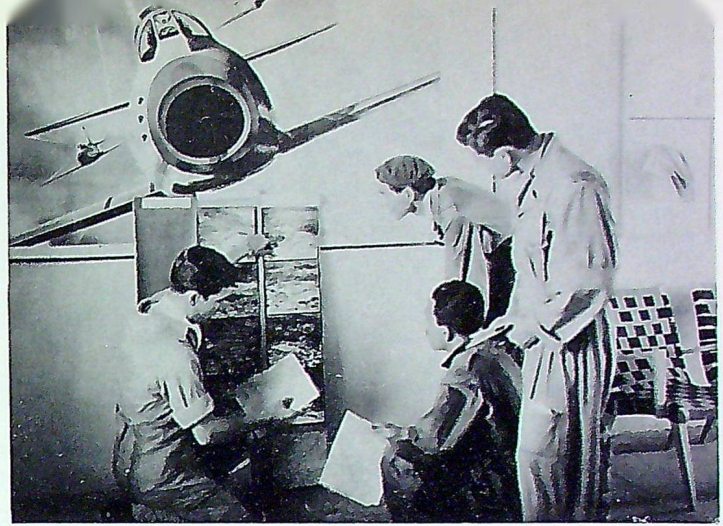
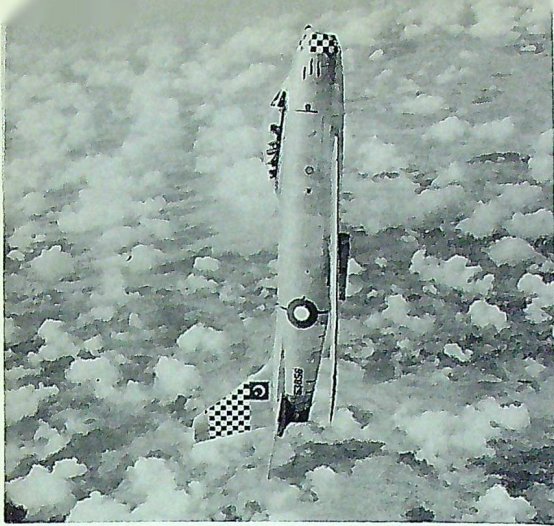
partition came about in 1947 these people remained with the IAF so the newly formed PAF had to fill senior posts from its own ranks.

The major air bases of the PAF are in West Pakistan, although a number of airfields do exist in the eastern portion of the country which is about 1,000 miles away and separated from West Pakistan by the land mass of India. There are, however, PAF recruiting centres in East Pakistan along with a glider unit, some care and maintenance units with communication aircraft and about 400 personnel.

Headquarters for the PAF is at Mauripur near the Pakistan capital of Karachi. Mauripur is also the base for No. 2 Fighter Conversion Squadron (*T-33s*) and two *Sabre* squadrons. Other important establishments of the PAF are at Dright Road and Korangi Creek. The former location is the site of No. 2 Group Headquarters which is responsible to Air Force Headquarters for all maintenance and supply. The most important units in No. 2 Group are also based at Dright Road, No. 102 Maintenance Unit which carries out all major servicing for the PAF and No. 101 MU, equally important as the PAF's biggest supply depot.

#### TRAINING IN THE PAF

At Korangi Creek the PAF School of Aeronautics has been established. This school gives ap-



*The Sabre is the standard PAF day fighter.      Officer trainees of the PAF being briefed at the Fighter Leader School.*

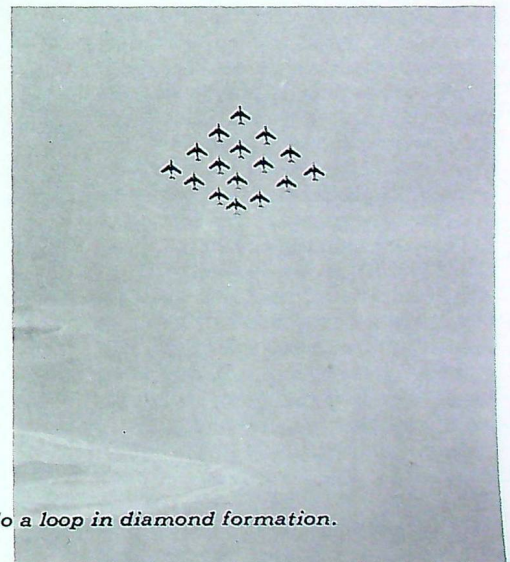
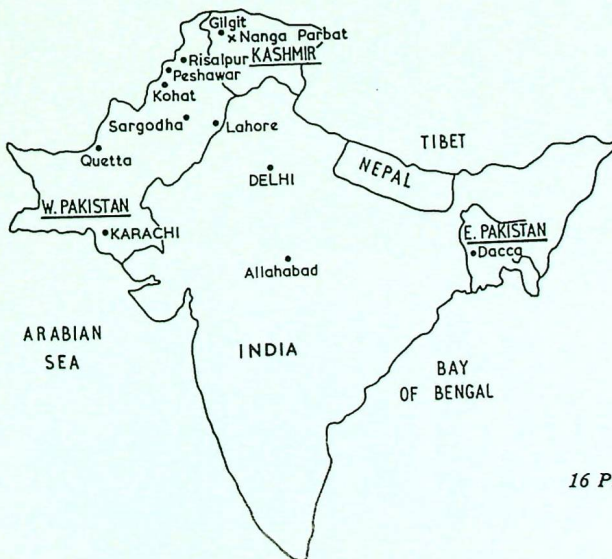
prentices a three-year course, trains maintenance officers in basic engineering, gives pilots a two-week course on ancillary equipment and provides airmen in certain trades with a one-year's specialized course. In addition, training is given to technicians of the Pakistan International Airlines. At Kohat, former RAF Station, is situated the PAF Recruits' Training School which, as the name implies, converts civilians into PAF airmen. Also at Kohat there is a non-technical training school for airmen and an administrative course for

officers. In all, Kohat houses approximately 2,500 PAF personnel.

