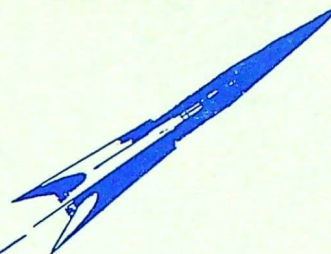




THE

Roundel



1959

MAY



THE

Roundel

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

VOL. 11, No. 4

MAY 1959

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THE ROUNDDEL is published ten times each year. Annual subscription rate is two dollars. Orders should be sent direct to the Queen's Printer, Ottawa, Ont. R.C.A.F. Association correspondence should be mailed to Ass'n Hdqts., 424 Metcalfe St., Ottawa, Ont.

Contributions and all other correspondence should be addressed to:

Editor, The Roundel,
R.C.A.F. Victoria Island,
Ottawa, Ont.



THIS MONTH'S COVER

Comet in the sky, artistically portrayed by Cpl. J. M. Blache, is featured in the story on page 2. R.C.A.F. was first airforce to obtain these jet transports six years ago this month.

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

On the Break



OUR entire staff has been abnormally airborne these past few weeks. Half of it journeyed from Ottawa to Vancouver and return to gather material for this month's lead article. The other half flew to Colorado Springs for a first-hand look at NORAD, which will be featured in the next issue.

Before taxpayers come stomping angrily to protest flagrant misuse of public funds, we hasten to explain that as our staff consists of only two, no great dint has been made in the transportation fund. As a matter of fact, for a couple of ex-aircrew types, we are remarkably desk-bound and cannot possibly accept all the invitations we receive to cover events of importance in the field. Hence, in the majority of cases, we must ask your co-operation in collecting information and photos on local stories which you think warrant space in your magazine. Send the material along promptly and we promise it will receive considerate attention.

* * *

As readers will see from the first two articles, jet flying in the service can vary a great deal. The R.C.A.F. was the first airforce in the world to use jet transport, acquiring two *Comet* I aircraft six years ago this month. They operated on scheduled trans-Atlantic crossings long before any commercial airline entered the jet business. See page 2 to learn how No. 412 Squadron handles V.I.P. traffic.

Comet passengers would find little resemblance to their cross-country trip in the jet flight described by Danny Turner on page 7. A veteran contributor of humorous articles to *THE ROUNDDEL* when he was in the service (most recent, "How to Fly Without Looking Where You Are Going", Vol. 10, No. 7), Mr. Turner is now a civilian instructor of English in the Primary Training School at R.C.A.F. Station Centralia. His first jet solo episode should not be taken too literally.

* * *

THE R.C.A.F. has been involved in several important anniversaries lately. Most recent one was the 10th birthday of N.A.T.O., perhaps the greatest experiment in collective security ever attempted. Our modest salute to this event begins on page 30.

Also last month we marked our own 35th anniversary at R.C.A.F. establishments, large and small. A sampling of the birthday parties, and photos of some of the pioneers and dignitaries who attended, appears on pages 24 and 25.

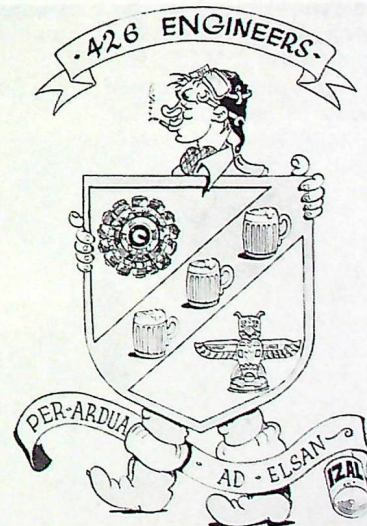
* * *

OUR offer of No. 419 Squadron badges a couple of months ago certainly proved to us the popularity of these wartime mementos and the eagerness with which readers look for the squadron stories as prepared by the historical branch. Last of five instalments relating the Moosemen's exploits starts on page 12.

Next squadron slated for *THE ROUNDDEL* treatment is No. 411, a wartime fighter unit which exists today as the County of York auxiliary squadron near Toronto.

Number thirteen in our series of official R.C.A.F. badges appears on page 23. Definitely not qualifying for inclusion in this group is the badge depicted below. It came to us from a reader who flew in No. 426 Squadron during the war, when that heavy bomber unit was based at Linton on Ouse.

The Editor





JET TRAVEL – A.T.C. STYLE

By FLYING OFFICER T. G. COUGHLIN

RAIN and snow propelled by wind gusting up to 28 m.p.h. herald an unpromising day for flying as, individually, the crew members arrive at No. 412 Squadron's hangar to prepare for Special Flight III.

Special flights are routine for Ottawa-based No. 412 and on this blustery March day a *Comet* has been laid on to take a V.I.P. trip non-stop to Vancouver. Departure from the ramp is scheduled for 1300 hours. At 1045 the aircraft captain, Flight Lieutenant W. B. Carss, leaves his home in the P.M.Q.'s at R.C.A.F. Station Uplands to begin the elaborate planning attendant to every Air Transport Command flight.

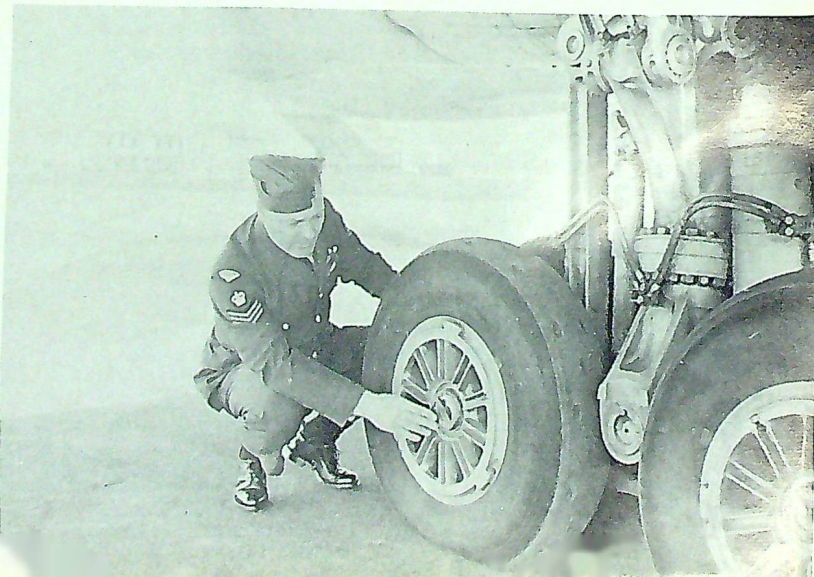
Proceeding to the cavernous hangar where the *Comet* is being groomed he meets his flight engineer, Flight Sergeant W. J. Hoehn, who is just finishing his pre-flight check of 110 items. Flt. Sgt. Hoehn informs him that the required fuel load of 53,800 lbs. is on board.

Inside the aircraft the steward, L.A.C. H. A. Bannister, who is stowing away food in the stainless steel galley, receives confirmation from the captain on the final number of passengers. The movement controller (air), Cpl. K. J. Graham, has been working on documents for the flight and determines from the total weight of passengers, baggage,

fuel, spare parts and safety equipment that the total weight of the aircraft will be 116,000 lbs. on take-off. Entering this information on the Weight and Balance Sheet, he shows the captain that the load is arranged so that the aircraft's centre of gravity will be within limits.

Satisfied that all is well here, Flt.

Flt. Sgt. W. J. Hoehn carries out a comprehensive pre-flight check while . . .



Lt. Carss makes his way through the driving snow to the operations room where he is joined by other members of his crew: the co-pilot, Flt. Lt. R. W. Glover; navigator, Flt. Lt. H. R. McClintock; and the radio officer, Flying Officer R. Wicks. After exchanging cordial greetings and caustic comments on the weather, this veteran crew, whose total flying time exceeds 20,000 hours, proceeds to the meteorological section for briefing.

They will go through four weather systems en route with the possibility of rain at destination, forecasts D.O.T. meteorologist Mr. W. Lewis. The major problem, however, is the prevailing weather in the Ottawa area. A slight change in temperature would make the difference between snow which would hamper the flight, and freezing rain which would cancel it. Reserving the final decision until a later weather sequence is available, the crew returns to the operations room. There the navigator works out his log while the co-pilot files a flight plan, and the captain enquires about braking action on the icy runways.

Meanwhile, the passengers begin

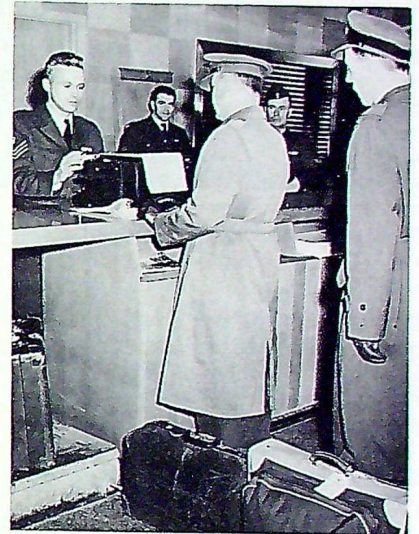
to assemble in the squadron's bright and modern waiting room which would be a credit to any airline. Names are checked off, baggage is weighed, tagged, and taken away. The passengers idly watch the wind blowing snow against the panoramic picture windows.

The airlines have called it a day and the *CF-100* squadrons have temporarily ceased flying operations when Flt. Lt. Carss checks the weather again: low ceilings, visibility down in blowing snow, but no danger of freezing rain aloft. Ten minutes before the V.I.P. party is due to arrive his decision is made: the flight is on.

Passengers board the *Comet* which, because of the inclement weather, is still in the hangar. When all are on board the door is closed and the ramp pulled back. Special Flight III is underway. An aircraft tractor pulls the *Comet* into the diminishing storm and an auxiliary power unit is wheeled into place.

The four Ghost engines rumble into life — sending loose snow and sleet scudding up against the blast fence. Bystanders shield their ears

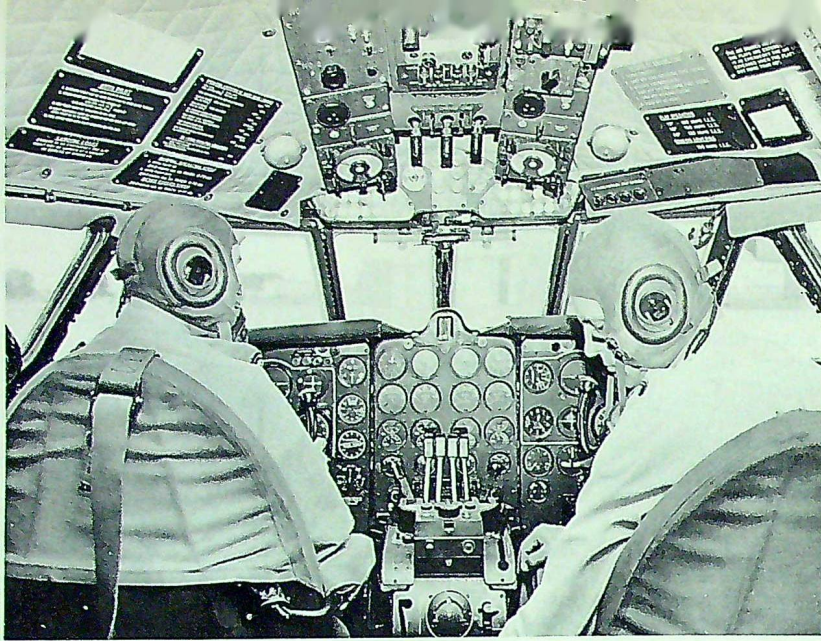
Passengers check-in, and have their baggage weighed.



... the crew attend "met" briefing. L. to r.: Flt. Lt. H. R. McClintock, navigator; Flying Officer R. Wicks, radio officer; Flt. Lt. R. W. Glover, co-pilot; Flt. Lt. W. B. Carss, captain; and Mr. W. Lewis, meteorologist.

Flight planning in the operations room.





The engines are started.

against the rising crescendo as power is applied to overcome the inertia of 58 tons of aircraft. As they taxi away from the ramp the pilots recite a familiar litany as they go through their check lists. Then the *Comet* swings onto the live runway.

