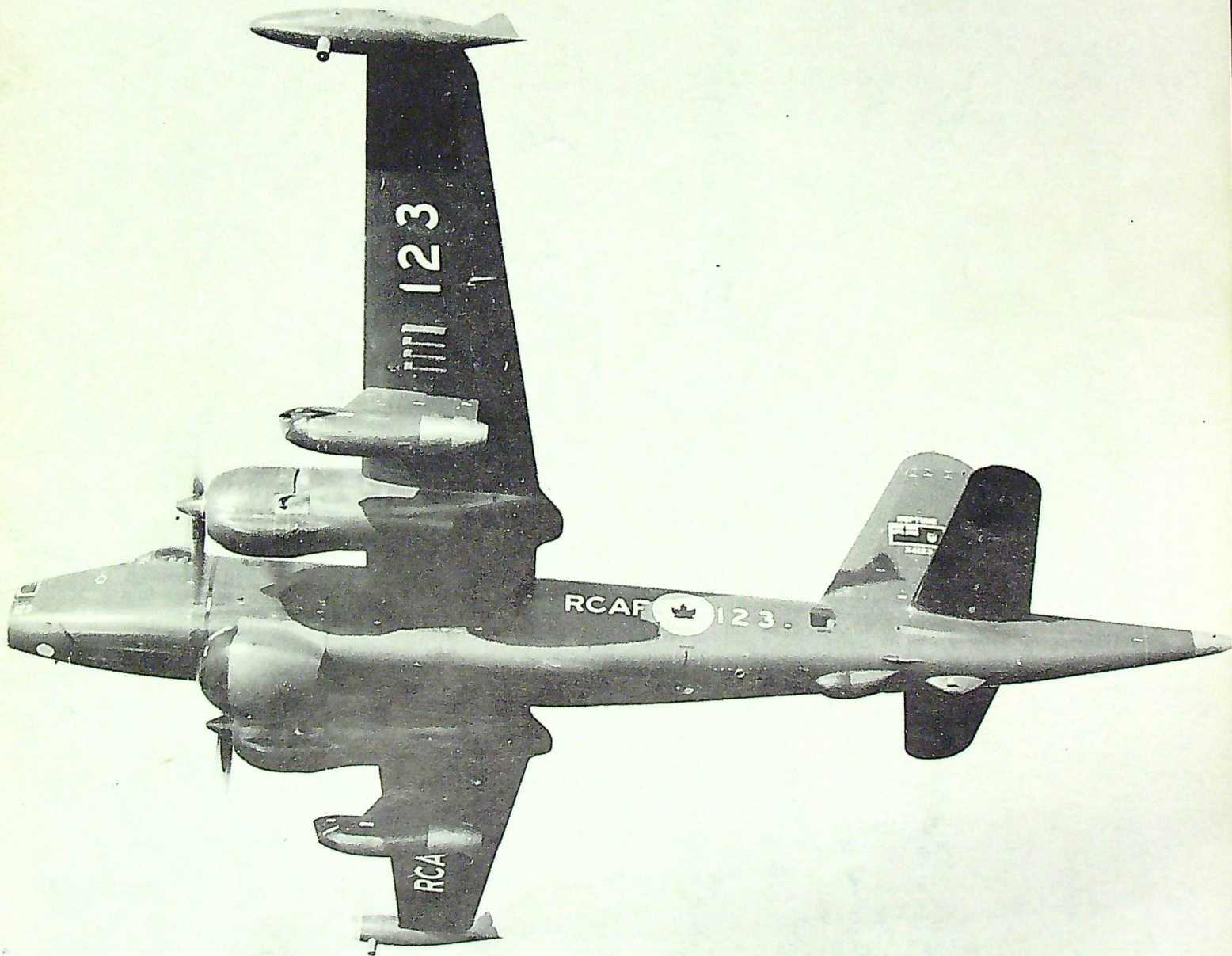


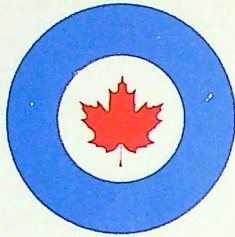
THE

# *Roundel*

VOL. 12, No. 5

JUNE 1960





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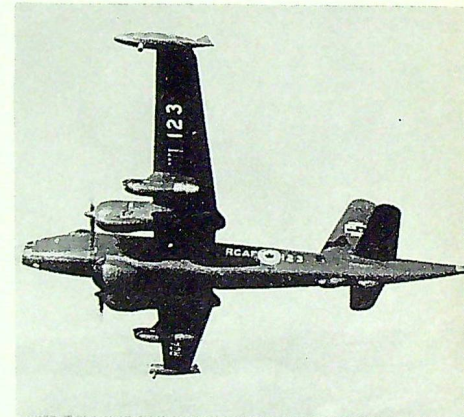
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### THIS MONTH'S COVER

A 407 Sqn. Neptune returns to its Comox base after a routine Pacific patrol. For a description of anti-submarine operational training on this type of aircraft see page 5.

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

# On the Break

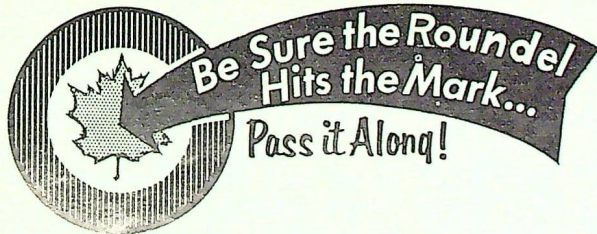


**S**UMMER 1960: Our world-famous Golden Hawks are currently touring Canada, performing at Air Force Days and other exhibitions for the second successive year (see page 2) . . . we pay tribute to the civilian volunteers of the Ground Observer Corps in southern Canada, who this month stand down after nine years of devoted service (page 10) . . . again this summer the RCAF hosts air cadet camps at four stations across the country (page 30) . . . and we welcome back into uniform 1500 university students who are spending the summer with us (page 9).

This is the time of year when, more than any other, air force families are on the move — whether on transfer to new assignments or simply to the nearest swimming hole (page 22). We hope this issue reaches you, wherever you are.

**O**NE phase of today's RCAF operations in which we take a back seat to no one is that of anti-submarine warfare. The Canadian-built *Argus*, on duty over the North Atlantic for more than two years (page 28), is complemented on the west coast by *Neptune* aircraft. For the aircrews of Maritime Air Command, long hours of ocean patrol are daily fare.

Whether these crews now operate from Greenwood or Comox, they all graduated to squadron service from No. 2 Maritime Operational Training Unit at Summerside — spotlighted this month in our series on stations of the RCAF (page 5). Summerside has been an air force station for 20 years, making it one of the RCAF's "middle-aged" establishments.



**T**HE concluding article in our series on air forces of the Commonwealth appears on page 12. The Indian Air Force celebrated its 27th birthday this year by staging its Air Force Day in Bombay, a departure from the usual practise of holding this annual event in Delhi.

We thank the various air forces which co-operated so generously in providing copy and pictures for this series. Previous articles [RAF (Sept. 59), SAAF (Oct.), PAF (Nov.), RAAF (Jan.-Feb. 60), RNZAF (April)] are available on request.

**S**PACE and space travel are undoubtedly the main topics currently featured in the scores of aviation magazines which cross our desk each month. One item which caught our eye in *FLIGHT* was the following, written almost 200 years ago by an unnamed author on the occasion of an air balloon ascension by a Mr. St. Croix at Salisbury, England, August 10, 1786:

"By land let them travel, as many as please;  
And by sea, those who like the hard fare;  
In my Airy Balloon, I will sit at my ease,  
And glide at my will through the Air.

Round this globe, at the furthest, is all they can go,  
If they travel night, morning and noon;  
Such excursions as these are but mere bagatelles  
Compar'd with a trip to the Moon.

How pleasant in Chariot Aerial to go,  
And visit my friends in the stars;  
Take a breakfast with Merc'ry and dine, if I please,  
With Jupiter, Saturn, or Mars.

But should I fatigued and wearisome prove,  
While from planet to planet I'm dodging,  
With Venus I'm welcome to tarry all night;  
Where, on earth, can you find such a lodging?"

Thus chanted St. Croix as he mounted his chair,  
And sat him undaunted within it;  
Majestic he rose, like a god in the air,  
And pierc'd through the clouds in a minute!

*The Editor*



Front row (l. to r.): F/L J. T. Price, F/L R. H. Annis, F/L D. V. Tinson. Back row (l. to r.): F/O W. C. Stewart, F/L E. J. Rozdeba, F/L J. D. McCombe, S/L J. F. Villeneuve.

## GOLDEN HAWKS - 1960 Edition

**T**HE RCAF's Golden Hawks aerobatic team is now on its second consecutive cross-Canada tour. This summer the Hawks will perform at Air Force Days and major civil exhibitions and air shows as shown on the schedule published on page 4.

Prior to their first 1960 public appearance on May 7 the Hawks spent several weeks at RCAF Station Chatham practising formation and solo maneuvers in their now-familiar gold, red and white F-86 Sabres. The accompanying pictures were taken during this "spring training."

One of the few Canadian aerobatic

teams to perform on a nation-wide basis, the Golden Hawks were created last year and took part in celebrations marking the RCAF's 35th birthday and the 50th anniversary of powered flight in Canada. During 1959 they put on 65 demonstrations before an estimated two and a half million spectators.

Except for one newcomer, the team is the same as last year. Leading the Hawks is S/L J. F. Villeneuve, with F/L J. D. McCombe and E. J. Rozdeba as wingmen, and F/O W. C. Stewart in the slot position. F/Ls R. H. Annis and J. T. Price will per-

form the solo maneuvers while the newcomer, F/L D. V. Tinson, will fill the standby position.

Co-ordinator of the 1960 tour is W/C J. F. Allan. F/O G. L. MacDonald is accompanying the Hawks as commentator again this year. S/L R. M. Bowdery is being succeeded by F/L L. G. Van Vliet as tour public relations officer later this month. F/L D. J. McKinnon is officer in charge of the maintenance party and FS O. J. Tousignant is NCO in charge of the specially selected ground crew.

The following tour schedule is subject to change:



Golden Hawk groundcrew prepare aircraft for flight at RCAF Stn. Chatham.

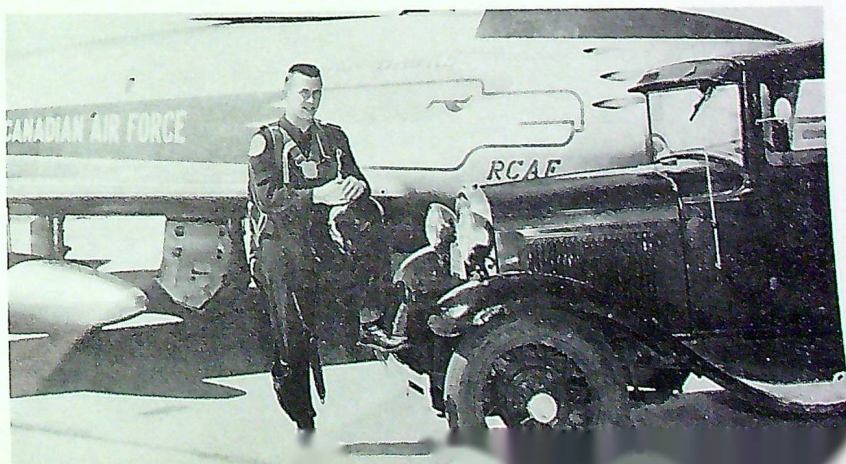


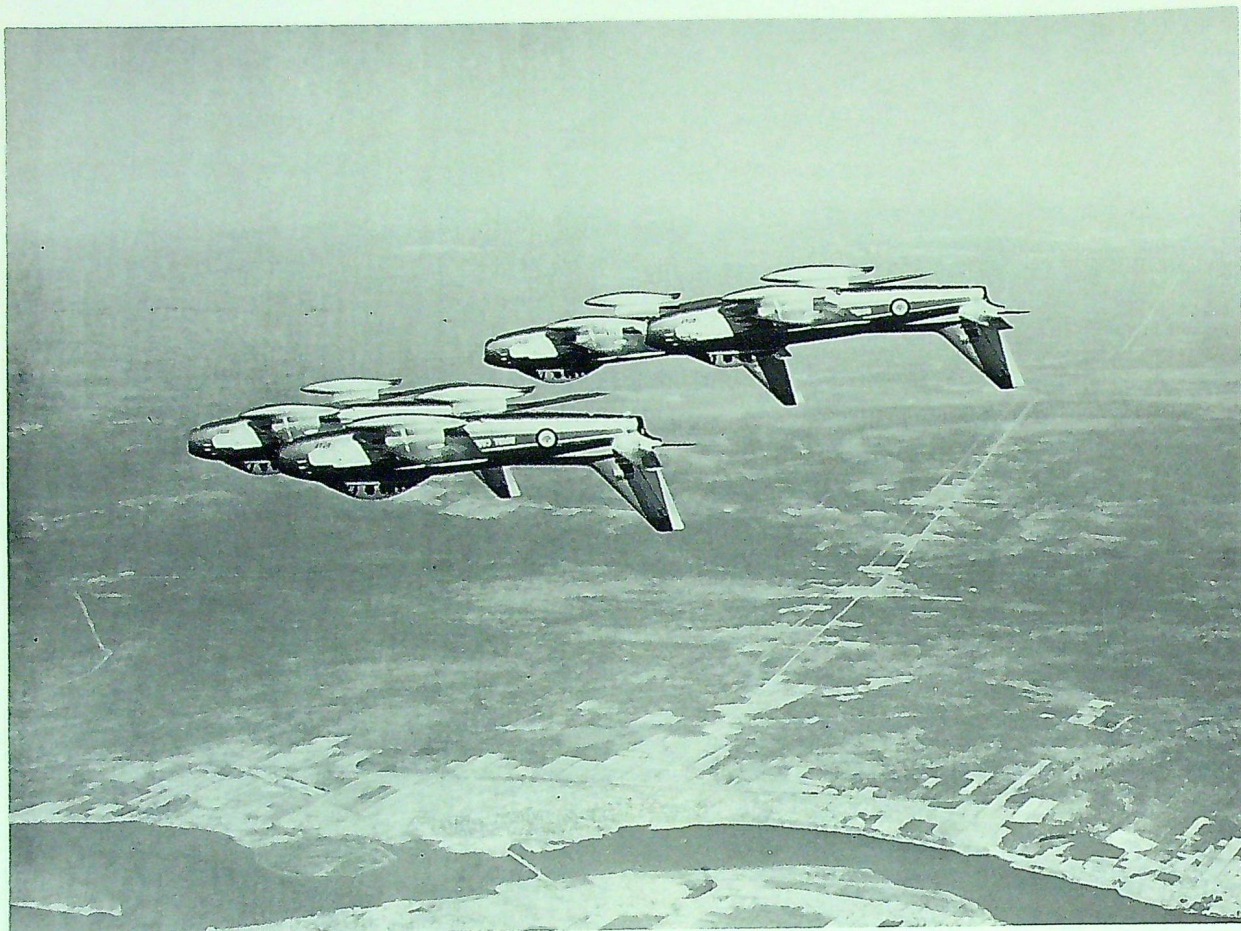
F/O W. C. Stewart carries out external check prior to practising aerobatics.