Until 1958, qualified PAF officers were sent for staff training either to the RAF Staff College, or to the USAF Command and Staff College. In January, 1959, a PAF Staff College was inaugurated at Dright Road (Karachi) and the first course, consisting of 15 students, is now in progress. It is hoped that future courses will include officers from the other two services, and also from the air forces of Commonwealth countries, Central Treaty Organization

and SEATO. The PAF intends to continue sending a small number of officers to the U.K. and U.S.A. for staff courses, mainly for purposes of liaison in this field.

English is the official language of the PAF and all training, both of officers and airmen, is done in English. The advantages of this are obvious; no time and effort is wasted in translating manuals, etc., from English and personnel can be sent abroad for training or other duties without special language training.



*16 PAF Sabres do a loop in diamond formation.*

The PAF has established Air Training Corps Squadrons (similar to Canada's Royal Canadian Air Cadet squadrons) in the principal towns where school boys are enrolled as Air Scouts and taught gliding. The age limits for the Air Scouts are from 16 to 22 years old. The PAF has also established two "public" schools on the British pattern, one at Sargodha and one near Murree Hills. Here boys are enrolled at about 11 or 12 years of age and undertake a six-year course leading up to the Senior Cambridge examination. Studies at these schools have a marked "air" bias and the schools are proving to be most productive nurseries for the officer cadre of the PAF. The schools will soon be upgraded to Cadet Colleges.

Selection of aircrew follows much the same pattern as in most other countries. Selected candidates join as cadets at the PAF college, Risalpur, which undertakes all officer training. Technical and secretarial cadets after a six months' basic service training course at the College, proceed to other institutions for specialist training. Pilot trainees stay at the College for two years during which time, in addition to the normal ground training, they fly about 200 hours on the *Harvard*. *Tiger Moths* were used as elementary trainers, with the *Harvard* as the advanced trainer, until 1950, then the *Harvard* was made an all-through basic trainer and this system continues today. It is hoped that the *Harvard* will in due course be replaced by a basic jet trainer.

On completion of the two-year course at the PAF College, the cadets are commissioned as Pilot Officers and awarded wings. They then undergo a six-month conversion course on fighters or transport aircraft. Eventually jet conversion will be given to all pilots even those who are going to fly transport aircraft. The transport conversion comprises 150 hours flying on the *Bristol Freighter* at the Transport Conversion Squadron, after which pilots are posted to transport squadrons. Conversion

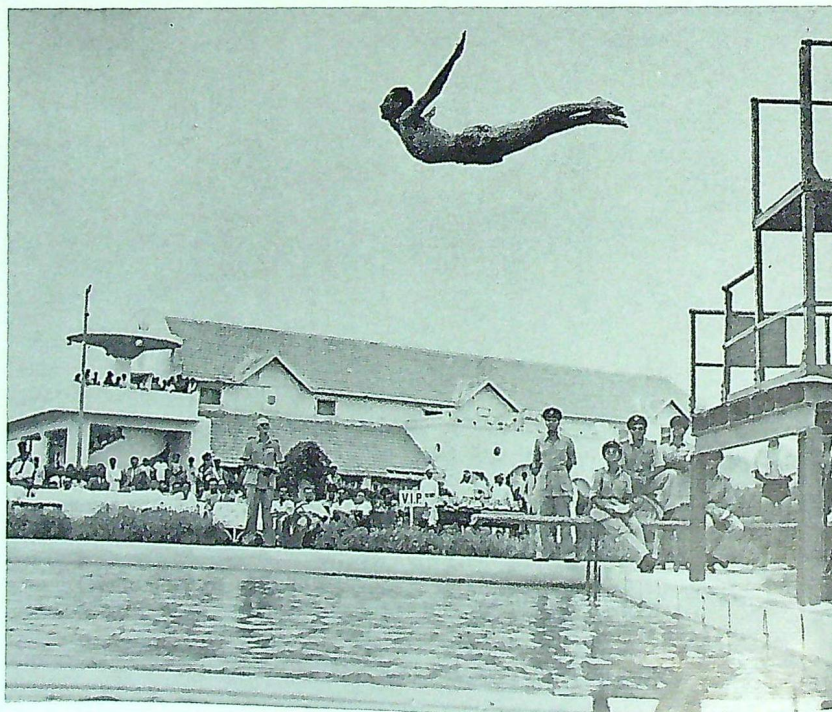


*Studies at the PAF public schools have a marked "air" bias.*

of PAF pilots onto jet aircraft started originally in the United States but is now done entirely in Pakistan by No. 2 Fighter Conversion Squadron at Mauripur. This squadron employs the Ameri-

can system of chasing the student (in an aircraft flown by an instructor) on his first few solo rides. Mobile training units are used to prepare the pilots to fly new types of aircraft; in addition, simulators

*Sports play an important role in the PAF.*



are used to check pilots on their knowledge of emergency procedures.

