

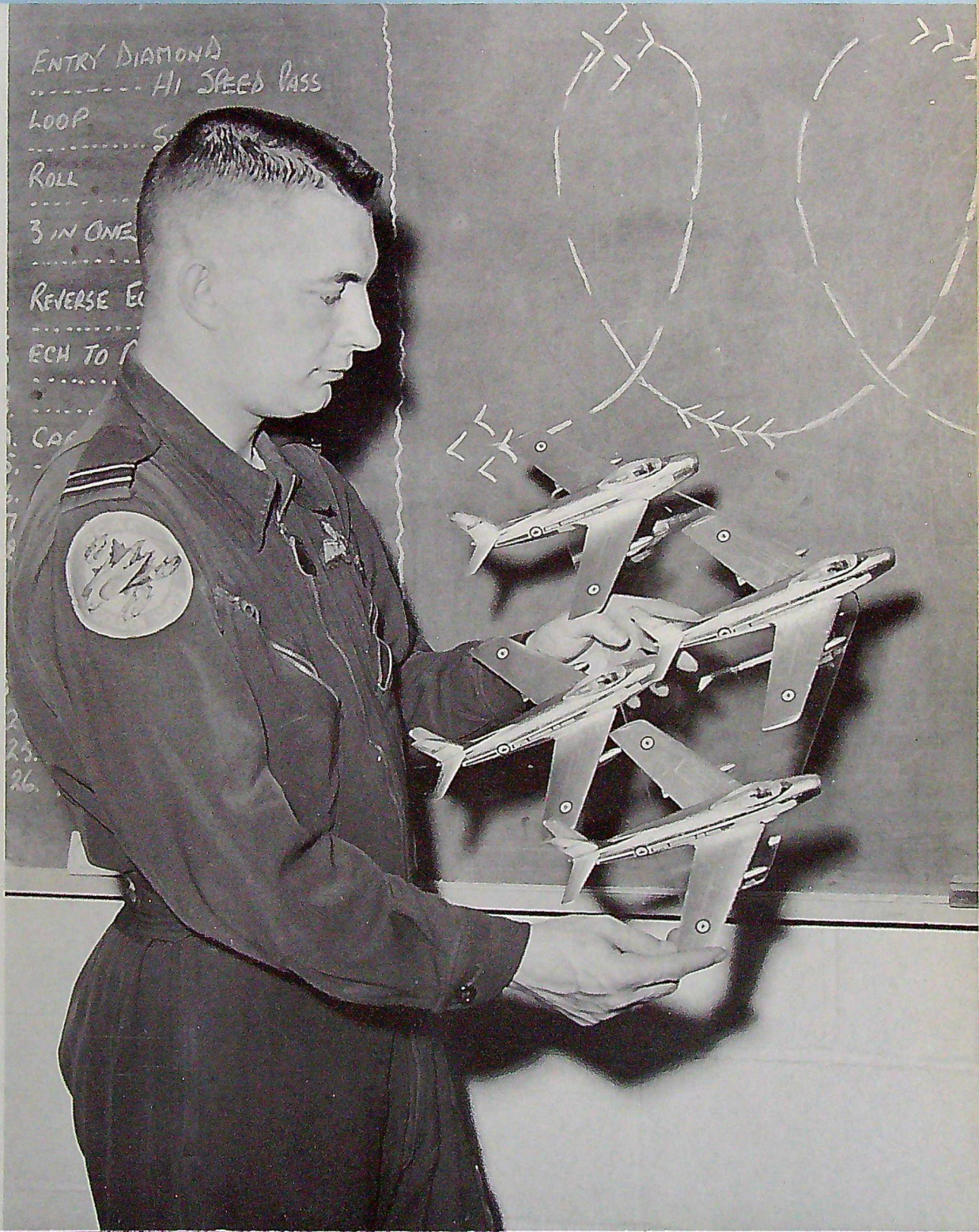


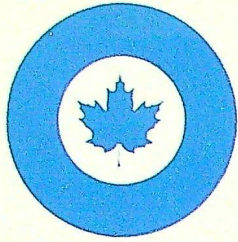
THE

# Roundel

VOL. 13, NO. 4

MAY 1961





THE

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

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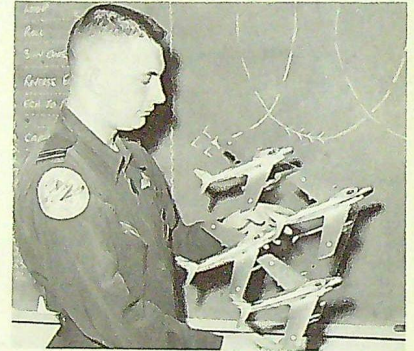
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THIS MONTH'S COVER

Golden Hawks' leader Acting S/L J. D. McCombe uses model of diamond formation to brief pilots for their 1961 tour (see page 2).

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

# On The Break



HERE are a few biographical notes on some of the people behind this month's stories:

No sooner had regular *ROUNDEL* contributor S/L Russ Bowdery finished his Trenton article (page 5) than he hopped an Air Transport Command *North Star* headed for the Congo, in his official capacity as ATC staff officer public relations. We anticipate more copy from him as a result.

F/L Bruce Sterling makes his *ROUNDEL* debut with a tribute to air movements personnel (page 10). This spring he was seconded to the Emergency Measures Organization and we're hopeful his next contribution will be on the subject of nuclear survival. A wartime army career, followed by stints as a newspaper reporter, cartoonist and motion picture producer (he shot TV film of Marilyn Bell's English Channel swim) are numbered among his varied accomplishments.

S/L Sylvia Evans assures us her autobiographical reminiscing (page 14) should not be taken too seriously. Now assistant for women to the chief of personnel at AFHQ, she has been busy lately organizing the service-wide celebrations marking the 20th anniversary of the WD's formation and the 10th birthday of airwomen's entry into the regular force.

Another first-time contributor is W/C T. T. Scovill (page 23), currently responsible at AFHQ for the private motor vehicle driving safety campaign being conducted throughout the RCAF. Perhaps his six years in the RCMP prior to joining the air force in 1940 earned him his present assignment. That be as it may, he has seen a lot of the world in the intervening 21 years — both from aircraft cockpits and administrative desks from Whitehorse to London, England.

Our technical article on the *Caribou* (page 25) was written by F/L Percy Goodfallow, a project engineer for this aircraft in the maintenance engineering branch. An RCAF navigator during the Second World War, he had the rather unique experience of flying in three Commonwealth squadrons, RAF, RAAF, and SAAF, but never with a Canadian unit overseas. He obtained his BASc in metallurgical engineering at the University of Toronto after the war.

Third in our series of escape and evasion stories, F/L Doug Cox's personal adventure (page 18) is timely this month as the author is scheduled to appear before the RCAF Association convention in Winnipeg to speak on the RAF Escaping Society, of which he is an ardent member. He is presently on the instructional staff at the College Militaire Royale de St. Jean.

"BUY CANADIAN" is the theme of a campaign sponsored by the Canadian Manufacturers' Association and supported by the Canadian Industrial Editors' Association, of which *THE ROUNDEL* is a member. We feel the success of this program will go a long way in ultimately solving our unemployment situation. If we as individuals would support Canadian industry to the utmost every time we make a purchase, not only would we be helping create employment, we would be reducing Canadian costs through volume production and thus improving our chances against foreign competition.

An example of what "Buy Canadian" means to this country, in addition to the jobs it creates, appears in the current issue of *PROGRESS*, staff magazine of the Canadian General Electric Co.:

"CGE is now working on a large electronics contract for the CF-104 aircraft for the RCAF. The equipment is of U.S. design, but CGE is doing everything in its power to make the Canadian content as high as possible. About 200 Canadian vendors are involved in this project, many of them small companies to whom the work will mean a great deal. For some it has meant breaking into entirely new fields of production; in many cases it has led to the development of skills and techniques not known in Canada before. It could well end up as one of the highest Canadian-content jobs of its kind, bringing millions of dollars worth of work and production that would not otherwise have been made in this country."

The final product is now rolling out at Canadair (see inside back cover).

*At Paton s/l*

Editor



Spring training for the Golden Hawks started last January at RCAF Station Chatham, with perfection the objective both on the ground and in the air.

## GOLDEN HAWKS ON TOUR AGAIN THIS SUMMER

SPRING training is over and the 1961 Golden Hawks have hit the campaign trail—heading for a certain third straight pennant as Canada's championship aerobatic team.

The Golden Hawks were created in 1959 to help celebrate the RCAF's 35th birthday and the golden anniversary of powered flight in Canada. Re-organized last year, they went through their aerial paces in 67 performances at 40 locations and were seen by more than three million people in Canada and the United States.

A unit of Air Defence Command,

the Hawks call RCAF Station Chatham home and prior to starting this year's tour they put in long hours of concentrated training, practising formation and solo maneuvers in their now-familiar gold, red and white *Sabres*.

Wing Commander J. F. Allan is again CO of the display team and S/L J. D. McCombe has succeeded S/L J. F. Villeneuve as leader. Flight Lieutenants E. J. Rozdeba, A. F. MacDonald, B. R. Campbell, L. J. Hubbard, F. L. Fraser and F/O W. C. Stewart complete the flying team. Tour public relations officer is F/L

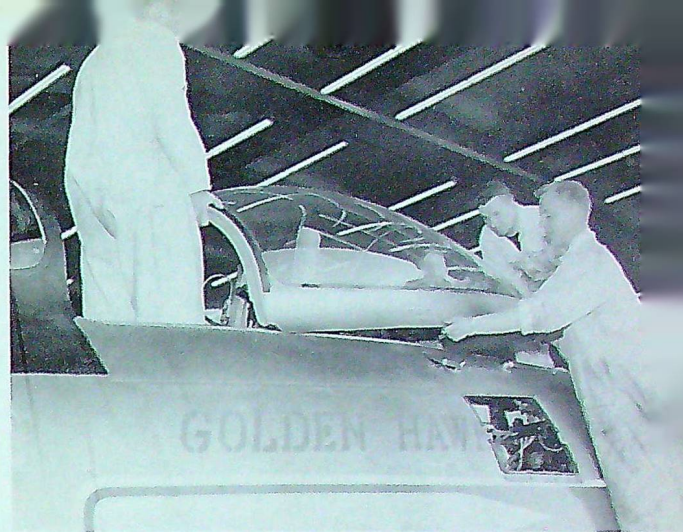
L. G. Van Vliet. "Voice of the Hawks" is commentator F/O W. R. Dobson.

Maintenance party is in charge of engineering officer F/O P. S. Perry, whose groundcrew consists of many second and third year Hawk veterans. FS O. J. Tousignant is maintenance superintendent, Sgt. D. F. McGillivray is NCO i/c servicing and snag crew, Sgt. J. H. Cooper base maintenance.

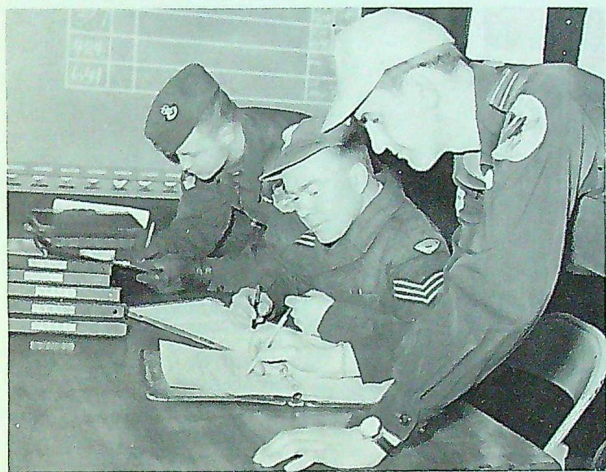
With four pilots new to the team this year, training started last January on Mark 5 *Sabres*. First Mark 6s arrived at Chatham in their special



Engineering officer F/O P. S. Perry, maintenance supt. FS O. J. Tousignant and NCO i/c servicing Sgt D. F. McGillivray check special fuel line for colored smoke trails.



Cpl. R. T. Lundahl, LACs J. E. L. Racine and A. M. Pardy install new canopy on Sabre aircraft.

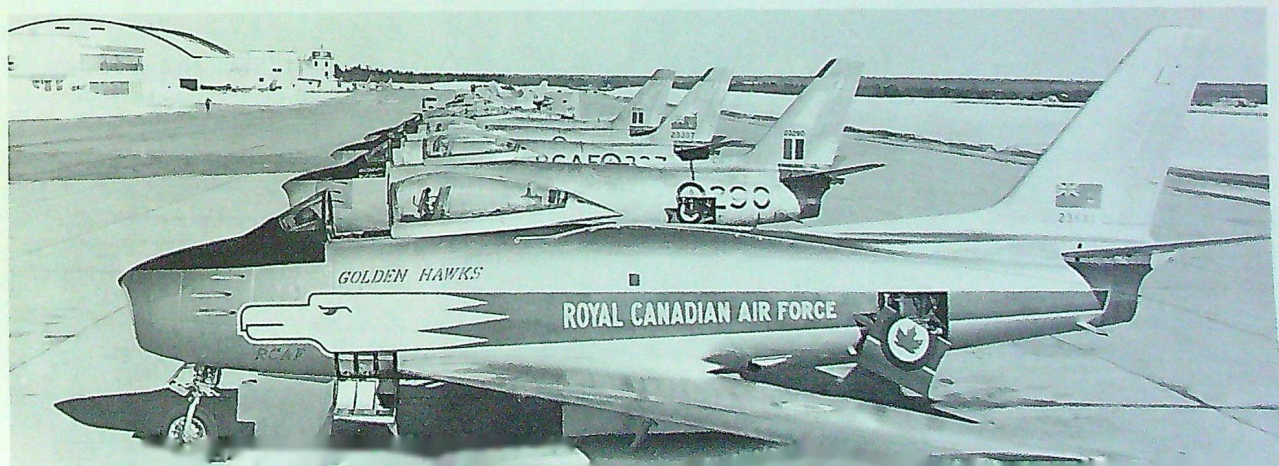


F/O W. C. Stewart and F/L E. J. Rozdeba sign out in Sgt McGillivray's office for practice flying.