LAC L. O. LeBlanc and Cpl. D. H. Haupt check fire detector units — one of many important daily tasks of Golden Hawk groundcrew.

On the ground, F/L J. D. McCombe prefers his Model A Ford to the gleaming Sabre parked in the background.





Scenes like this are being repeated daily this summer by the Golden Hawks, now on their second cross-Canada tour.

- |   |                                    |  |
|---|------------------------------------|--|
| 7 May - AFD Torbay                      | 18 June - Halifax Air Show         | 15 July - Moose Jaw Exhibition                 |
| 13, 14, 15 May - Andrews Air Force Base | 19 June - AFD Sydney               | 16 July - AFD Cold Lake                        |
| 17 May - Cleveland Air Show             | 24 June - AFD Chatham              | 18, 19, 20 July - Edmonton Exhibition          |
| 20 May - Duluth Air Show                | 25 June - AFD Summerside           | 23 July - AFD Winnipeg                         |
| 21 May - K. I. Sawyer AFB               | 29 June - AFD Greenwood            | 1-6 Aug inclus. - Regina Exhibition            |
| 22 May - Selfridge AFB                  | 1 July - Fredericton Air Show      | 13 Aug - AFD Penhold                           |
| 25 May - AFD Camp Borden                | 1 July - St John Air Show          | 20, 29 Aug - 3 Sep                             |
| 28 May - AFD Trenton                    | 3 July - AFD Falconbridge          | - PNE Vancouver                                |
| 4 June - AFD Ottawa                     | 3 July - AFD North Bay             | 5 Sep - Que. Provincial Exhibition             |
| 8 June - AFD Senneterre                 | 9 July - AFD Sea Island            | 9 - 10 Sep - Cdn. International Air Show (CNE) |
| 11 June - AFD St Hubert                 | 9 July - AFD Comox                 | 17 Sep - AFD Centralia                         |
| 12 June - AFD Bagotville                | 11, 12, 13 July - Calgary Stampede |  |

# SUMMERSIDE

PRINCE Edward Island is variously referred to in tourist brochures as "The Bermuda of the North", "The Birthplace of Confederation" or "The Garden of the Gulf". However, to thousands of RCAF personnel who have called RCAF Station Summerside their temporary home, it bears the affectionate title of "Spud Island."

"They talk about Texas,  
Kentucky, and Maine.  
They talk about London,  
Paris and Spain.  
But there's a little island,  
I long there to be.  
Prince Edward Island  
is heaven to me".

Throughout Canada the familiar verses of this "song of the Island", the music of Don Messer and his Islanders, and step-dancing are readily identified with the smallest province. Perhaps a trifle less known are some basic statistics.

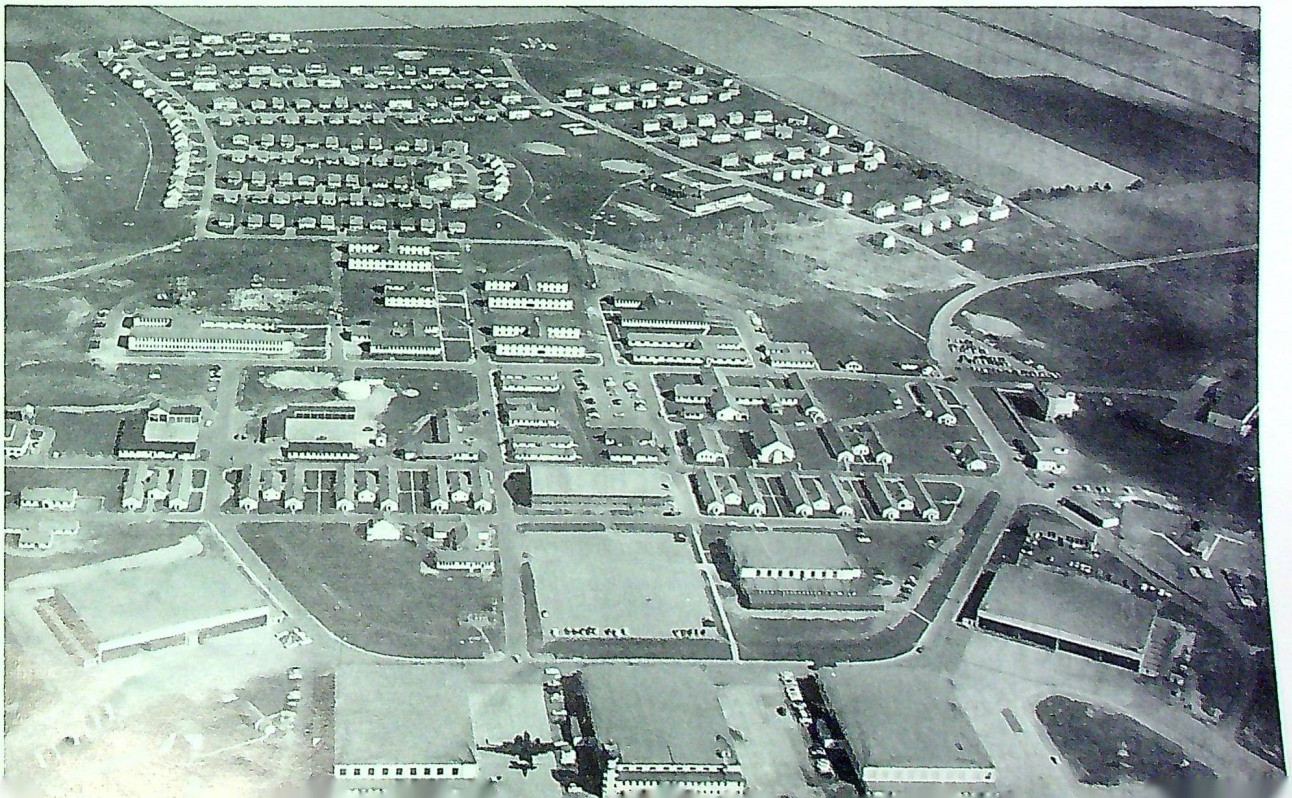
P.E.I., lying in the lower Gulf of St. Lawrence, is 140 miles long and varies from four to 40 miles in width. Although the prime resource is agriculture there is also a major fishing industry, notably lobsters and Malpeque oysters. Increasing numbers of tourists arrive in P.E.I. each year to vacation at some of North America's

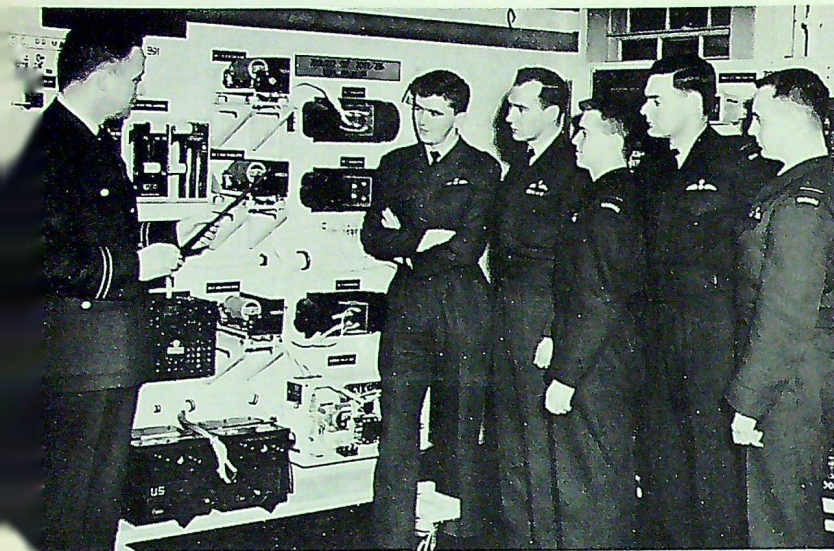
finest beaches. These white sandy shores are along the Island's north coast and a great deal of development is underway to encourage tourist interest.

The population of P.E.I. is about 100,000 and that of the capital city, Charlottetown, is approximately 17,000. The town of Summerside, five miles from the RCAF station, has nearly 9,000 residents.

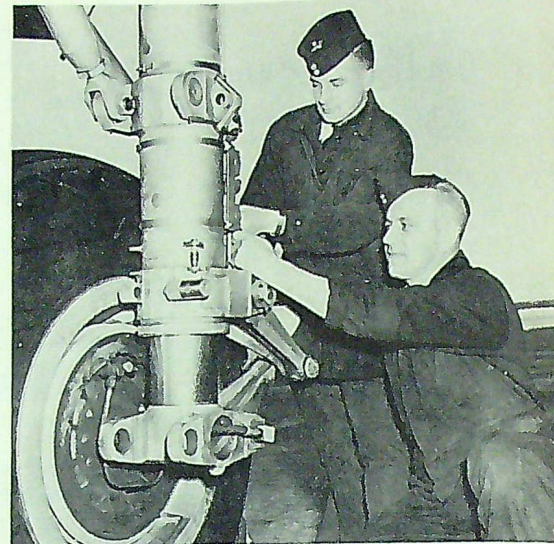
The plans for RCAF Station Summerside were originally drawn in April 1940 and later that year construction started on the shore of oyster-famous Malpeque Bay. When the station

RCAF Station Summerside, showing part of hangar line in foreground, Slemon Park married quarters in background.





F/L H. L. Cartmill explains Neptune electrical components to observer trainees.



Servicing section air frame techs Cpls. R. Mills and L. Robertson carry out daily inspections.

officially opened on 25 January 1941 it was designated No. 9 Service Flying Training School. Its first pilots graduated the following April.

In July 1942 the SFTS was moved to Centralia, Ontario, and Summerside became the home of No. 1 General Reconnaissance School and remained so until the end of the Second World War. From early 1946 until late 1947 the station was placed on a "care and maintenance" basis.

#### NAVIGATOR TRAINING

The station was reactivated in 1948 and early that year the RCAF established its only Air Navigation School (ANS) at Summerside. Training included courses for newly enlisted flight cadets, navigation instructors (for experienced navigators and pilots) and a specialist course for seasoned navigators.

In the fall of 1950 the first NATO representatives arrived to begin navigation training at Summerside. The courses included students from Belgium, France, United Kingdom, Italy and Norway who studied their computers alongside Canadian counterparts and flew the well-worn tracks to Sable and Anticosti. The first graduation of NATO students in Canada

took place at Summerside in May 1951 and many senior government officials and foreign ambassadors witnessed the impressive ceremony.

The "Specialist Wing" of ANS flew several record-breaking flights during this period and the section had become so prominent that on 1 August 1951 it was made a separate unit called the Central Navigation School (CNS). In addition to their duties of training specialist navigators, the CNS had the responsibility of standardizing instruction at Summerside and the newly-formed No. 2 ANS at Winnipeg. The test and development section of the CNS originated and proved several instruments and new navigation techniques.

October 1953 saw the move of No. 1 ANS to Winnipeg and the control of Station Summerside changed from Training Command to that of Maritime Air Command. In September 1954 the CNS joined ANS at the hometown of the Blue Bombers football team, thus ending "the era of navigators" in Summerside.

The Royal Canadian Navy moved a detachment to Summerside in September 1953. The force was called the 31st Support Group and consisted of No. 870 *Sea Fury* Squadron and

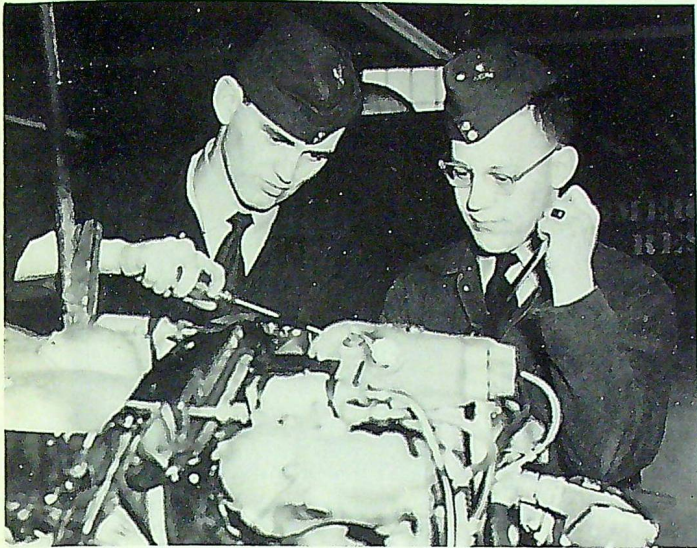
No. 880 *Avenger* Anti-Submarine Squadron. When the *Sea Fury* squadron was de-activated in the fall of 1955, the last of the naval personnel departed.

#### MARITIME O.T.U.

The main unit of present-day RCAF Station Summerside is No. 2 (Maritime) Operational Training Unit, which was moved there from Greenwood, N.S. in December 1953. The OTU trains aircrew in the complicated aspects of anti-submarine warfare (ASW).

During the first three years at Summerside the OTU used specially equipped and modified *Lancasters* to indoctrinate the students in maritime warfare procedures. In addition to training for the normal transit type of flying to points anywhere in the world, these crews must also learn the complex art of hunting, tracking and killing their unseen adversary, the stealthy submarine.

Among other things, the OTU teaches the pilot to handle his aircraft in tight turns at 100 feet over the water, the navigator to guide the aircraft to accuracies expressed in yards, the radio officer to handle a tremendous variety of communications and



Aero engine techs LACs R. Burns and S. Bullard work in repair section on Neptune engine.



Airwomen help keep them flying. Here LAW Lennox explains camera settings to AW1 A. Farrow, LAW's D. Dirks and A. Woodward.

complex detection equipment, and the flight engineer to control the engines in synchronism with the pilot's control of the aircraft.

Incidental to the arrival of 2 (M) OTU was the establishment of a small unit called the Maritime Air Command Trade Advancement School (TAS) in 1954. The purpose of this school was to train groundcrew in aero engine, airframe and armament which at that time were the 'big three' in Maritime RCAF Trade Structure. Students were flown to Summerside from Greenwood, Torbay and Halifax for the three-week course. The *Neptune* (P2V7) aircraft began arriving at the OTU in 1956 and the necessity for the MAC TAS lessened, resulting in its gradual dissolution.