Greater emphasis has been placed on instrument flying in the last few years and regulations now prohibit a pilot going on a flight involving a landing away from his home base, unless he has a current instrument rating. All pilot trainees are required to obtain "white" instrument ratings on the *Harvard* before graduation from the PAF

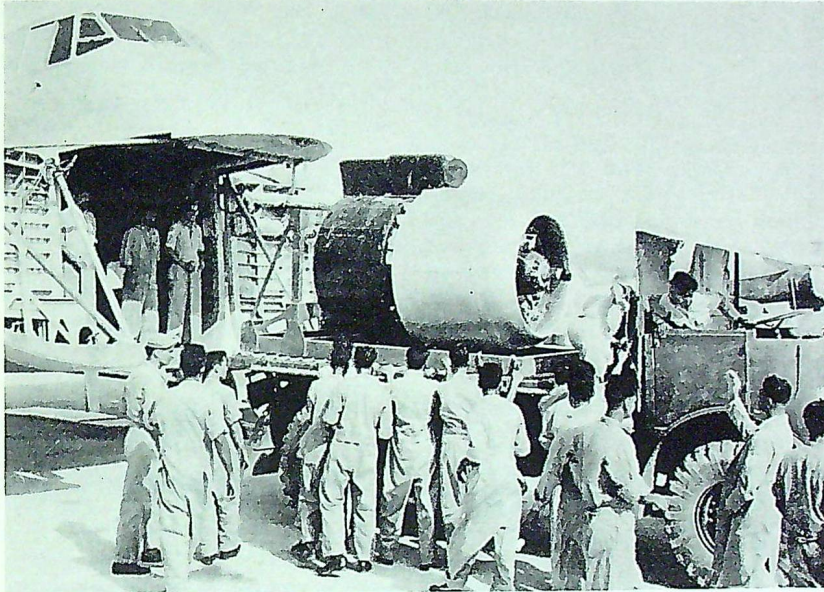
well and there is still one squadron flying these aircraft in the northern region of West Pakistan. The first formation aerobatic team of the PAF "Red Dragons" was formed with four *Furys* in 1950. Although the *Fury* continued to be the mainstay of the PAF until 1955 a limited number of *Supermarine Attackers* was acquired in 1951 to form the first jet squadron of the PAF. The *Attacker* was phased out of service in 1956 with

the annual armament competition in which all fighter squadrons take part. The school operates short courses for senior officers to keep them current on the problems involved in jet fighter/bomber operations.

#### TRANSPORT OPERATIONS

Station Chaklala, located near the planned capital for Pakistan, is the headquarters for the PAF's two transport squadrons and the Transport Conversion Squadron. The transport squadrons, No. 6 and No. 9, are two of the oldest in the PAF since, along with No. 5 Squadron, they came over from the IAF in 1947 as the nucleus of the PAF. Main transport aircraft is the *Bristol Freighter* which has replaced the original *Dakota*. The *Freighter*, although a good workhorse, operates at a disadvantage because of its slow speed which is particularly noticeable on the long trips between the east and west wings of the country. The PAF is, therefore, exploring the possibility of acquiring a transport aircraft with higher speed and longer range. The *Freighters* have also been employed on search and rescue work and maritime reconnaissance, but these duties have now been taken over by the amphibious *Grumman Albatross* which is better suited for the purpose. Rescue in a large and under-developed country like Pakistan, with its inaccessible mountains, deserts, swamps, jungles and long coast lines, is always difficult, and the arrival of *Albatross* aircraft and *H-19* helicopters has been greatly appreciated by the aircrew. For VIP transportation work the PAF operates *Viking* and *Viscount* aircraft.

The role of the PAF transport squadrons includes transport duties in West Pakistan, or between the West and East wings of the country, supply dropping to army units in Kashmir, flood relief in East Pakistan, and incidental duties. In the flood relief role the transport squadrons have flown many hundreds of hours and, on several occasions, their *Bristol Freighters* have provided



The "workhorse" of the PAF is the Bristol Freighter.

College, and are awarded jet or transport ratings at the conversion stage. All squadron pilots are required to renew their ratings every year. Weather in Pakistan is generally so good that little actual weather flying can be practised. But, when the weather is bad, it is really bad with dust storms presenting serious hazards.

#### THE FIGHTER FORCE

At its birth, the standard fighter aircraft of the PAF was the *Hawker Tempest* but very soon the *Tempest* was replaced by its newer, faster and more versatile version, the *Hawker Sea Fury*. The *Fury* has served the PAF

the arrival of the *Sabre* under the United States military aid programme. The *Sabre* is now a common sight at PAF airfields and their contrails link the most distant parts of the country.

Recently a Fighter Leaders' School has been established where selected pilots are trained as flight and squadron commanders. The course consists of intensive weapons and tactics training on the *Sabre* aircraft. The staff at the school have attended weapons and tactics courses with the RAF and USAF. Between courses, the staff visit fighter squadrons to check and standardize procedures and tactics. They also act as judges at

the only food supply line to inundated villages. One of the most regular tasks, and certainly the most hazardous, for the transport squadrons is the dropping of food and other supplies in the extremely mountainous northern areas. To do this job the *Freighters* fly through narrow winding valleys, skirting some of the highest mountains in the world. Apart from the ever-present possibility of flying into a box canyon where there is nothing but a dead end and with no room to manoeuvre, there is always the problems of the valleys suddenly filling with clouds without any warning. Since parachute drops are done from 500 feet above ground and free supply drops from about 300 feet, severe bumpiness and strong down drafts in the ravines present a particularly grave problem. These operations have also, on occasion, been done at night. In spite of these hazards, however, during more