Throttles move forward and 20,000 pounds of thrust respond. Some 45 seconds and 4,000 feet later the heavily-laden *Comet* eases off the concrete and begins its characteristic, but somewhat disconcerting, steep angle of climb. Next stop Vancouver.

Within minutes the aircraft is in cloud, climbing away at 1,000 feet per minute. At 24,000 feet it breaks through the overcast into brilliant sunshine and continues to climb. Over Sudbury, some 200 west of Ottawa, Special Flight III reaches its initial cruising altitude of 31,000 feet and Flt. Lt. Carss reduces power. The roaring Ghosts, which have gulped down more than 9,500 lbs. of fuel during the climb, subside to a muted whistling but continue to quench their thirst at the rate of two tons of fuel per hour.

* * *

While the captain is thus occupied with his task, back at Uplands his wife has packed Karen, aged

12, and Elizabeth, seven, off to school and is doing the noon-hour dishes. In Vancouver it is 1045 P.S.T. and a brother-in-law he is hoping to see will be having morning coffee break.

* * *

In the cabin the 28 passengers turn to their magazines, engage in conversation, or gaze out at the seemingly endless deck of stratus cloud which effectively hides the earth from view. Unseen by the passengers, on the flight deck smooth teamwork assures their safety and comfort. With the co-pilot at the controls, the captain consults his pilot's handbook for information that will be required later.

The flight engineer, having completed a fuel consumption check, lifts a panel in the floor of the galley and descends into the equipment bay for a look at the hydraulic reservoir, electrical equipment and pressurization system. Meanwhile, the radio officer is passing transmissions by voice to D.O.T. stations as well as position reports by key to R.C.A.F. flight following centres. He passes radio fixes to the navigator, whose work calls for the highest degree of accuracy since the *Comet's* high speed great-

ly magnifies any errors. Aft of the galley in the forward compartment the steward spreads white linen table cloths and sets out chinaware and silverware, while a dozen pre-cooked dinners heat in the galley's oven. As the passengers leisurely eat southern fried chicken and mashed potatoes, the *Comet* impatiently eats up the miles and by the time dessert has been consumed the aircraft has covered more than 200 miles.

Over the Lakehead the extensive cloud deck ends abruptly. The ground, visible for the first time since take-off, is an awe inspiring sight. From their altitude of 31,000 feet the passengers can see an area encompassing thousands of square miles and a glance in any direction takes in 100 miles. They look upon acres upon acres of snowy forests and a myriad of frozen lakes whose icy surfaces glint in the sunlight. Inside the cabin it is temperate zone weather, but outside in the rarified air it is -49°F . The Lake of the Woods area gives way to flat land as the aircraft races the sun across the patchwork quilt of prairies. Then, with an appreciable

Tea time at 30,000 feet for Flt. Lt. W. G. Burchnell.



amount of fuel burnt off, the *Comet* gradually increases its height to take advantage of the greater speeds attainable at higher altitude.

* * *

As they enter the Central Time Zone Flt. Lt. Carss glances at his watch. In Ottawa it is 1600 hrs; Karen and Elizabeth will be getting out of school. In Vancouver it is 1300 hrs. and his brother-in-law will be finishing lunch and heading back to the office. Now it is coffee time on board the Comet and the passengers experience one of the "selling points" of jets. The coffee doesn't cause a ripple in the cup, mute testimony to the smoothness of flight.

* * *

At seven miles high the *Comets* are in an almost exclusive domain far above normal traffic. Occasionally they share their realm with military jets but more often they travel in solitude. At 35,000 feet now the *Comet* gently undulates

for a moment, a perceptible reminder that the aircraft is cruising along the edge of the tropopause. At such lofty operational heights the normal air traffic control rules and regulations do not apply. Except for the infrequent reservation of air space for military traffic, the captain of a *Comet* can choose his own altitude, unlike the piston aircraft skipper far below on the airways who must fly at the altitudes assigned by air traffic control.

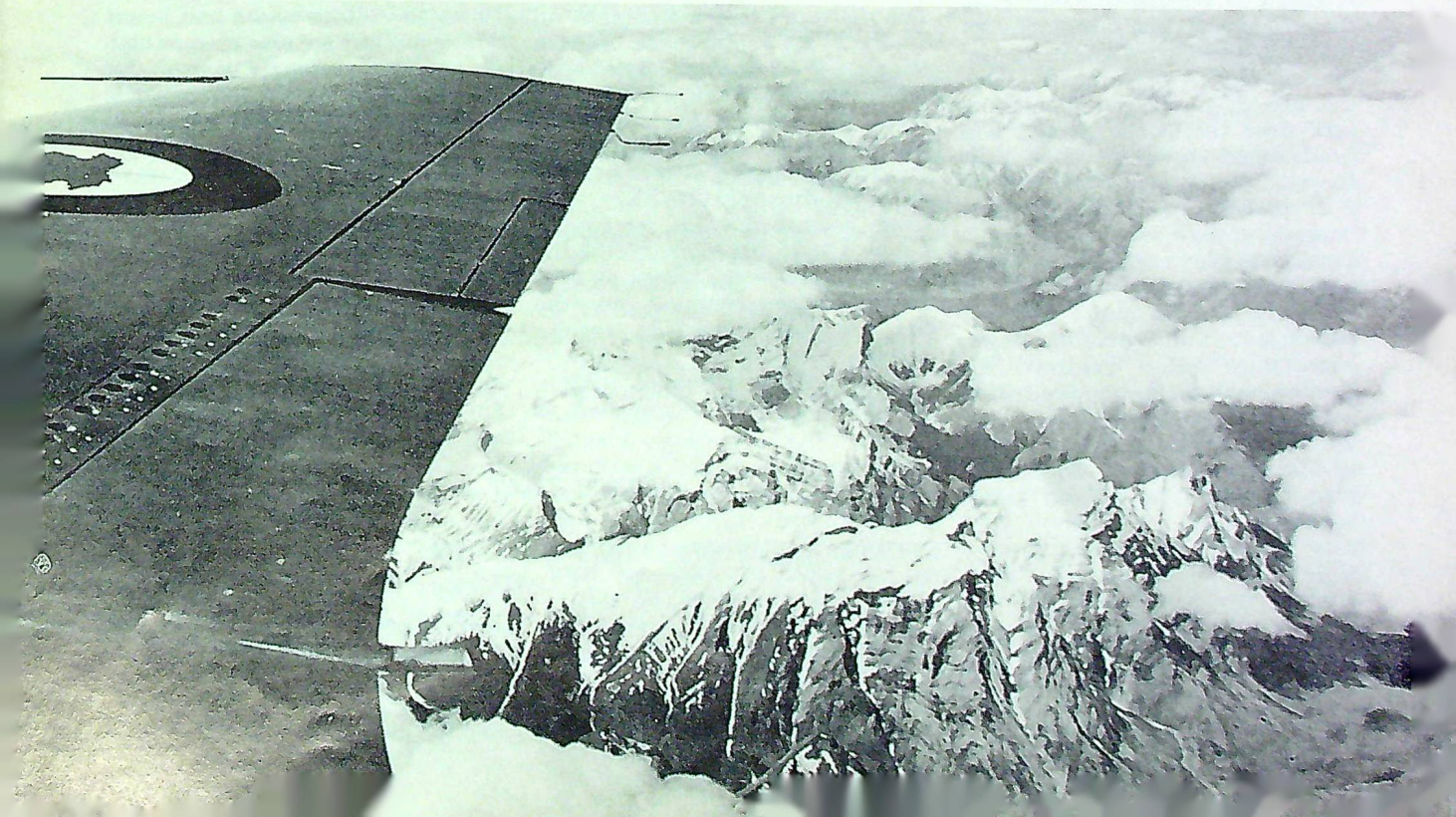
The *Comet's* high speed is also a factor to be reckoned with. Although most aircraft find it most convenient to cross Canada on Green One, the main airway, the *Comet* foregoes the luxury of this aerial throughway with its many navigational aids in order to fly the more direct great circle route.

The machmeter on the instrument panel indicates the *Comet's* speed approaching seven-tenths the speed of sound but, with the inevitable headwinds encountered when flying westward, groundspeed is reduced to about 450 m.p.h. In

pressurized comfort seven miles high and at seven miles a minute the travellers quickly cross the prairie provinces and, west of Calgary, see the foothills appear far below like ripples on a mill pond. They strain to catch first glimpse of Canada's Rocky Mountains, but this is not to be. Before the main system can make its impressive appearance an ocean of cloud shrouds the peaks from view.

Contacting air traffic control over Carmi, Flt. Lt. Carss receives clearance to start his descent at a point in space some 165 miles east of Vancouver. Speed brakes pop out and the *Comet* eases into a slight dive. The hands on the altimeter unwind as the *Comet* leaves its lofty realm and slants towards the clouds. Engulfed in a world of whiteness, the captain flies on instruments and joins the airway over Hope. A few minutes later he begins an instrument approach towards Vancouver's International Airport. Breaking into the clear on procedure turn, the *Comet* heads

The Canadian Rockies as seen by Comet passengers.



inbound under clouds heavy with the threat of rain. Made lighter by the 17½ tons of fuel burnt off en route, it crosses the boundary fence at a modest 120 knots and gently settles onto the runway. Taxiing quickly to the ramp where senior officers of the three services await the arrival, Flt. Lt. Carss pulls off power and four turbines whistle into silence.

* * *

The Comet has been in the air five hours and 37 minutes, has flown 2100 miles and, unpredicted and unpredictable winds notwithstanding, it has made the ramp within three minutes of the required time. In Ottawa it is approaching 2000 hrs.; Mrs. Carss and the girls have finished supper and are watching television; but, for people on the Comet who have business in Vancouver, there is still time to reach downtown offices before they close for the evening.

* * *

Two days later this time-tested routine is repeated in reverse. A light glows on the captain's instrument panel. The passengers are on board, the cabin door has closed. A gaggle of pheasants standing on the infield watch with obvious interest as the *Comet* taxis to the live runway. A few minutes later the aircraft does a gentle climbing turn over the Pacific Ocean and heads east towards the Coast Range.

Five hours and ten minutes later the *Comet* sweeps across the threshold lights at Uplands Airport and lands. It taxis quickly and smoothly up to the squadron's passenger terminal and shuts down. More than half a continent has been crossed, yet the required ramp time has been made within one minute. Another trip has ended and, as usual, No. 412 Squadron's high standards have been maintained.

* * *

The R.C.A.F. became the first air force in the world to fly jet transports when, on 29 May 1953,



The end of another flight, and the Comet is ushered home.

a *Comet Mk. I* was delivered to No. 412. The delivery flight gave the R.C.A.F. the honour of being the first to operate jet "airliners" across the Atlantic. A second *Comet* was delivered to the squadron on 16 June 1953 but seven months later, as the result of *Comet* accidents overseas, these aircraft were grounded. From a promising start the *Comets* spent three ignominious years gathering dust in hangars until, in August 1956, they were flown back to the U.K. for modification. On 26 September 1957 the two aircraft, now known as *Mk. IXB's*, were returned to the R.C.A.F. and placed in regular service.

The *Comets* are used for unscheduled domestic flights such as

Special Flight III and on scheduled overseas runs from Ottawa to Marville. On one of its fastest trans-Atlantic trips a No. 412 *Comet* flew from Gander to overhead Shannon in three and a half hours. These aircraft are also used as high flying, fast moving "targets" for Air Defence Command practise interceptions. With one exception *Comets* can travel to any place frequented by other R.C.A.F. transport aircraft. The one exception is the far north, where their imposing weight is too much for the present runways. This problem, of course, can be solved and when it is, the aurora borealis and other stars of the northern galaxy will have to share their glory with man-made *Comets*.

HOW'S THAT AGAIN?