The purpose of the TAS was to improve the technicians' skills by extra training and help these airmen to qualify for higher trade groupings. The introduction of the *Neptune* brought about a need for more specialist training. Each unit has now taken over its own trade advancement responsibilities and a Field Technical Training Unit (FTTU) is being established to train senior tradesmen as specialists in *Neptunes* which are flown at Comox, B.C., and Summer-

side. Another FTTU has been established at Greenwood, to train *Argus* specialists. The trades involved include airframe, aeroengine and electrical technicians and techs from five electronic trades.

#### NEPTUNE ERA

The twin-engined *Neptune* brought about several other changes at Summerside. The OTU was re-organized into a 'two-school' system. During the first phase of instruction (Maritime Reconnaissance Course) students were taught the basics of ASW and flew in *Lancasters*. After passing the first phase they moved into the Operational Conversion Course and were checked out on the more intricate *Neptune* equipment and the more complex procedures and rapidly advancing techniques of anti-submarine warfare.

April 1959 marked the end of still another era when the last of the immortal *Lancasters* was phased out of Maritime Air Command. (The memories of the auxiliary power unit odours have outlasted the more easily forgotten roar of the mighty Merlins.) Just prior to the departure of the *Lancs* the OTU again re-organized, this time back to a 'one-school' system training entirely on *Neptunes*. Last

year the *Neptunes* were equipped with jet engines to supplement the reciprocating power plants. The jets are used primarily for take-offs and to increase aircraft speed when required.

The instructors at 2 (M) OTU are all long-time aircrew members who have served tours with at least one of MAC's operational squadrons. The officer commanding the school is W/C L. C. W. Limpert and his chief ground and air instructors are S/Ls J. A. A. Aitken and R. A. Swartz respectively. The OTU course is four months long and the subject matter is constantly evolving to keep pace with advancing techniques and increasingly complex equipment.

Early in 1958 part of the OTU staff was detached to Greenwood to establish a Conversion Unit whose purpose is to convert OTU graduated crews onto the Canadair-built *Argus*, presently the RCAF's largest aircraft\* and the largest maritime aircraft in the world. The Greenwood operational squadrons were converted first, and the detachment now concentrates on training OTU graduates.

The latest unit to move to Station

\* Until the CC-106 comes into service

Summerside is the Maritime Proving and Evaluation Unit, consisting of top flight aircrew whose extra ability and experience in ASW adapts them to the role of specialists. The group conducts operational proving and evaluation trials on new airborne ASW equipment and systems under every conceivable set of circumstances and conditions.

Most of their work is of a classified nature and cannot be discussed in this article, however their contribution to MAC is monumental. The officer commanding this unit is S/L A. E. Tomkinson.

#### STATION SERVICES

Group Captain J. E. Creeper, commanding officer of RCAF Station Summerside, arrived at the station in mid-summer 1958 from Norfolk, Virginia, where he held a key post in the SACLANT organization. His chief administration officer is S/L E. Q. Semple and his chief technical services officer is S/L G. R. Denison. Under these capable leaders and their predecessors the station has seen many improvements in the past few years, such as runway and taxiway



G/C J. E. Creeper, DFC, C.O. Station Summerside.



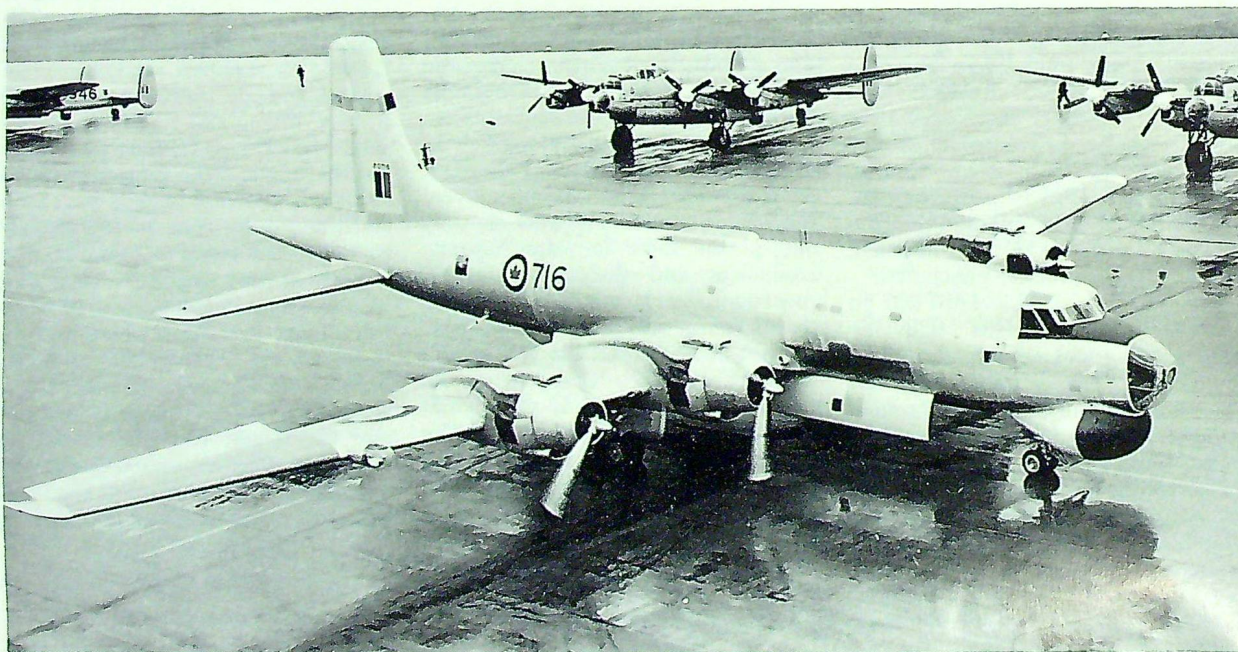
W/C L. W. C. Limpert, O.C. No. 2 (M) O.T.U.

extensions (the longest runway is the only one in Canada which nearly bisects a province), new navigation aids and (following a disastrous ice storm) all of the electrical and telephone wiring being put underground. The electrical system also has a 1000 kilowatt auxiliary power unit capable of supplying the entire electrical

needs of the station should there be a failure of the primary source of power.

The latest improvements include the addition of high intensity lighting on all runways, and in July 1959 a "Quad Radar" Ground Controlled Approach system was installed to facilitate aircraft landings under mini-

First Argus to visit Summerside parades past now-retired Lancasters.



mum instrument flying conditions. Construction is underway on a multi-million dollar cantilever hangar and two smaller hangars, all part of the tremendous development program at Summerside.

There has also been a two-lane curling rink and an indoor skating arena constructed with artificial ice plants. The airmen have a keen, highly competitive, six-team intersection hockey league which had each team playing 30 games in this year's schedule before playoffs. The granite throwers and sweepers have well organized men's, women's and mixed curling leagues and the quality of play has reached the point where RCAF teams are making a fair dent in provincial championship competition.

Among other recreation activities are bowling leagues, badminton leagues, softball and soccer leagues, rifle range and skeet range. In the 58/59 season the men's basketball team (Sultans) won the provincial Senior "C" men's championship. Golfers have the tremendous advantage of having a fine nine-hole course a couple of miles from the station and two of the finest 18-hole courses in Canada are within one hour's motoring distance. One of these larger courses is at Charlottetown, Canada's birthplace, and the other is Green Gables located at Cavendish, P.E.I., where Lucy Maud Montgomery set the scene of her "Anne" books. Station Summerside also has a driving range in Slemon Park, operated by the community council.

#### FUTURE PLANS

Residents of Slemon Park, the station married quarters, are in the rather unique position of living in the third largest community in the province. They have a very active council which promotes various projects including popular minor hockey and baseball leagues. Station expansion in the last year has made necessary the construction of a 100-unit entrepreneur housing development on the outskirts of the town of Summerside. Future plans call for an additional 200 such units.

New mobile home being built for Station

Summerside is the flying club. This club is in its embryo stage as a satellite of the Moncton Flying Club and the hopes are that within the year it will have its own charter. From the parent club they have borrowed two *Fleet Canuck* aircraft and both ground and air instruction started in March 1960.

The new hangars, which are nearing completion, are being constructed

to accommodate the *Argus* aircraft which will be arriving at the station in the near future. Aircraft flying over the Island's famous red soil will thus have progressed from the wartime pilot training craft, through the ANS *Dakotas*, OTU's *Lancs*, the present day *Neptunes* and soon on to the mighty *Argus* — rated by some as the world's best submarine killer.

## Working their Way through College

This summer more than 1,500 flight cadets from Canadian universities and services colleges are on duty at RCAF units in Canada and overseas. Approximately 780 are enrolled under the Regular Officer Training Plan (ROTP), 600 men and 140 women are members of the University Reserve Training Plan (URTP), and 60 are subsidized regular force airmen.

The ROTP was first introduced in 1952 to provide the principal source of highly qualified officers for the armed forces. It is a tri-service plan offering young Canadians financial assistance in attaining a university degree and a permanent commission in one of the three services. About 250 candidates are selected annually.

Half the ROTP flight cadets currently serving in the RCAF attend either Royal Military College, Royal Roads or College Militaire Royal de

Saint-Jean. The other half take their academic training at universities, the majority in engineering or applied science. On graduation, all enter the service of their choice as commissioned officers for a minimum of three years.

The URTP was inaugurated in 1948 to ensure a flow of university-trained officers into the RCAF regular and reserve forces. Initially operating at seven major universities, the plan proved so attractive that soon practically all Canadian colleges had participating members.

The purpose of URTP is to select and train students in officer branches allied to their university courses. The program is of three years' duration and consists of summer training in the RCAF and weekly lectures and parades at university during the winter. There are 17 university squadrons now in operation throughout Canada.

## COMPETITION AT COLD LAKE

The fourth annual Air Defence Command rocket meet was held at RCAF Station Cold Lake from 28 May to 4 June. Teams from all nine Canadian-based CF-100 squadrons competed for the W. R. MacBrien Trophy, emblematic of aerial weapons supremacy in ADC. The annual rocket meet is designed to increase the efficiency of air defence personnel by fostering inter-squadron competition.

Competing for efficiency awards were teams from 409 (Night Hawk) Squadron, Comox; 414 (Black Night) and 433 (Porcupine) Sqs., North Bay; 410 (Cougar) and 428 (Ghost) Sqs., Ottawa; 416 (Lynx) and 425 (Alouette) Sqs., St. Hubert; 413 (Tusker) and 432 (Panther) Sqs., Bagotville. Each team consisted of two all-weather CF-100 interceptors with aircrews of pilots and observers, one radar controller from a radar site near their home station and a technical support team shared by the two squadrons from the same base.

## A TRIBUTE TO GROUND



On duty at the GOBc post atop Campbell River, B.C., high school (l. to r.): Lloyd Leishman, Mrs. Betty Barton, Mrs. Elizabeth Leishman.

Volunteers at Smiths Falls, Ont., man rooftop GOBc post during one of many exercises conducted during past nine years.

THE southern division of the Ground Observer Corps and certain segments of the northern division south of the 55th parallel were disbanded effective the first of this month. Thus, the nine year old association of civilian volunteer ground observers and the RCAF in the air defence of southern Canada came to an end.

North of the 55th parallel or Mid Canada Line the civilian volunteers of the GOBc will continue to supply much-needed early warning information.

The Ground Observer Corps was formed early in 1951 to supplement the Aircraft Control and Warning System by direct visual observation during the system's growth and development stage. Canada then depended for its defence largely upon whole-hearted civilian participation. Thousands of Canadians from all walks of life freely volunteered their services. In announcing the recent stand down, Defence Minister G. R. Pearkes stressed the fact that the AC&W system has developed to the point, in southern Canada, that the GOBc volunteers could now be relieved of the heavy burden they had undertaken in air defence.

Over the past nine years the response and enthusiasm of civilians in volunteering for service in the GOBc has constantly amazed members of the RCAF, especially so when one remembers that the volunteers were not paid for their services. Observation towers, built by the volunteers at their own initiative and expense, sprung up from coast to coast. Small huts appeared, as if by magic, on the roofs of schools, monasteries, and in fact, any high suitable building — all designed to protect the volunteers from the elements, while carrying out their air defence duties. Many queer-looking, but decidedly effective listening and visual aids (from elaborate electronic audio amplifiers to binoc-

# BSERVER CORPS VOLUNTEERS

BY FLIGHT LIEUTENANT V. T. RILEY

culars) were either purchased or built by the volunteers, again at their own expense.

Although we are happy that the opportunity to test these volunteers under battle conditions never presented itself, they demonstrated their worth in many exercises. Often volunteers went without sleep for periods of two to three days in order to ensure their posts were manned on a 24-hour basis when required.

In the field of search and rescue, a secondary role, the volunteers had ample opportunity to demonstrate their worth. On at least two occasions pilots were reported in trouble while still floating to earth in their para-

chutes. Many times volunteers aided search and rescue by reporting aircraft in distress. Volunteers were called in the middle of the night to check emergency strips for overdue aircraft; it is surprising how many times this check found a missing aircraft and saved costly search flying time.

The volunteers of the Ground Observer Corps have filled the role of civilian assistance in defence in the very best of tradition. Their members in the south now being relieved of duty will be missed and the remaining GOBC volunteers in our north-land have a shining example to uphold.



GOBC regional supervisor Lloyd Leishman boards RCAF crash boat on west coast to assist in search for missing CF-100.

In the GOBC filter centre at St. Jerome, P.Q., volunteers and RCAF personnel concentrate on track of unknown aircraft reported by civilian observers.





*Sixth in a Series on Air Forces of the Commonwealth.*

## THE INDIAN AIR FORCE

Material for this article was provided by the IAF

**T**HE sub-continent of India, from the towering Himalayas to its steaming jungles, parched deserts and seemingly-endless rice paddies, covers more than a million and a quarter square miles and contains some 370 million people. The aerial defence of this vast domain is the responsibility of the largest air force in South East Asia, the Indian Air Force.