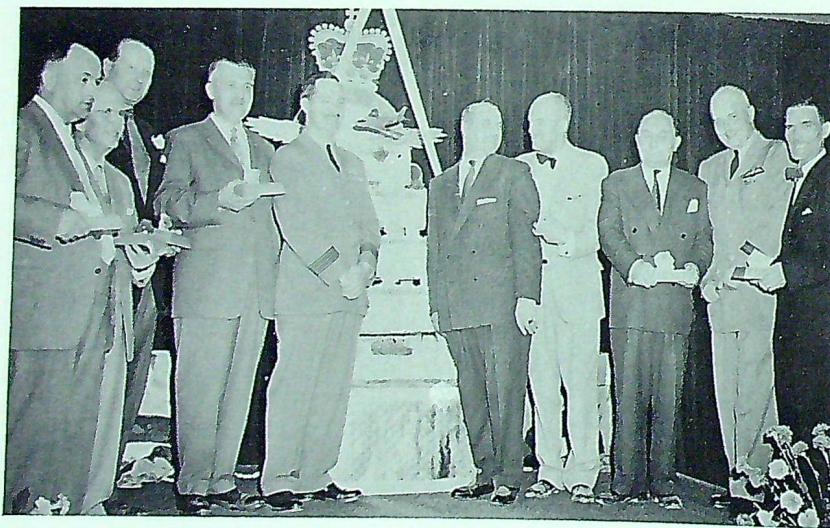
than six years of supply dropping operations in the mountains, only one *Freighter* has been lost.

The transport squadrons get their pilots either from the PAF college at Risalpur or from the fighter squadrons via the Transport Conversion Squadron. Every crew member of a transport squadron must have a category and they are expected to raise their categories as they acquire additional experience. The Transport Conversion Squadron bring students up to a "D" category unless they do not have sufficient flying experience to qualify. In such cases these personnel must achieve a "D" category in six months of squadron service and a "C" category within a year. The squadrons have their own training flights which provide training for aircrews in the lower categories. After pilots have reached "C" standard they are responsible for improving their own category. To ensure that

this is done the PAF has a Transport Crews Examining Unit which visits Lahore twice a year and re-categorizes half a squadron on each visit.

In its watch over the remote frontiers of Central Asia, the PAF is maintaining the fine traditions built up there by the RAF and is establishing a new, and highly individualistic, one of its own. The struggle to keep pace with the fast moving aeronautical world continues with renewed vigour. Now the PAF is being equipped with its first jet light bomber, the B57 (U.S. equivalent of the *Canberra*) and is constantly striving to modernize in all its aspects. Pakistan as a member of the Central Treaty Organization and SEATO is playing its role in the defence of the free world, and the PAF is determined to make its fullest contribution towards that goal.

## Pioneer Bush Pilots Honoured at Val d'Or



*Aerial pioneers and hosts (l. to r.): Messrs. A. Fecteau, president Fecteau Air Transport Ltd.; I. Vachon, Curtiss Reid Flying School; T. Sims, Canadian Ltd. sales and service manager; K. Edmison, TCA regional operations manager, Halifax; W/C E. J. Higgin, CO RCAF Stn. Senneterre; Hon. H. Courtemanche, Secretary of State for Canada; P. Twist, TCA mainline operations manager, Winnipeg; B. Woollett, assistant to CPA executive vice-president, Montreal; S/L H. J. Tennant, C Ops O RCAF Stn. Senneterre; F. Young, TCA regional operations manager, Toronto.*

Seven men whose aerial feats helped open northern Quebec's Val d'Or region were honoured guests at RCAF Station Senneterre's anniversary year celebrations.

Val d'Or Air Display Day proved that even a comparatively remote and small RCAF unit can stage an impressive "open house", if all concerned determine to make it successful. Over 13,000 persons visited the booths and static displays and witnessed the Golden Hawks' air show which climaxed the afternoon's programme. Some of the visitors travelled many miles from surrounding communities and were not disappointed in the show, arranged jointly by RCAF personnel from Pinetree Line Senneterre's radar station and civilian residents of Val d'Or.

The seven ex-bush pilots were each presented with a mounted piece of high-grade ore, donated by local mines, at a reception following the day's events.



The Nova Scotia flag, which was flown in front of two Argus aircraft on display in Australia and New Zealand, is folded for storage aboard the aircraft. Left to right G/C J. H. Roberts, AFC, commander of the two plane detachment, and A/C W. I. Clements, OBE, AOC Maritime Air Command.



Aussies meet the Argus near Sydney. Cpl. D. K. Herman points out the aircraft's interesting features to his new friends.

## Cheques for Achievement

The largest cash amount ever presented to a member of Canada's armed forces for an invention has been given to W/C J. G. Wright, DFC.

Wing Commander Wright invented the R Theta Computer, a simplified navigational device for high speed aircraft. He has merited cash awards totalling approximately \$10,000. One award resulted from the fact that W/C Wright's invention had been adopted by the RCAF for use in its all-weather interceptor aircraft. The other award represents his share of royalties received by the Crown from its commercial exploitation.

For his invention of the R Theta Computer W/C Wright won the Trans-Canada McKee Trophy for 1954. The computer may be used by both pilots and navigators but was designed primarily for navigators to be used in the event

The pride of Maritime Air Command—the *Argus*—has added many more admirers to its already long list as a result of a successful month-long goodwill tour of Australia and New Zealand.

The tour started in September when two of the RCAF sub-killer aircraft left their Greenwood base to cross the continent and span the Pacific. Made at the invitation of the Australian and New Zealand governments, the tour coincided with Queensland's centennial celebrations and Australia's Air Force Week. The aircraft gave a flying display at Brisbane and took part in an anti-submarine exercise off Auckland, N.Z., five days later.

The westbound half of the trip was staged through Alameda Naval Air Station (near San Francisco), Honolulu, Nandi (in the Fiji

of radio transmission jamming during aerial interceptions. Independent of radio transmission for its operation, it is entirely immune from "jamming" or radio inter-

Islands) and then down the east coast of Australia. The aircraft were on view at Townsville and Brisbane in Queensland, Sidney and Canberra. From Amberley, near Brisbane, they flew to Auckland and Wellington, N.Z.