LAC D. W. Merriam straps in F/L J. L. Fraser for a test flight.

Team trained first on Mark 5 Sabres, then switched to the familiar gold, red and white Mark 6s (in foreground) before leaving Chatham last month to begin their 1961 tour.



paint jobs in March and the team converted to them in April. Because the two aircraft have different flying characteristics, Mark 5s and 6s are not used together in team flying.

First public performance of their 1961 tour was at St Hubert on 28 April, as a feature attraction of the Canadian Fighter Pilots' reunion. The following schedule, subject to change, had been approved up to press-time:

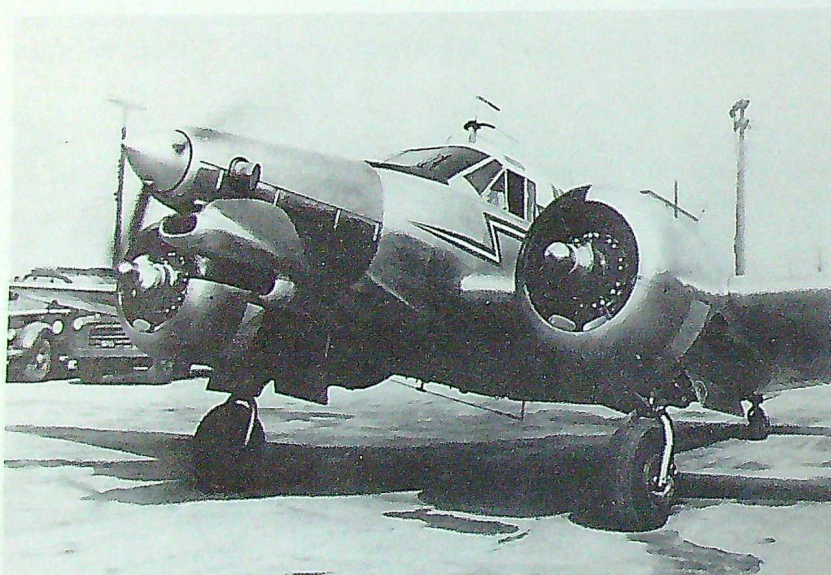
- 6 May — Cornwall Air Show
- 20 May — Sydney, N.S. AFD\*
- 21 May — Moise, P.Q. AFD
- 26 May — Chatham, N.B. AFD
- 27 May — Torbay, Nfld. AFD
- 31 May — Halifax, N.S.
- 3 Jun — Greenwood, N.S. AFD
- 3 Jun — Summerside, PEI. AFD
- 6-11 Jun — USN Naval Base  
Pensacola

\*Air Force Day

- 17 Jun — St. Hubert, P.Q. AFD
- 18 Jun — Quebec City, P.Q.
- 21 Jun — Senneterre, P.Q. AFD
- 24 Jun — Ottawa, Ont. AFD
- 25 Jun — Bagotville, P.Q. AFD
- 28 Jun — Camp Borden, Ont. AFD
- 1 Jul — Trenton, Ont. AFD
- 2 Jul — North Bay, Ont. AFD
- 2 Jul — Falconbridge, Ont. AFD
- 5 Jul — Lakehead, Ont.
- 8 Jul — Cold Lake, Alta. AFD
- 14 Jul — Moose Jaw, Sask.,  
Exhibition
- 17-19 Jul — Edmonton, Alta.,  
Exhibition
- 21 Jul — Stations Gimli and  
Portage la Prairie

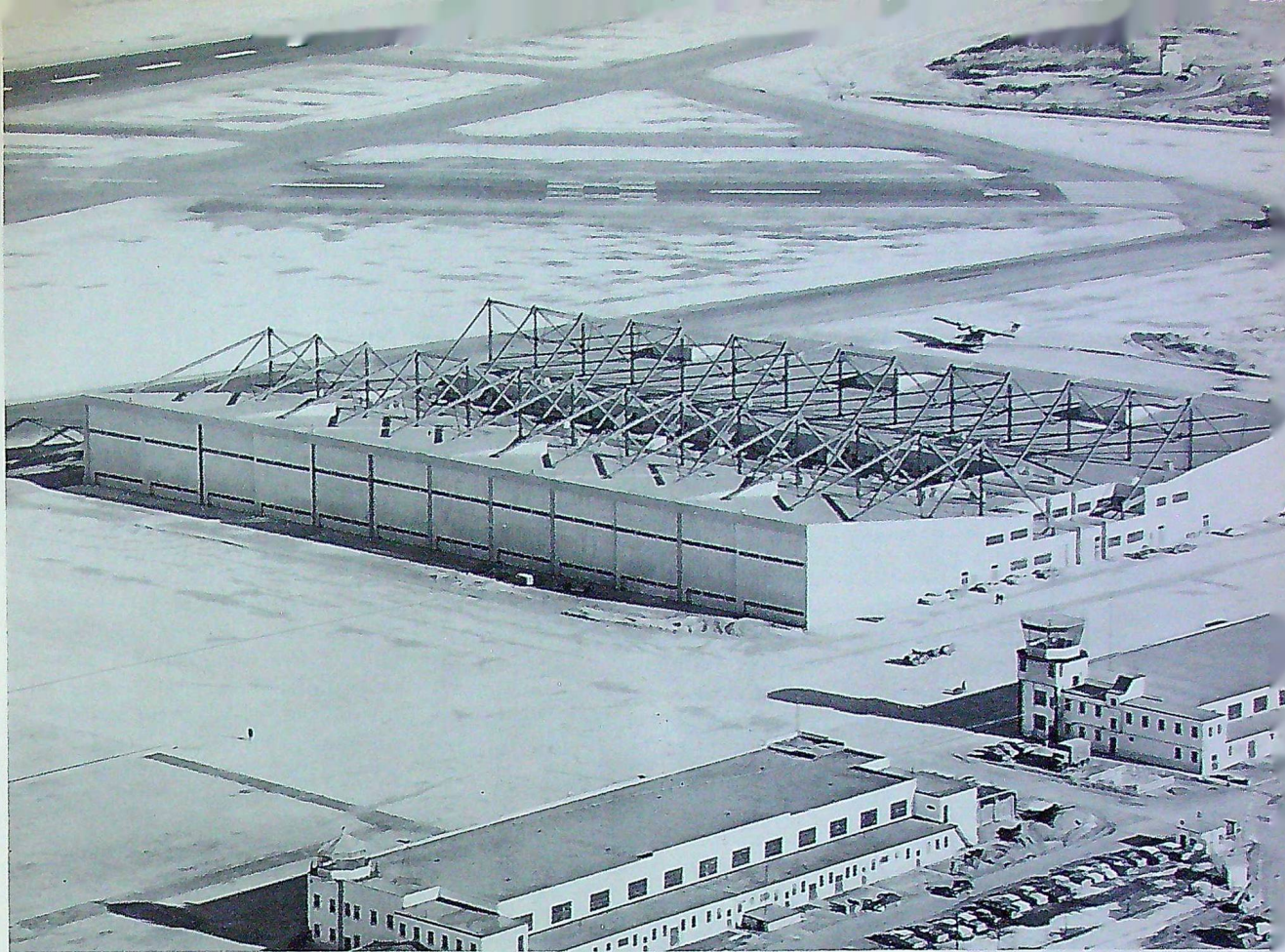
- 22 Jul — Winnipeg, Man. AFD
- 24-26 Jul — Saskatoon, Sask.,  
Exhibition
- 31 Jul — Regina, Sask., Exhibition
- 5 Aug — Sea Island, B.C. AFD
- 9 Aug — Kelowna International  
Regatta
- 12 Aug — Victoria, B.C.
- 13 Aug — Comox, B.C. AFD
- 19, 21 Aug — Pacific National  
Exhibition,  
Vancouver, B.C.
- 23 Aug — Lethbridge, Alta.
- 26 Aug — Penhold, Alta. AFD
- 27 Aug — Namao, Alta. AFD
- 1-2 Sep — Canadian International  
Air Show, Toronto, Ont.
- 9 Sep — Centralia — Clinton, Ont.  
AFD

## THREE-ENGINEED EXPEDITOR



A strange looking aircraft will soon be seen in Canadian skies when an *Expeditor*, now undergoing extensive modification at Downsview, takes to the air.

The aircraft, borrowed from the RCAF as a flying test bed, has had a 500 h.p. turboprop engine installed by the de Havilland Aircraft Company. After completing its ground tests the tri-motor *Expeditor* will be flown to St. Johns, Quebec, for a flight test program. Known as the PT 6, the engine is Canada's first turboprop engine, designed and built by Canadian Pratt and Whitney Aircraft Co. Ltd.



Trenton's new cantilever hangar dwarfs those in foreground. Traffic is now controlled from tower in field, upper right, strengthening claim to "most-towered" RCAF station.

## STATIONS OF THE RCAF: TRENTON

### SECOND OF TWO PARTS

By SQUADRON LEADER R. M. L. BOWDERY,  
Air Transport Command SOPR

A WARM, unseasonable wind swept across the airfield. Under its balmy breath the clean white mounds of snow quickly shrank and disappeared. As the snow melted, scars of a winter's work were gradually exposed to view. Station Trenton had changed its role and with this change came many major physical alterations to this RCAF air cross-roads of the world.

A huge new hangar had been built and completed a full year ahead of the final contract date. Thousands of tons of concrete had been mixed and poured to strengthen the tarmacs and apron areas of the airfield to support the weight of the leviathans soon to join the air transport fleet. Hangars, which a few short months before had housed *Harvard* trainers, were now completely transformed.

One became the home of a heating plant destined to pour thousands of cubic feet of heated air into the cavernous shell of the cantilever hangar. Next door, a second similar hangar now contained a modern pleasantly-appointed air terminal.

Number 2 Air Movements Unit has all the recognizable facilities of a present day international air transport terminal. An overseas reception

centre, with health authorities, customs and immigration, allows crews and DND passengers returning from abroad to be quickly and efficiently processed. A snack bar adjoins the domestic terminal; a public address system pipes its impersonal voice into all parts of the terminal, periodically announcing the arrival or departure of Air Transport Command's many scheduled flights. (See page 10.)

In this same hangar, behind a door marked "Restricted — Authorized Personnel Only", a spacious operations centre exists. Located within hailing distance of one another are meteorological, flight planning and the many other items that the most travelled air crews in the RCAF might require before starting out on a trip to Bombay or Timbuctoo.

A scant hundred feet further west a third hangar is joining in this

changing parade. Here, when work is completed sometime this summer, freight will flow in an orderly stream from tractor-trailer to forklift to aircraft after being efficiently sorted, weighed and way billed. The handling of priority freight will be greatly speeded by the installation of roller conveyors and other special equipment.

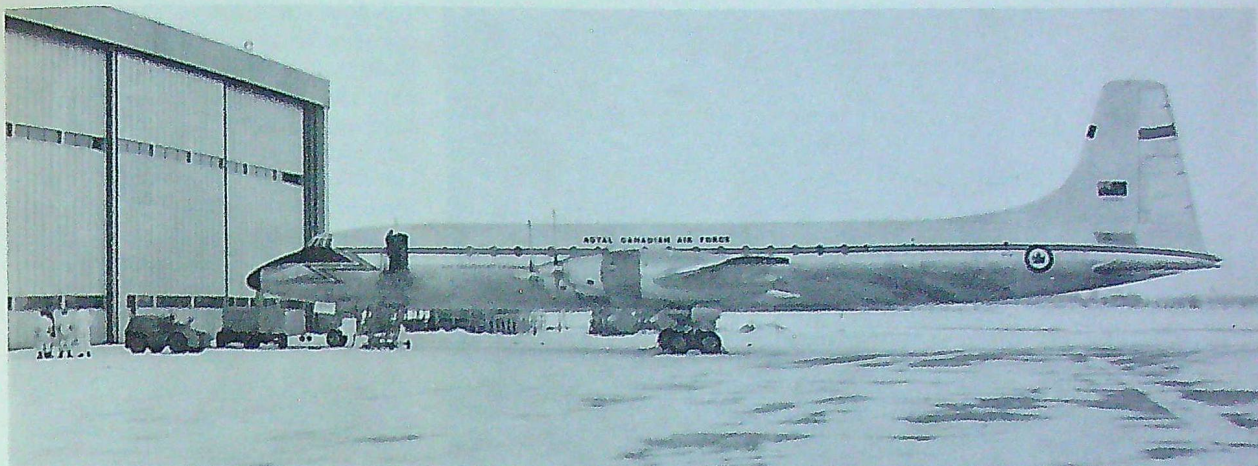
In another nearby hangar *North Star* aircraft nestle cozily beneath its beams with only their empenages protruding like the tails of a line of metal ostriches. This unusual view is but another indication of how the ingenuity and skill of station construction engineering and maintenance people combined to solve a serious deficiency — insufficient hangar space. Prior to the completion of the big cantilever hangar the *Stars* could fit into only three of the nine hangars — numbers one, two and nine. One and two were oc-

cupied by *Dakotas*, *Cansos*, *Expeditors* and other sundry aircraft belonging to No. 102 Composite Unit. Number nine was originally the home of Operational Training Unit and later No. 426 Squadron. None of these hangars could easily be turned over to the maintenance crews for static occupation during periodic inspection. There were other hangars available that with some modification could be used for *North Star* maintenance; the problem was how to get the aircraft in and out.

A real close look and some old-fashioned head scratching found the answer — railroad them in. And that is exactly how it was done. Tracks were laid and dollies were built. *North Stars* due for periodic inspection are placed on these miniature flat cars and then the aircraft are moved into the hangar virtually sideways. Using this unusual approach enables maintenance men to place

A familiar sight at Trenton — troops disembark from *North Star* after army rotation flight to Middle East.