In 1958 the IAF celebrated its Silver Jubilee. It was, in fact, a double celebration since it marked 25 years

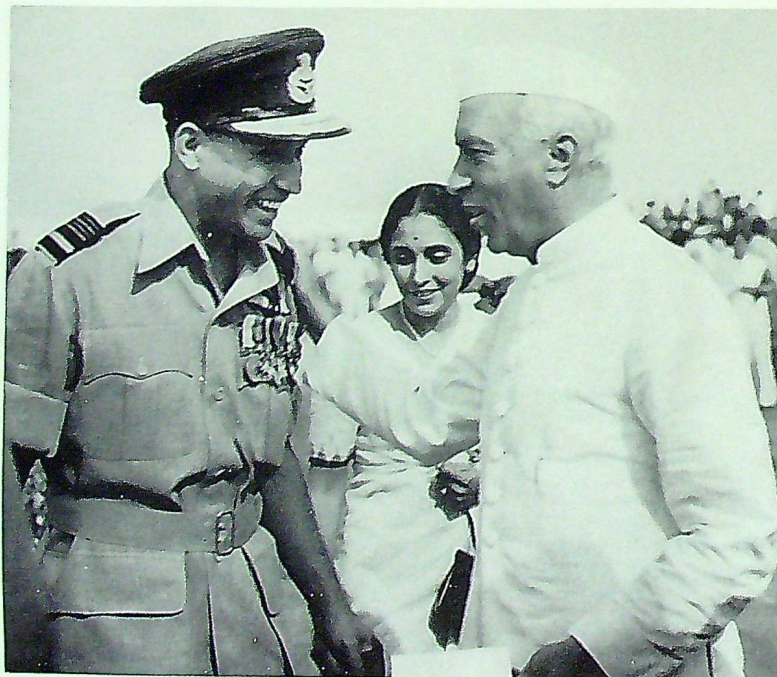
of service to India and the completion of a conversion program which transformed the IAF into an all-jet fighter force. Today's force, with its substantial numbers of aircraft and personnel, is a far cry from the IAF of 1933. On 1 April of that year the Indian Air Force came into being with the formation of "A" Flight, an organization comprising six officers, 11 airmen and two *Wapiti* aircraft. Small though it was, "A" Flight set a precedent in the country, since it was

the first time a unit of a fighting service in India had officers and men drawn from all corners of the country without any distinction between martial and non-martial classes.

The flight became No. 1 Squadron and, in 1936, it was posted to the North West Frontier for operational service with the RAF. Flying on the frontier, particularly in those days, was a precarious occupation. There was no place for emergency landings in those hilly tracts of the country and a forced landing meant almost certain death to the crew. In case they survived there was a great danger lurking among the tribesmen. The aircraft crew had to carry with them certificates, signed by the Governor of North West Frontier, called Protection Certificates promising a reward for the safe delivery of the aircraft crew.

At the outbreak of the Second World War it was apparent that the Royal Air Force in India needed reinforcement, especially because of its heavy commitments in Europe and the Middle East. This reinforcement was partially provided by an enlarged Indian Air Force. From one squadron in 1939 the IAF expanded to nine squadrons by 1943. In addition to its fighter squadrons, which went into action in Burma, the IAF sent individual pilots to serve with the RAF.

Air Marshal S. Mukerjee, first and only Indian Chief of the IAF, Mrs. Mukerjee, and Prime Minister J. Nehru.



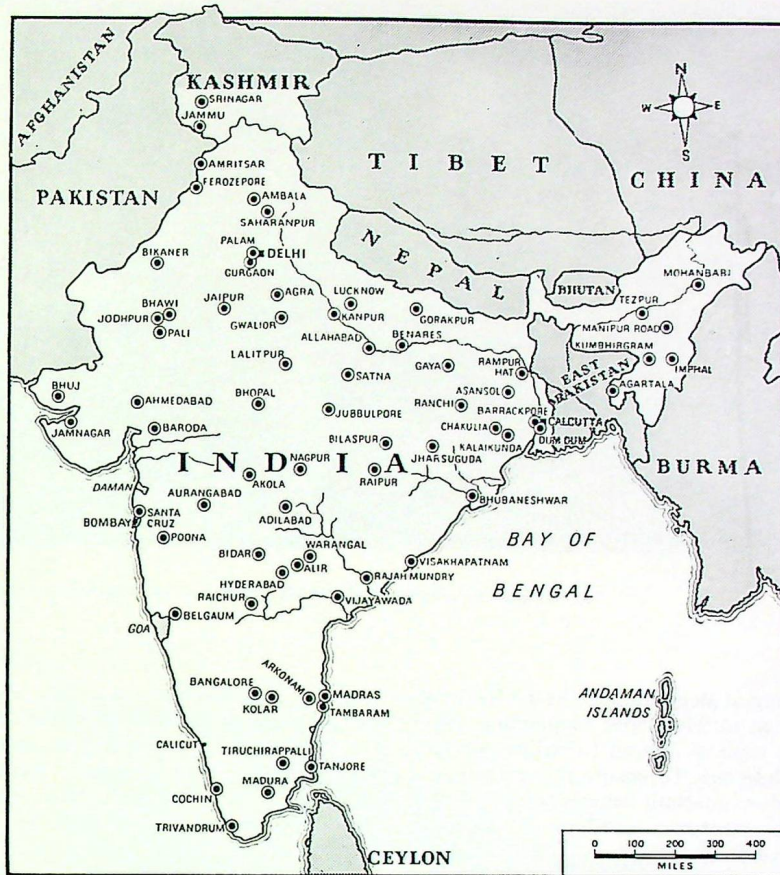
Map of IAF bases courtesy "The Air Forces of the World", by Wm. Green and John Fricker; Macdonald and Co. (Publishers Ltd.) 1958.

Some of these fought in the Battle of Britain and others flew *Lancaster* and *Halifax* bombers in raids over Germany. In 1944, the IAF was granted the royal prefix and it remained the Royal Indian Air Force until 1950 when India became a republic.

### POST-WAR YEARS

After the partition of the Indian sub-continent into the countries of India and Pakistan, an expansion and modernization program of the IAF was undertaken. The Supermarine *Spitfires* and Hawker *Tempests* were supplemented, then replaced, by the IAF's first jets, de Havilland *Vampires*. A survey flight, a maritime reconnaissance squadron and new flying and ground training establishments were created. In 1953 the French jet aircraft Dassault *Ouragans* were introduced into the IAF and in 1954 the first of a number of C-119s were purchased. The Auxiliary Air Force, formed in 1956, is now a five-squadron "Citizens' Air Force". In 1957 the conversion of the IAF to a jet force was accelerated by the acquisition of *Canberras*, *Mysteres*, and *Hunters*.

The Indian Air Force is the air arm of the defence organization which consists of the Ministry of Defence and the Headquarters of the three services, under the Defence Minister. Air Marshal S. Mukerjee, Chief of the Air Staff since 1954, is responsible to the Defence Minister for the efficient functioning of the IAF. Below the Air Headquarters level, the IAF consists of Operational Command, Training Command, Maintenance Command and a few units directly under Air Headquarters. Operational Command controls all flying units consisting of fighter, bomber, reconnaissance and air transport squadrons and is responsible for operations, air defence, and surface support. Within its domain are the operational training of all aircrews and the training of paratroopers. Training Command con-



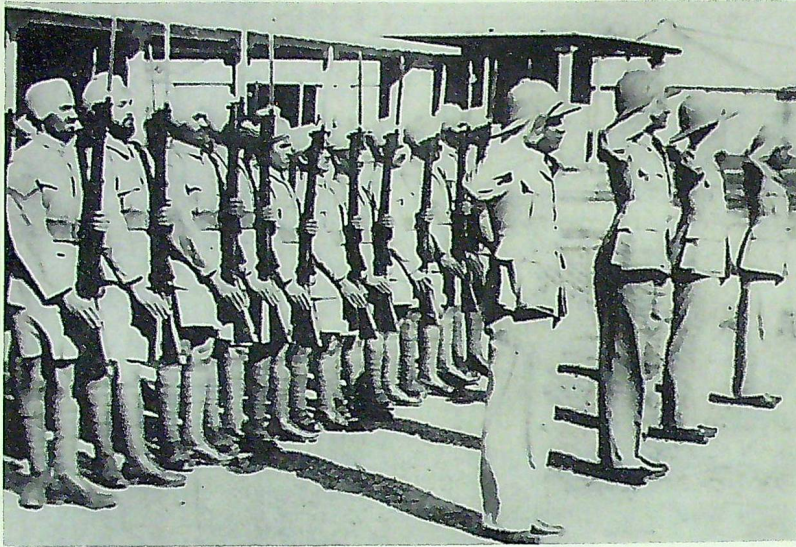
trols all training other than operational training of officers on flying or ground duties. Under Maintenance Command are the Base Repair Depot, all equipment depots, explosive units, and motor transport storage units. This command is responsible for the storage, maintenance and repair of aircraft and equipment of the IAF.

### TRAINING IN THE IAF

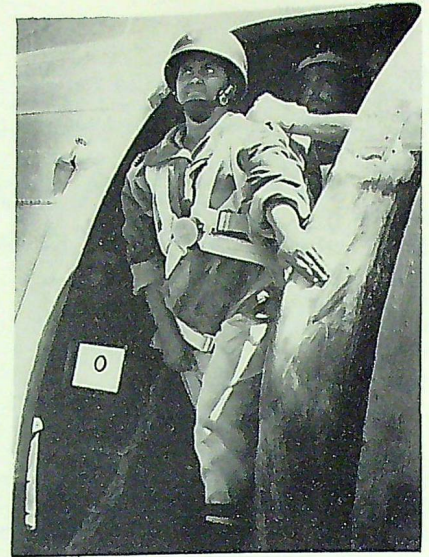
In the past, the Indian Air Force relied on the RAF for its training but times have changed. A certain amount of advanced flying and technical training for the IAF officers is still carried out in the UK but for the most part it is done in India. Training is divided into four classes: flying, technical, administrative and what might be broadly described as non-technical. Flying training for IAF pilots and navigators begins at the Air Force Flying College at Jodhpur.

Aircrew join the IAF either by direct entry or from the National Defence Academy and proceed to Jodhpur for a one-year course. The course consists of two six-month phases with an eight-week leave period in mid-summer, timed to coincide with the monsoons which render flying training impossible.

Training for pilots is carried out first on the Hindustan *HT-2* basic trainer, *Texan* and *Vampire* or *Dakota*. However, the IAF has experimented with all-through jet training and intends to adopt this system at a later date. One aspect of pilot training which is probably peculiar to the IAF is the emphasis on workshop training. Pilots must become thoroughly familiar with their aircraft since, at squadron level, they are responsible for the daily inspections on their machines. The second year for pilots is spent at the Transport Training



No. 1 Sqn. on parade in the early 1930s.



First IAF woman doctor-parajumper F/L G. Chanda.

Wing at Begumpet or the Jet Training Wing at Hakimpet, depending upon the type of aircraft for which a cadet is selected. To ensure flying efficiency and a constant supply of good flying instructors a Flying Instructors' School has been established. This school also categorises the existing flying instructors and advises on the standardization of flying training.

Technical training is given officers at the Air Force Technical College which was established at Bangalore in 1949. Engineering graduates from various universities enter this college with a commission while selected non-commissioned officers join as flight cadets. The duration of the course is 66 weeks. Technical airmen are trained partly as apprentices and partly as direct entries. Apprentices are trained in the Air Force Technical College on a four-year course. Non-technical training for airmen is also given at Ground Training School. Officers of ground duty branches (including administrative and special duties, equipment, education and accounts) are given a 52-week course at the Air Force Administrative College.

In addition to the above training units, the Defence Services Staff College provides "post-graduate" officer training for candidates from all

services. English has been, and still is, the medium of communication in the air force but, in conformity with the policy of propagating Hindi throughout the country, Hindi has been introduced to the IAF in a number of ways. It is progressively becoming a part of the educational curriculum for the training of officers and for the airmen recruits. All words of command are now given in Hindi and a technical IAF vocabulary in Hindi is being forged. The translation of air publications from English to Hindi has also been undertaken. These and other measures have introduced a certain amount of linguistic duality in the force, but this is inevitable and is acceptable so long as it does not impair efficiency in expression and communication.

#### OPERATIONAL ROLES

In India aircraft and aircrews are subjected to extremes in temperatures and conditions. Hawker *Hunters*, which are the standard day fighters in the IAF, are operated during the summer in outside temperatures in excess of 110°F — while *Canberras* top the tropopause and encounter temperatures of minus 26°F. Added distractions are severe turbulence which extend to 45,000 feet over the

Himalayas and blistering sand storms over the Rajasthan desert. The fact that the personnel of the IAF can still maintain their efficiency in spite of these adverse conditions is a tribute to their determination and skill.

In addition to the normal duties common to all air forces, the IAF engages in a wide variety of "extra-curricular" activities largely concerned with the relief of suffering. It has brought help to people marooned during floods both in India and Ceylon. Its aircraft have dropped food and medicine to stricken areas and flown supplies to Egypt and Hungary. It has participated in anti-locust campaigns and has experimented with sowing seeds from the air. The IAF has also contributed to the success of India's five-year plans by carrying out oil explorations and hydro electric surveys and aerial photography. In the latter case an immense job remains since large segments of India have yet to be accurately mapped and the Himalayas alone cover an area of 50,000 square miles. The Logistic Air Support Squadron of the IAF uses Canadian *Otters* in its work. Although the lack of air-conditioning renders the aircraft quite hot inside, IAF

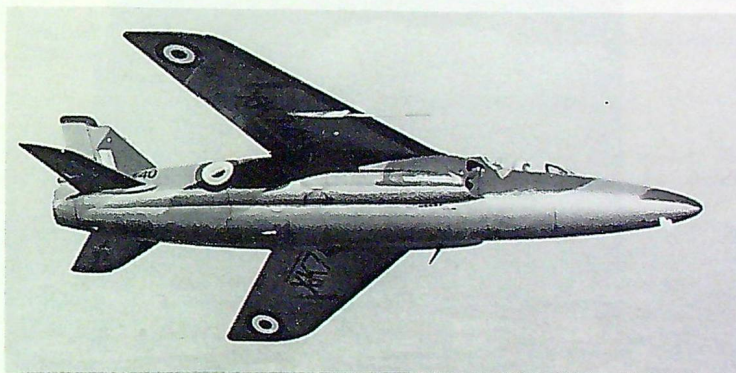


Formations of IAF *Hunters* (left) and *Mysteres* fly past over Bombay on Air Force Day.

personnel find the Canadian aeroplanes admirably suited for their role. They appreciate the low-speed handling qualities, the ample payload capacity and the fact that *Otters* remain waterproof, even in monsoon rain.

Another important role for the IAF is the transporting of VIPs. In a country of vast distances like India the aeroplane provides an excellent means of exercising leadership and establishing personal contacts, thus promoting unity which is the main purpose of independence. In this, the IAF in peacetime, while it seeks to improve its fighting efficiency, also participates in national programs of reconstruction as far as possible, provides a means of unifying the land and, what is equally important, displays to the nation an example of discipline and high morale.