On the homeward journey, a new Canadian distance record was established when one of the *Argus* aircraft flew 4570 miles non-stop from Barbers' Point, Hawaii, to RCAF Station, North Bay, in 21 hours, nine minutes.

Commander of the operation was G/C J. H. Roberts, AFC. The two aircraft were captained by W/C C. Torontow, AFC, and F/L E. N. Starink, DFC. The crews of both aircraft were made up of personnel from No. 405 (Maritime Patrol) Squadron, the RCAF's first *Argus*-equipped unit.

ference. The computer may also be used for homing—providing the pilot with the direction and distance to any place he sets into the device.

## ARGUS DOWN UNDER

# The Suggestion Box

Air Marshal Hugh Campbell, Chief of the Air Staff, has written letters of thanks to these individuals for their original suggestions which have been officially adopted by the RCAF. Each has received an award from the Suggestion Award Committee, Department of National Defence.



F/L J. H. Pocklington of Air Weapons Unit revised a method of setting up the MG-2 Fire Control System in CF100 MK IV B aircraft.

Sgt. R. A. Harley of Station Camp Borden suggested a modification to the release knife 21F/148 to include the principle of the Dzus key.



F/L J. M. Rogers of Station Bagotville suggested an emergency chlorinator to be used during shut-down or repair of the permanent unit.

Sgt. R. F. Holmes of CEPE Detachment Namao suggested a modification to the CSU drive shaft shroud bellows assembly on Argus aircraft.



FS C. J. Larkin of 14 Training Group revised the history tags used with air-crew watches.

Sgt. H. A. Jenkins of AMCHQ suggested a modification to the test procedure of time release units for the CF100 aircraft.



Sgt. S. W. Cattroll of Station Cold Lake suggested a modification to the vacuum pump used when testing equipment on the oxygen regulator test stand.

Sgt. A. R. Kingston of AFHQ suggested a method to supply the handling and verification of form RCAF A30.





Sgt. J. P. McMinn of 11 TSU suggested the relocation of roll and pitch control in the CF100 Mk V aircraft.



Cpl. E. R. Hicks of Station Downsview suggested a safety cage for inflation of split rim wheels.



Sgt. R. Sharkey of Station Summerside devised an improved locking pin for the main landing gear on Neptune aircraft.



Cpl. S. J. Hoy of 1 Communications Unit suggested a modification to the Dual Tone Keyer, Type 153, Model 1.



Sgt. E. Shore of 1 Air Division suggested a modification to the target towing apparatus installed in T33 aircraft.



Cpl. P. D. Scarrow of Station Saskatoon suggested modification to the C45 nose fuel tank cap assembly, now in service with Expeditor aircraft.



Sgt. M. L. Young of 2 Fighter Wing suggested a shift schedule for use in RCAF establishments.



LAC G. W. Scrutton of 407 Maritime Patrol suggested a modification to the barrel switch cover on the Retro Ejector, Aero 1-B.



Cpl. T. M. Bruce of Station Trenton suggested a modification to the K-12 unit of the very high frequency radio receiver in Chipmunk aircraft.



Miss A. V. Manion of AMCHQ suggested an improved method of cataloguing and editing CAP 10 amendments.

# What's The Score?

How is your knowledge of military history? The following quotations are signals, messages, statements or reports associated with famous military leaders or events. In some cases the association is traditional, or apocryphal, rather than historical, but the quotations are so well known that you should have no difficulty in relating them to the author or the event. Answers on page 32.