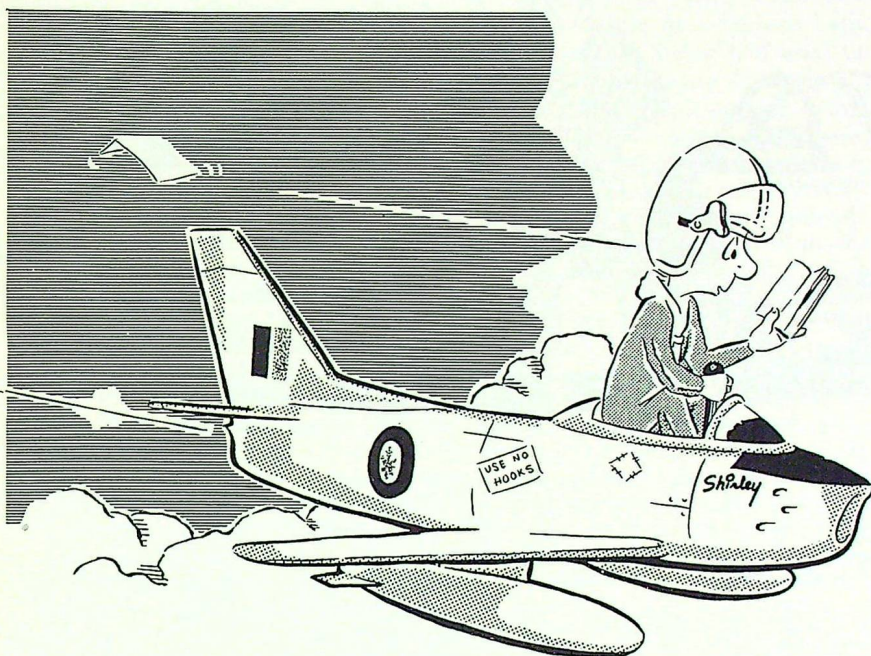
"What do you think of the New Vanguard?"

"I think it's a winner."

"Yes, it's a good-looking car."

"Oh . . . I thought you meant the Vickers Vanguard."

No, no, the Vicar's got an Austin, the Squire's got a Vanguard."



Reprinted Courtesy CENTRALIA CORONET

By DANNY TURNER

THERE is a popular superstition that jet pilots are a race apart, a tribe of young men square of jaw, bright of eye and big of bicep. The pilots of fiction, those chiselled statuesque Apollos, the Terrys and the Steve Canyons, only serve to foster the illusion that jet pilots are not born, but quarried. That such is not really the case I have only to offer myself as proof. The Air Force permits me to call myself a pilot in public, yet in no way do I resemble the glamorous gentlemen of screen and script. In fact, the kindest thing you can say for my appearance, is that I haven't got webbed feet.

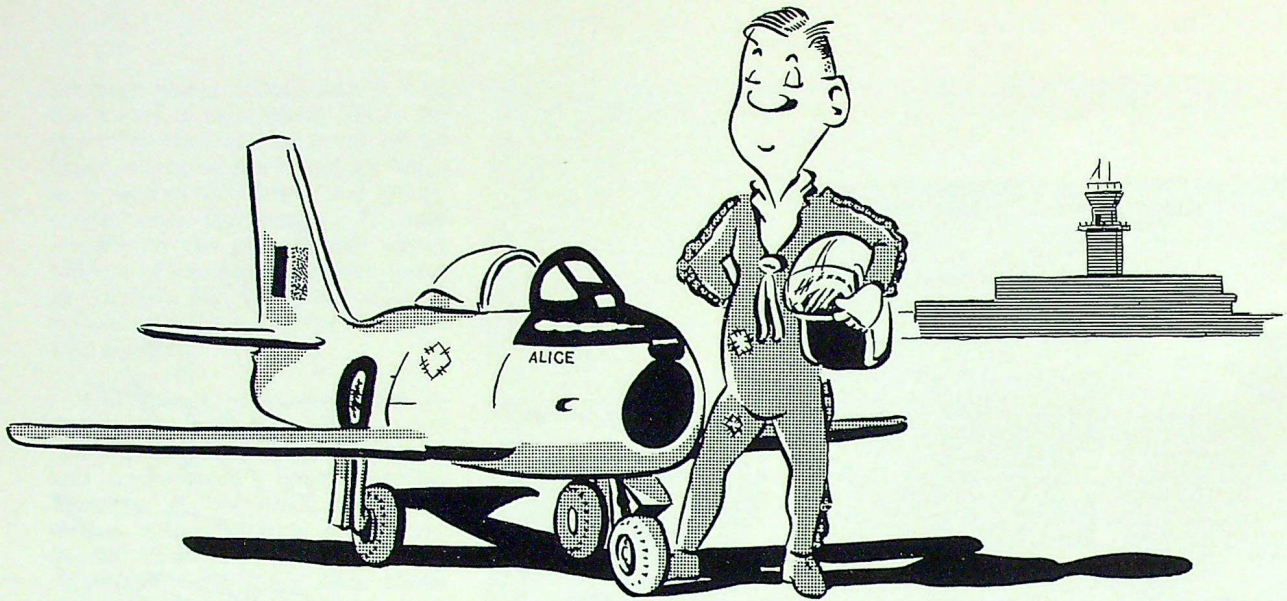
My first solo in a jet is behind me, and so I am qualified to speak

up, to tell what it was *really* like; although there is little hope that in doing so I can win for myself the reputation of the mythical jet pilot, at any rate I can at least bring him down to my level.

Nothing at jet school approached the heady good looks of Colonel Canyon in flying clothing, and certainly I didn't. I do not have the barrel-chested physique of the Colonel, my general outline being less like a barrel and more along the lines of a coke bottle. When dressed for flight I was almost frightening, especially if you came upon me suddenly. Until the era of the jet jockey, no serviceman has been so fantastically arrayed since military circles abandoned

the use of war paint and feathers.

The basic garment of the ensemble was an anti-gravity, or 'G' suit, a skin-tight affair constructed of dark green nylon. When clad in mine I resembled nothing so much as a cucumber, especially so, since at waist level my 'G' suit was fitted with a rubber hose which, hanging down by my side, gave me the appearance of having a little cucumber. The extreme snugness of the suit revealed in close detail the extent of Mother Nature's bounty and to add to the remarkable spectacle I represented, a white crash helmet covered my entire head with the exception of a small portion of my forehead and eyes. My nose and mouth were already



Cartoons by L.A.C. P. LAROUCHE

In case someone had a camera . . .

hidden behind a rubber oxygen mask built along the lines of a snout and since my eyes were the only part of me left exposed to the light of day, the sensation was one of having been mummified.

When I first wore my anti-gravity suit, I half expected to become weightless and float about like some grotesque fairy. It was later explained to me that the purpose of the suit was to protect me during violent manoeuvres and prevent the blood from draining out through my feet. I felt better after that.

Entering the flight room for the first time, I crossed to where my instructor sat. He dropped his book and said "Good God!" He had never seen me in flying gear.

Respectfully, I reminded my instructor that I was to receive a final check ride in a T-33 (a two seater jet), before going solo in a Sabre. "Okay," he said "Let's go!"

For an hour we flew around the general area of the airfield practicing emergency procedures, forced

landings and simulated bail-outs. Finally when we landed, my instructor reined back the aircraft and said "Okay, you'll do. You fly the Sabre this afternoon." He sounded somewhat disgruntled over my impending solo, but then I reflected, after an hour of flying with me, none of my instructors had ever seemed quite grunted.

Together with the four other pilots who were to fly the Sabre for the first time that afternoon, I waited in the flight room for a few last words from the Chief Flying Instructor. The CFI at jet school was something of a celebrity. He had just returned from a tour of operations in Korea, and the degree of saluting and bowing that went on whenever he entered a room was reminiscent of Julius Caesar visiting a Roman flop house. He was one of the 'chin-up, never-say-die' school.

"Well boys," he yodeled, when we had risen from our obeisances, "Get out there, get her up in the air and show her who's boss!" All

Sabre pilots, it seems, refer to their mounts as 'her' although there are no structural details to support the implication.

My instructor came with me to my Sabre to help me do the pre-flight inspection. He looked down the hole in the front, while I examined the one in the rear. When our eyes didn't meet, we felt it safe to assume the engine was safely aboard. We shouted 'hallo!' into the holes, and receiving no reply, concluded that there wasn't a mechanic in there trimming the wick. We examined the guns, checked the touch-holes for fluff and kicked the nose wheel as we passed. (It hadn't done anything, but all pilots do that, so we kicked it anyway).

I climbed onto the wing and posed for a moment in case there should be someone around with a camera, and then inserted myself into the cockpit. Squeezing myself, complete with parachute, survival pack, life jacket and crash helmet into the tiny compartment was no easy matter. Having done so, I

tucked my legs under an instrument panel resembling something from a science-fiction movie, and fastened the safety harness over what I like to call my chest. My little store of bravado was beginning to ebb away and when my instructor put his thumb in the air and started to walk away, I pretended I thought he wanted me to come with him. I had almost succeeded in dismounting before he pushed me back in and angrily stamped away.

The sensation of loneliness was intense. With all its modern developments, aviation still hasn't come up with some means of withdrawing the instructor from the plane little by little, until the student is entirely alone and thus achieves solo flight. The break is a clean one and just as brutal as a mother eagle booting her baby out of the nest to fend for himself at the first sign of a pin feather. As I watched my instructor disappearing in the distance, I almost wept.

Starting up the engine, I strapped my oxygen mask and microphone over my face and prepared to call the control tower for permission to taxi. It was then that I discovered my oxygen mask caused me to speak with a curious lisp, and as you may imagine, lispng among jet pilots is a serious business and should be avoided.

The airfield at Jet School was a busy one and as the control tower gradually came on the air, the frenzied babble of the controller's voice assaulted my ears. It sounded as if he were selling his tower by auction. Shouting him down, and obtaining his indulgence to taxi, I released the brakes and allowed my *Sabre* to roll forward towards the runway.

Having done the final check of the controls and feeling like a witch who has traded in her broom for a vacuum cleaner, I lisped out a request to take off. There was no answer. The whole airfield seemed to hold its breath.

"You're cleared for take off!" It was the voice of my instructor. He was apparently up in the control tower to watch the festivities.

Opening the throttle to its maximum setting for take off, I aimed my *Sabre* down the runway. The speed indicator started to move and I watched, fascinated, the rate of acceleration. Only moments later, travelling at a furious pace, I realized that *Sabre* had used up nearly all the runway and I should do something about getting it into the air. I pulled back on the control column (or 'stick' as it's known in the trade), and then said "OOOf!" when my 'G' suit suddenly inflated, striking me a mortal blow in the paunch and almost severing me in two.

Recovering, I became aware that the *Sabre* had me nicely under control and having left the runway, was carrying me straight upwards with the apparent intention of delivering me unannounced at the judgement seat. But not for long. As I gingerly pushed the stick forward in an attempt to level the machine, it did a hasty 'U' turn

and headed straight down for the domain of the Evil One.

With engine shrieking, the *Sabre* dived straight for home, bearing me with it. It was aiming deliberately for the roof of its kennel where the Chief Flying Instructor had his office in a semi-detached outhouse. To save myself the embarrassment of arriving at his feet as a burnt offering, I closed the throttle and opened the dive brakes. Simultaneously the 'G' suit I was inhabiting inflated to its maximum and tried to squeeze me out entirely. Replacing my eyeballs in their sockets and swallowing my liver again, I listened in amazement to a bugle which had started to play in my earphones. Wonderingly I speculated if the control tower had come on the air with a trumpet solo, but then with relief I realized it was the warning horn telling me not to land because the wheels weren't down. For a moment there, I had begun to suspect it was Gabriel calling me home.

With hips and shoulders rolling . . .



In level flight once more, I decided to complete the exercise as soon as possible before sanity left me completely. Searching for 'Lesson Plan One' and finding it in the map case between an old issue of 'True Love' and a half completed letter to someone called 'Lil', I read carefully what I was supposed to do. The first thing, it seemed, was to fly the *Sabre* at speed in excess of Mach one — or, faster than sound.

I closed the dive brakes and opened the throttle. With the dive brakes going in, as if it were laying back its ears, my *Sabre* seemed to hunch its back for a moment before leaping forward with a wild howl at something it saw on the other side of the sound barrier.

Smoke poured from the exhaust, vapour streamed from the canopy roof and the machine bumped along at ever increasing speed. In all, my *Sabre* was behaving very much like a runaway Stanley Steamer. With mounting apprehension, I watched the speed indicator climb towards the sonic barrier. Finally I could stand it no more and closed my eyes. Were all those rumors really true? What was

the sound barrier like? Would I catch up with something I'd been saying yesterday, or would I hear a loud bang and suddenly discover I'd changed my sex? I ducked my head and waited. With a gentle shudder the *Sabre* approached the barrier, paused there a moment and then leaped forward to supersonic speed.