The Indian Air Force is democracy's aerial defence in Asia. This heavy responsibility is carried out by maintaining a small but well trained and efficient force. The role of the Indian Air Force is a defensive one but, should India's independence or way of life be threatened, the IAF is prepared and willing to give a convincing demonstration of its capabilities.



*Gnat* — produced under licence in India.

Formation of *Canberras*.



# A Day with a Dietitian

PHOTOSTORY BY CORPORAL W. WHITEHEAD



F/O Annamarie Patrick, food services officer at RCAF Station Trenton, begins her day by ordering the groceries.



She examines a new shipment of potatoes with J. Legault, NCO in charge of the airmen's mess . . .

With Sgt. J. A. Turner the dietitian is responsible for in some 300 flight lunches packed weekly at Trenton.



It has been said that "an army travels on its stomach". If such be the case the RCAF is well prepared to travel, for its epicurean requirements are in the hands of experts — the food services officers.

Flying Officer Annamarie Patrick is one of 42 food services officers whose work is dedicated to making air force meals palatable and appealing. Her responsibility is to ensure that the high standard of food is maintained at RCAF Station Trenton where approximately 1,000 living-in personnel eat regularly, and many married personnel eat occasionally, at one of three messes.

This young lady's duties include ordering supplies (potatoes by the ton, meat by the hundreds of pounds), selection of menus, supervision of food preparation and in-flight meals. While attending the University of Alberta F/O Patrick spent three summers training with the RCAF as a flight cadet in the University Reserve Training Plan and completed her dietetic internship under RCAF sponsorship. She joined the regular force in 1957 equipped with a bachelor of science degree in household economics, and has recently also acquired a husband.



then samples Mr. K. Sabos' pressed meats in one of the station's three mess kitchens . . . .



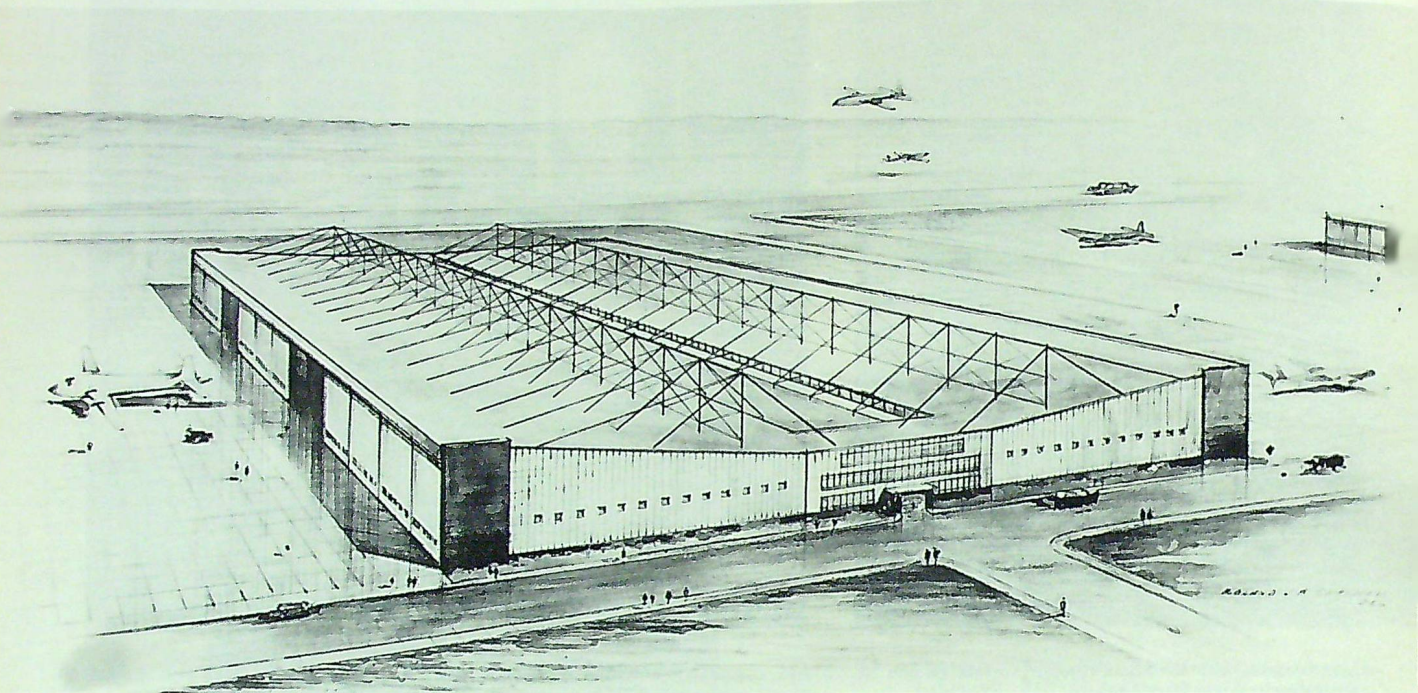
and checks the airmen's cold table salad offered by WO R. Barry, station superintendent cook.

ring top quality contents

Back at the office, F/O Patrick goes over the week's menus with FS Legault before calling it a day . . .

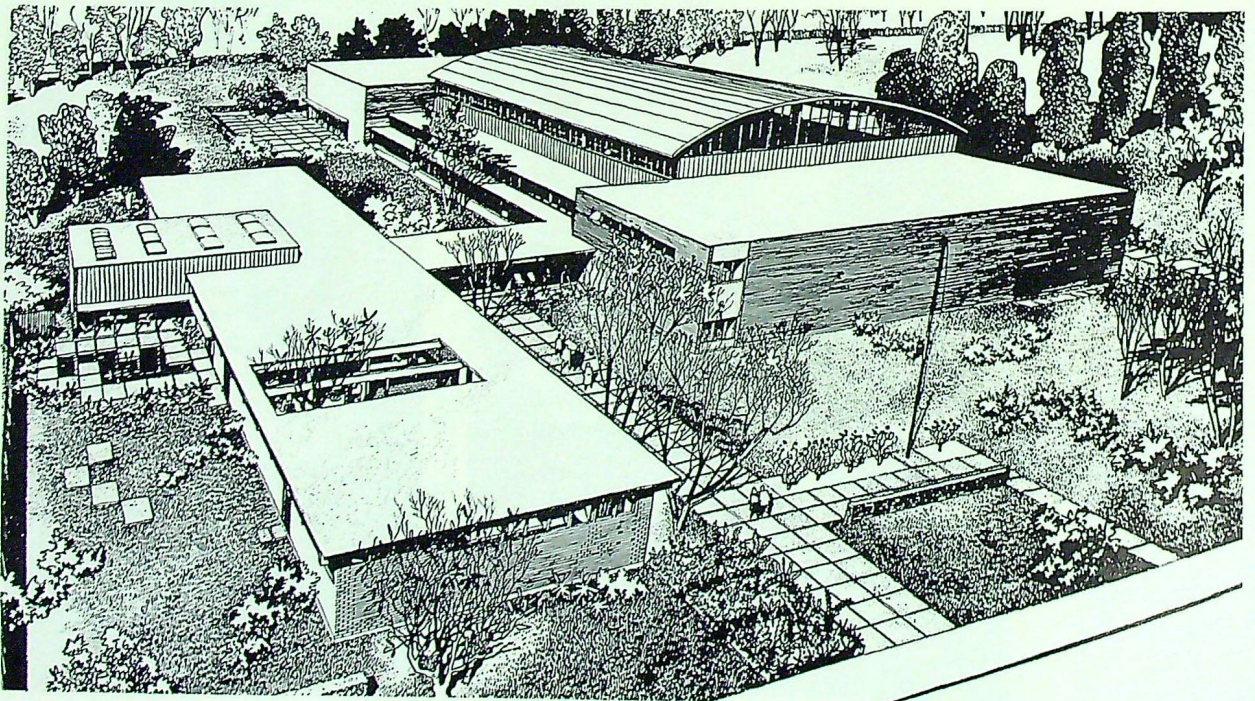
. . . and then relaxes with her sewing. She makes most of her own clothes for off-duty hours.





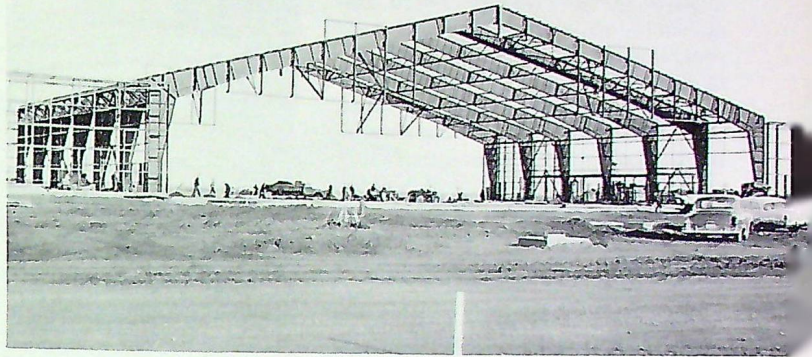
Standard RCAF Cantilever-type Hangar.

Standard RCAF Drill-Recreation Hall.



# AIR FORCE ARCHITECTURE

By MR. O. F. BUSH  
Director, RCAF Directorate of Architectural Construction



Anti-corrosion hangar being constructed  
at RCAF Station Summerside.

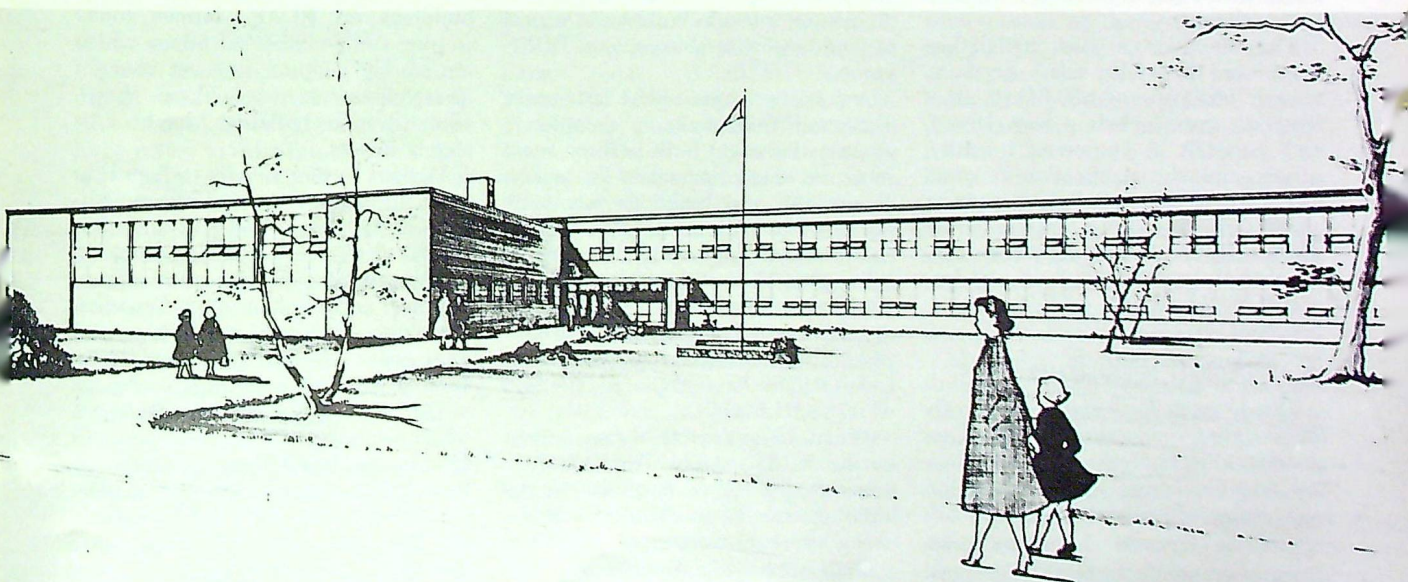
STILL in service at RCAF Station Camp Borden are hangars built in 1917 to house Curtiss *Jennys* belonging to the Royal Flying Corps. Near these venerable 43-year old structures stand cavernous arch-type hangars capable of housing today's largest aircraft. These new buildings, which form such a vivid contrast to the old, are the design work of the RCAF's Directorate of Architectural Construction.

The Directorate of Architectural Construction (D Arch C) is a comparatively new formation within the organization headed by the Chief of Construction Engineering, Air Commodore R. B. Whiting, MBE. The functions of both architecture and engineering were, until 1956, the responsibility of Construction Engineering Design Branch; but in that year D Arch C was formed to handle all aspects of building design while

the Directorate of Engineering Construction was made responsible for all engineering aspects of design work, other than architectural and structural.

Within the D Arch C there are four branches. The Projects Branch is concerned principally with the development of preliminary proposals, sketch plans, outline specifications, cost estimates, etc., for projects under development. In many instances pre-

Standard RCAF School - 19 classrooms and gymnasium.



liminary work is done in order to form a basis for a Treasury Board submission — to enable the funds to be programmed and to obtain permission to proceed with the working drawings and specifications required for tender call. This branch is also responsible for liaison with the consultants employed by the Department of National Defence to assist the RCAF in the preparation of working drawings and specifications for buildings and structures.

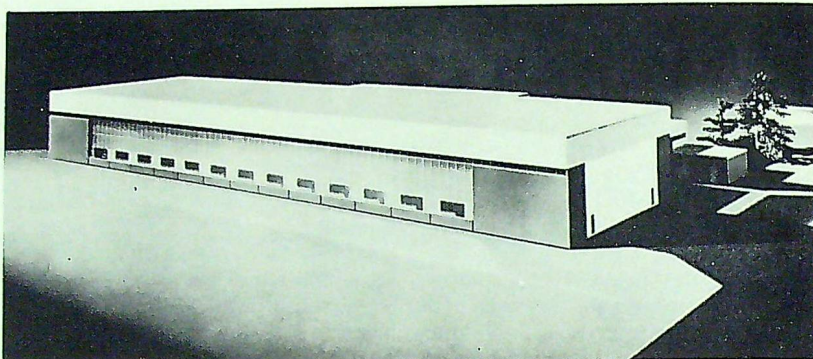
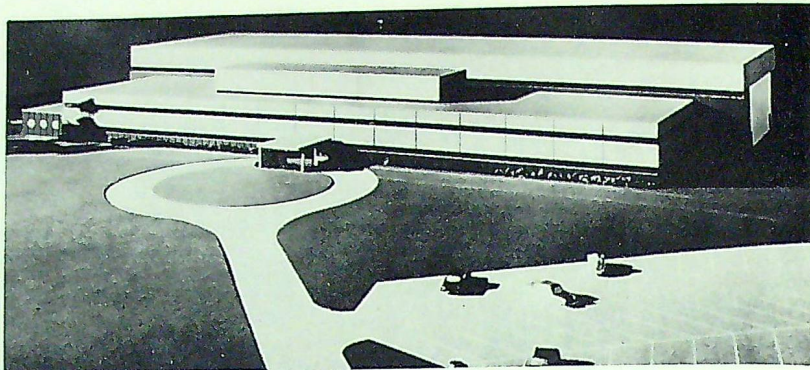
The Production Branch processes working drawings and specifications. It is responsible for checking the contract documents which are sent to Defence Construction Limited and is concerned with standard criteria used in the design of buildings. One section of this branch is set up to handle the assessment of all alternative materials and methods submitted by various contractors and suppliers through the Inter-Service Equivalents Board, thus ensuring adherence to the intent and meaning of the plans and specifications.