Largest transport aircraft in the RCAF, the CC-106 noses up to its new home, largest cantilever hangar in the RCAF.

two aircraft in each hangar with only inches to spare.

This is the mood of the new Trenton. "There's a job to be done, let's do it".

A new air traffic control tower rises in lonely majesty on a knoll just south of the long runway. Already possessing three glass towers, Trenton can continue to lay undisputed claim to the title of most towered station in the RCAF.

#### ACROSS THE ROAD

Building and renovations haven't been confined to the operational side of the airfield. On the administrative side of the station changes and improvements have also been taking place.

The old Ensign Theatre at the east end of the main administrative building is no more. In its place is an impressive and functional operations and search and rescue centre. Really a part of Air Transport Command Headquarters, this major project was carried out by the station construction section.

Although Training Command Headquarters departed from its Trenton home in September 1959, training here is anything but a thing

of the past. Three units of Training Command remain at Station Trenton. They are the School of Instructional Techniques (SIT), the School of Meteorology and the Training Standards Establishment (TSE).

The SIT does its job of instructing instructors on how to instruct so well that it has the reputation of being the outstanding school of its type in Canada. Trans-Canada Air Lines, the Department of Transport, the Royal Canadian Mounted Police, and other government departments send their people to Trenton to take the three-week course. During its ten years of existence the RCAF's SIT has graduated over 10,000 students.

The Trade Standards Establishment is also a unique organization. It is the largest examination setting and review department in the RCAF. Under the experienced eyes of TSE staff more than 50,000 examinations are prepared, marked and administered every year. In all, over 1600 different varieties of examinations are handled by the TSE. All trade examinations, qualifying examinations, aircrew annual proficiency exams for regular and auxiliary personnel are prepared, marked and

administered by the TSE. The fact that four test specialists — people specially trained in test marking and analysis techniques — are employed with the test establishment gives some idea of the thoroughness with which the TSE approaches its important work.

The third Training Command orphan, the School of Meteorology, gives varied courses on weather analysis, prognostication and observation to meteorological observers of all three services and to met officers of the Department of Transport who will serve with the Department of National Defence.

#### TRANSPORT TRAINING

Training is also a function of certain Air Transport Command units at Station Trenton. The ATC Operational Training Unit trains crews on *Dakota*, C-119 and *North Star* aircraft. The 102 "K" Unit has the only flying boat conversion course in the RCAF, converting crews to the new RCAF search and rescue triphibian, the *Albatross*.

*Caribou* conversion is also given at Station Trenton. The lone aircraft located there provides a training vehicle for crews before they re-



Air Commodore F. S. Carpenter, AOC ATC, and G/C D. J. Williams, CO Stn. Trenton, chat with Mayor M. Haig of Belleville, left, and Mayor J. MacDonald of Trenton before examining first CC-106 to arrive for squadron service.

port to El Arish, Egypt, to fly one of its trio of sisters operating in the desert under United Nations colours.

Air Transport Command's specialist technical training is carried out by the staff of No. 4 Field Technical Training Unit (FTTU). Originally termed MTU or Mobile Training Unit, certainly No. 4 FTTU is now anything but mobile. Housed in the old station CE section, the FTTU's new accommodation is resplendent with bright airy classrooms and large clean display areas for the many elaborate systems demonstrators used in providing advanced training to ATC technicians and aircrews on CC-106, *Cosmopolitan*, C-119, *North Star*, helicopter and *Albatross* aircraft.

Another indication of the increas-

ing complexity of training aids for modern aircraft is the Synthetic Training Section. The old wheezing fan and bellows link trainer has long ago been replaced by sophisticated, electronic flight trainers. Trenton will soon have in its Synthetic Training Section three of these modern flight trainers. At present the section boasts two general purpose trainers which have been deliberately manufactured so as to resemble no particular aircraft. On these aircrews practice blind flying, radio procedures and emergency actions for any type of aircraft. Later this year the section will be the proud home of a CC-106 flight simulator. Using this machine Synthetic Training Section staffs will be able to thoroughly train aircrews in all aspects of CC-

106 flying before these men even lay eyes on the aircraft itself. The simulator will allow crews to practice procedures ranging from start up to landing. Low approach and landing simulation is provided by closed circuit TV which will give the pilot a pictorial presentation of the particular airfield he is approaching, under weather conditions selected by the instructor.

#### PERSONNEL

The availability of the new hangar so much ahead of schedule resulted in a hurried reshuffle of station units. W/C D. F. Dunning, chief technical services officer, heaved a sigh of relief when the big hangar became RCAF property. Now he could assign breathing space to some of the more cramped technical sections of the Maintenance Wing. Number 426 (Transport) Squadron, commanded by W/C J. O. Maitland, has moved from the arch type No. 9 hangar into the cantilever. No. 102 "K" Unit, with S/L R. J. Lemieux as its OC, has taken over the arch type hangar vacated by 426 Sqn. The Operational Training Unit, with W/C A. J. Mackie temporarily at the helm remains in its present accommodation, a Butler Building and Hangar No. 6. W/C Mackie wears two hats right now, OC No. 4 OTU and station chief operational services officer while acting W/C H. B. Russell, OC No. 4 OTU, is serving with the UN Force in the Congo.

The CC-106 Operational Service Trials which will be carried out from Trenton under the watchful eye of S/L W. R. Lloyd will, naturally enough, work from the cantilever. S/L R. N. Smith, station aeronautical engineering officer, could now move his *North Star* maintenance off the rails in No. 8 hangar into one of the bays of the cantilever. S/L L. T. Cox, OC of the CC-106 Technical Group, joined S/L Lloyd in the cantilever.

All this re-allotment of space along

the hangar line wasn't without its difficulties. The Telecom Section under S/L O. F. Bradley was busily implementing requests for telephones; S/L R. Hollett's Supply Section had many an E42 for desks, tables and chairs to fill. S/L K. E. Rideout, the construction engineering officer, had to detail his work crews for a good many last minute projects.

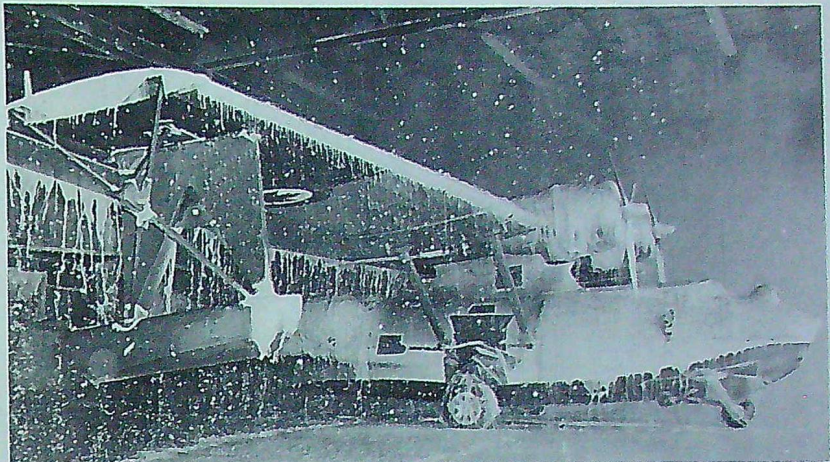
The many administrative responsibilities of a unit of this size are ably taken care of by W/C F. Y. Craig, the chief administrative officer, and S/L G. S. Tinker, personnel administrative officer. Accounts and finance come under S/L W. G. Scott and the station hospital under S/L D. E. Ryder. Spiritual welfare is attended to by the Protestant padre S/L R. P. Condon and the Roman Catholic padre F/L J. S. Proulx. Dental care for station personnel is the responsibility of Lt. Col. R. H. G. Cunningham.

The station commander, Group Captain D. J. Williams, DSO, DFC, has a permanent detachment of his station located over a thousand miles away — at Resolute Bay in the Arctic. Near or far, the men and women serving under G/C Williams all show bursting enthusiasm and quiet pride in their unit. "Versatile and Ready" is the motto of Air Transport Command. Station Trenton is becoming more versatile and increasingly ready for any challenge as the days go by.

#### RECREATION

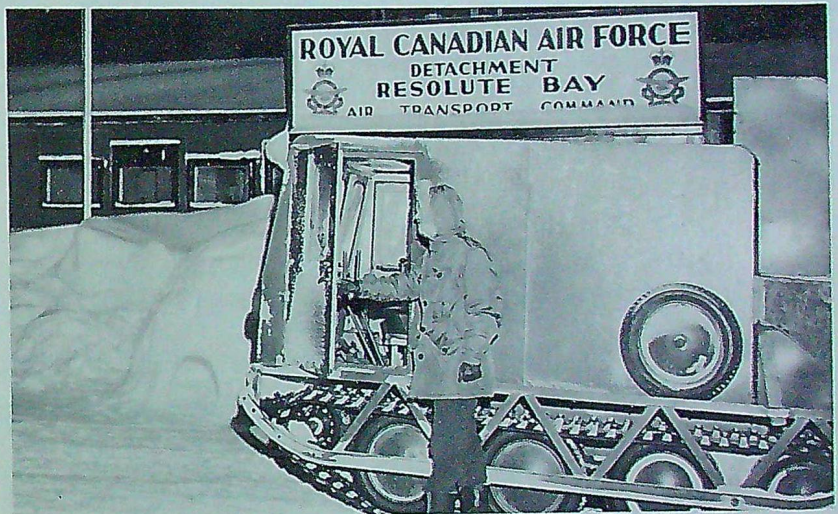
Perhaps no other military establishment in Canada is blessed with the recreational opportunities and amenities that exist here for airmen and airwomen. Located in the scenic Hastings — Northumberland — Prince Edward County region of southeastern Ontario, Station Trenton personnel through the years have taken advantage of this lucky location in the development of their recreational programs.

Men and women of the station,



Over 8,000 gallons of water and foam per minute rain on Canso from firefighting sprinkler system in Trenton's cantilever hangar.

Trenton detachment Resolute Bay is located over 1,000 miles north of its parent.



No. 6 Repair Depot and ATCHQ along with their dependents participate in sports the year round. As spring gives way to summer, naturally outdoor sports come into their own, but winter slows the sports tempo not one whit. A flying club operates all year round with its three light aircraft, giving flying instruction to ground crews and non-pilot aircrew members. Hobby shops, a drama club, body building classes,

judo instruction, and a square dance class are also included in the station's long list of extra-curricular recreational facilities.

Truly, those who 30 years ago decided to build an RCAF station on this site would hardly recognize the place today. But building on their efforts, and those of their successors, the 1961 residents of this station are adding another exciting chapter to the Trenton story.



At No. 2 Air Movements Unit, Trenton, Lt/Commander R. Devens checks in with Cpl. V. Downey prior to leaving on RCAF scheduled flight.



LACs M. Coll (foreground), J. Barriault prepare to move personal baggage to waiting aircraft.

## ONE HUNDRED MILLION MILES BY AIR

A salute to the personnel of RCAF Air Movements Units

BY FLIGHT LIEUTENANT A. B. STIRLING

OVER the public address system the voice of Sgt. Bob Wright cut through the hum of conversation which filled No. 2 Air Movements Unit's spacious passenger terminal at RCAF Station Trenton.

"Announcing departure of C-119, Scheduled Flight Number 2 to Winnipeg, Edmonton and Vancouver. The airman standing at the main exit will direct you to your aircraft. No smoking outside the terminal, please."

Leading Aircraftman Don Mas-

trianni led the stream of uniformed passengers across the tarmac, stopped at the foot of the passenger ramp and collected boarding passes. Once inside the aircraft, the travellers were met by another transportation technician, LAC Roy Peck. Peck was the AMU crew member who would be responsible to the C-119's captain for passengers and baggage during flight.

As they adjusted safety belts and opened magazines, Peck moved among the passengers, anxious to

have everyone seated before the aircraft captain appeared for the pre-flight briefing.

Fifteen minutes later the powerful Wright engines lifted the *Flying Boxcar* into the air and S/F No. 2 was westward bound. This departure, one of a dozen leaving Trenton terminal that day, was but a small part of the RCAF's large and complex air transportation operation.

There are 11 Air Transport Command terminals in Canada, with a 12th located at El Arish in Egypt.



Sgt. R. Wright, NCO in charge of the AMU, advises passengers it is time to board the flight.



At top of ramp, LAC R. Peck welcomes travellers aboard the C-119 and soon they will be winging westward.

At four of them are Air Movements Units: No. 2 AMU at Trenton, No. 3 AMU at Uplands, No. 1 AMU at Namao and No. 7 AMU at Downsview. At the remaining eight terminals are Air Movements Detachments, consisting of one or more personnel.

The staff of each Air Movements Unit or Detachment, known as transportation technicians (a trade which is interrelated with the Supply Branch at the rank of Flight Sergeant and above), must cope with a variety of tasks. AMU personnel provide the facilities to process a steady flow of men and material through all of the 12 air terminals, an operation which requires a highly efficient organization and involves a great deal of detail and many hours of plain hard work.

It was not until the Korean War, coupled with Canada's NATO commitment that ATC began to develop the highly effective airlift capability it has today. This development, which has taken place over the past ten years, has been accompanied by a necessary increase of AMUs to handle the expanding traffic volume. Before Korea the total strength of AMU personnel was somewhat less than 80 all ranks; today it is more than double that figure. However, the increase of transportation technicians appears very small when compared to the increase in work load. Some idea of the actual accomplishments of AMU are vividly illustrated from figures compiled since the Korean airlift. (The figures for Korea are not included in the totals — though the latter represent a very

impressive effort, consisting of 600 return trips across the Pacific.)

Since Korea the RCAF air terminals have processed 500,000 personnel and 150,000,000 pounds of freight — passengers and freight covering a total of more than 100,000,000 miles by air. And for those who are space-minded, providing we convert the total weight of freight into people, this represents 1250 return trips to the Moon for every resident of Greater Toronto.