I opened one eye, and to confirm that I had really achieved supersonic flight I studied the instruments for a moment. There it was, plainly indicated on the instrument panel, I was supersonic! The proud smile faded abruptly from my face when I looked out and found I had lost a great deal of height and was now flying towards a fine stand of timber. Rapidly, I urged my mount back towards the clouds.

Up above the clouds, I read the rest of 'Lesson Plan One' which instructed me to do gentle turns, climbing and diving while taking note of the aircraft's smooth response. The *Sabre* may have shown a 'smooth response' to the man who composed 'Lesson Plan One', in all probability he was an experienced *Sabre* pilot, beneath my untutored hand however, it responded with

the hysterical leaps of a confirmed spinster who awakes to find herself in the arms of Bluebeard. Between bounces, my covert glances at the instrument panel revealed that my *Sabre* had consumed nearly all of its fuel and I turned it around to head for home.

Three miles from the airfield I called the tower and asked for permission to enter the circuit and land.

"Report your fuel quantity," snapped a voice. It was my instructor.

I told him how much fuel I had. "Cleared to land," he sneered. His tone implied that he considered me pretty unsporting, and now I know I was. Only an utter cad would land when he has enough fuel to make it once more around the field.

Bringing my *Sabre* to a halt on the tarmac, I climbed out and swaggered towards the flight room. With hips and shoulders rolling hard in a manner I thought befitted a jet jockey, I strode through a group of instructors.

"Poor lad," said one of them sympathetically, "It must be haemorrhoids."

RCAF Staff College Journal ESSAY CONTEST FOR 1959

An award of \$250.00 will be made to the member or former member of the Canadian Armed Forces or Civil Service who writes the best unsolicited essay, not exceeding 5,000 words, likely to stimulate thought on military matters. This includes strategy, operations, training, logistics, personnel administration, technical, research, production, or any other field.

In addition to the prize money, the writer of the winning essay will be paid at the rate of three cents per word upon publication. Moreover, all entries will be considered for publication and those selected will be paid for at the same basic rate.

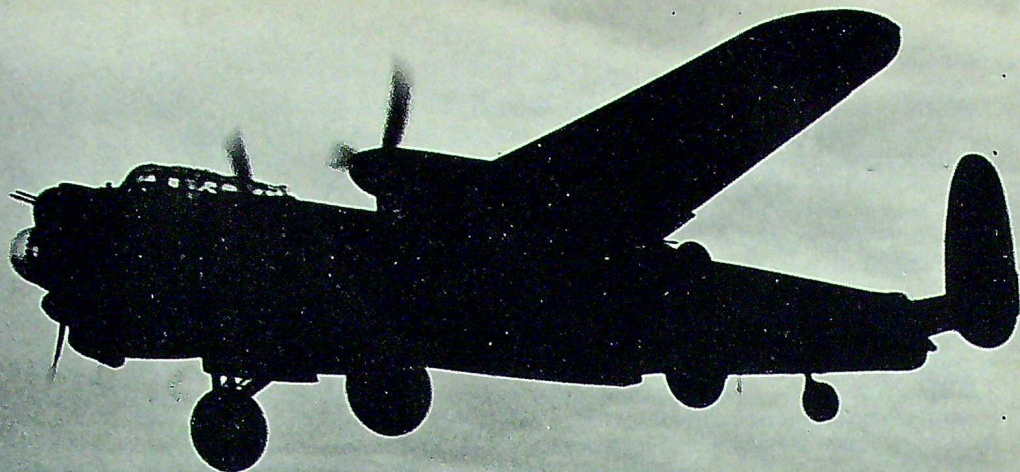
Entries are not to contain classified information. Manuscripts must be delivered to The Editor, R.C.A.F. Staff College Journal, Armour Heights, Toronto 12, Ontario, by 30 June, 1959.

The Board of Directors of the Journal will appoint the judges, whose decision will be final. If no essay meets the standard of excellence set by the judges no award will be made.

What's the Score ?

TWENTY questions to tax your memory of military aircraft, past and present, have been prepared by Sqn. Ldr. A. P. Heathcote, author of *THE ROUNDLE's* current wartime squadron history. We tried this out on our editorial committee members, and if you can better their average score of 13, you can consider yourself an expert. Answers on page 32.

- The all-time veteran in point of service with the R.C.A.F. is the:
 - Harvard
 - Vedette
 - Siskin
 - Dakota
- The first aircraft to carry out a bombing raid in the First World War was the:
 - Gotha
 - Handley Page
 - Avro 504K
 - Fokker
- The fastest (level flight) piston-engine aircraft ever on squadron strength with any air force was the:
 - Hornet
 - Spitfire XIX
 - Focke Wulf Ta. 152 C-1
 - Tempest II
- The last operation of an R.C.A.F. squadron overseas before hostilities ceased in the Second World War was flown by the:
 - Typhoon
 - Catalina
 - Sunderland
 - Dakota
- By the end of the Second World War, the highest speed (accurately measured) by any aircraft had been achieved by a:
 - Meteor
 - Messerschmitt 262
 - Spitfire (in a dive)
 - Messerschmitt 163
- The only biplane flown on operations by an R.C.A.F. squadron overseas in the Second World War was the:
 - Swordfish
 - Albacore
 - Gladiator
 - Stranraer
- Responsible for downing more enemy aircraft than any other weapon or means in the Battle of Britain was the:
 - Balloon barrage
 - Spitfire
 - Anti-aircraft artillery
 - Hurricane
- The first enemy aircraft shot down in the Second World War fell to a:
 - Hurricane
 - Spitfire
 - Battle
 - Anson
- The heaviest bomb ever dropped from an aircraft was carried by a:
 - B-29
 - Lincoln
 - Lancaster
 - Heinkel 177
- Six hundred German aircraft and 600 flying bombs fell, in 60 nights, during the Second World War, to the:
 - Mosquito
 - Tempest
 - Meteor
 - Beaufighter
- Nicknamed the "Flying Porcupine" by the Germans because of its strong defensive armament was the:
 - Fortress
 - Sunderland
 - Halifax VII
 - Marauder
- The heaviest-calibre gun ever mounted on an aircraft was carried by the:
 - Airacobra
 - Kurier
 - Beaufighter
 - Mitchell
- Popular designation of a Second World War twin-engine German night-fighter was:
 - Moskito
 - Salamander
 - Gustav
 - Komet
- The first remotely controlled, air-to-surface, guided missile was dropped from a:
 - Dormier 217 E-5
 - "Betty"
 - B-52
 - Victor
- Wishfully intended for the bombing of New York City was the:
 - Focke Wulf 200K
 - Mitsubishi 97
 - Messerschmitt 264VI
 - Piaggio P-32
- Sqn. Ldr. W. I. Clements, first member of the R.C.A.F. to take part in an operation over enemy territory, flew in a:
 - Hurricane
 - Battle
 - Hampden
 - Blenheim
- Used by the R.A.F. against the African Mau-Mau was the:
 - Tempest
 - Harvard
 - Mustang
 - Beaufighter
- Britain's first super-sonic fighter (in level flight) was the:
 - Swift
 - Hunter
 - P-1
 - Javelin
- The world's first jet aircraft designed as a bomber was the:
 - Canberra
 - B-52
 - Arado 234 B-2
 - Tupolev 16
- The first attack on a U-boat in the Second World War was delivered by a:
 - Sunderland
 - Anson
 - Catalina
 - Swordfish



BEWARE THE MOOSE!

PART FIVE

BY SQUADRON LEADER A. P. HEATHCOTE
Air Historical Branch

This Concluding Chapter of No. 419 Squadron's Wartime History Relates
the Unit's Participation in the Final Push to Victory in Europe.

THE Moose Squadron began the month of September 1944 by raiding Germany in daylight for the first time since its cloud-hopping intrusions of nearly two years before. Emden, ship and submarine building centre at the mouth of the Ems River, was the target. The Moosemen's aiming-point was the dock area and inner harbour, which received very severe damage. Though only 180 aircraft were involved, they produced a bombing concentration so intense that it seemed all out of proportion to the size of the attacking force.

Despite this strategical beginning, September was "Support-the-Army Month" for 419 Sqn. *Lancasters*. In that 30-day period they flew more sorties (105) in direct

support of the ground forces than in any other month. The focal points of their tactical activities were coastal strongholds at Le Havre, Boulogne, Calais (three times) and Cap Gris Nez. It is common knowledge that these attacks, more than anything else, prompted the towel-throwing gesture on the part of each garrison commander.

The squadron had no sooner returned from its third crack at Calais than it was warned to be ready for a "maximum effort" the next morning. The call came and 22 VR *Lancs* (the record for 419) headed for a synthetic oil plant at Bottrop, one of several in the Reich that were to be high-priority targets in the coming months. This was the squadron's third "daylight" over

Germany in three weeks, it having paid an early-evening visit to Dortmund six days after the Emden raid.

DAYLIGHT DECORATION

An intense barrage of heavy flak over Bottrop found the range of eight Moose aircraft, inflicting damage that ranged in degree from slight to extensive. Distinctly in the latter category was that done to "P"-Peter. One engine on each side was put out of action, the hydraulics no longer worked, and the control surfaces were so perforated that two crew members had to help their captain, Flying Officer J. A. Anderson, manoeuvre the *Lancaster* by pulling manually on the rudder controls. Anderson continued

his bombing run on the two remaining engines and attacked the primary.

Over the Dutch coast en route home a third engine began to give less than full power and emergency precautions for ditching were taken. These proved unnecessary, as the pilot somehow succeeded in nursing the *Lanc* to the Woodbridge emergency field, where he pulled off a masterly landing. His efforts on this occasion were largely responsible for his winning the coveted D.S.O. In the accompanying citation were the words, "This officer has consistently displayed a high degree of gallantry and devotion to duty on operations . . . He has set the finest example in pressing home his attacks, often in the face of fierce opposition . . ." Only ten days after the announcement of this award a D.F.C. was gazetted for the same officer.

A feature of 419's work in September was the preponderance of daylight ops, all but one of its 13 objectives being attacked by day. In this lay the probable reason for the absence of casualties during the month. No such welcome statistic had applied to the unit since November, 1942.

For all of six months now, the airborne heavy artillery had been largely sidetracked from strategical objectives in favour of those with a temporarily higher priority tag. In that interval Nazi industry had recovered enough to merit more concentrated attention from Harris' demolition crews. Throughout the next seven months, therefore, Germans on the home front were to learn anew the meaning of total war and the relentless efficiency with which Command's representatives could carry it to them. The Moose Squadron was to log another 68 operations before the war's end, only two (the first and the last) being directed elsewhere than against cities and towns in Germany.

* * *

As might have been expected, the return to concentration on strategical objectives meant a return

to the steady hammering of the Ruhr and Rhineland. All but three of 419's targets in the last quarter of 1944 lay in either region. Most of the target names appearing on the ops board in this period were only too familiar; some were not so familiar. There were Essen, Cologne, and Duisburg, for example, which, over a 17-day period in October were each subjected to back-to-back saturation raids, one by day and one by night. There were Dortmund and Duesseldorf, Stuttgart and Soest, Oberhausen and Opladen, Karlsruhe and Castrop-Rauxel. There were Bochum, Gelsenkirchen, Munster, Hagen, Neuss, and Ludwigshaven; and there were still others. Few indeed were the industrial centres of note in the two main productive areas which were not attacked by 419 in those three months. It was no mere coincidence that four of the above targets were leading producers of the number one item on Hitler's growing list of shortages: oil.