1. "Push on, York Volunteers!" was
  - (a) King Harold's order to his troops on the march from northern England to meet the Norman invasion, 1066.
  - (b) General Washington's encouragement to his forces at the crossing of the Delaware, December 1776.
  - (c) The chantey of the Canadian voyageurs serving with the Gordon Relief Expedition on the Nile, 1884.
  - (d) General Brock's rallying cry at the Battle of Queenston Heights, 1813.
2. "C'est magnifique, mais ce n'est pas la guerre" was the comment of
  - (a) General Gamelin on the evacuation from Dunkirk, 1940.
  - (b) French observers about the charge of the Light Brigade at Balaclava, 1854.
  - (c) Napoleon Bonaparte on the use of observation balloons in battle, 1794.
  - (d) French officers on first seeing Scottish soldiers in kilts, 1745.
3. "Damn the torpedoes! Go ahead!" was the order given by
  - (a) The commander of the "Bismarck" under attack by the Fleet Air Arm, May 1941.
  - (b) Admiral Raeder to the "Scharnhorst" while running the Strait of Dover, February 1942.
  - (c) Admiral Farragut at the Battle of Mobile Bay, August 1864.
  - (d) Admiral Beatty at the Battle of Jutland, May 1916.
4. "Soldiers, . . . . . forty centuries look down upon you" was the exhortation of
  - (a) Alexander to his army when it reached the Indus River, 327 B.C.
  - (b) Alaric to his Visigoths before the walls of Rome, 410.
  - (c) Napoleon to his troops at the Battle of the Pyramids, July 1798.
  - (d) Hitler to the German Army when ordering the invasion of Poland, September 1939.
5. "Peccavi" (I have sinned) was
  - (a) Sir Charles Napier's terse message to the War Office after the surrender of Hyderabad, February 1843.
  - (b) Napoleon's confession on the retreat from Moscow, 1812.
  - (c) Caesar's message to the Senate in Rome, apologizing for crossing the Rubicon.
  - (d) Pompey's dying word after his defeat at Pharsalus, 48 B.C.
6. "We have met the enemy, and they are ours" was
  - (a) Admiral Nelson's signal at the Battle of the Nile, August 1798.
  - (b) Commodore Perry's message after his victory at Put-in-Bay on Lake Erie, September 1813.
  - (c) General Middleton's report following the Battle of Batoche, May 1885.
  - (d) General Alexander's despatch to Prime Minister Churchill on the conclusion of the Tunisian campaign, May 1943.
7. "Nuts!" was the laconic reply of
  - (a) The American commander to German demands for his surrender at Bastogne, Belgium, December 1944.
  - (b) The Australian commander to General Rommel at the siege of Tobruk, 1941.
  - (c) President Lincoln to critics who complained that General Grant drank too much, 1864.
  - (d) The British commander at Fort Ticonderoga to Ethan Allen's demand that he "Surrender in the name of the Great Jehovah", 1775.
8. "We shall fight on the beaches . . . . ." was
  - (a) King Harold's rebuttal to William of Normandy's threat of invasion, 1066.
  - (b) Queen Elizabeth's defiant comment when told that the Spanish Armada had been sighted in the English Channel, 1588.
  - (c) The Turks' retort to the Anzac landings on Gallipoli, 1915.
  - (d) Prime Minister Churchill's assurance after Dunkirk, 1940.
9. "Don't give up the ship!" was
  - (a) Sir Richard Grenville's command to the crew of the "Revenge", 1591.
  - (b) Nelson's death-bed instruction to his fleet at Trafalgar, 1805.
  - (c) Capt. James Lawrence's dying injunction to the crew of the "Chesapeake" engaged with the "Shannon" off Boston, June 1813.
  - (d) Hitler's last order to the commander of the "Graf Spee", 1939.
10. "My centre is giving way, my right is pushed back—excellent! I'll attack" was the comment of
  - (a) Marlborough at the Battle of Blenheim, 1704.
  - (b) General Lee at the Battle of Gettysburg, 1863.
  - (c) General Montgomery at the Battle of El Alamein, 1942.
  - (d) Marshal Foch at the Battle of the Marne, 1918.
11. According to tradition, Gray's immortal line "The paths of glory lead but to the grave" was quoted by
  - (a) Major General James Wolfe on the eve of the Battle of the Plains of Abraham, September 1759.
  - (b) Sir John Moore at the Battle of Corunna, 1809.
  - (c) Davy Crockett at the defence of the Alamo, 1836.
  - (d) Adolf Hitler before committing suicide, April 1945.
12. "Hymn 224, verse 7." (Oh happy band of pilgrims, Look upward to the skies . . . .) was
  - (a) The Archbishop of Canterbury's instruction for the hymn to be sung in English churches on 15 September 1940 when the Battle of Britain was at its height.
  - (b) The cryptic message from Rear-Admiral Tyrwhitt reporting the destruction of Zeppelin L.53 by

- the Canadian pilot, Lieut. S. D. Culley, off Terschelling, 11 August 1918.
- (c) The hymn used in the first church parade of the Royal Flying Corps, 1912.
- (d) The hymn sung by Napoleon's army at the burning of Moscow, 1812.
13. "I intend to fight it out on this line if it takes all summer" was
- (a) General Grant's statement of policy in the Wilderness campaign, 1864.
- (b) General Currie's order-of-the-day to the Canadian Corps before the attack on the Hindenburg Line, 1917.
- (c) Field Marshal Rommel's report to Hitler after examining the defences of the West Wall, June 1944.
- (d) General MacArthur's assertion on reaching the 38th parallel, 1951.
14. "I have not yet begun to fight" was the defiance voiced by
- (a) General MacArthur on leaving the Philippines in 1942.
- (b) General Haig at the time of the German break-through in March 1918.
- (c) John Paul Jones on board the "Bonhomme Richard" engaged with the "Serapis" off Flamborough Head, England, September 1779.
- (d) Madeleine de Vercheres when the Indians called on her to surrender, 1692.
15. "Don't fire until you see the whites of their eyes" was the order of
- (a) King Edward III to his archers at Crecy, 1346.
- (b) William Prescott to the American troops defending Bunker's Hill, 17 June 1775.
- (c) Colonel de Salaberry to the Canadian militia at the battle of Chateauguay, 25 October 1813.
- (d) Air Marshal Dowding to his fighter pilots in the battle of Britain, August 1940.
16. "Ils ne passeront pas!" was the boast of
- (a) King Henry V to his longbowmen at the Battle of Agincourt, 1415.
- (b) Adam Dollard in the defence of the Long Sault against the Iroquois, 1660.
- (c) Napoleon Bonaparte on ordering a blockade of the British Isles, 1802.
- (d) General Petain on taking over command at Verdun, 26 February 1916.
17. "Nigger" was
- (a) The code-word for the first night attack on Berlin, 1940.
- (b) The nickname for one of the tunnels used in escapes from Stalag Luft III, 1944.
- (c) The cover-name for the campaign to have fighter pilots eat carrots to improve their night vision, 1941.
- (d) The W/T message from W/C Guy Gibson's aircraft reporting the successful breaching of the Moehne dam, 16/17 May 1943.
18. "... if they mean to have a war, let it begin here" was said by
- (a) Mason and Dixon as they surveyed their famous line.
- (b) Stefan Prinzip when he shot the Austrian archduke at Serajevo, 1914.
- (c) John Parker to the Minute Men at Lexington, 19 April 1775.
- (d) Charles I as he marched into the Houses of Parliament, 1640.
19. "There is plenty of time to win this game . . ." was the calm assurance of
- (a) Julius Caesar as he cast the dice before crossing the Rubicon, 49 B.C.
- (b) Sir Francis Drake before going out to meet the Spanish Armada, 1588.
- (c) Lord Wellington before leaving the playing fields of Eton to meet Napoleon at Waterloo, 1815.
- (d) "Five-Ace" Shatterproof before cashing in his chips when the Indians attacked Fort Whoop-Up, 1872.
20. "Gentlemen of the French guard, fire first" was the invitation of
- (a) Lord Charles Hay at the Battle of Fontenoy, 11 May 1745.
- (b) General Kutusov at the Battle of Borodino, 7 September 1812.
- (c) Bismarck at the Battle of Sedan, 1870.
- (d) The commander of the first German troops to cross the French border in August 1914.