The work of AMU personnel falls into two natural divisions. One is the processing of passengers and personal baggage; the other is the handling and documentation of freight.

Processing begins with the arrival of a passenger list from the local area co-ordinator, a position which has



Loading a cargo for El Arish

are usually a few waiting for such an opportunity at every air terminal.

Air Movements Unit personnel also see that box lunches are ordered in advance for longer flights. These lunches are placed on the aircraft and become the responsibility of the transportation technician crew member who distributes the food when required.

Finally, a member of the AMU staff must accompany the passengers to their aircraft and collect their boarding passes. On the aircraft another transportation technician, who forms part of the aircraft's crew, is responsible to the aircraft captain for the passengers' comfort during the flight.

The documentation and handling of freight — which may vary from supplies for the troops in Egypt or consist of urgently needed electronic equipment for an isolated radar station in the far north — forms the larger and more complex part of the AMU's day-to-day workload.

This side of the transportation technician's job begins with the delivery of DND freight to the Transport Command air terminal. Here port Command air terminal. Here the freight is examined for damage, weighed and checked against its original bill of lading. A new bill of lading is prepared — noting the freight's priority — and the shipment is then ready for air transportation.

The selection of a total cargo for each aircraft is a job which demands an experienced transportation technician. Each type of aircraft is limited to a definite weight of cargo — limitations which are governed by the all-up weight of aircraft including fuel and oil.

Once a bulk of freight has been selected it cannot be loaded haphazardly. If it were, the aircraft's center of gravity would be seriously affected and take-off, while spectacular, would be definitely unpleasant for those aboard. The correct loading and distribution of weight is a procedure which must follow a

been established at various points across Canada. In the case of overseas flights the passenger lists originate at AFHQ. These lists range from the newest airman to the most important of VIPs.

From this original information the AMU prepares a passenger manifest for each specific flight and notates the individual's priority. On the day of departure every passenger is checked through the terminal. Baggage is weighed, labelled and loaded on the aircraft by a transportation technician.

However, it frequently happens that immediately prior to departure — and for a variety of reasons including sickness, cancellation of temporary duty, etc. — a number of passengers will fail to appear for their scheduled flight. When this happens the NCO in charge of the passenger terminal will give the seat to some fortunate serviceman proceeding home on leave — and there

Arriving back from a year's UNEF duty, soldiers are greeted with army pay parade at No. 2 AMU, Trenton. RCAF Cpl. D. Mastrianni stands by to escort them ...



set loading plan — a plan which varies with each type of aircraft and with every cargo.

To ensure correct loading and proper distribution of weight AMU prepare a form known as a weight and balance sheet, a document which is completed long before the freight is loaded. Another important requirement when loading freight is to make certain that the cargo is properly secure. Use of tie-down equipment is essential as any movement of freight during flight could be extremely dangerous.

The work of AMU personnel does not end with the processing, loading and securing of cargo. A transportation technician is included in the crew of every aircraft. He must carry out a continual check of tie-down equipment; supervise any load changes made en route — which, of course, includes any loading or unloading at various air force stations along the way, and he must maintain complete records of any such


changes.

At RCAF stations where there is no AMU representative the flight transportation technician becomes, in effect, an AMU detachment all by himself.

Replacement of the aging *North Stars*, *Dakotas* and C-119s by CC-106s, CC-109s and C-130s is gradually proceeding now. The new aircraft will fly faster, carry more freight or passengers and fly further non-stop than most people realize. The CC-106, for example, airlifts 134 passengers or three times as much freight as a *North Star*, and can carry such a load non-stop from Trenton terminal to No. 1 Wing in Europe.

S/L A. W. Richardson, senior movements staff officer, Air Transport Command Headquarters, comments: "The arrival of these new aircraft will mean much more than a simple extension of the *North Star* operation. Their tremendous capabilities will open up a new concept

of air transportation — a concept of such significance that we must take a very critical look at every part of our present operation. We must examine new methods of loading and packing — methods needed to streamline the processing of freight from terminal to aircraft. We must obtain the best tie-down equipment and take every step needed to ensure the most modern, effective and economical operation possible. It is essential that the ground operation be geared to meet the capabilities of the new aircraft."

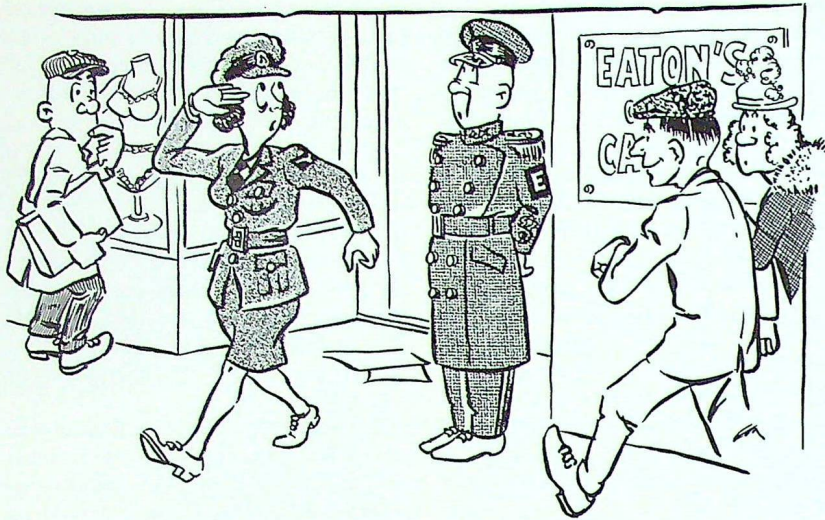
It is evident that the future will bring many changes for AMUs. New and difficult problems will have to be overcome. AMUs are now preparing to solve these problems and continue to provide the smooth and efficient operation which many of us in the air force are inclined to take for granted. Perhaps the very fact that we do take the services of AMUs for granted is the compliment they so richly deserve. 

... through Canadian Customs, where Inspector L. Hill examines baggage of troops just returned from Egypt. A permanent staff of customs and immigration officials works at No. 2 AMU.



Pte. G. Bissonette is greeted at Trenton by his wife and children, youngest of whom was born while he was in Egypt.





"The doorman received many smart salutes."

## Recollections of an Original Airwoman

By SQUADRON LEADER SYLVIA EVANS

Cartoons by CORPORAL P. LAROUCHE

I FIGURE my military career definitely started at ground level. During the first World War, being under school age, I did my bit for the Red Cross unravelling old garments to be reknit into soldiers' wool socks. In 1940 I joined the Alberta Women's Service Corps, took a course in motor mechanics, and found myself spending an awful lot of time flat on my back, peering up at the innards of army vehicles.

Thus, when the RCAF started recruiting women in 1941, I jumped at the chance to get airborne — little realizing that the main reason the airforce wanted women was so that more men could fly. One hundred and fifty of us reported on 23 October 1941 to the Manning Depot (the former Havergal College) in Toronto to start our indoctrination

under the supervision of WAAF officers from England.

In one respect this was a typical air force unit of that period — it wasn't quite finished. The halls were cluttered with wires, ladders and electricians. We spent long days drilling, at classes and being inoculated against every conceivable disease and, as a result, were grateful enough to escape each evening to our double-decker bunks — uncomfortable though these were.

The first day we emerged on the streets of Toronto in uniform we created quite a stir. Eaton's doorman, well-decorated with gold braid, received many smart salutes. Not intending to get caught this way again, I later snubbed the US Naval Attache and several other allied nationals whose uniforms I did not

recognize.

After six weeks came graduation. Those were the days of rapid promotion: I changed over-night from AW2 to the commissioned rank of Assistant Section Officer. My first assignment was to 4 Training Command HQ, Calgary, to help them prepare for the shock of contingents of airwomen arriving at Macleod, Claresholm and other prairie stations.

My first air force flight was in an *Anson*, piloted by the AOC. They cleared all the runways and off we went — around by Mt. Assiniboine, in the bright winter sunshine — to Claresholm. Among other daring flights undertaken in the line of duty, I recall the night I got a flip from Lethbridge to Calgary with a mad RAF squadron leader. I bundled into the parachute and then into the back seat of the *Harvard* and we took off. Through the ear-phones I heard noises to the effect that the pilot wanted to sleep, and would I fly the plane? Not knowing how to drive the aircraft didn't bother me so much as not knowing how to



operate the inter-com system. The lights of little villages showed clearly below, and soon a larger patch of lights which was Calgary appeared. I tried to steer in that direction; the *Harvard* turned sideways but continued its northeasterly course. As we were passing Calgary the pilot woke up and decided to take over for landing. After two years in Calgary I was transferred to No. 3 Training Command HQ in Montreal and then to Eastern Air Command HQ in Halifax. From there I took trips "overseas" to Newfoundland, to see how the WDs were getting along at Gander, Torbay and St. John's.

One day I was informed that the Chief of the Air Staff wished to see me. Mystified, I hastened off to Ottawa and found that I had a new job as private secretary to H. R. H. Princess Alice, wife of the Governor General, the Earl of Athlone. This was really the job of lady-in-waiting, but it was deemed more suitable for an air force officer to be a "secretary".

While the Athlones went to England for a month, I returned to

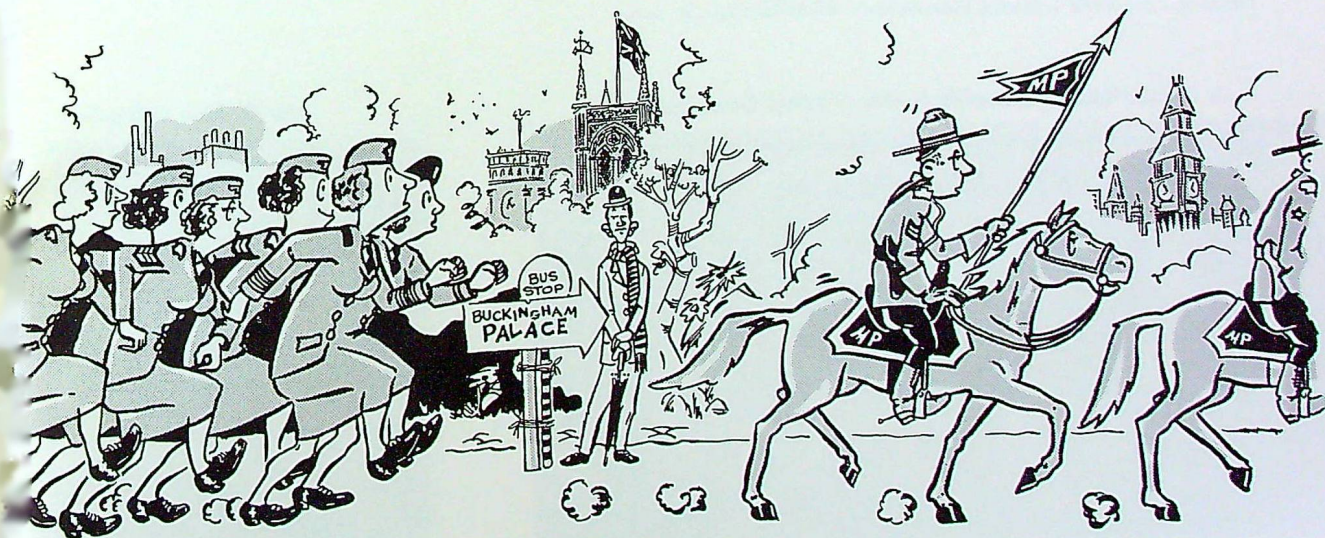
Halifax in time for the celebration of VE Day. On that sunny May morning there was a tri-service parade to Citadel Hill. Squadron Officer Helen Neilson, command messing officer, led the squadron of airwomen. The admiral ordered that the women were to be dismissed and the servicemen were to march through the streets of Halifax, to divert attention from the rioting which had broken out. Helen Neilson quietly marched the WDs back to Gorsebrook Barracks, where they were kept out of mischief and out of the news, making sandwiches for the service police who were on 24-hour duty.

In April 1946 I was demobilized. I returned to the peace and quiet of civilian existence and took up mountain climbing. Five years later I came down out of the clouds and back into the RCAF, to again help males prepare for the shock of contingents of airwomen. Naturally any mountaineer can walk eight miles without batting an eyelash, so I was chosen to go to England with the Canadian contingent, for the coronation of

H. M. Queen Elizabeth in June 1953. The RCAF group also included two nursing sisters and 11 airwomen of the regular force and auxiliary reserve. It was a stirring experience, and the great coronation parade went off like clockwork in spite of the weather and drill manoeuvres unknown to CAP 90. For instance, it was a little difficult keeping in step with the RCMP horses which marched in front of the RCAF. The airmen achieved miracles in getting their sodden uniforms pressed, and next day the Commonwealth contingents paraded to Buckingham Palace, to receive from the Queen the coronation medals they had earned.

After five and a half years at AFHQ I signed a lease for a new apartment — and got transferred overseas, to 1 Air Div HQ in Metz, France. To promote international relations I joined the French Alpine Club, looked up all the European friends I could think of and studied the continental cuisine. It is true what they say about travel being broadening! Now I am back at AFHQ, getting to work on the XB program.

"The great Coronation parade was a stirring experience . . ."





Zone 1 — RCAF Station Namao



Zone 2 —



Training Command Ladies Champions — RCAF Station St. Jean

## TAKE ME OUT

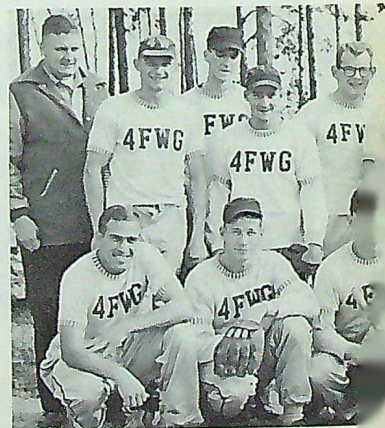
IN the spring some young folk fancy turns to the ball park and the RCAF those people are numbered in the thousands. Without doubt, softball is the No. 1 sport activity of the RCAF's summer program.