The Structural Branch designers concern themselves with the design of structures using timber, steel, reinforced concrete, aluminum, etc. These engineers, working with the architects, are not only engaged in the routine slide rule work so necessary in structural design, but are also the "idea men" prepared at all times to provide a structure compatible with the architect's scheme.

The members of the Estimating Branch are the "dollar men". Accurate records are kept of all RCAF construction costs including both labour and materials. A system of quantity survey and the application of unit prices applicable to various centres across Canada enables this branch to predict the cost of the work described by the plans and specifications prepared by the Project and Production Branches.

#### DESIGN REQUIREMENTS

The D Arch C is responsible both for providing economical and functional designs for contemporary buildings and also for design requirements for long range development of RCAF stations in Canada. In every case attempts are made to provide designs



Model of Technical Training School, RCAF Station Camp Borden.

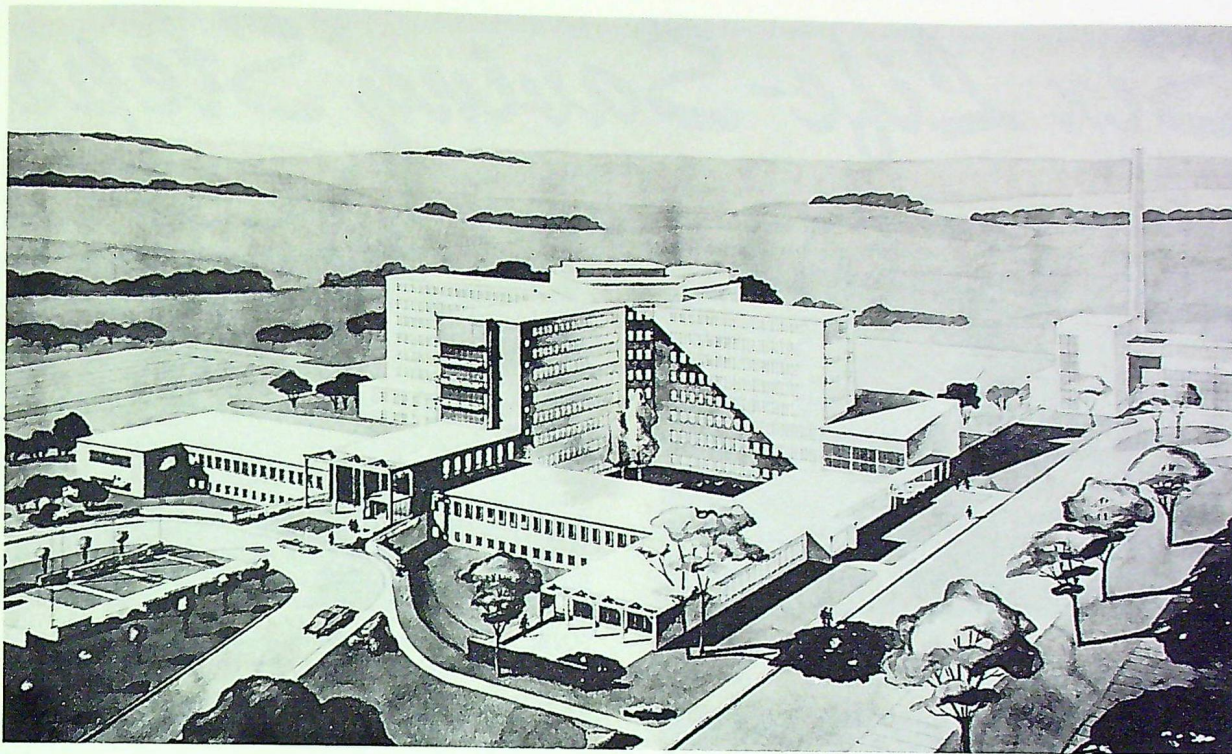
which are pleasing in appearance and which will employ the use of construction materials consistent with ease of maintenance. The directorate provides designs on request for anything from a single building at a unit to buildings for a complete RCAF station.

A prime example of the latter case is Station Cold Lake, a completely new establishment built in three years at a cost of approximately 30 million dollars. All the buildings were designed by architects on the staff of Construction Engineering in Ottawa or by prominent architects in Canada who assisted the RCAF. Examples of the directorate's work on a smaller scale are the modern airmen's barracks which have replaced the old wartime "H-huts."

When designs are being considered by the RCAF's Architectural Branch, thought is given to flexibility so the buildings can be modified to suit the changing requirements of individual stations. For example, airmen's bar-

racks can be increased in size by the addition of a wing, or wings, and the rooms can be modified to accommodate a larger number of airmen should the occasion arise. Many buildings on RCAF stations today employ demountable partitions which are readily adapted to meet changes in requirements for offices, shops, administration buildings, hangars or supply depots.

Designs are generally tailored to meet site conditions. At College Militaire Royal Saint Jean, for instance, special design work was undertaken to ensure that the architecture was in keeping with the French-Canadian environment. Local conditions and local materials also play a part in architectural plans. Air force buildings in Ontario, Quebec or other provinces where winters are severe will be more heavily insulated than buildings in British Columbia where a more moderate climate prevails. In Eastern Canada, spruce, pine or some other local type of wood is generally used,



National Defence Medical Centre, Ottawa — now under construction.

while the same requirement would be met in B.C. by Douglas fir. All new construction, except that of a temporary nature, is designed for use over at least a 20-year period.

#### 10-YEAR RECORD

Since the inception of the RCAF design and construction program, which began in 1950, it has been air force policy to establish certain standard designs for repetitive types of structures such as: chapels, skating rinks, messes and hangars. This policy is particularly applicable to flying stations, radar and missile sites where functions performed may be common to a number of stations.

The design and construction of new hangars continues to present a most interesting problem for the architectural design staff. The policy is to construct hangars of non-combustible materials, and, where possible and considered necessary, to provide an automatic foam deluge sprinkler system for fire protection. Consider-

able emphasis is now placed on the provision of an automatic and positive method of combating fires in hangars. The RCAF has, incidentally, pioneered in this field of Canadian hangar design. Flexibility of use is taken into consideration in hangar design today. At RCAF Stations Winnipeg, Cold Lake and Uplands, for instance, the hangars will not only accommodate the types of aircraft which are currently operated from these stations, but will also house large aircraft up to and including the *Argus* or *CC-106*.

In addition to standard designs the Directorate of Architecture also provides designs for specific requirements such as: the special building at Station Rockcliffe which houses AMCHQ's big new electronic computer, the Technical Training School at Camp Borden, various buildings and structures for the Pinetree radar improvement program, SAGE and Bomarc, anti-corrosion hangars for Stations Greenwood and Summerside and a quality

control laboratory for Station Rockcliffe.

Along with construction required specifically for RCAF use the RCAF designers have, from time to time, been chosen to design buildings for use by all three services. Some examples are the Canadian Joint Staff building in Washington, D.C., dependents' schools, and general hospitals for the Department of National Defence. The most prominent example of this is the new \$8,500,000 Tri-Service Medical Centre now being constructed in Ottawa. This medical centre was designed by a firm of architects under the direction of the RCAF's architectural design staff.

The aim of the Directorate of Architectural Construction is to provide functional, efficient modern buildings in keeping with the concepts and ideals of Canada's youngest fighting arm. Comparisons with facilities provided by other services in our own and foreign countries show that this responsibility is being met.

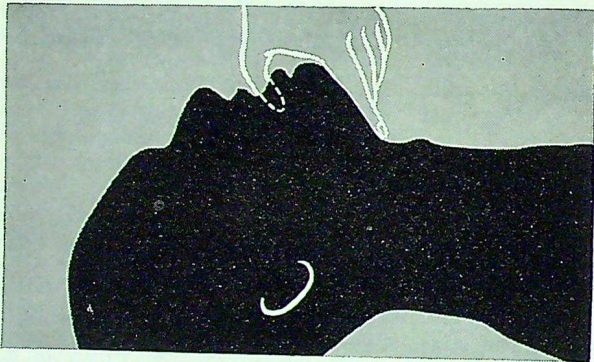
# Six Life-Saving Steps



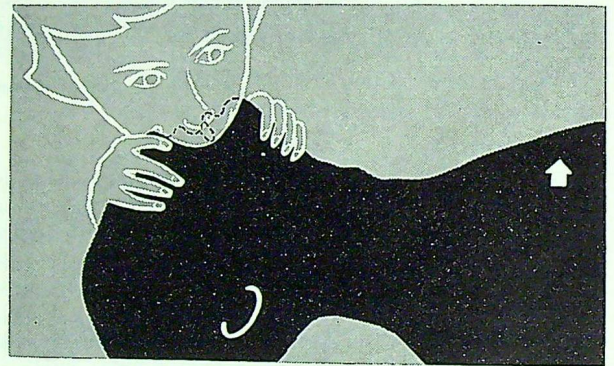
**ONE:** Place victim on the back, loosen collar and belt. Stretch head back and raise lower jaw.



**FOUR:** Take a deep breath, place your mouth firmly over the victim's mouth and breathe out.



**TWO:** Insert left thumb in the mouth and grasp lower jaw and lift it forcibly upwards and forwards.



**FIVE:** While breathing into victim, watch chest rise to make sure his air passage is clear.



**THREE:** Hold the lower jaw up and with the right hand close the victim's nose.



**SIX:** Remove your mouth from the victim's to allow his breath to be exhaled. Count three and repeat.

■ **THE SIMPLE** six steps of the mouth-to-mouth rescue breathing technique are illustrated on this page. Below Dr. L. C. Haslam, chief medical officer, Canadian Industries Limited, has answered some questions which may arise concerning this technique.

**What is the advantage of the mouth-to-mouth rescue breathing method over the arm-lift one?**

It is simple and any obstruction of the air passage is recognized at once.

**Can the method be used on babies? Is there any difference in the technique for babies and for adults?**

It is perfectly adaptable to a victim of any age. With infants, the jaw is pushed forward by pressing at the jawbone. This is because the thumb in the mouth can block it. Air is breathed into the infant by covering the nose and mouth with your mouth and breathing in.

**This doesn't sound like a new method — isn't it actually old?**

It goes as far back as the Bible and a "rescue breathing" incident is recorded in 2nd Kings, Chapter 4, verse 34.

**What do you do if the victim's jaws are so rigid you can't breathe into the mouth?**

Cover the mouth completely with your fingers and then breathe into the nostrils.

**What about germs if I'm to put my mouth on a stranger's?**

Don't worry about germs when a life is at stake. However, a hole can be torn in a handkerchief (if one is available) and this placed over the mouth of the patient.

**If I'm breathing my air into someone's lungs, isn't it bad air filled with CO<sub>2</sub>?**

If you inhale deeply before breathing into the patient, he will get enough oxygen from you, in fact more than he needs.

**Does this mean I inhale more deeply?**

Yes. You are breathing for two so you should inhale about twice as deeply.

**How can I tell if his tongue is blocking the throat?**

The chest will not rise when you breathe in.

**What do I do if this is so?**

Try to clear the tongue from the throat, re-adjust the head angle and resume the method.

**With a drowning victim, when should I start using the technique?**

Don't wait until the patient is ashore. If at all possible, begin mouth-to-mouth breathing immediately. The earlier artificial respiration is started, the better the chance of success.

**Are there any special factors with a drowning victim to consider?**

Your first breath into him may cause water to come out. Clear his throat and resume breathing. If there is water in his stomach, push gently on the stomach and let the water flow out of his mouth.

**How do you know the victim needs rescue breathing?**

Your administration of rescue breathing can't hurt him if he is breathing all right but it can save his life if he isn't. You can recognize the patient's shortage of oxygen because of the blue coloration of the lips, tongue and fingernails.

**How many breaths will be needed to revive a patient?**

It may take only 10 or 15 or you may have to continue the method for hours.

**Why are the nostrils pinched?**

This prevents air leakage out through the nostrils.

**How can I tell the method is working?**

The skin color will gradually turn to a glowing pink.