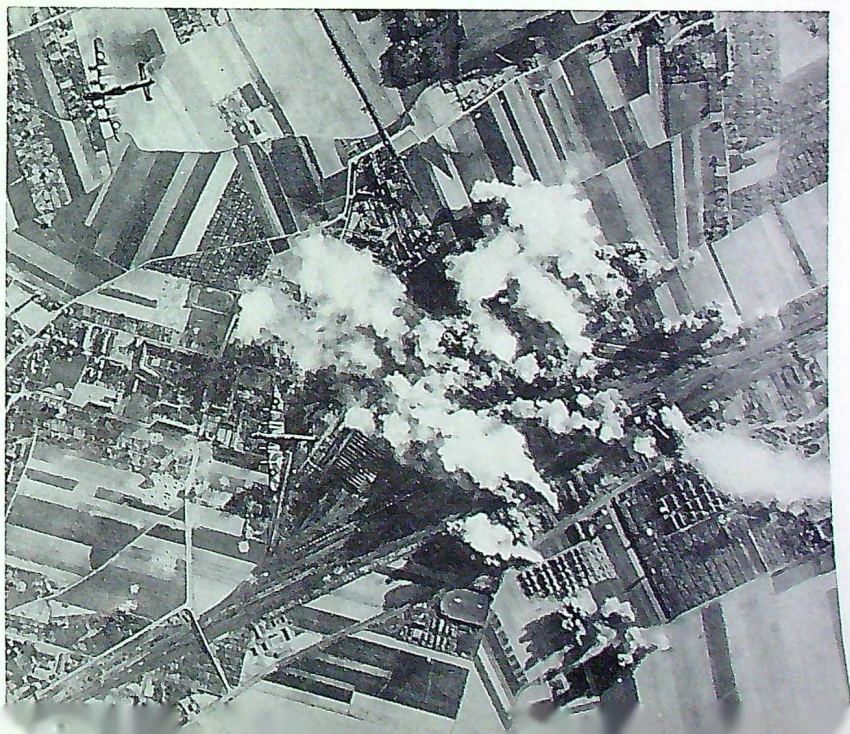
Most of the attacks took place at night, and crews were subjected to considerable interference by a still-cohesive enemy fighter force.

Over Bochum Flt. Lt. Anderson and crew were faced with a most unusual predicament. Flak damage to their aircraft's electrical system had produced a short circuit which made the navigation lights go on and stay on despite attempts to douse them. The lights offered a standing invitation to night-fighters to attack the *Lancaster*, now defenceless by reason of two unserviceable gun turrets. The *Luftwaffe* obliged with five attacks, but well timed evasive action saved the bomber from further damage. This was the tenth time Anderson's aircraft returned showing glaring signs of operational wear and tear.

BLOODY BATTLE

While returning from Oberhausen, "U"-Uncle was subjected to a hail of cannon shells from a *Focke Wulf 190* which severely damaged the *Lancaster* but miraculously killed none of its crew. One shell exploded inside the fuselage, blowing the mid-upper gunner out of his seat and depositing him on the floor but causing him no bodily harm. His partner in the rear tur-

Daylight target photo from 18,000 feet.





Flt. Lt. J. A. Anderson, D.S.O., D.F.C., and crew. L. to r.: F/O A. P. McKillop, Sgt. F. W. J. Flippant, Flt. Sgt. M. E. Sanders, Flt. Lt. N. McConnachie, Flt. Lt. Anderson, Sgt. M. A. Gerrard. Kneeling: Sgt. A. A. Kenyon.

ret, Flt. Sgt. R. A. Toane, was wounded in the face, and one leg, but fought back as hard as he could. Also suffering facial and arm wounds was the wireless operator, Flying Officer L. W. Sitlington. Ignoring them, he grabbed an extinguisher and put out a fire at his position. The FW's cannon had knocked out the port inner engine, riddled the fuselage, tail section, and starboard elevator, decommissioned the intercom, hydraulic, and pneumatic systems, and punctured both tires. All navigation aids were useless. After the Belgian coast was crossed, the starboard inner quit. Twice "Uncle" fell into spiral dives and twice Flying Officer R. L. Cox managed to regain control when the *Lancaster* seemed headed for a watery grave. Presently the port inner responded to attempts to restart and "Uncle" was eventually crashlanded at Manston.

Also prominent in the crew's safe return was navigator Flying Officer S. B. Lindsay. Despite back and facial wounds inflicted by shrapnel he succeeded in extinguishing, first, a fire at his position, and later, a fire at the wing root.

In so doing he burned his hands rather badly. He fainted from shock but afterwards insisted on returning to his duties.

This action was the basis for an immediate award of the D.F.C. to Cox, Lindsay and Sitlington, and of the D.F.M. to Toane. The latter

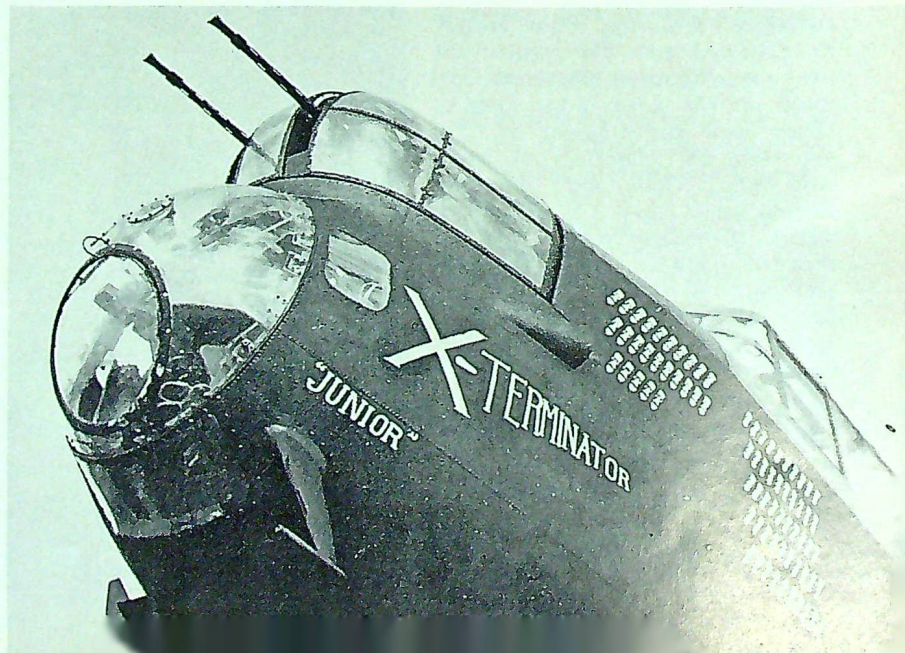
had shown unusual fortitude by staying with his guns and shooting it out with the fighter although half blinded by blood streaming down his face.

ELEMENTS ENEMY TOO

As if the enemy's ground and air defences were not opposition enough, Nature itself was now proving a tougher opponent than usual. Perhaps the worst flying weather ever experienced by the squadron was compressed into the first week of December 1944. Towering cumulonimbus and its travelling companion, icing, lay astride the beaten path of the bomber stream, and surmounting it was a thick layer of haze, which added to the already great hazard of mid-air collision. At roughly 1940 hours in the evening of 6 December the Moosemen were taking aim at their fourth target (Osna-bruck) within four days and for the fourth successive time highly adverse weather conditions prevailed. One experienced captain was quite explicit about the weather in his account of this raid, excerpts from which read as follows:

" . . . Those were 6½ hours of the dirtiest flying weather I have ever seen . . . From base we climbed to 23,000 feet trying to avoid heavy

Veteran of 75 operations.



icing cloud that covered England and the continent. We iced up badly, and the stuff made a weird, ominous sound as it was flung off the props and hit the fuselage. Flew all the way there and back on instruments, then lost all my instruments going home because of icing. Even told crew to stand by to bail out, but things began to improve. My instruments started to work again when I joined the circuit to land."

In spite of the elements, only one of the 63 sorties put up by 419 in these foul four days was abortive. The ability of the squadron, and others like it, to continue operating effectively in conditions that might have meant "wash-out", not to mention a breather for the enemy's air defences, foreshadowed the finish of the *Luftwaffe* as a force to be reckoned with and helped no little to hasten the end of the war in Europe.

BATTLE OF THE BULGE

In the last two weeks of 1944 the squadron was committed largely to night attacks on marshalling-yards in the Cologne area, thereby indirectly supporting the Allied armies during the critical phase of the Battle of the Bulge. By day it joined a raid on the heavily defended Lohausen airfield at Dueseldorf, which was promptly rendered unserviceable. A first-class concentration of high explosive was poured on the runways, infield, and administration buildings. Among the installations hit during 419's bombing stint was a fuel ammunition dump, which went up in one classic eruption. One experienced captain summarized results in four words: "No aerodrome there now". This was the first of three consecutive operations just before the year's end in which the unit absorbed losses. After a casualty-free November, the number of "missing" once more mounted sharply. Four of the five crew-losses in December came in the last week of 1944.

Early in the New Year there came a final change in command.



Wing Cdr. D. C. Hagerman, C.O. from Aug. '44 to Jan. '45.

On 26 January Doug Hagerman was posted and a new O.C. was acquired in the person of Wing Cdr. M. E. Ferguson, formerly a flight commander with 428 Sqn. A second gong for Hagerman was to be gazetted in March.

Industry, communications, oil — throughout their last four months of operations the Moosemen kept hammering almost exclusively at these. Their targets were spread

over the length and breadth of Germany; from Heide, in Schleswig-Holstein, to Nuremberg, in Bavaria, and from Goch, near the border of Holland, to Dresden, near the border of Czechoslovakia. A great majority were the "name" targets of old, all possessed of flak defences which, though not nearly as potent as before, could still hurt; and most were accessible only by flight over hotly defended territory.

Wing Cdr. M. E. Ferguson, 419's last wartime C.O.





L. to r.: Flt. Sgt. L. E. Cromwell, Flt. Lt. Cliff Black (pilot of 419's 1000th sortie), F/O F. G. Tipp, F/O Doug Griffith.

JET FIGHTERS

Although its numbers were sadly depleted, the *Luftwaffe's* fighter force had for some weeks boasted an amazing new weapon. That was, of course, the jet fighter with which Moose crews were soon to become acquainted.

All but one of 419's operations in January and February, 1945, were carried out at night. Particularly outstanding were those on Nuremberg, Hanover, Dresden, and Pforzheim. The latter pair were "one shot" affairs that needed no repeating by Command. Of Germany's ten major cities (population, 500,000 or more) none was more thoroughly incinerated in one stroke than Dresden. Formerly a leading source of precision instruments, Pforzheim was virtually eliminated in just 19 minutes.

It was in February that the squadron recorded its last air-to-air victories. *Lancaster* "T"-Tare was in the middle of a bombing-run over Ludwigshaven when tracer materialized from an unseen source and barely missed it. Second-tour skipper Flt. Lt. A. M. ("Porky") Halkett, D.F.M., dived steeply to starboard, closing the bomb-bay

doors as he did so. His 300-m.p.h. dive successfully thwarted the E/A, an *Me. 410*, and the *Lanc* emerged undamaged. Scarcely a minute after the first attack had begun, a second was delivered by an unidentified twin-engined enemy. The mid-upper gunner, Pilot Officer D. W. Storms, D.F.M., opened up as the bomber was put into evasive action. Some of his hundred rounds found the mark and touched off an explosion. The E/A disappeared momentarily in the smoke over Ludwigshaven; it reappeared as a blazing streak plunging uncontrolled into the black void. Halkett did an orbit and undamaged "Tare" dropped its remaining incendiaries in the target area.

Over Pforzheim a *Ju. 88* followed *Lancaster* "M"-Mike into a cork-screw, and that was its undoing. The rear gunner, Flying Officer J.D.M.R. Charbonneau, gave it one long burst and several short ones, and presently sparks were seen coming from it. In another few moments the *Junkers* spiral-dived into the ground. About three weeks later Charbonneau's aircraft was brought down by a fighter while re-

turning from Hagen. The second-tour gunner was one of four who bailed out safely and landed in friendly territory. Though managing to log another op or two, he never got the chance to avenge his fallen companions. He eventually wore the ribbon of the D.F.C.

MOSTLY DAYLIGHTS

In its last two months of operations 419 worked mostly in daylight. It visited Mannheim on 1 March and Cologne on the 2nd. On Cologne it was assisting American ground forces for the second time, the first instance of such support having been at Julich in mid-November. Next came night attacks on distant Chemitz and Dessau, each at the cost of a crew. On the 11th and 12th the squadron took last looks at Essen and Dortmund. Both delivered in daylight by nearly 1100 aircraft, the latter pair of attacks were the heaviest of the war. The one on Essen (11 March), mounted three years, almost to the day, after 419's first attempt thereon, was Command's 28th major blow against the one-time industrial colossus. To illustrate the Moosemen's leading role as giant-killers, it need only be pointed out that they missed but five of that total.