Last season over 400 men's 30 women's teams took to the diamonds for a full season of softball and an uncounted number of league exhibition and play-off games.

Air Division Ladies Champions — No. 2 Wing, Grostenquin



Air Division Champions —





Station Gimli



Zone 3 — RCAF Station Clinton

## THE BALL PARK

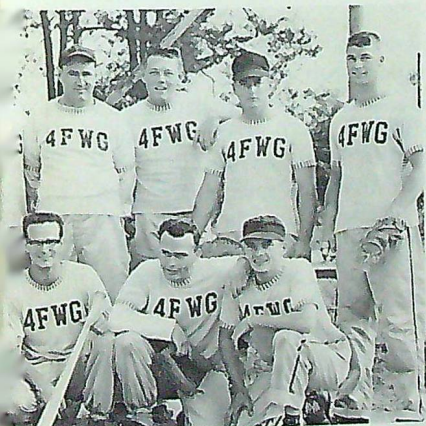
this, of course, leads to championships and here are a few of the top teams from last season. With the exception of the ladies and the Air Division Champions from 4 Wing, Germany, all the teams are section teams which have progressed through the unit intersection league and on into an extra-mural program.

This month another season begins. Champions, look to your laurels! Underdogs, this is your year!



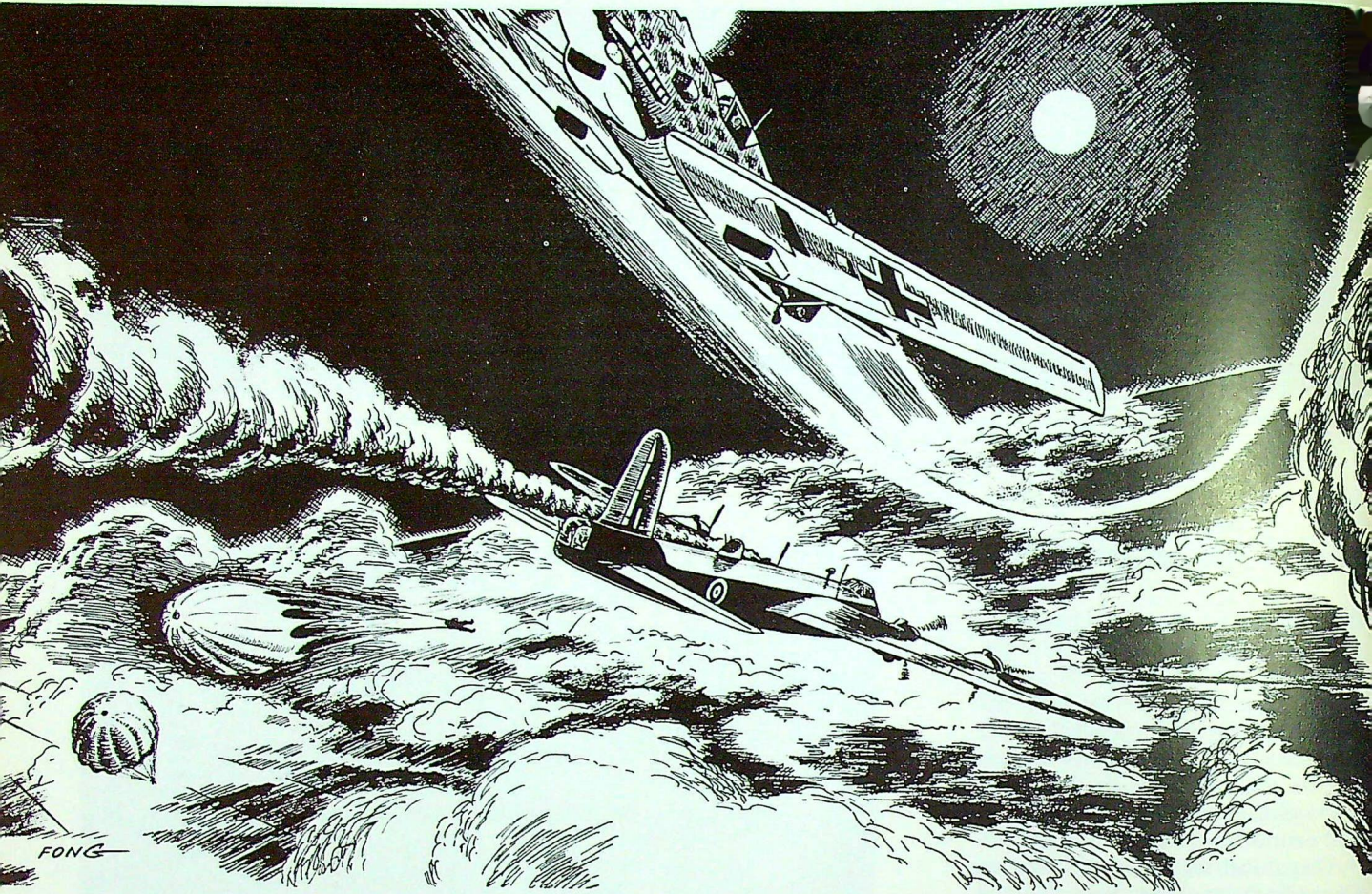
Zone 4 — RCAF Station St. Hubert

o. 4 Wing, Baden Soellingen



Zone 6 — No. 2 Wing, Grostenquin





## IT WAS A LONG WALK HOME

By FLIGHT LIEUTENANT D. M. COX, DFC.

*The argument in the flight room had been lively and long. The wisdom of removing nose-turrets from Stirling aircraft had been given a thorough going-over. One thing was sure: something had to be done to boost the Stirling's performance as it was the slowest of the RAF's heavy bombers. Many of the aircrew felt that the subsequent lack of defence against frontal attack was not important as the Luftwaffe seldom attacked head-on. This view was shared by myself, a sergeant observer attached to the RAF's Pathfinder Force. I was soon to have a second thought on the matter.*

AT LESS than one-minute intervals the 35-ton goliaths rumbled down the runway and lumbered into the air, their bellies full of latent destruction. Target for the night was Munich — the city which just a decade before had witnessed the birth of Nazidom. It was 9 March 1943, a date of no particular significance apart from the fact that *Stirling* No. 9149 and some of its crew were making their seventh — and last — operational trip.

At 8,000 feet the *Stirling* crossed the French coast and headed inland towards Luxembourg. In order to pinpoint our position sometime later, I asked my skipper P/O "Tommy" Tomlinson to hold the aircraft straight and level while I took a celestial fix. When that task was completed the captain resumed his defensive weaving manoeuvres. A matter of minutes later, over the roar of the engines, we heard a nerve-shattering staccato and saw streams of fire arching towards us. There was a sickening thud of cannon shells biting into metal, then a crescendo of sound as a German night fighter swept past. The attack had been head-on.

Coincidence, or were the Germans aware of the removal of the *Stirling's* nose-turret? This was no time for speculation; the *Stirling* was diving, its starboard wing shrouded in flames. All attempts to put out the fire failed as the aircraft lost height rapidly.

The order came to bail-out. I made my way to the escape hatch and rolled into the night. The *Stirling* swept past like a torch, brightening the darkness with its trail of flames, then snuffed itself out with a thud as it slammed onto the terrain below. A brief parachute descent landed me in a tree somewhere in the Ardennes forest. A short distance away the burning aircraft had set the woods on fire and its ammunition was exploding like deadly popcorn. I made my way to the flaming wreck-

age to see if there was any sign of my crew-mates. I was to learn later that the pilot's body was found near the crash. His efforts to save the aircraft and let the crew bail-out first had cost him his life.

#### THE WALK BEGINS

Leaving the area as quickly as possible and guiding myself by reference to the north star, I headed in a westerly direction. It was an all-night hike. Stumbling around in the dark, not sure of my exact whereabouts and knowing my heading only roughly, made for a difficult journey — but I was putting distance between myself and the downed aircraft. Far above, a steady drone let me know that the bomber stream was still in business. I found my way out of the woods and started down a country road. In the silence of the night the gravel crunching under my feet seemed to make a tremendous din so I took to grain-fields and pastures beside the road. A large black shape sprang suddenly from a clump of trees and, with a bellow, went pounding off across the field. It was a toss-up which was

more frightened, the bull or myself.

At dawn, splashing my way through a stream to frustrate the efforts of any dogs that might be used to pick up my trail, I came to a reservoir with the words "Eaux de Mezieres" printed on it and realized that I was in France. Some time later I saw a hill heavily forested with evergreens, so I abandoned the stream and took refuge under the inviting trees. I was just nicely out of view when a hedge-hopping German aircraft skimmed by overhead. It was a close call but I hadn't been seen. However, it appeared that the Germans had a fair idea of my whereabouts. I would have to be careful. A few hours later I came across an abandoned mill complete with rustic water wheel. Approaching the mill cautiously, I entered it through a cellar window. When my eyes adjusted to the darkness I climbed the rickety old stairs which threatened to collapse and pitch me into the cellar. The mill was empty except for some old newspapers which I spread on the floor to lie on. Before resting I glanced out of the window in time to see a German motorcycle roaring down the road followed by a German staff car. I also noticed an isolated farmhouse not far from the mill. I lay on the newspapers and slept.

#### BY AN OLD MILL STREAM

When darkness came I left the shelter of the old mill, made my way to the farmhouse and rapped at the door. A night visit in German-occupied territory was a greatly feared event as it frequently meant that the much-dreaded Gestapo was calling. Thus, the elderly farmer who opened the door was considerably relieved to find an RCAF flier on the threshold. In spite of the penalty for sheltering an evader, his wife gave me the first meal I had had in 24 hours and provided me with a ragged old jacket, a pair of ancient mud-caked boots and a list of town

The author today.





The shattered remains of the author's *Stirling* aircraft. The picture was taken at the time of the incident and given to F/L Cox 17 years later.

names all the way to Paris. Not wishing to jeopardize the two kindly old people\* any further I left the farmhouse, returned to the mill and lay down. When I awoke moonlight was streaming through a window, painting a path of gold across the dusty floor.

I got up and headed for Paris, hoping to be inconspicuous in that vast metropolis while attempting to contact the French underground. I walked until dawn then decided to hide out again. The hayloft of a barn provided a comfortable refuge. After sleeping a few hours to recover my strength, I prepared to resume my trek. Noticing a roll of wire on the floor, I slung it over my shoulder as if I were a farm labourer, then continued down a main road in broad daylight.

For two days and nights I travelled until hunger and cold forced me

\*I located this old couple last summer after 17 years. They are now both 83 years old.

to try once more for help. I warily approached a blacksmith in a small village and revealed my identity. The blacksmith told me to wait while he went to see somebody. The tension of not knowing whether or not I was being betrayed mounted until I saw the blacksmith return with the village priest. They drove me in a small truck to a railway station, then to an adjacent barn where I was told to spend the remainder of the day hiding in the hayloft. At nightfall my benefactors gave me some money and smuggled me onto a freight train bound for Paris.

#### CRISIS IN PARIS

Because of the strict surveillance maintained at all station exits, arrangements had been made for a railway worker to get me out of the station in Paris. But something went wrong. On reaching Paris I hid in a freight car for hours until, realizing that my man was not going to show

up, I ventured out of my hiding place and asked a labourer if there were some way out of the station. The worker said that he would take me out through the office of a man who could be trusted but, on looking through the office window, he grabbed my arm in great alarm and rushed me down a small service stairway, explaining en route that he had seen a Nazi spy in the office. With a quick farewell he pushed me out through a small exit to the street. Once more I was on my own.

I lost no time getting away from the station and was just beginning to breathe more easily when a squad of German motorcyclists came up behind me. I stopped to let them go by. No sooner had they passed but they turned around and approached once more. The tension began building up. Were they suspicious, was there something about my appearance that didn't seem quite right? The Germans came up to me, then went on. A crisis had passed. All day I wandered the streets of Paris — up broad avenues, down narrow cobblestone streets, across broad plazas and into tiny market places — but I had no way of knowing where I could locate a member of the underground.

As evening approached the problem arose of the night's lodging. It was impossible to get a bed anywhere in the city without being asked for identification so I headed for the outskirts. I was walking down a street which paralleled a railway cutting when a German staff car began following me. I could see the German officers in the staff car giving me the once over. It was time to do something. I started to cross a low bridge over the railway tracks and decided that if the staff car stopped me I would jump over the bridge and attempt a getaway. The staff car drew alongside, then speeded up and disappeared down the road. Another round in the war of nerves was over.

Weary from mental as well as

physical fatigue, I decided to seek a moment's rest and a little refreshment. At a small restaurant called the "Papillon Bleu" I bought a glass of wine. Being the only customer in the restaurant, I took the opportunity to make inquiries. I queried the young barmaid about the underground organization and received an unexpected reaction. She began to accuse me loudly of being a Gestapo agent and made such a fuss with her colourful language and descriptive phrases that her family came running into the restaurant to see what was going on. The girl's reaction, while not appreciated, was understandable. It was a favourite Gestapo trick to have an English-speaking German pose as an allied airman and try to get help. If help was received the Gestapo would arrest all those who gave assistance.

#### UNDERGROUND PROTECTION

But the situation changed rapidly for the better. I was wearing my "dog tags" and with these established my identity. Only then did I discover that I had stumbled upon a branch of the French Resistance. From that point on every move I made was planned by people who risked their lives to get me back to England.

After having a meal and a bath I was given a room where, because of sheer exhaustion, I slept for 24 hours. While I slept a conference took place concerning my future; the underground railway started to roll. I was taken to a house in a Paris suburb to stay a few days before moving on. Then tragedy struck. The constant threat under which members of the resistance movement worked became reality. The Gestapo managed to penetrate their ranks and temporarily shattered the organization all the way from Paris to Switzerland. These courageous people died, as did many more before the war was over.