"... and stop referring to us as that fly by night outfit!"

(courtesy AIR FORCE TIMES)

# RCAF ASSOCIATION

*This section of THE ROUNDLE is compiled by RCAF Association Headquarters, 424 Metcalfe St., Ottawa, Ont.*

**M**EMBERS of the RCAF Association joined with the RCAF, Air Cadets and veterans on September 20 in annual observances of Battle of Britain Sunday at many points across the country.

In most localities Wing members paraded to memorials for wreath

laying ceremonies and then attended church services. At some centres the parade concluded with a march past. Clear skies and warm weather helped to attract large crowds to the ceremonies.

At Toronto A/M W. A. Curtis, president of the RCAF Association, took the salute as units of the RCAF, RCAF Auxiliary, Air Cadets and the Association marched past.

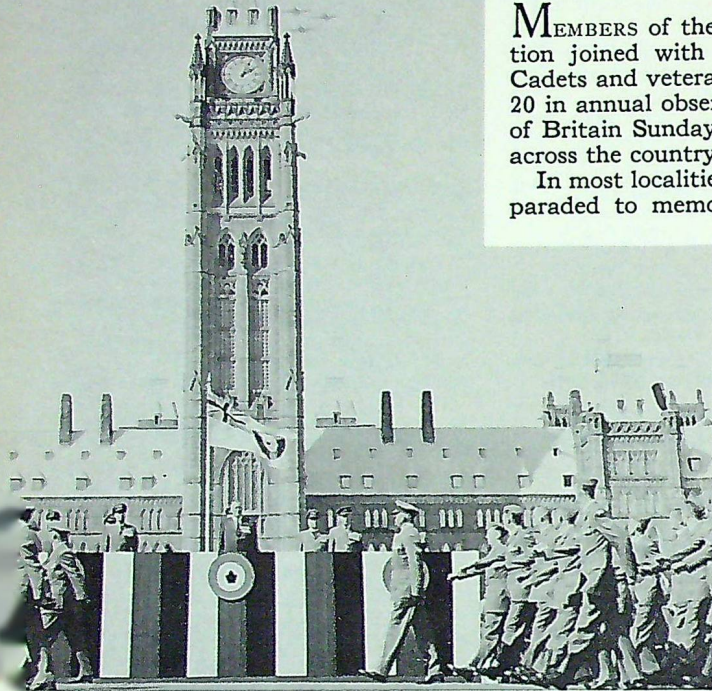
At Chatham, N.B., Lieutenant Governor the Honourable J. Leonard O'Brien took the salute as a parade headed by officers and airmen from RCAF Station Chatham and St. Margaret's marched past. No. 254 (Miramichi) Wing of the Association took part in the ceremonies with air cadets from Newcastle, Chatham and Bathurst.

At Moncton, No. 253 Wing joined with RCAF No. 5 Supply Depot personnel, Air Cadets and veterans organizations in special observances at the cenotaph. Following attendance at church services the parade marched past the city hall where the salute was taken by Mayor M. M. Baig.

The Chief of the Air Staff, A/M Hugh Campbell, placed a wreath on the memorial at Windsor during special ceremonies. Battle of Britain observances in the border city coincided with a two-day international air show viewed by 45,000 spectators.

## LAKEHEAD MEMORIAL

At Fort William the unveiling and dedication of the Lakehead District Air Memorial was carried out on Battle of Britain Sunday. The memorial was erected through the efforts of No. 501 Lakehead Wing and honours the memory of those members of the RCAF from the Lakehead district who gave their lives in World War II. G/C H. P. Crabb of Winnipeg represented A/M Curtis at the ceremony at Lakehead Airport. The memorial, designed by a local artist, was unveiled by Mrs. J. Jessiman and an address was given by Mr. W. P. Lehto, president of No. 501 Wing.



*In Ottawa, Associate Minister of National Defence Paul Sevigny took salute on Parliament Hill.*

*At the Charlottetown cenotaph (l. to r.): J. H. Currie, W. S. MacLeod, D. A. Lecky, Major R. D. McGillivray, Aide to Lieut. Gov., Hon. F. W. Hyndman, Premier W. R. Shaw, Mayor E. C. Johnston, Rev. R. S. Latimer. (Photo courtesy W. Taylor, Charlottetown Guardian-Patriot).*



#### MARITIME MEMBERSHIP CAMPAIGN

A membership campaign for the Wings of Maritime Group was announced by the Group Executive meeting in Moncton in September. The campaign has set a two-fold objective: to obtain a high percentage of renewals of membership and to enrol a minimum of 600 new members. To this end quotas have been established for each Wing in the Group.

An Air Cadet Flying Scholarship valued at \$150.00 will be made available to the Wing with the highest increase above its quota during the campaign. The scholarship will be awarded by the winning Wing to a qualified air cadet in a squadron sponsored by the Wing. In the event that the Wing does not sponsor a squadron in its area, the award will be made to a qualified cadet in the nearest squadron.

The meeting, at which Maritime Group President Sinclair MacLeod presided, heard reports from the provincial vice-presidents and a programme of visits designed to strengthen the link between the executive and the local Wings was set up. Suitable regulations to govern the awarding of the Tupper Trophy were discussed and left with a committee headed by Gerald MacDougall of Amherst to finalize.