The unit's farewell gesture to the Ruhr was a day raid on the Mathias Stinnes benzol plant at Bottrop. An observation common to all crew reports was the paucity of flak over the target area and the approaches thereto. At long, long last the vaunted Ruhr had lost its counter-punch.

Still able to offer more than token resistance, however, were the G.A.F.'s remaining fighter *geschwader* now equipped almost exclusively with *Me. 262s*. These jets were responsible for the downing of two Moose aircraft during a night operation on Hagen in mid-March. With the possible exception of the Scharnhorst-Gneisenau raid in February 1942, the only time the squadron lost an aircraft to day fighters was on 31 March 1945, over Hamburg. On that day

6 Group's gaggle, ten minutes late over the target and hence without fighter cover, was bounced by some 30 *Me. 262s*. In the only large-scale air battle into which it was ever drawn in daylight the unprotected Group came out second best. Eight of its aircraft went down, two belonging to the Moose Squadron. Most of 419's dozen aircraft that returned safely had shot at the *Messerschmitts* (three having been actually attacked), but nothing conclusive came of these efforts. The double loss brought the unit's total for March to seven, highest for any month since May 1943. It was no mere coincidence that all seven aircraft were victims of fighters.

In strong contrast with the above, the next daylight op produced little in the way of fighter opposition, this despite the fact that the target, the Engelsdorf marshalling-yard at Leipzig, was the most distant ever attacked by "night" bombers in daylight. Contributing to an exhibition of tidy precision-bombing, the Moosemen helped to block all through lines and to create a shutdown in the

adjacent locomotive depot. The accuracy of their work was obvious in their remarkably clear bombing pictures.

The squadron's last target was remote from the industrial regions with which it had been so long concerned. The fortified island of Wangerooge was, for example, some 150 miles from the nearest point of the Ruhr. In this one raid coastal gun batteries, which constituted the primary objective, were neatly eliminated.

* * *

A statistical survey of 419's contribution to the air war in Europe reveals that it barely missed the "400" mark in operations. Over a span of roughly three and one quarter years it mounted 342 bombing attacks, 53 mining excursions, three leaflet raids, and one "spoof". Its purely operational sorties (i.e. excluding 38 logged in sea searches) totalled 4325, of which 3863, or approximately 89 per cent, were considered successful. It should, however, be noted that 122 of the abortive sorties were the direct result of recalls and wash-outs rather than of hu-

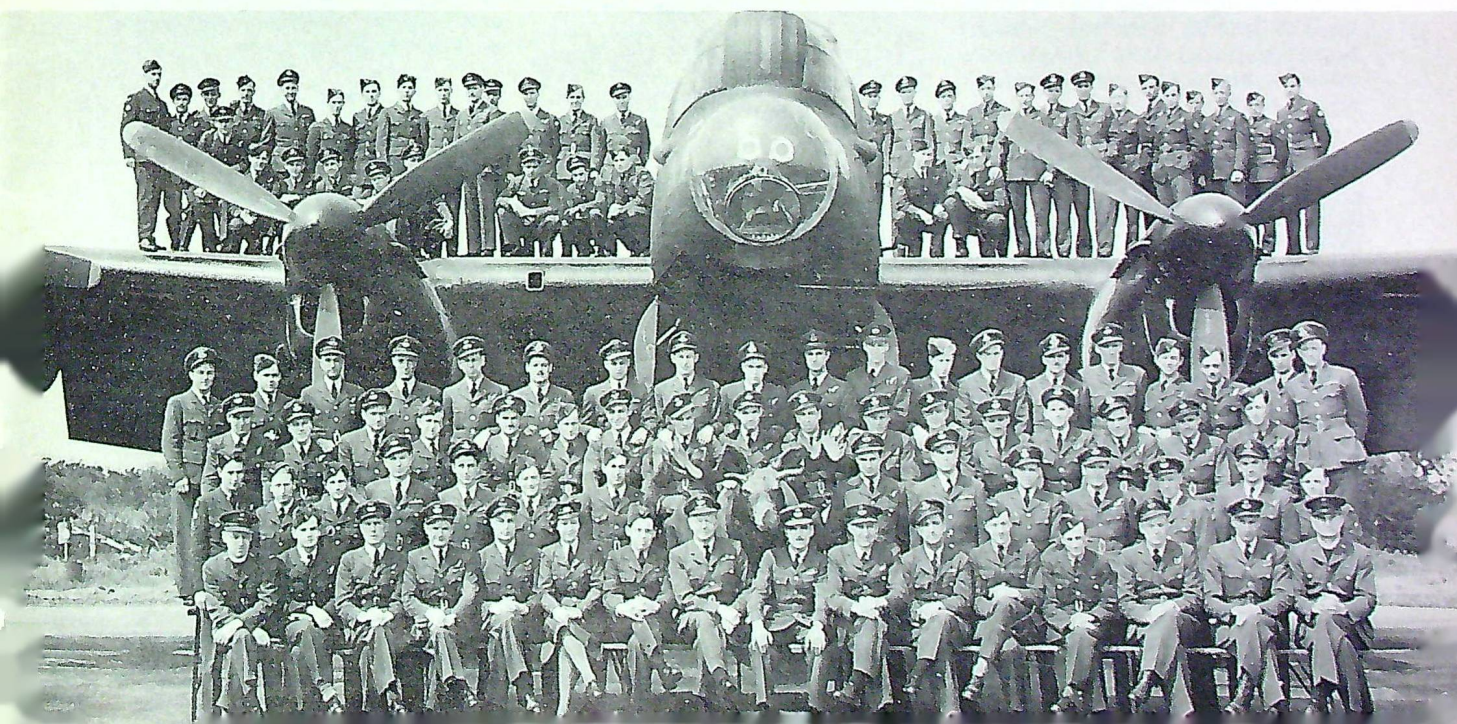
man error or in-flight unserviceabilities.

The weight of bombs delivered by VR *Wellingtons*, *Halifaxes*, and *Lancasters* was calculated at 13,416 long tons. Though the corresponding figure for mines is unavailable, the addition of the unknown quantity would certainly boost the grand total to well over 14,000.

Unquestionably the Moosemen's number one target was Essen, which they visited 23 times, or almost once in every three trips to "Happy Valley". Their second-favourite target was another Valley centre — Duisburg — bombed 15 times (only three less than by Command "in force"). On more than half their Ruhr visitations, therefore, they were after one or the other. Other targets high on their priority list were Hamburg and Cologne, each logged 13 times, Berlin (10), Le Havre (9), Bremen (8), and Boulogne (7). Their favourite gardening waters were those around the Frisian Islands and Heligoland, in which they sowed a deadly crop on 19 and 7 occasions, respectively.

As might be expected in the

No. 419 Squadron aircrew and headquarters staff, prior to departure for Canada, May 1945.



case of a unit employed over a period of 39½ months on one of the most hazardous jobs in the most active theatre of the air war, 419's casualty list was a long one. Having formerly manned 129 aircraft lost on operations, 618 aircrew were killed or presumed dead, 197 became prisoners of war, one died while a P.O.W., 25 evaded capture and returned to England, two escaped their captors, 22 were listed as safe, and four (all R.A.F.) were categorised under "fate unknown".

Moose Squadron gunners chalked up 14 official kills, one probable (a second was unofficial), and three damaged (another six were never confirmed). In addition, it was possible that a further half-dozen were destroyed, those having been claimed by gunners whose own aircraft were downed during the combats in question.

One of the R.C.A.F.'s most highly decorated units, 419 numbered among its awards for valour a Victoria Cross, 4 D.S.O.s, 3 Bars to the D.F.C., 150 D.F.C.s, 35 D.F.M.s, 1 M.C. and a number of mentions-in-despatches, foreign awards, and other honours.

HOMeward BOUND

Three days before V-E day there came the first inkling that something interesting was in store for 419 besides a victory celebration. Added that day to the already intensive aerial training programme were several maritime cross-

country details. Twenty-four hours later the squadron learned that it would soon be ferrying its own aircraft across the Atlantic to Canada. Accordingly the maritime aspect of training was given special emphasis.

On 22 May a party of maintenance and servicing personnel were airlifted to Lagens, in the Azores. Ten days later, ten crews made their last take-off from Middleton as their *Lancasters* got airborne on the first lap of the flight home via St. Mawgan and the Azores. On 4 June another 10 crews departed. All 20 made the long hop without incident.

Shortly after their arrival at Debart, N.S., crews were sent on leave pending the decision as to the squadron's future disposition. Approximately a month later an order was issued declaring that the unit was to reassemble on 15 July and begin training on 10 August for duty in the Far East. It was to be a heavy-bomber squadron of No. 661 Wing, "Tiger" Force, based at Yarmouth.

Training had scarcely begun when events at Hiroshima and Nagasaki precipitated the end in the Pacific. Ten days after the official surrender, an order appeared stating that 419 Squadron was to disband. The disbandment was effective on 5 September.

* * *

In the spring of 1954 the Moose re-appeared on the aerial scene, and at a most likely location. Its

new stamping ground was at North Bay, gateway to Ontario's north-land. The new 419 was originally slated for relocation at Comox, B.C., after a short period at North Bay, but a change of plan resulted in the continuance of its operations at the Ontario base. Redesignated 419 AW (F) Squadron, it was equipped with CF-100 jet fighters and given the twofold responsibility of carrying out all-weather interceptions and conducting its own training in that field.

In August 1957 the "new Moosemen" flew their *CF-100s* to Germany, joining Canada's Air Division in the N.A.T.O. team at Baden Soellingen. This is their home today, from which the cry "Beware the Moose!" is borne on the whine of *Orendas* instead of *Merlins* as in yesteryear.

Vastly changed though it may be in function, equipment and personnel, 419 has the same proud past to live up to, the same wealth of tradition to uphold. Intangibles like these give no little stimulus to fulfilment of the prime responsibility borne by an all-weather interceptor unit. Undoubtedly much of 419's motivation arises from a distinctive trade-mark, one quite possibly unique among flying units the world over — the popular name of its original 'come-legendary leader adopted as its own. Both in spirit and in name, therefore, the legend of The Moose lives on.

THE END

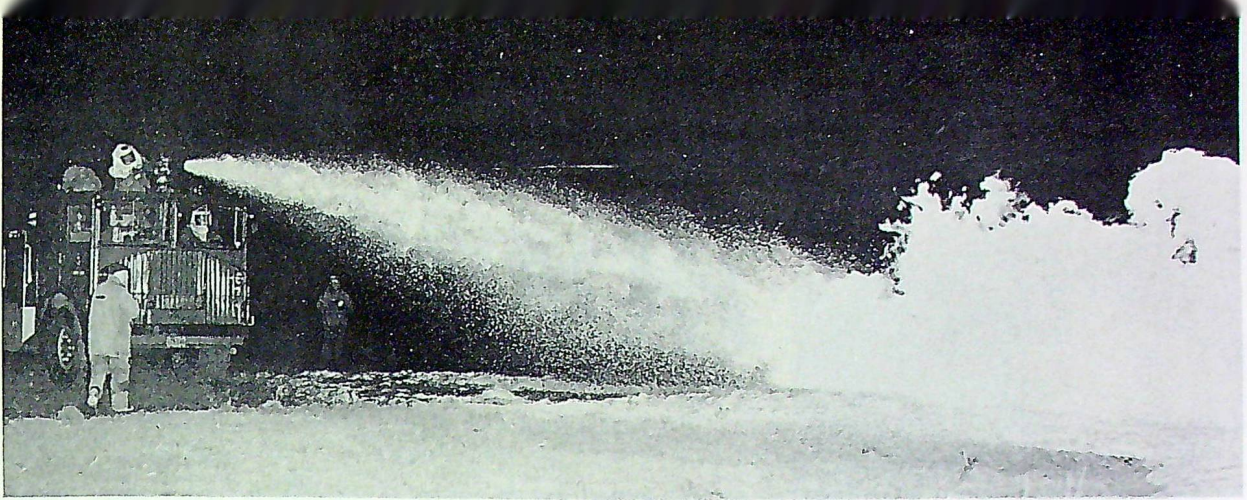
For Springhill — From Afar

AIR VICE MARSHAL Larry Wray, A.O.C. No. 1 Air Division, presented a cheque for \$7,000 sent by personnel of his command for the Springhill Disaster Fund to Robert C. Coates (left), MP for Cumberland, N.S., and the Hon. George Nowlan, Minister of National Revenue, whose constituency is Digby-Annapolis-Kings. The money was raised by individual contributions, from a spontaneous desire of European-based personnel to help people of Springhill.