Following that major setback, I



A French Resistance group who helped the author (back row, centre, in white shirt and tie).

was taken to an apartment in Paris where several other allied servicemen were in hiding. After two weeks the French decided to take us to a secret airfield north of Paris where we could be picked up by an RAF *Lysander*. Unfortunately, plans for this operation fell through. My fellow evaders and I were moved to a small Brittany town where, it was hoped, a combination of high tides and dark nights would permit a submarine to come close to shore and pick us up. Upon arrival at this town we evaders were taken to the mayor's house for dinner. Then, for greater safety, we were split up and sent to four different houses to await developments. I was hidden in an upstairs room of an elderly couple's house. While the German commander of the local coast battery played chess with the owner, he was, in effect, playing the dangerous game of Russian roulette. If I had been discovered the Frenchman

would have been quickly disposed of for harbouring a fugitive. But all the courage in the world is in vain unless there is also an element of luck, and luck was not with us. After two weeks of waiting for favourable conditions the attempt to escape Fortress Europe by sea had to be abandoned. It was decided that we must make our way to freedom via Spain.

#### JOURNEY TO SPAIN

In a mood of frustration, bordering on despair, we were returned to Paris. Once more an apartment was found where we could stay until arrangements could be made for the long trip south. After false documents had been produced, guides procured and a number of other details worked out, the hazardous journey was begun. Allowing for the fact that I was travelling through enemy-occupied territory, unable to speak the language or to prevent



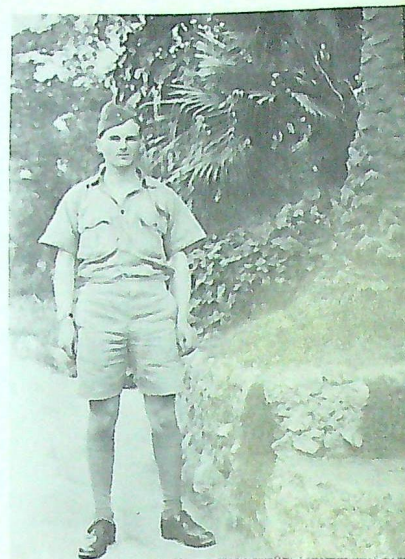
Jean Camord, an expert forger and skilled guide for downed Allied aircrew, and his wife, a present-day stunt flier.

my apprehension, I had an uneventful trip. Along with my fellow fugitives I arrived at the town of Pau in the shadow of the Pyrenees and prepared for the march across the mountains.

The assault of the summit was to be the acid test. The Germans were

well aware that allied fliers were partial to Spain as an escape route and they were determined to slam the door of freedom in their faces. The frontier between France and Spain was heavily guarded. In addition to German border patrols, barbed wire, land-mines and searchlights there was the matter of Spanish sentries. Spain was a neutral country and wanted to stay that way; therefore, the Spanish sentries were as anxious as the German troops to catch allied service men entering Spain. Breaching this formidable blockade was a cosmopolitan operation with French guides taking Canadian and British fliers past German guards and Spanish sentries.

Finally, all was set and the attempt was made. Choosing a dark night when only momentary flickers of moonlight betrayed our presence, my fellow fugitives and I, along with our guides, started out. The most precipitous and precarious parts of the Pyrenees were chosen by the guides for the border crossing since chance of detection in those parts was reduced. The scheme worked. In three days we were safe in Spain. After turning ourselves over to the Spanish authorities we were eventually escorted to the British garrison at Gibraltar.



On free soil once again, the author relaxes in Gibraltar after his long hike through enemy-held territory.

It was all over. The hardship, the dangers and the moments of great fear were behind. In a few weeks we would be on a troopship bound for England. For me, the long and weary hike across France had paid off. I was a successful evader but it had been a long walk home. ☺

## UPLANDS WINS FIRE PREVENTION AWARDS

For the second successive year an air force station has won both the National Fire Protection Association Grand Award and the Howard Green Trophy in the annual international competition for excellence in the field of fire safety education and performance. The winner in 1959 was RCAF Station Falconbridge and in 1960 RCAF Station Uplands.

The NFPA Grand Award is presented, for permanent retention, to the station with the best fire prevention program in the Canadian military division of the competition. Entries are judged at NFPA headquarters in Boston in December of each year.

The Howard Green Trophy is for annual competition and is presented to the winner of a separate contest

between the Department of National Defence Grand Award winner and the Government Division winner. These entries are judged in Ottawa subsequent to the announcement of the NFPA awards.

An additional award, the Dominion Fire Prevention Association Shield, is presented to the Service to which the NFPA Grand Award winner belongs and is retained annually at the headquarters of that Service.

If You Drive  
An Automobile,  
Remember . . .

## ACCIDENTS ARE SELDOM ACCIDENTAL



“ . . . even if you are a green ticket pilot.”

By WING COMMANDER T. T. SCOVILL.

*(Who just got a summons for driving the wrong way on a one-way street — Editor.)*

WE CANNOT explain accidents as products of pure chance. The dictionary does this, but we know better. We are convinced, for instance, that relatively few automobile accidents are wholly accidental. Statistically speaking, the number has been reckoned at well below 15 percent.

If accidents aren't due to chance, what are they due to? Every driver of a motor vehicle should stop to ponder this question before he gets behind the wheel again.

No one in his right mind would take an aeroplane off the ground before he had learned to land it, yet there are many people driving cars who have not learned how to get home safely. Despite evidence to the contrary, some of today's drivers think that all there is to driving a car is to push or pull a few levers or buttons and take off. A new-born baby does not immediately get up on his two legs and run. If this was

possible, imagine the results as the child's mental processes could not keep up with his physical maturity. "A bull in a china shop" would be mild in comparison.

Nature very kindly protects us in our younger years by allowing our mental development to keep up with our physical development, but in later years we are on our own. When we change our environment by getting off our two legs and sitting behind the wheel of a car, an adjustment is necessary in order that our mental and physical make-up can meet this change. Unfortunately, this fact does not sink in very easily and people drive cars too fast for their own reactions to cope with. Things happen much faster when driving at 50 mph than when walking down the street.

If anyone told you that you were a poor driver you would likely be very upset; yet, have you ever really analysed your own driving habits?

It is a common failure on our part to always blame the other fellow and to say "Why doesn't he learn to drive?" This saying is often coloured with many adjectives. Do you realize how many times someone is saying or thinking the same about you? If you did, you would drive more carefully and observe the rules of the road to everyone's advantage.

In the RCAF we like to think that we are a mature lot of people imbued with good common sense. If you think that way, reflect for a moment on the fact that more of our personnel are killed or injured in private motor cars in a year than in flying accidents, yet keeping aircraft in the air is our day-to-day business. If we can work at comparatively dangerous jobs with such good safety records, why can't we drive our own cars more safely?

Quite frankly, the following points are intended to make you stop and evaluate your own driving habits. How many of them apply to you personally?

- Male drivers between 16 and 24 years of age have a much higher accident rate than any other

group and pay a much higher insurance premium on their cars. Girls in the same age group are classed as normal, as far as insurance risks go.

- About three out of ten drivers involved in fatal accidents were speeding. Is a few minutes saved worth it?
- In 26 out of 100 fatal accidents a driver or adult pedestrian had been drinking. "The face that lingered so long in the mirror behind the bar does not fit so well behind the wheel."
- Traffic laws set maximum speeds but also state that you must not travel at any time at a speed which will endanger life or property. At 30 mph you need 81 feet to stop on dry concrete — 42 feet to make up your mind and 39 feet for actual braking. On a dry icy surface at the same speed you need 180 feet and if the ice is wet you need 300 feet. Every additional 10 mph over 30 increases your stopping distance by over 50 percent. Do you always drive keeping the stopping factor in mind?
- You need good visibility to drive a car safely. You cannot drive a car on instruments like you can an aeroplane, even if you are a green ticket pilot.
- Every four hours a person is killed on Canadian roads — every 12 minutes someone is injured. Do you operate on the premise that "it can't happen to me"?

Safety on our roads is everyone's business. All RCAF stations are currently conducting private motor car safety campaigns through driver education. Legislation can only provide the basis for road safety; from then on it is a question of developing a "safe driving attitude" in the person behind the wheel. Are you doing your part? ☉



Elijah Mkhupela and Jackson Gomani point out their home in Nyasaland to Protestant padres W/C A. R. MacIver, Rev. H. Poughman and Major H. A. Merklinger.

## "Inasmuch . . ."

Reprint from THE PLANESMAN

NYASALAND, deep in the heart of Africa, is a long way from Ottawa, deep in the heart of Canada, but members of the Protestant faith in the RCAF have helped to bridge that wide gap for two young African students.

It took weeks of travel but Elijah Mkhupela and Jackson Gomani, aged 18 and 20 respectively, have come many thousands of miles through a roundabout route and have overcome many difficulties in order to attain an objective. Their odyssey was inspired by the desire to further their education then return to their homeland to help their people.

Upon graduation from a Christian Mission School in Nyasaland Elijah and Jackson were determined to get additional training. This presented a number of formidable problems.

In the first place, there were regulations forbidding able bodied African men from leaving the country. In addition, they had no passports or visas, and very little money. Undaunted, they set off. Travelling through Tanganyika, they arrived in the Sudan where they got permits which identified them and enabled them to travel on. They went to Cairo then on to Yugoslavia seeking help for scholarships. In Yugoslavia they met a Canadian economist who suggested they might get help under the Colombo Plan. But, unfortunately they did not qualify for assistance under this plan. Finally they appealed to the Presbyterian Church in Ottawa. Some funds were obtained from Presbyterian and United churches there and the Canadian Department of Immigration allowed the two boys to enter Canada on a

visitor's permit.

On arrival in Ottawa they went to the local congregations, which had been first to answer their appeal, and these congregations asked the Protestant Chaplain Branch of the armed forces to sponsor the boys. There was an immediate response. An African Student Fund was set up and Protestant members in the services united in their support of the cause. Air Force chaplains at units across Canada and overseas were asked to contribute to the worthy project. Contributions came from a variety of sources. In addition to special church collections many units, like RCAF Station Moose Jaw, gave to the Fund the offerings from Children's Christmas Eve Services and from Midnight Choral Communion. Children attending Sunday schools were also given a chance to contribute.

The two students who wanted to get an education so badly are having their wish fulfilled. Elijah is at the Kemptville Agricultural College, near Ottawa, where he is learning agriculture. Jackson is learning technical training in motor mechanics and electricity at the Ottawa Technical High School. At the end of their three years apprenticeship they will return to Nyasaland well qualified to teach their countrymen modern methods.

The members of the Protestant faith in the RCAF can be justly proud of their efforts on behalf of the two students. "Inasmuch as ye have done it unto one of the least of these My brethren, ye have done it unto Me".

The whisper of a pretty girl can be heard farther than the roar of a lion.

—Arab Proverb

Trust men and they will be true to you; treat them greatly and they will show themselves great.

—Emerson

# CONCERNING THE CARIBOU

By FLIGHT LIEUTENANT P. A. GOODFALLOW,  
Directorate of Maintenance Engineering, AFHQ.

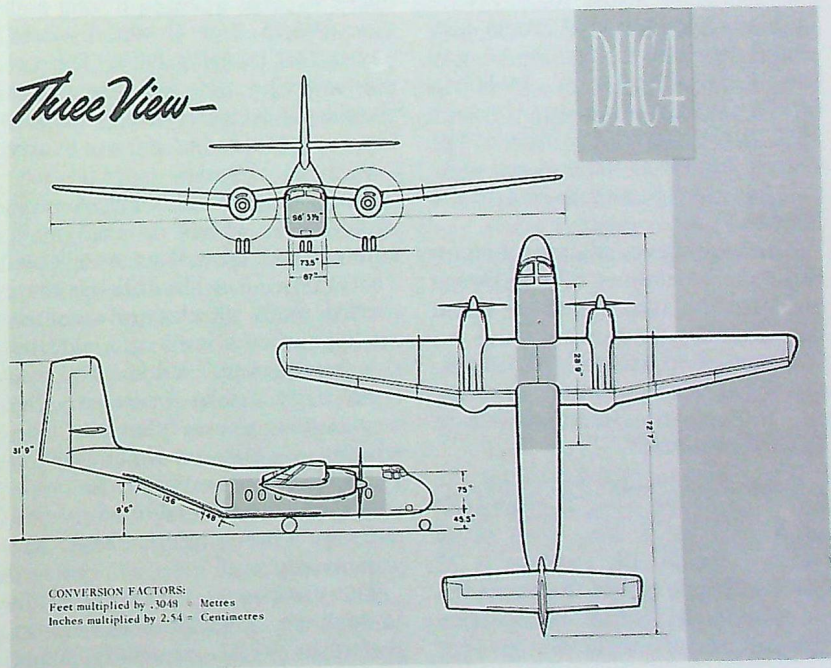
**F**OLLOWED by a swirl of dust, the high-winged, towering-tailed white bird bumped to an unusually short stop on the sand of the Sinai Desert. Beneath the UN letters and the RCAF roundel painted on its up-swept fuselage, the *Caribou's* rear-facing loading ramp was lowered, revealing 32 troops of the United Nations Emergency Force ready for patrol duty.