**What other accidents can produce asphyxiation?**

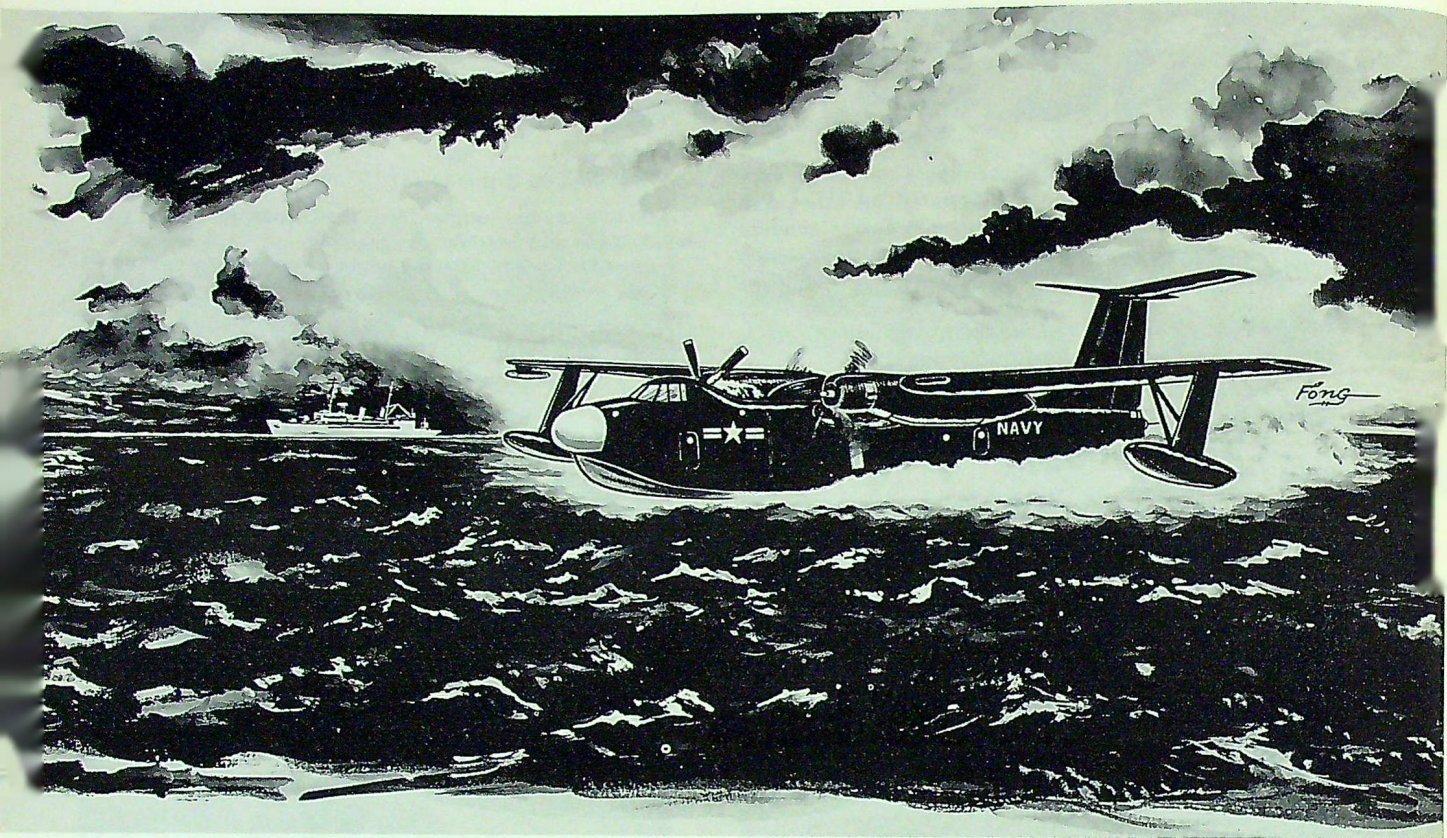
Carbon monoxide poisoning from a car's exhaust, electric shock, a foreign body lodged in the throat, an overdose of certain medicines or a chest injury.

**What is the first step with a victim of carbon monoxide poisoning?**

Get the patient into fresh air and then send someone for help if this is possible. Immediately begin rescue breathing.

**What is the first step in saving a victim of electric shock?**

Make sure he is not still touching a source of live current. Then begin rescue breathing as quickly as possible.



## Drama at Sea

**F**LIGHT Lieutenant H. E. Smale, an RCAF navigator currently on exchange duties with the US Navy, was a crewmember of a flying boat which recently broke the world's water taxiing record. He and the other 12 men aboard a disabled P5M-2 Martin *Marlin* taxied 530 miles across the open Atlantic in two days, six hours and 52 minutes.

The unrehearsed record-breaking voyage began as a routine 1250 mile over-water flight from San Juan, Puerto Rico, to the Atlantic Fleet Patrol Squadron 44's home base at Norfolk, Va. Flying was normal for the first 400 miles, then suddenly the right engine burst into flames and emergency procedures failed to keep

the fire out. Only after making a successful open-sea landing was the crew able to bring the fire under control and finally extinguish it.

Radio contact continued with a sister ship overhead and, after a geographical position was established, other ships were summoned to the aid of the crippled aircraft. It was decided that the aircraft should proceed to Grand Turk Island, B.W.I., 200 miles distant, to rendezvous with the seaplane tender *USS Albemarle*, with which the squadron had been working. The *USS Abbot*, a destroyer in the vicinity, would join the aircraft and escort it to the island.

The *Marlin* started its journey, hoping to reach Grand Turk in about

30 hours, have the tender make repairs, and continue on its way to Norfolk. The *Abbot* joined the aircraft, but due to calm seas and a slight wind, did not take her under tow.

The plane reached Grand Turk and met with the *Albemarle* as planned. It was then determined that the plane was too badly damaged to be repaired by the tender. Due to extensive damage by heat, fire and sea travel the plane could not be readied for flight. The decision was then made that the *Albemarle* escort (or tow in the event of rough weather) the aircraft to the Naval Base, Guantanamo Bay, Cuba, allowing the plane to make one of the longest water taxi

trips in seaplane history. From Cuba, she would be sealifted to the continental United States.

The crew members temporarily transferred to the tender for showers and food, only to return to their "grounded" plane immediately after the *Marlin* was replenished with food and fuel for her voyage. Again the seaplane taxied out into the open sea bound for a new destination with the tender *Albemarle* by her side. The strange procession continued, finally reaching Cuba two days, 6 hours and 52 minutes later and over 530 miles away from their emergency landing area.

Aircraft from Patrol Squadron 44 brought the holders of the record for seaplane water taxi to Norfolk.



F/L H. E. Smale, greets his wife and children Michael and Patrick on arrival at Norfolk, Va. after helping break the world's record for a seaplane taxi.

## Awarded American DFC

An RCAF exchange officer serving with the USAF has become a member of an exclusive group — he is one of eight Canadian fliers to win an American DFC since the end of the Second World War.

To quote the citation "F/L D. G. Scott showed exemplary performance in the face of extreme danger" while flying a crippled weather aircraft over the arctic ice pack last summer.

F/L Scott was the pilot of a WB-50 *Superfortress* aircraft carrying out a

weather reconnaissance flight 900 miles north of Fairbanks, Alaska, when part of one propeller broke away tearing a 26-inch hole in the fuselage, and severing some of the electrical hydraulic and control cables. Broken hydraulic lines caused the bomb-bay doors to open, thus creating severe buffeting and drag, and prevented the use of the wing flaps.

After regaining control of the aircraft F/L Scott feathered the engine, and elected to nurse the crippled aircraft, with its 11 crew members, 900 miles to Fairbanks, Alaska — the nearest suitable landing field. Although two emergency fields were closer, neither runway was long enough to allow a safe landing without use of wing flaps or reversed propellers, both of which were rendered useless. At Fairbanks, Scott succeeded in making a safe landing without further damage to the aircraft thereby saving a valuable aircraft and eleven crew members from possible injury or death.

The DFC was presented to the Canadian flier at a special ceremony at McClellan Air Force Base, Sacramento, California.



## Controller Commended

Her Majesty the Queen has been pleased to approve the Queen's Commendation for Valuable Service in the Air to FS K. M. Cameron for his action in controlling a T-33 jet trainer for about 15 minutes when a severe headache seriously impaired the pilot's vision.

The incident occurred last October during a cross-country flight originating from Portage la Prairie. FS Cameron, a passenger in the aircraft who has had some civilian flying training, took control when he learned of the pilot's predicament and returned to the Portage radio beacon, descending through cloud and carrying out the required radio and cockpit checks. On arriving over the airbase, he expressed a willingness to land the jet, but by this time the pilot had regained his eyesight sufficiently to complete the approach and landing.

In the words of the citation FS Cameron's "resourcefulness and skill saved a valuable aircraft and possibly prevented loss of life".

Born in Vancouver, FS Cameron joined the RCAF in 1948 as an aircraft controller and served at various bases in western Canada until 1953, when he was transferred to No. 2 Fighter Wing at Grostenquin, France. Since 1957 he has been stationed at Portage la Prairie as a ground controlled approach (GCA) controller.



# The Suggestion Box

The following individuals have received awards from the Suggestion Award Committee, Department of National Defence, for original suggestions which have been officially adopted by the RCAF. Photographs of winners of \$100 or over appear below. Proper procedure for submitting suggestions is detailed in AFAO 99.00/01.



F/L T. E. Robson of Station St. Hubert made a suggestion concerning the MX900 Chaff Dispenser. Details are identified as CTeI 59A104.



Mr. R. Baker of 1132 TSD Montreal suggested a method of reclaiming the Dow Corning Fluid from components of the MG2 Fire Control System.

## Other award winners:

S/L R. W. Hill  
 F/L D. C. Danard  
 F/L W. J. Johnson  
 F/L J. D. Dickson  
 WO1 C. E. Oakander  
 WO2 W. E. Hawkins  
 FS A. R. Baker  
 FS G. Simmons  
 FS T. Brock  
 FS R. W. MacRae  
 FS L. E. Palmer  
 FS H. B. Kendall  
 FS R. S. Arbuckle  
 Sgt. R. M. McPhail  
 Sgt. J. Acton  
 Sgt. E. W. Cann  
 Sgt. R. Angus  
 Sgt. J. Rae  
 Sgt. D. E. Stevenson  
 Cpl. W. W. Taylor  
 Cpl. L. W. E. Murphy  
 Cpl. J. P. Ryan  
 Cpl. N. J. Ouellette  
 Cpl. B. E. F. Spencer

Cpl. G. H. Rogers  
 Cpl. F. A. J. Holman  
 Cpl. J. H. M. Blache  
 LAC P. J. Richard  
 LAC A. S. McCaull  
 LAC C. A. Northup  
 LAC F. W. W. Vincent  
 LAC M. N. Reshnick  
 LAC D. W. Fasken  
 LAC J. A. R. Rouleau  
 LAC A. B. Severn  
 Mr. W. E. Johnston  
 Mr. C. O. Martlew  
 Mr. D. D. Phelps  
 Mr. E. H. Beaton  
 Mr. M. Goldberg

A man has to live with himself, and he should see to it that he always has good company.

—Charles Evans Hughes

Everything comes to those who wait—on themselves.

The RCAF Association held its 10th annual national convention in Toronto last month, too late for a report on the meetings to make our June deadline. Full coverage of the three-day event will appear in the July-August issue of THE ROUNDEL.

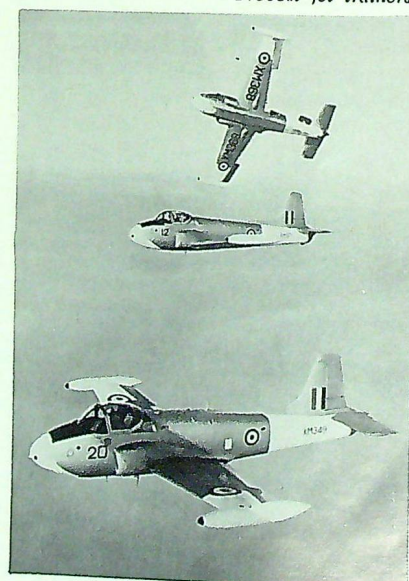
## RAF PIONEERS ALL-JET TRAINING

First course of RAF student pilots to train entirely on jets graduated this month at No. 2 FTS, Syerston, Notts.

The students have completed about 120 hours each on the side-by-side two-seater *Provost* 3 trainer. They now go to advanced training units for a further 120 hours on *Vampires* before receiving their wings. It is expected that in the near future all British RAF pilots will be jet trained from the beginning. Those destined for piston-engined aircraft will have to be converted from jets — a complete reversal of the previous procedure.

(UK Information Service)

*Provost jet trainers*



# The Care and Feeding of Flight Instructors

Reprinted courtesy

THE AIRMAN

(Official journal of the USAF)

**I**N learning to fly, the beginner is faced with two major problems. First is the airplane, which is a piece of machinery that can be mastered with perseverance, practice, cool headedness, curses, and occasional swift kicks. Second is the flight instructor and a problem not so easily surmounted.

The instructor is a special breed of pilot. He is easily recognizable by his great courage, extreme skill, low forehead, and mean little eyes. Because the instructor already knows how to fly, he has the student completely at a disadvantage. He is unimpressed with whatever skills the student might have outside of aviation. He is dedicated, therefore, to showing the student how little he knows and, by his own example, how completely unsuitable the student is as pilot material.

Those who wish to make a success of flying are advised to follow a few common sense rules in dealing with instructors.

**1. Let Him Know Who Is Boss.** This is done by keeping your mouth shut, as he already knows he is.

**2. Earn His Respect and Admiration.** Best done by saying your father is president of a large airline looking for pilots at a fantastic salary. All instructors are dissatisfied with their present jobs.

**3. Reward His Efforts.** It is well to bribe him with bills of large denomination. In return he may show you a little about flying an airplane.

**4. Let Him Know Your Problems.** Say you are constantly pursued by beautiful women to whom you would introduce him. Instructors are girl-



crazy and you will get extra flight time while he thinks this over. It also serves to keep his mind off your mistakes.

**5. Show Admiration for Him.** Let him know how impressed you are that he can fly even though he had no sleep and is suffering from acute hangover. Instructors are egotistical and will mistake this for a compliment.

**6. Tell Him Your Ambitions.** Appear for lessons with hair uncombed, shoes scuffed, and buttons missing from your shirt. Wear a leather jacket with holes at the elbows and look bored with the whole procedure. He will know you are interested in becoming an instructor and give you special attention.

**7. Demonstrate Your Aptitude.** Fly with one wing low and skid all

turns. Get plenty of good bounces into landings and ground-loop once in a while. Instructors prefer to think all students are knuckleheads.

**8. Show the Right Mental Attitude.** Convince him you are a lunatic. Instructors solo students when convinced there is nothing to be done, and they are bent on committing suicide anyway. Louse up enough landings and he will leave the airplane to save his own skin. You can then teach yourself.

**9. Never Disobey Instructions.** When the instructor tells you to go to . . . , file a flight plan and take off.

**10. Don't Take Unnecessary Risks.** Fly solo whenever you can.

(From AM, Anderson Air Activities, Malden AFB, Mo.)

RCAF and National Film Board  
combine talents to produce the

## GHOST HUNTERS

National Film Board technicians select a vantage point for their camera, to record the arrival of *Argus* No. 711, at RCAF Station Greenwood.



THE role played by the RCAF's Maritime Air Command will be seen by thousands of viewers, starting this month, as the result of a 30-minute film produced by the National Film Board and scheduled for international distribution.

The "Ghost Hunters", filmed in technicolour, follows an *Argus* aircraft on a Trans-Atlantic return crossing, an attack on a sub, then a three-engined landing at Greenwood in a driving rain storm. During the filming of "Ghost Hunters" an NFB five-man team flew in a No. 405 Squadron *Argus* from Greenwood to Gibraltar. The actual filming of the movie took two months.

The film, which took a year to produce, will be seen on television in Canada, U.S., Australia, New Zealand, Great Britain, and France. The movie will be available in both the English and French languages. Produced for the RCAF for public information purposes, the film will also be shown to air cadets, high school students, and service clubs.