More recently, Air Div. headquarters members contributed \$562.00 and 39 cases of foodstuffs and clothing to the French Red Cross for distribution to flood victims of Madagascar.

THE ROUND





Some Like It Hot

A new challenge for R.C.A.F. fire fighters was successfully met last March when a four-man crew from Station Namao was sent out to stop a natural gas well-head fire.

Company engineers estimated that the fire, 20 miles northeast of

Vegreville, Alta., was burning at the rate of two million cubic feet of gas per day. Within three minutes of their arrival the R.C.A.F. crew extinguished the fire with foamite and dry chemicals.

Squadron Leader R. W. La-

mont, Namao's construction engineering officer, was in charge of the operation. Warrant Officer O. Kleppe, station fire chief, headed the fire fighters. It is believed this is the first time R.C.A.F. men and equipment have been used to stop such a fire.



TOP GUN

An interest in shooting, acquired while stationed at R.C.A.F. Station Goose Bay, has resulted in an Air Force officer becoming one of the top skeet shots in the world.

For the past 10 years Sqn. Ldr. B. C. Hartman, who is now stationed at A.F.H.Q., has had a winning way with guns. In 1949 he entered, and won, his first competition — the Halifax Bi-Centennial. From that auspicious beginning he went on to win skeet contests with almost monotonous regularity and in 1958 he was selected as a member of the All-American skeet team, becoming the first Canadian to win this honour.

During 1958 he started out in typical fashion by winning the Canadian Open All Gauge and the high Over-All plus four titles at the

Capital of Canada Open. Then, looking for new skeetshooting worlds to conquer, he sojourned to the U.S.A. where he promptly won three titles at the Empire State Open at Rochester. He was also re-selected as a member of the All-American Skeet team. At the end of 1958 the National Skeetshooting Association, which compiles the yearly averages of all North American competitive skeetshooters, listed Sqn. Ldr. Hartman in first place in the 20-gauge, second in 12-gauge, third in 28-gauge and fifth in the over-all.

Sqn. Ldr. Hartman, however, is not resting on his laurels. He is already practising for the coming season which he hopes will win him a place on the team representing Canada at the 1959 Pan-American Games in Chicago.

ВЕК ЖИВИ - ВЕ

Изучение русского языка в С

IT HAS been said that "one language makes a wall, but it takes two to make a gate". If such is the case, then numerous gates are gradually being opened at R.C.A.F. Station Centralia.

Last fall several personnel of that station approached Flight Lieutenant D. A. Dolan, Director of Language Training at Centralia and formerly O.C. of the Tri-Service Russian Language School in Ottawa, requesting that he inaugurate a Russian language course

for interested persons. The course began on 1 October 1958 with 18 students turning up for the opening bell. Classes are held twice weekly from 1900 to 2100 hours.

Station Centralia is the ideal spot for such an undertaking because the R.C.A.F.'s Language School is located there. With the permission of the Commanding Officer, the school's elaborate facilities, which compare favourably with those of any educational institution in North America, are at the

students' disposal. The students, representing a cross-section of station personnel, both military and civilian, are learning written and spoken Russian through a functional language laboratory.

ELECTRONIC AIDS

Electronic equipment such as tape recorders, pronounciary recording and play-back card machines, and intercommunication equipment are used throughout the

Centralia's Russian language class (l. to r.): Flying Officer J. M. Ananny, Sgt. J. P. Pepin, Cpl. C. R. Tomlinson, Miss D. Gordon, Flt. Lt. D. A. Dolan (course director), Miss I. D. Stewart, Cpl. J. Dragomir, Sgt. W. G. Gagne, Cpl. P. F. Kendrick.



УЧИТЬСЯ в тралини, Онтарио.

training. One of the most advanced aids is the language laboratory which makes possible individual and simultaneous instruction to as many as 12 students. In this room there are separate cubicles — each equipped with a microphone, ear-phones and a double channel tape recorder with non-erasable master tape. Each booth is electrically connected to the master control. This booth system of instruction aims at the improvement of a student's ability to understand and produce spoken Russian.

An outstanding feature of the functional laboratory method of instruction is that it makes use of the library method, often called the "individual study approach method". In this system every student booth contains facilities for the student himself to operate and control his own master, which in this case is a master tape. Even apart from normal class hours the student may enter the booth room at any time in the evening for private study. Just as some students will read a text once and others will re-read it five times, so the student can progress entirely at his own rate of learning with as much repetition as he wishes, and with nothing to stop him but his own ambition and talent. The student listens to a pre-recorded master, and simultaneously, during the

pause, records his own response. On playback he has an immediate comparison between the "perfect" and the "not-so-perfect". He can compare and evaluate as many times as he wishes; or if he prefers he can again listen to the "master", making a new recording of his own version while automatically erasing his previous attempts.

HELPS WITH GRAMMAR

In addition, this laboratory method is as useful in teaching grammar as it is in instilling proper Russian pronunciation and intonation. It copes with two major problems of Russian grammar instruction; the need for more exercise material than is given in non-lab classrooms, and the need for a transition from the theoretical mastery of a grammar point to an ability to apply the point orally with ease. This system of instruction directly attacks the failing implied by the frequently heard criticism "he studied Russian for a year but can hardly speak it".

Dr. G. Stavrakys, M.D., a native Russian, and presently on staff at the University of Western Ontario, recorded all of these master tapes from initial phonetics to excerpts from Russian geography, history and literature.

Another electronic device has



Cpl. J. Dragomir at work.

the imposing name of Ellamac Pronunciary Record and Playback. A student can select any number of cards, each with a different word or sentence printed on it, and feed it into the machine. The audio portion of this machine transmits, in Russian, the sentence printed on the card, thus giving the student practise in aural comprehension. The student can also make his own cards to compare his pronunciation with the correct pronunciation as demonstrated by the machine.

The purpose of the course is to train the students to become as proficient as possible in understanding, reading, speaking and writing Russian, in that order of priority. The degree of proficiency acquired is dually dependent upon the drive and ability of the individual student and the method of instruction. The total classroom instruction over a ten month period is 160 hours. Students spend approximately the same amount of time in private study. This is in contrast to the Army Language School in Monterey, California, and similar institutes where students spend 2400 hours in the classroom and approximately 1000 hours on homework during the 10 month course.

Content-wise, the course revolves around two fundamentals:

1. an understanding of Russian grammar
2. the active usage of a basic 2500 word vocabulary.

No larger vocabulary is attempted because students in a Russian course invariably notice their capacity for constantly assimilating new vocabulary, new phrases etc. is, sooner or later, subject to the law of diminishing returns. Limiting the vocabulary to 2500 basic words, frequently repeated, gives the student an attainable objective; he doesn't feel that for every new word learned he has forgotten several old ones.

PRACTICAL VALUE

At the end of the course the students will have a sound knowledge of Russian grammar, a reading and aural interpretation vocabulary of 2500 words and sufficient active

vocabulary to converse on non-technical topics. The stress is deliberately placed on the interpretation of spoken and written Russian in contrast to conversation because there would be little opportunity for the students to keep their conversational ability in practise. Conversely, unlimited opportunity exists for practise in reading the printed word and relistening to the course tapes which the graduates retain. However, the laboratory system, by its very nature, will produce a graduate conversationally at ease within the limit of the 2500 word basic Russian vocabulary.

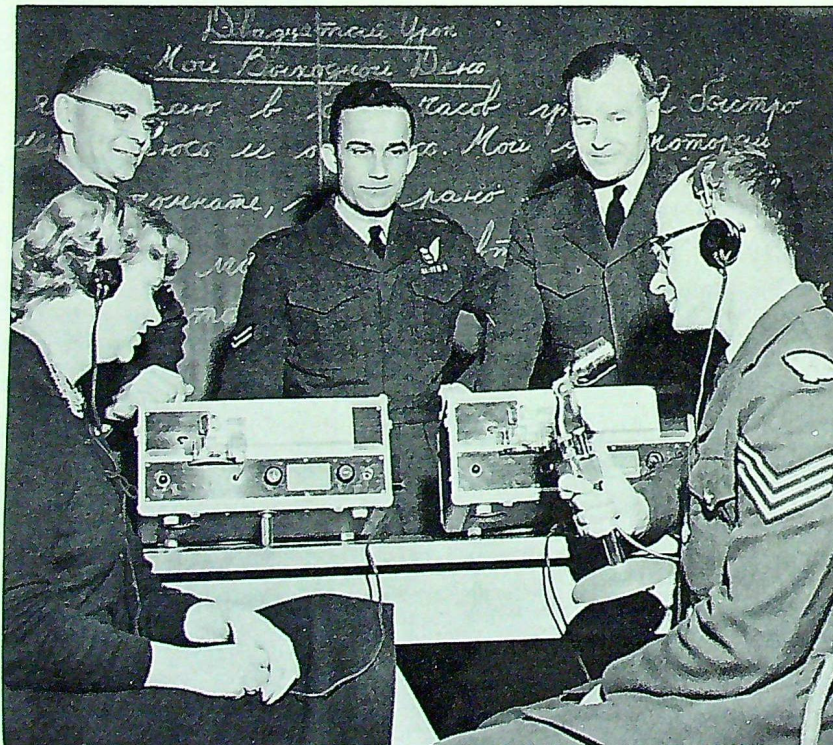
Although the course was initiated solely for the purpose of giving personnel the satisfaction and sense of accomplishment which comes with the mastery of another language, *for at least one of the students the course will be of practical value.* Sgt. W. G. Gagne has been informed by Queen's Uni-

versity that a pass mark on the Centralia course will be accepted by the university in lieu of a matriculation subject, thus permitting the sergeant to enter Queen's in the fall.

Since Russian language courses are becoming more popular at universities and colleges in Canada, Flt. Lt. Dolan hopes that next fall dependents' children of high school age will also attend the language course. By so doing, the high school students will begin early the cultural experience of acquiring another language and will be able to continue this study when they go to institutions of advanced learning.

Every station in the Air Force has a wide selection of off-duty activities to provide recreation and entertainment for its personnel, but only at R.C.A.F. Station Centralia can there be listed among these activities the fascinating and challenging task of learning Russian.

Around the Ellamac pronunciary record and playback, l. to r.: Miss D. Gordon, Sgt. W. J. Gagne, Cpl. J. Dragomir, F/O J. M. Ananny.



SCHOOL DAZE

Two men are driving along discussing the high rate of taxes and the waste of money by the local government. At the height of the discussion a school bus passed them from the opposite direction.

"See! That's what I mean," exclaimed the one, "when I was a boy we walked three miles to school and three miles back every day. Now we spend \$5,000 for a bus so the kids won't have to walk. Then we spend \$50,000 for a gymnasium so they can get some exercise."

One pound of learning requires ten pounds of common sense to apply it.—Persian Proverb.

BADGES of THE R.C.A.F.: 13

This is the thirteenth in our series of illustrations of R.C.A.F. badges. The dates shown in brackets beneath the names of the units are the dates on which the badges were officially authorized. Black-and-white reproductions of the badges shown may be obtained by writing to: Director of Public Relations, Air Force Headquarters, Ottawa, Ont. Glossy or mat prints are available in two sizes: 8" x 10" (50¢) and 11" x 14" (\$1.00). Cheques or money orders (not cash) must be made payable to the Receiver General of Canada.



R.C.A.F. Station Sydney

(May 1958)

The head of a white-tailed buck, issuant from a wooded island.

SPOR FHURACHAS

(Eternal Vigilance)

White-tailed deer are found in large numbers on the wooded island on which the station is located. The buck is ever on the alert to detect danger threatening the herd, and thus symbolizes the role of the station in maintaining constant watch against the approach of an enemy. The motto is in Gaelic.

During the Second World War Sydney was a base in Eastern Air Command from which bomber reconnaissance squadrons flew *Deltas*, *Bolingbroke*s, *Hudson*s, *Venturas* and *Cansos* on anti-submarine patrols and escorts over the approaches to the Gulf of St. Lawrence. *Hurricane* fighter squadrons and a *Lysander* coast artillery co-operation flight were also based there. The station reached the peak of its activity at the end of 1943 when four squadrons and a radio detachment were located there under the administration of a station headquarters. By V-E Day most of the units had been transferred or disbanded and the station was closed at the end of 1945.