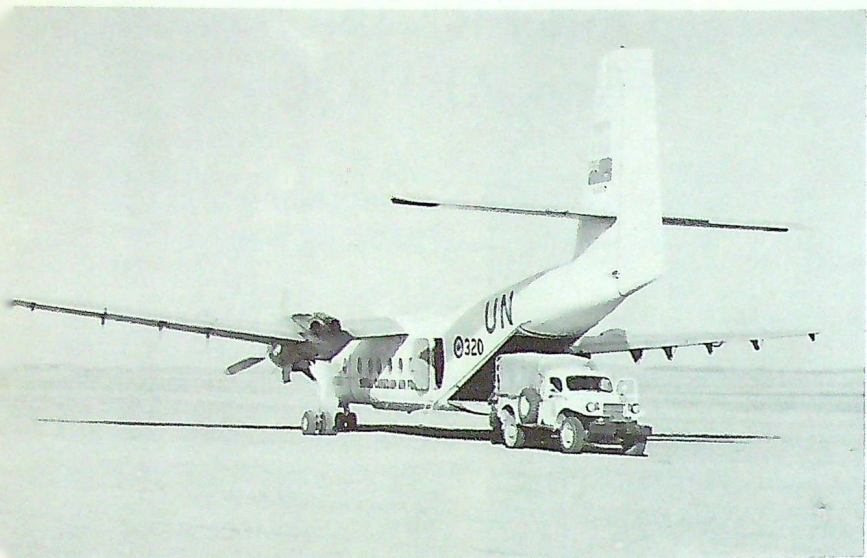
This is a common sight somewhere east of Suez, where for more than four years Canadians have been stationed to help keep the peace. Last fall three *Caribou* replaced three

*Dakota* and two *Otter* aircraft on the inventory of No. 115 Air Transport Unit operating out of El Arish, Egypt. It was the first RCAF assignment for the newly acquired transports, which seem made to order for this UNEF job.

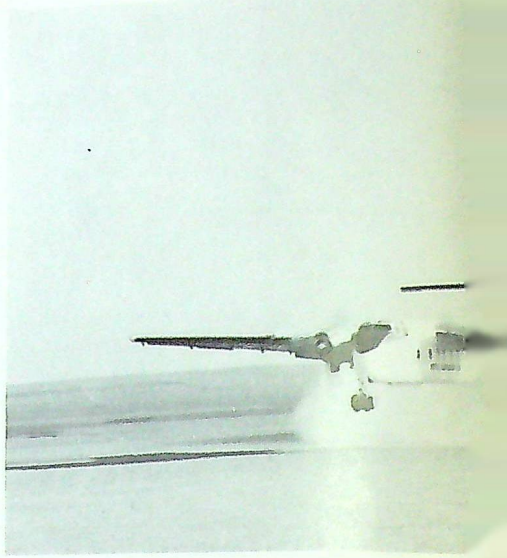
Perhaps the most important asset of this de Havilland of Canada designed and built aircraft is its ability to take off from and land on small unimproved airfields. The de Havilland Company, long noted for its development of "made to measure" STOL aircraft,\* originally planned

\*THE ROUND, Vol. 10, No. 9, Nov. 1958.





*Caribou* floor is at truck-bed height and loading ramp extensions permit vehicles to be driven directly into 1150 cu. ft. cabin.



STOL capability admirably fits *Caribou* to operate from rough desert strips on

the *Caribou* for operation from rough hastily-prepared strips. The US Army showed immediate interest in its capabilities and purchased five aircraft to undergo gruelling tests on muddy and ploughed fields. Results were so good that additional orders were placed, bringing the total to 61, and carrying production at de Havilland's Downsview plant through 1962 at four aircraft a month. The Ghana Air Force has ordered eight and five have been delivered to the RCAF.

To encourage sales and to demonstrate the capabilities of the *Caribou* one aircraft made a round-the-world trip in 1959. Stops were made on four continents, including Australia, and flying demonstrations were carried out. No time was lost due to unserviceabilities.

The *Caribou* purchased by the RCAF is a high wing, twin-engined aircraft. It has a wing span of 96 feet 5½ inches, the fuselage is 72 feet 7 inches long and the tip of the tail reaches 31 feet 9 inches. This high tail at the end of the upswept

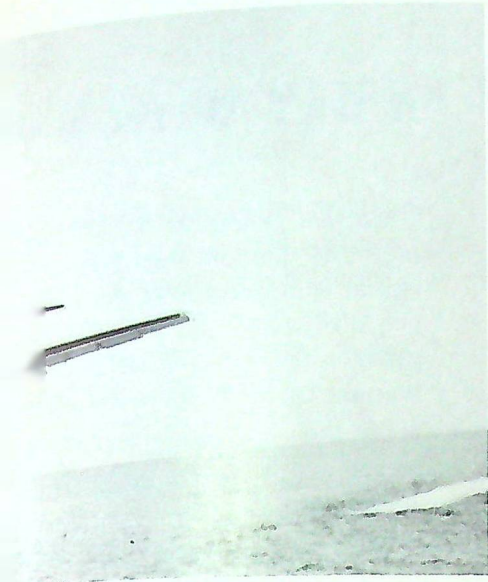
fuselage is perhaps the most prominent feature of the ruggedly constructed *Caribou*. The engines are Canadian Pratt and Whitney R-2000-7M2. The R-2000 engines were produced in large quantity during and after World War II and used to power the Douglas DC4. The extensive flying time on this engine should guarantee relatively trouble free operation and ensure ready availability of parts.

The undercarriage is tricycle type, with double wheels on each main landing gear as well as nose gear. The 11.00 x 12 in. size tubeless tires, for the main wheels, are mounted on light alloy wheels in a side by side arrangement. Brakes are disc type, hydraulically operated. The nose landing gear is fitted with twin wheels on which are mounted 7.50 x 10 in. tubeless tires. The main wheel tires are inflated to 35 psi and the nose-wheel tires to 38 psi approximately.

The *Caribou* uses a combination of high-lift, high drag devices to give it its STOL capability. Wing

area is 912.4 sq. ft., 285 sq. ft., of it devoted to the high-lift area. Wing trailing edge flap area including ailerons is 285 sq. ft. The flaps are full span double slotted, with the outer trailing portion operated independently as ailerons. Slots between the wing trailing edge and between the two flap sections keep air flow smooth over the flaps. A fence to reduce spanwise flow is located on top of the wing, seven feet outboard from the nacelle.

At a gross weight of 26,000 lbs. and both engines at take-off power of 1,450 h.p. the *Caribou* requires only 540 ft. before becoming airborne; to clear a 50 ft. obstacle requires a total of 1,020 ft. With a 10 kt. headwind these figures are reduced to 410 ft. before becoming airborne and 820 ft. to clear a 50 ft. obstacle. Required landing distances are 525 ft. ground roll, or to clear a 50 ft. obstacle 1,020 ft. total. A 10 kt. headwind reduces the ground roll to 460 ft., or 825 ft. to clear a 50 ft. obstacle. This permits operation from unimproved thousand-foot runways



UNEF duty. Take-off distance with zero wind is 540 feet.



Payload is roughly three tons with fuel for 200 miles. Maximum range (normal tanks) is 1,450 miles. Cruising speed is 182 mph and stalling speed 62 mph.

in jungle, bush or desert landing strips. Despite its ability to carry 30 passengers and baggage, or 32 fully equipped combat troops from postage stamp sized fields, the *Caribou* is comparatively easy to fly.

Pilots who are accustomed to higher performance aircraft find difficulty adjusting themselves to the steep angle of climb and landing approach that is characteristic of the *Caribou*. Forward visibility is reduced during a steep climb despite the 32 square feet of glass surrounding the cockpit, giving 265° forward vision. Maximum auto lean cruising speed is 170 mph at sea level and 182 mph at 7,500 ft. Stalling speed is 64 mph. Service ceiling is 26,500 ft. on both engines or 11,900 on one engine. The rate of climb at maximum continuous power (2 x 1200 BHP) is 1,575 fpm at sea level with both engines or 345 fpm on one engine.

At an all up weight of 26,000 lbs., the *Caribou* can carry a payload of 4,701 lbs. 115 miles, or 1,410 lb. 662 miles. The normal fuel capacity

in the two fuel tanks, one in each wing, is 690 gallons; however, three rigid tanks are available and can be installed inside the fuselage to provide 600 additional gallons for long-range ferry operation. Recently the *Caribou* has been authorized to fly at an all up weight of 28,000 lb. for normal operations and 29,500 lb. for ferry flights. This increases the payload considerably.

Several other features of the *Caribou* appeal to pilots: nose wheel steering gives a 30.5 ft. turning radius. The cockpit layout features airline duplication of instruments. One pilot can operate the *Caribou* for short haul operation. Low approach speed of 75 mph on final is excellent for instrument landings. Hydraulic power operates the flaps, landing gear, brakes and nose wheel steering. The power plants are identical from the firewall forward. The cowlings are petal type facilitating easy, speedy servicing. The cabin floor is at truck-bed height, 45 inches above the ground with loading ramp extensions available to permit vehicles

such as jeeps to be driven directly into the 1150 cu. ft. cabin. The cabin floor will carry a distributed load of 200 lb. per square foot. Tie-down rings having a capacity of 10,000 lb. are available.

The *Caribou* seems destined for increased popularity. No other aircraft having its load carrying capacity can operate from unimproved 1000 ft. airstrips. The de Havilland Co. is currently conducting a study to install two T64 turboprop engines with a military rating of 2700 ESHP and a normal rated power of 2330 ESHP. ☺

Real difficulties can be overcome; it is only the imaginary ones that are unconquerable.

—Theodore N. Vail

In this world, there is always danger for those who are afraid of it.

—Bernard Shaw

The soul of man is stronger than anything that can happen to him.

—Lieut. Robert F. Scott



WO Fleming checks with a draughtsman in the design and requirements flight regarding a construction detail which his tradesmen have queried (l. to r.): Mr. F. J. Kitchener and WO Fleming.

A discussion concerning screens takes place in the carpenter shop (l. to r.): Sgt. J. Presseau, Mr. A. Seguin and WO Fleming.



## A DAY WITH A

Warrant Officer W. M. Fleming of RCAF Station Rockcliffe is a typical representative of those who play a key role in the RCAF's construction and maintenance program. Warrant Officer Fleming is a member of the construction engineering branch and is known popularly as a foreman of works.

There are approximately 200 service and civilian foremen of works in the RCAF. Each of the 55 air force stations which provide C. E. service has one to four of them on strength, depending on the size of the station. They are employed at

WO Fleming discusses the repair of electrical components in his projects flight electrical shop with: Mr J. Proulx and FS J. R. McCauley.

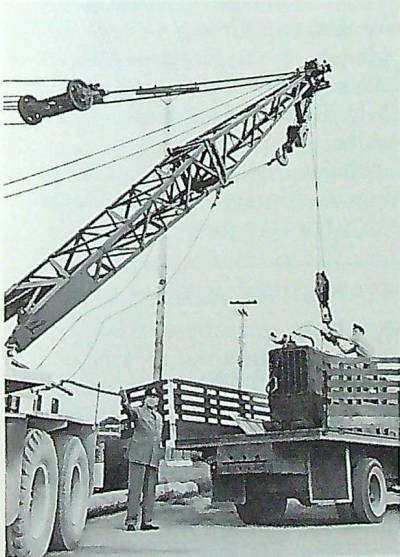


## MAN OF WORKS

larger stations as project flight superintendents, pavements and grounds group foremen, preventive maintenance flight superintendents or as estimators and inspectors in design and requirements flights.

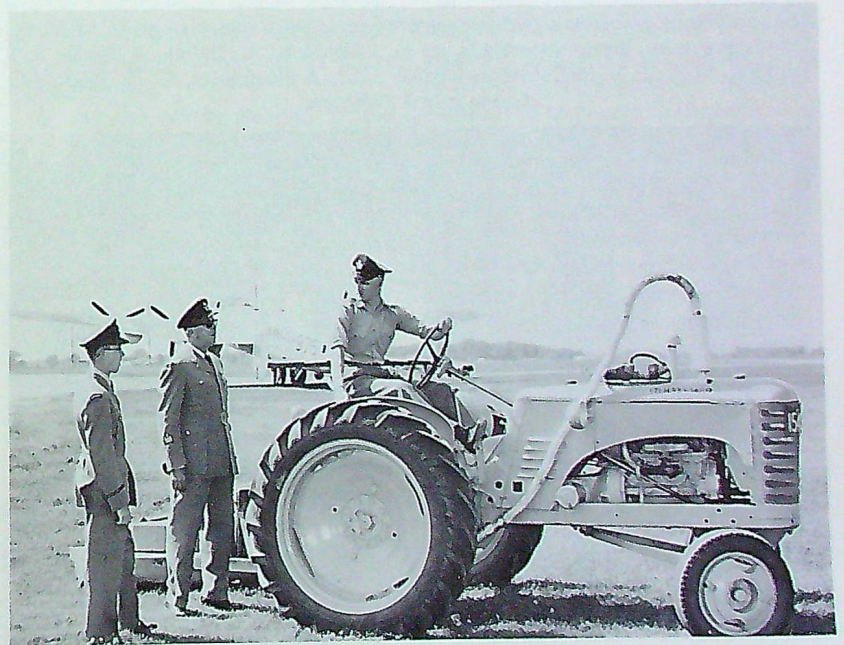
A foreman of works must be at least a flight sergeant in rank and have been employed in some C. E. trade such as carpenter, plumber, electrician or painter. The personnel in this trade act in a supervisory capacity and must have either a long and varied career in the air force's construction and maintenance program or else an extensive background in civilian construction work. Ⓞ

WO Fleming supervises the unloading of an auxiliary power unit which will be incorporated in one of his current projects.



WO Fleming here gives assistance in inspection of work on a road contract to F/O C. T. Harnden who is responsible for co-ordinating the supervision of contracts.

Although WO Fleming is not employed in the pavements and grounds group, he cannot resist the urge, as an old hand, to take a look at how the aerodrome grass cutting is progressing. He talks to F/O Harnden and LAC J. M. McKeigan.





# RCAF ASSOCIATION

*This section of THE ROUNDDEL is prepared by Association Headquarters, 424 Metcalfe St., Ottawa, Ont.*

## GROUP MEETINGS PRELUDE NATIONAL CONVENTION

GROUPS across Canada have now held their 1961 annual meetings. Each year these functions become more elaborate and are better attended than the ones before.