The Association's Executive



*In Windsor, a wreath was laid by Chief of the Air Staff A/M Hugh Campbell (centre) at Dieppe Gardens memorial. (Photo courtesy Windsor Star).*

Assistant, F/L Ross Rowlands of Ottawa, addressed the meeting on the function of a Group executive committee and suggested a number of ways in which the Group committee could serve to strengthen not only the Wings within its area of responsibility but the Association as a national body. Following the meeting in Moncton F/L Rowlands visited No. 105 (Cumberland) Wing, Amherst, and the Sackville Squadron of the Wing; No. 250 Wing, Saint John and No. 252 Wing, Fredericton.

Members of the Group Executive attending the meeting were W.



*A/M W. A. Curtis receives special medallion from Frank Young, chairman of the Canadian International Air Show, for his "great contribution to aviation." Medallion was machined from Inconel X, the alloy used for the skin of the X-15 space probe.*

*In Toronto, the inter-wing colour party led the parade.*

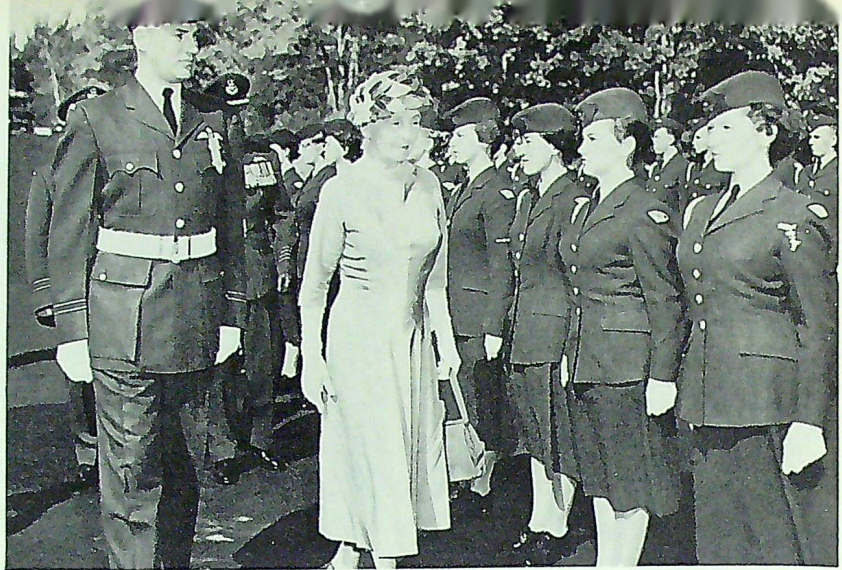


Sinclair MacLeod, President; Errol Laughlin, Joe Murphy and Alyre Daigle, Vice Presidents; N. N. Larabee, Secretary; J. P. Magee, Treasurer; Gerald MacDougall, Maritime Group Additional Representative; and Miss Janet Etter, WD Representative (Eastern).

The date for the Annual Group Convention was set for February 22 and 23 when the Maritime delegates will be the guests of No. 101 Wing in Halifax.

**Answers to What's The Score?**

1. (d) 5. (a) 9. (c) 13. (a) 17. (d)
2. (b) 6. (b) 10. (d) 14. (c) 18. (c)
3. (c) 7. (a) 11. (a) 15. (b) 19. (b)
4. (c) 8. (d) 12. (b) 16. (d) 20. (a)



*Princess Alice inspects guard of honour at Lac St. Denis. Guard commander is F/L S. E. Burrows.*

## Royalty at Lac St. Denis

You cannot prevent the birds of sorrow from flying over your head, but you can prevent them from building nests in your hair.

—Chinese Proverb

*The Magazett*

H.R.H. Princess Alice took time on her recent Canadian holiday to visit RCAF airwomen at Lac St. Denis, pinetree radar station in the Quebec Laurentians.

An air commodore in the RAF Women's Division during the Second World War, Princess Alice

still maintains a lively interest in the welfare of all servicewomen. She was accompanied on this trip by S/L E. L. Dalton, RCAF senior women's personnel officer, and two former Women's Division leaders, Miss K. O. Walker and Miss W. M. Taylor.

## 1959 RCAF Staff College Journal

THE RCAF STAFF COLLEGE JOURNAL is published annually at the RCAF Staff College, with the permission of the Chief of the Air Staff. The aim of the JOURNAL is to encourage serious writing on topics of professional military interest. The ideas expressed in the JOURNAL are those of the writers and do not necessarily reflect official policy. The price is one dollar per copy and subscriptions may be mailed direct to:

The Editor,  
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The 1959 issue of the JOURNAL will be released early in November. Such authorities as Dr. Garthoff, a Soviet affairs expert; Professor R. Preston, History Department, R.M.C.; Major-General Besson, Jr., Chief of Transportation, U.S. Army; Major-General Penhale, Canadian Army (Retd.), now Commandant Civil Defence College; Dr. Marcus Long, Professor

of Philosophy at the University of Toronto and international affairs commentator; Mr. Peter Stursberg, former CBC correspondent at the UN; Air Vice-Marshal Kingston-McCloughry, well known authority on military strategy, Wing Commander Gellner, RCAF (Ret.), rapidly becoming an authoritative observer on international and national affairs; and several lesser known authors, cover subjects ranging from global strategy, through limited war possibilities, to problems of national security. Soviet strategy is interpreted, and the philosophers try to find an acceptable alternative to mutual suicide; several book reviews are being included which touch on major problem areas.

In addition, the 1959 Essay Contest entries reflect expanding tri-service and civil service interest in contemporary military problems and the quality of contribution is most encouraging; this is tangible evidence that the contest's aim is being accomplished. The prize essay and several of the more thought-provoking entries are included.



## *The R.C.A.F. Benevolent Fund*

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