"Ghost Hunters" gives an insight into the many duties performed by each of the *Argus*' 15 crew members during a routine patrol and while engaged in tactics. The action climax of the film shows an *Argus* carrying out a simulated attack on a submarine. The submarine used in the sequence was provided by the Royal Navy, courtesy the British Admiralty.

The reconnaissance and anti-submarine role depicted in the movie is one that is carried out daily by an ever-increasing number of RCAF personnel. In fulfilling this role, Maritime Air Command operates two squadrons of aircraft on the east coast and one on the west coast. Numbers 404 and 405 Squadrons, based at Greenwood, operate with *Argus* aircraft which have the most up-to-date detection equipment available, an armament load of 8,000 pounds and a combat range of approximately 4,000 miles.

The Command's maritime squadron on the west coast No. 407, based at Comox, is equipped with *Neptune* aircraft.



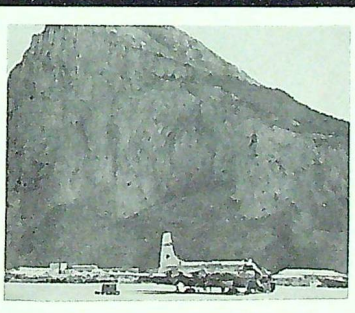
W/C C. Torontow, Commanding Officer of No. 405 Squadron, briefs the aircrew before a flight, during the filming of the movie *Ghost Hunters*.



*Argus* No. 711 fires-up prior to takeoff for Gibraltar.



F/L J. S. Middleton, captain of the aircraft, pilots the *Argus* through a severe storm.



The "star" of the movie, *Argus* No. 711, is refuelled and rearmed against the background of the rock of Gibraltar.



No. 711 lands at RCAF Station Greenwood with one engine feathered.

# ROYAL CANADIAN AIR CADETS

## Summer activities mark "coming of age" for cadets training program

By ARTHUR MACDONALD,  
Assistant General Manager,  
Air Cadet League Hdqts.

THIS month marks the completion of the 20th training year by the air cadet movement in Canada. On such a significant anniversary it is difficult to resist the temptation to look back over past accomplishments; however, this column will do just the opposite: take a forward look at the extensive program of special summer activities which will occupy the attention of over 6,500 air cadets during what is sometimes referred to as the "vacation season".

While it is generally conceded that the real reason for the success of the overall program is the week-by-week training given by squadrons across the country during the school year, there is no doubt that the summer reward activities are extremely attractive to the cadets and often provide the incentive which keeps boys turning out regularly on parade nights throughout the rest of the year. The summer program has been developed with this point in mind. Its purpose is to reward the cadets for outstanding performance with their squadrons and also to provide advanced training of a type that could not be conveniently carried out at squadron level.

From the standpoint of numbers, the major items in the July-August program are the summer camps of two weeks' duration held at RCAF Stations Sea Island, B.C., Trenton, Ont., St. Jean, P.Q., and Summerside, P.E.I., starting on July 4th. Total attendance at the four camps will be 6,000 cadets who have qualified for this reward. Since the camps can accommodate less than 25% of the total enrolment it is obvious that competition to attend them is extremely keen.

All four summer camps offer a balanced program of outdoor recreation and sports, plus advanced in-

struction in syllabus subjects and specialized courses for air cadet NCOs, officers and instructors. Every cadet attending camp also receives a 45-minute flight in an RCAF aircraft.

### SPECIAL COURSES

RCAF Station Camp Borden will again be the location of the Air Cadet Senior Summer Camp which comprises two courses for 100 cadets each: the Senior Leaders Course, and Drill Instructors Course. Cadets for these courses are carefully selected from all provinces; they receive seven weeks of leadership training which qualifies them for future positions of responsibility with their home squadrons. Successful graduates receive a training bonus of \$100 for the summer's work. The Borden courses are carried out by the highly qualified staff of the RCAF's Supervisor Service Training School and are widely recognized as probably the finest single avenue of training open to air cadets. This year's courses will commence on July 11th, and the graduation ceremonies are planned for August 24th.

Selection has been made of the 250 cadets across Canada who have qualified this year for flying training scholarships provided by the RCAF. Each scholarship covers 35 hours of flying, plus the 60 hours of ground-school required to qualify candidates for a private pilot license. In most parts of the country, training will commence at the flying clubs on July 4th.

Arrangements are also being made to provide scholarships for many of the qualified candidates who could not be accommodated within the RCAF quota. The necessary arrangements are being made direct between the air cadet squadron concerned and the flying clubs or schools in each

area. Last year a record number of 137 "non-service scholarships" was provided and it is hoped that the results will be equally impressive in 1960. All successful graduates of flying scholarship courses are permitted to wear the air cadet flying badge in recognition of their achievements.

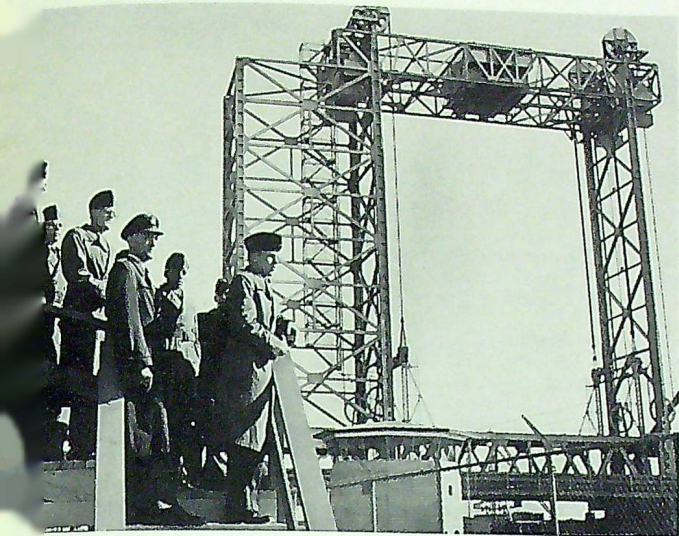
### EXCHANGE VISITS

The 1960 edition of the international air cadet exchange visits scheme will get underway on July 12th when 33 Canadian cadets, bound for overseas, will assemble at RCAF Station Trenton. They will take off on July 17th and arrive in London the following day. Twenty-five of the cadets will remain in the United Kingdom while the other eight will move on to the continent for visits, in pairs, to Norway, Sweden, Holland and Denmark.

The return party of overseas cadets will arrive in Canada on July 22nd. Their itinerary will include a week-end in Montreal and district, then a long flight to British Columbia, with a stopover for several days in the Calgary area. Most of their stay in Canada will be spent as guests of the B.C. Provincial Committee of the League. They will take off from Trenton for the return flight across the Atlantic on August 11th.

Another group of 25 Canadian cadets, selected to visit the United States, will assemble at Trenton on July 17th, leave for the U.S. on July 21st and return to Canada on August 9th. Their U.S. program will include visits to New York and Washington, D.C., and an extended stay in the State of Nebraska, as guests of the U.S. Civil Air Patrol. Meanwhile, their counterparts from the U.S. will be entertained in the provinces of Ontario and Quebec.

An interesting feature of the ex-



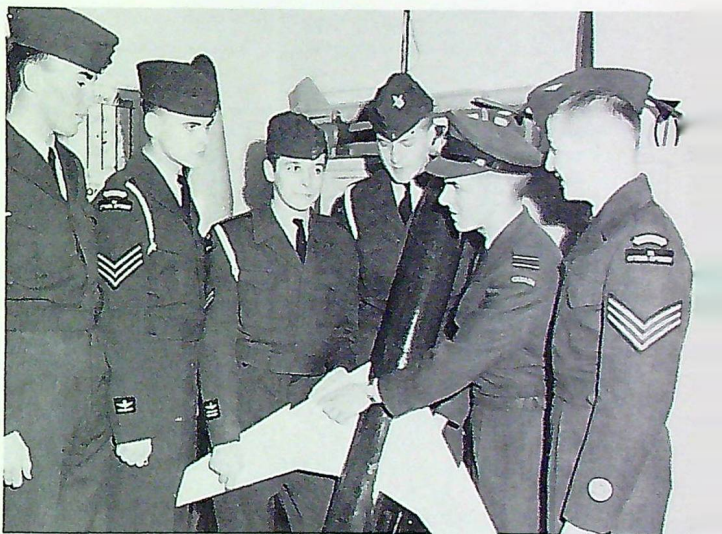
Fourteen top cadets from squadrons in the Moncton area enjoyed a visit to Montreal as guests of RCAF Station St. Hubert. Here they view the St. Lambert locks on the St. Lawrence Seaway.



NHL hockey star Doug Harvey signs autographs for a group of cadets from 315 Sqn. Newcastle, N.B., who visited Montreal as guests of 518 Rosemount Sqn.



A Strathcona Award of \$100 for outstanding performance is presented to Chairman George F. Love of 695 Sqn., North Kildonan, Man., by Capt. W. A. B. Gabriel, army area cadet officer. Looking on: S/L D. Halcrow, ACLO; and F/L A. Stevens, C.O. of the North Kildonan Sqn.



A group of Ottawa air cadets receive instruction from their commanding officer, F/L Dave Wilson. Guided missiles are featured in the new air cadet training syllabus.

change program this year will be that all cadets travelling to and from continental Europe will be assembled for dispersal at the USAF Base at Rhein/Main, Germany. This will provide the two-fold advantage of having cadets of over 20 countries

come together for a sort of international air cadet "rally" and will also simplify the transportation arrangements.

Another summer project in which air cadets have taken a more than passing interest over the years is the

R.T.T.P. program conducted by various reserve units across the country. This year, air cadets will apply for RTTP training in the same way as candidates from other sources and it is expected that a goodly number of them will qualify for summer training courses with the RCAF Reserve.

# Letters to the Editor

## YOU'RE WELCOME, UNEF

Dear Sir:

"Somewhere East of Suez" (ROUNDEL, Vol. 12, No. 2) has done a real publicity job for us out here with UNEF. Congratulations and thank you for your fine coverage. At least the rest of the air force and RCAFA members (who keep us so well supplied with Canadian newspapers and magazines) will know now where we are and what the boys are doing.

F/L W. E. Traynor,  
PAO,  
115 ATU, El Arish, Egypt.

## SQUADRON SOUVENIR

Dear Sir:

The ROUNDEL carrying No. 411 Sqn.'s history (Vol. 12, No. 1) has been a popular one in our household. My daughters took it to school, friends have sent me copies and it has sparked a reunion of 411 wartime pilots (held to coincide with the RCAF Association national convention in Toronto last month).

W/C F. J. Mills, present CO of 411 (Aux.) Sqn., has asked for the picture you printed of me in a *Spitfire* cockpit for the squadron office at Downsview. Can you oblige?

G. C. Semple,  
140 Airdrie Rd.,  
Leaside, Toronto 17, Ont.

(The photo is on its way — Editor)

## SERVICE BOWLING CHAMPS

The 1960 RCAF wire-bowling championship has been won by a team from RCAF Station St. Jean, P.Q. More than 40 teams throughout Canada and overseas took part in the annual competition. Teams bowled at their individual units and results

were wired to AFHQ for compilation. G/C H. G. M. Colpitts, Station St. Jean's commanding officer, presented championship badges to the winners (l. to r.): Cpl. G. Lebel, Mr. G. Chenail, FS K. A. Besteck, Mr. L. Beauchesne, FS W. A. Wickware.



## BACK COPIES REQUESTED

Dear Sir:

Would it be possible to obtain a back copy of THE ROUNDEL which contained the history of 410 Sqn? If not, perhaps you could advise me as to where I might obtain a copy of this material.

May I say that I have enjoyed receiving and reading THE ROUNDEL over the years. I think your publication is tops!

J. C. Holtom  
11 Ridout St.,  
Lindsay, Ont.

(This squadron history appeared in our Jul-Aug 1950 issue. Unfortunately we have no extra copies. This prompts an appeal to readers to forward us back issues in order to meet similar requests. — Editor.)

## ADDRESS WANTED

Dear Sir,

Would you be able to give me the current address of Mrs. Leonard Handcock who operated the Air Officers Leave Club at 10 Cadogan Gardens, during the war?

F/O E. N. Richardson  
2416 AC & W Sqdn.,  
RCAF Station Uplands.

(Sorry, we can't oblige. Perhaps a reader may be able to help. — Editor)

## COLOUR COVERS

Dear Sir,

A few days ago the May issue of THE ROUNDEL arrived at my office. I always look forward to receiving the magazine but, I must admit, this time I was disappointed. Why in the world did you go back to a black and white cover photo? The December issue showing the Golden Hawks in all their glory was a picture worth framing and the March issue, with the UNEF scene, was superb.

Please, let's have more colour covers.

F/L A. T. Miller,  
AFHQ, Ottawa.

(This is typical of many comments we have received on the same subject. — Editor.)

## POW REUNION

Dear Sir:

Canadian airmen who were prisoners in the famous "Wooden Horse" prison camp in Germany during the Second World War will gather in Toronto on the week-end of September 9-10 to celebrate the 15th year of their liberation.

Stalag Luft 3, the huge Luftwaffe camp near Segan, became one of the world's most celebrated prison camps. It was the scene of the famous "Wooden Horse" escape and of "The Great Escape", the incredibly complex engineering feat in which about 80 prisoners tunnelled their way to freedom. All but three were recaptured and 50 were executed by Gestapo firing squads.

Paul Brickhill, the Australian flier and ex-POW who wrote the story of "The Great Escape" is coming to Canada for the reunion. Other distinguished ex-prisoners from Britain will include W/C Robert Stanford-Tuck, famous RAF fighter ace of Battle Britain days.

Arrangements have been made with the King Edward Hotel, Toronto, whereby old-boy prisoners will be made to feel at home in an atmosphere of barbed-wire, guard towers, and waiters attired in the uniforms of tommy-gun-toting German prison guards. Ex-POW's seeking further details are asked to write to the undersigned.

C. W. (Wally) Floody,  
POW Association,  
Air Force Branch,  
Suite 701, 159 Bay St.,  
Toronto 1, Ont.

Loud mouths don't have to worry about a shortage of food. They usually have to eat their words.

## West Coast Visitor



DURING the recent visit of the USN aircraft carrier "Coral Sea", largest vessel to enter Port of Vancouver, 121 C & R Flight pilots from RCAF Stn Sea Island extended their own personal welcome, landing a Vertol helicopter on the flight deck and circling the ship in a *Canso*. The entire rescue organization was placed on alert during the arrival and departure of the huge vessel, with the helicopters standing by and marine section crash boats shepherding the carrier in the confines of the harbour approaches.

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ROYAL CANADIAN AIR FORCE