It is these Group meetings that originate the majority of resolutions to be considered this month at the 11th National Convention in Winnipeg. Groups also nominate a slate of officers for the National Executive Council and the elections are carried out at the annual general meeting.

The following Group Presidents were elected to serve for the ensuing year:

Mr. Angus MacLellan — Maritime Group.

Mr. Frank Michalak — Quebec Group.

Mr. William Caverly — Ontario Group.

Mr. Harold Ogden — Manitoba, N.W. Ontario Group.

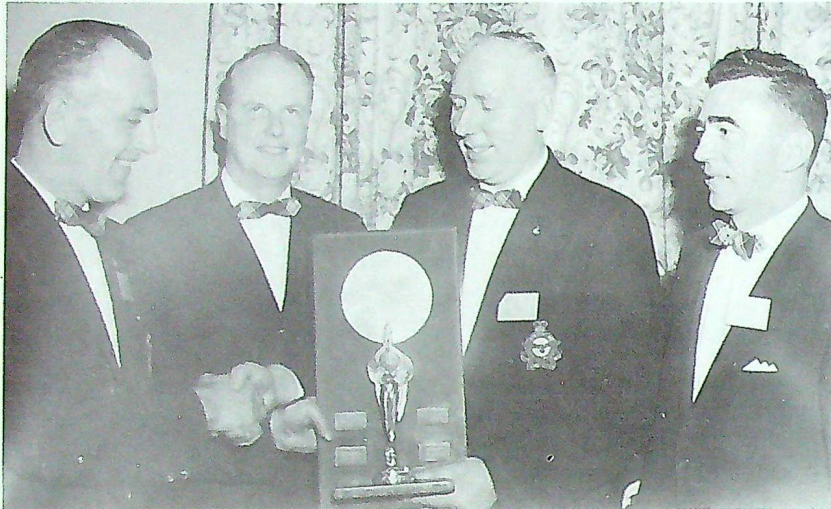
Mr. A. J. T. Boyd — Saskatchewan Group.

Mr. Ronald D. White, Q.C., — Alberta Group.

A detailed report of the Group meetings is contained in the April issue of WINGS AT HOME.

### CHANGING ADDRESS?

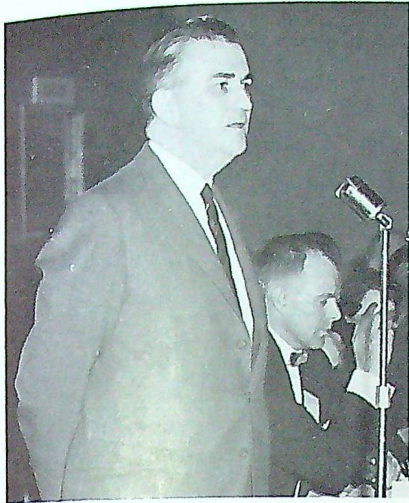
Association members wishing to assure continuous receipt of THE ROUNDDEL must send a card immediately on moving, stating both their old and new addresses, to: Secretary, RCAF Association, 424 Metcalfe St., Ottawa, Ont.



Lord Beaverbrook Wing in Fredericton, N.B., has won the Tupper Trophy for the second successive year for being the most beneficently active Wing in Maritime Group. At the presentation (l. to r.): Sinclair MacLeod, Maritime Group president; Leonard Baldock, national president; George Watts, wing president; Angus MacLellan, Maritime Group president-elect.

Toronto Wings' presidents and former presidents were guests at an RCAF Station Downsview mess dinner recently. L. to r.: J. Johnson, W. Duthie, A. Deeks, E. R. Penfold, W/C J. T. McCutcheon (station CO), J. Humphries, G. E. Penfold, L. Schedlin and T. Simpson.





Fisheries Minister Angus McLean, an RCAF evader in Europe (ROUNDEL, Nov. 60), addressed Ontario Group annual meeting in Trenton, telling of wonderful work done by French underground during the Second World War.

## GOOD RESPONSE FROM MEMBERS-AT-LARGE

Early in 1961 members-at-large of the Association, totalling in excess of 3200, were asked to furnish the national office with the names and addresses of acquaintances who were formerly members of the RCAF but so far not of the Association. The response to our request was most gratifying. We have received in excess of 5000 names and we are now beginning to receive returns from our membership solicitation. This is really our only source for obtaining the names and addresses of former members of the air force as the original lists have become obsolete.

We are very grateful to all the members-at-large who heeded our request and suggest to Wing members that this would be a splendid way to build up a roster of names for a Wing membership campaign. Thank you very much, members-at-large.

## Apparently We Have Forgotten

**D**URING the Second World War thousands of Allied fliers were shot down on operations and a considerable number of them, including Canadians, successfully evaded capture. The fact that these personnel managed to evade the enemy was largely due to the heroic efforts of thousands of civilian men, women and even children of several nationalities. In doing so these civilians risked much more than the escaping or evading airman they helped. If the fliers were caught they became prisoners of war. The civilians helping them were unlikely to escape sudden death, if they were lucky, or prolonged torture if they were not.

It is a matter of historical record that many of these courageous civilians were, in fact, caught after helping Canadian fliers make their escape. They left behind them widows, widowers and orphans whose enduring loss is an addition to the supreme price they themselves paid in the cause of freedom. In the series of escape and evasion stories now appearing in THE ROUNDEL passing reference is made to some of these gallant people.

At the end of the Second World War the RAF Escaping Society was formed as an act of gratitude by those who got away. It was conceived by Lord Portal, then Chief of the Air Staff, RAF, who became its president. Being the only society of its kind in the world, its membership was opened to all men of the Allied and Dominion's air forces who successfully escaped or evaded from enemy-occupied territory during the Second World War. More than 4,000 people in Europe who helped our airmen to escape were enrolled automatically as honorary members.

The main object of the Society is to repay some part of the debt we

owe to our faithful friends, especially to the widows and orphans of those who died helping us in France, Belgium, Holland, Italy, Norway, Denmark, Luxembourg, Greece and in the Far East. Over the years the Society has brought many orphans to England for a holiday and, since 1950, a regular holiday scheme for adults and children has been in operation to help foster the spirit of international friendship and understanding to which the Society is pledged. Some children are staying longer in England where they are being educated at the Society's expense. Help has also been given to widows afflicted by sickness or want and their needs do not diminish as the years pass.

To finance the ever present need for help to individuals and to run the holiday scheme is beyond the means of the Society members alone, although each member pays a subscription and many make additional donations in an attempt to do so. Many people in other lands gave their lives that Allied airmen, including Canadians, could return to England and continue the fight for freedom. Unfortunately, however, Canadians in general have been very remiss in their duty towards these helpers. ⊙

The Association is deeply concerned with the fact that air force veterans of Canada have not taken a real interest in the welfare of their European benefactors during the Second World War. The matter is on the agenda of the National Convention at Winnipeg when, it is hoped, steps will be taken to formulate plans for more active participation in this worthwhile and needy cause.

## Letters To The Editor

### EYEING SEA ISLAND

Dear Sir,

In concluding his article on RCAF Station Sea Island (Jan-Feb 61) F/L D. F. B. Metcalf mentions that Sea Island extends a hearty welcome to those who may venture that way on duty.

As I have never been west and would like very much to venture that way and particularly to Sea Island, could you please tell me how a person could arrange a tour of duty at this particular spot?

Cpl. G. R. Thompson,  
RCAF Station Chatham, N.B.

(If we could answer that question, corporal, we'd be there ourselves! — Editor.)

### CALLING-EX-COUGARS

Dear Sir,

With the coming of the seventh anniversary of the squadron's reactivation this fall, the officers of 432 AW(F) Sqn. feel the need of some assistance to celebrate the event. To this end, we are proposing a squadron reunion to be held in Bagotville 22, 23, 24 September.

Would all ex-squadron members please note these dates and attempt to keep a few days clear to aid us in our celebrations?

Reunionally yours,

F/O W. Naylor,  
RCAF Station Bagotville, P.Q.

### SALUS AB ALTO

Dear Sir,

It was good of you to give us permission to reprint the article "Bird Breather Helps RCAF Combat Polio in B.C." (Dec 60) and we would not be surprised to find materials used in future respirators of a higher order of quality and durability after those concerned have carefully digested this article.

It may interest you to know that the original respirators sent to the University of British Columbia were provided by Dr. Forrest Bird and Mr. Leon Koerner, a Canadian. Doctor Segal, the UBC doctor mentioned in the article, recently spent two weeks at the Bird respiratory and rehabilitation center in Palm Springs and I understand we are now training some of the RCAF flight crews on a rotation basis.

We assure you that it is most stimulating for us as individuals to be able to help people in distress.

H. L. Pohndorf,  
Bird Corporation,  
Palm Springs, Calif.

## On the line...by LAROUCHE



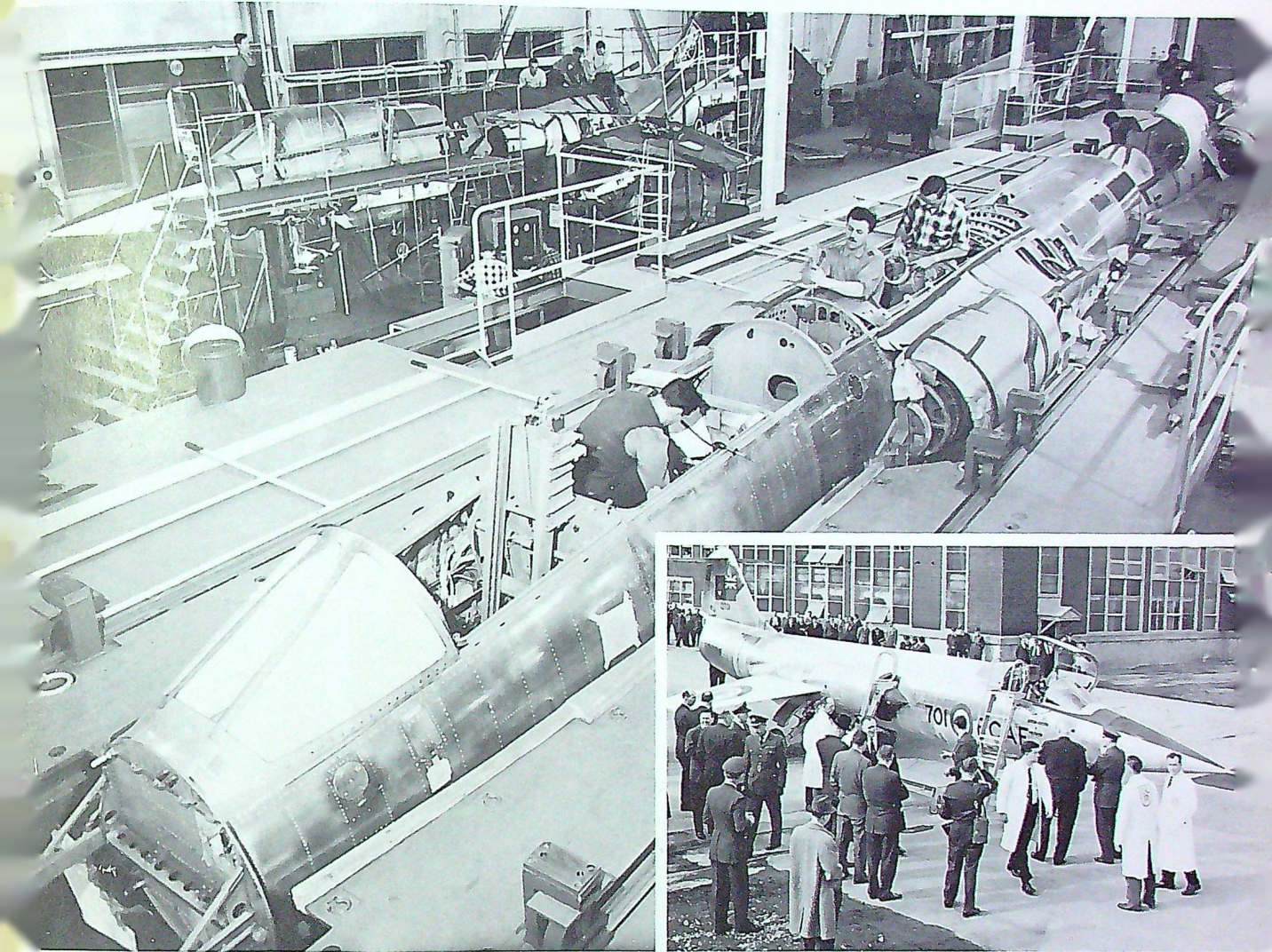
"You know, Harrison, I got a feeling nobody will believe us!"

### SNOWED UNDER

LOOKING for all the world like a snowstorm, a new method of using foam spray for fire protection was demonstrated at RCAF Station Summerside. The foam automatically mixes with water at the hangar as these two substances arrive via pipes from remote storage tanks.

At present, three Stations: Summerside, Greenwood, and Trenton, are equipped with this fire protection system. Designed primarily to protect Argus and CC-106 aircraft, the foam spray will become an integral part of intermediate cantilever hangars. The system incorporates storage tanks containing one-half million (US) gallons of water and 10,000 (US) gallons of foam. It is estimated that a few minutes of this man-made snowstorm would subdue the most stubborn blaze but, the design allows for 20 minutes of continuous spraying. Should the need arise for maximum operation of this indoor snowstorm, the foam on the hangar floor, and aircraft, would build up to a depth of approximately four feet.

## *CF-104s Roll Out at Canadair*



CF-104 aircraft for the RCAF are now rolling off the assembly line at Canadair Ltd. near Montreal. The first production model (inset above), and the second to be completed this month, will be transferred to Burbank, Calif., for checking and flight-testing by Lockheed Aircraft Corporation, the plane's designers. All subsequent aircraft of the 200-plane order will be test-flown at Canadair starting in June. First deliveries to the RCAF are due this fall.

*Roger Duhamel*

*The Queen's Printer — L'Imprimeur de la Reine*

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