R.C.A.F. Station Sydney was re-opened in 1953 in its present role as a unit in Air Defence Command.

No. 418 Squadron

(June 1958)

On an ice-floe, an Eskimo holding a harpoon.

PIYAUTAILILI

(Defend even unto death)

The badge symbolizes the functions of the squadron standing guard on Canada's northern frontiers. The motto is in Eskimo.

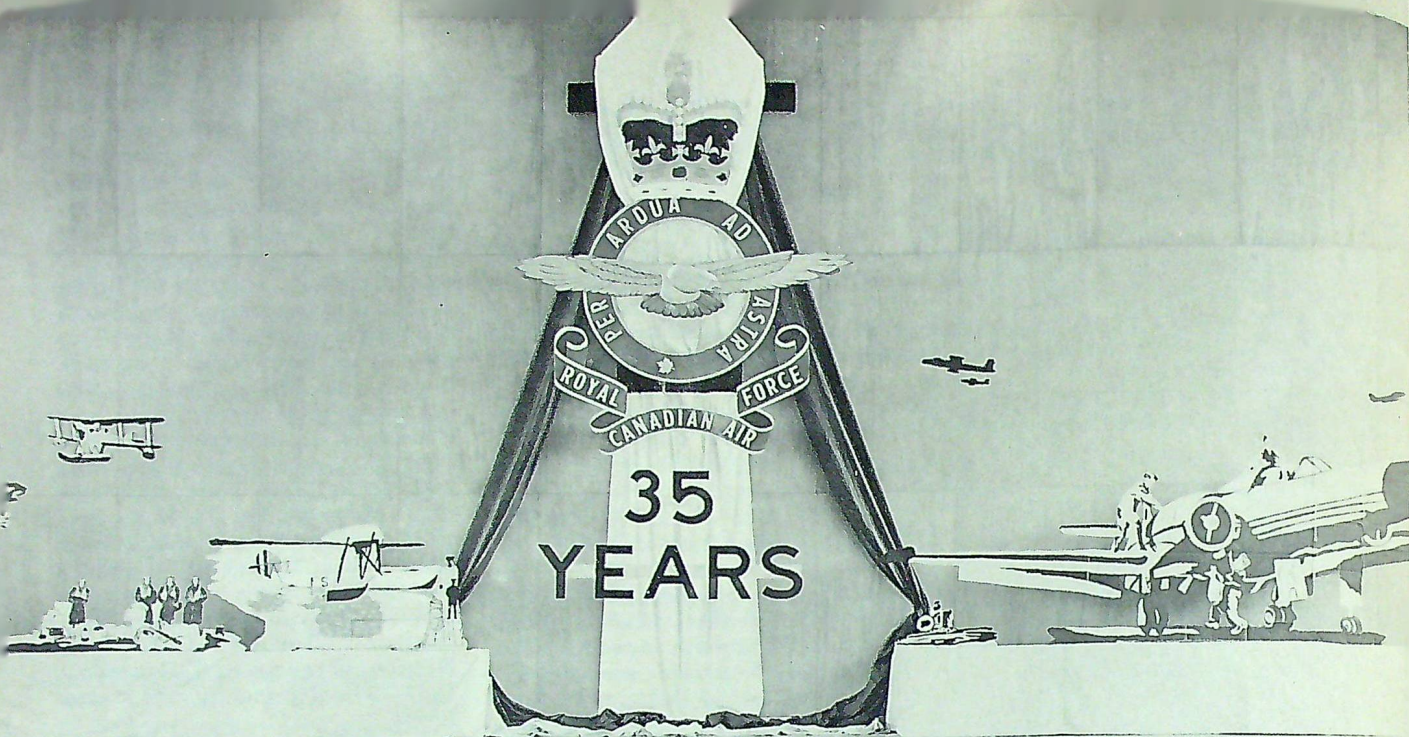
No. 418 Squadron, the first R.C.A.F. intruder unit, originated at Debden, Essex, in November 1941, and remained in England for over three years, operating from such bases as Bradwell Bay, Ford, Hunsdon and Hartford Bridge.

Equipped originally with Douglas *Bostons*, the squadron converted to de Havilland *Mosquitoes* in March 1943 and won high reputation by its daring day and night intrusions deep into Hitler's Reich. In air combat 105 enemy aircraft were destroyed, plus 73 more destroyed on the ground and over 100 damaged. On defensive patrols against the V.1 the squadron's *Mosquitoes* shot down 77 flying-bombs over the sea and five over land.

Late in 1944 the squadron was transferred from intrusion operations to close support work with 2nd Tactical Air Force and subsequently moved to bases in Belgium and the Netherlands. It was disbanded at Volkel on 7 September 1945. No. 418's battle honours include Defence of Britain 1944, Fortress Europe 1942-1944, Dieppe, France and Germany 1944-1945, Normandy 1944, and Rhine.

In 1944 the squadron was adopted by the City of Edmonton, and after the war No. 418 was reformed there, on 15 April 1946, as one of the first units in the post-war Auxiliary component of the R.C.A.F. The designation "City of Edmonton" was incorporated in the squadron's title in 1952. Originally a light bomber unit equipped with *Mitchells*, No. 418 was recently converted to a civil defence, search and transport role using *Expeditors*.





R.C.A.F. Station Foymount recreation hall was decorated by NCO and airmen volunteers for 35th birthday celebrations.

Our Birthday Commemorated

THIS year, as the R.C.A.F. celebrates its 35th birthday, it looks back over a life of achievements. Beginning with a handful of men and flimsy aircraft, it is now preparing to take its first steps into the missile age.

At R.C.A.F. units across the country people who have contributed greatly to Canadian aviation, from the historic flight of 1909 through two world wars and up to the present time, helped to commemorate the occasion last month.

A special A.F.H.Q. anniversary dinner, hosted by Air Marshal Hugh Campbell, C.B.E. welcomed among the head table guests the Rt. Hon. Vincent Massey, C.H.,

and the Hon. J. Angus MacLean, D.F.C., Minister of Fisheries.

Five people whose association with aviation totals 200 years were among those paying tribute to the Air Force at R.C.A.F. Station St. Hubert. These aviation notables were: Air Commodore J. S. Scott, M.C., A.F.C., with the original regimental number, R.C.A.F. No. 1, who commanded the Canadian Air Force 1921-22; Air Marshal C. R. Slemmon, C.B., C.B.E., former chief of the air staff and now deputy commander NORAD; Hon. Air Cdre. J. A. D. McCurdy, M.B.E., first British subject to fly in the British Commonwealth; Air Vice Marshal W. R. MacBrien, O.B.E., who commanded the first

R.C.A.F. fighter wing during the Second World War and now heads A.D.C.; and Air Vice Marshal C. M. McEwen, C.B., M.C., D.F.C., a fighter pilot in the First World War and A.O.C. of No. 6 Bomber Group in the Second World War.

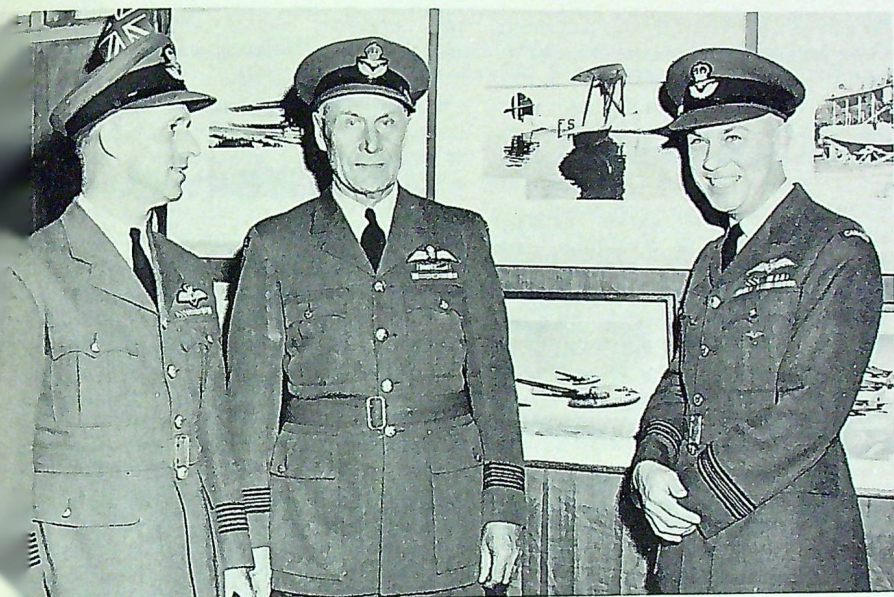
Typical of the celebrations carried out at various stations, was the ceremony held at R.C.A.F. Station Foymount, where over 200 guests from the surrounding community attended. Highlight of the programme was the cutting of a birthday cake and a presentation to Sqn. Ldr. G. H. R. Phillips (ret.) by Wing Cdr. H. E. Smith, A.F.C., commanding officer. Sqn. Ldr. Phillips, whose flying record is almost as old as the history of

flight in Canada, was presented with a silver tray. His son, Ldr. J. H. Phillips, D.F.C., came from Trenton to help pay tribute to his dad.

Warrant Officer P. C. Redgrave gave an address tracing the history of the R.C.A.F. from its inception in 1924 with references to Canadian fliers of the First World War. He outlined air force activities in the peaceful years between the wars and the changes that have been wrought in the service since that time.

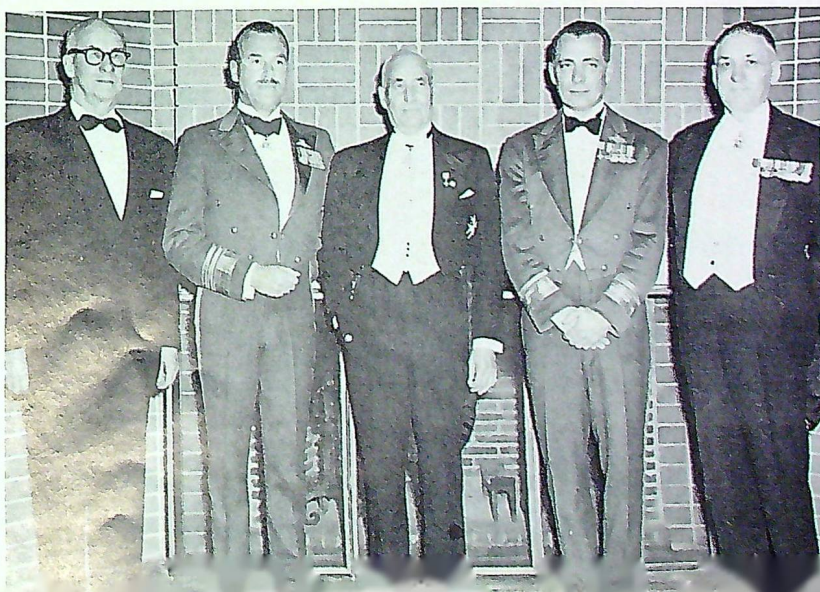


At Ottawa, the Governor-General cut the birthday cake. A/V/M D. M. Smith is on Mr. Massey's right, Air Marshal Hugh Campbell and Fisheries Minister J. Angus MacLean on his right.



At Foymount, l. to r.: Wing Cdr. H. E. Smith, Sqn. Ldr. G. H. R. Phillips (ret.), Sqn. Ldr. J. H. Phillips.

At St. Hubert, l. to r.: Air Cdr. J. S. Scott, Air Marshal C. R. Slemmon, Hon. Air Cdr. J. A. D. McCurdy, A/V/M W. R. MacBrien, A/V/M C. M. McEwen.



R.C.A.F. Association



Lethbridge mayor Cliff Black fires first rock to open R.C.A.F. Association Sixth Annual Bonspiel. His sweepers are Group Capt. C. G. Ruttan, R.C.A.F. Station Cold Lake, and Col. A. Schwab, U.S.A.F. Minneapolis.

Curlers Whoop It Up At Lethbridge

Eighty-eight rinks competed in the 1959 R.C.A.F. Association Bonspiel at Lethbridge, Alta. This sixth annual event was again sponsored by 702 (Lethbridge) Wing, and successfully conducted under the chairmanship of Charles Linn.

The Del Martin Memorial Trophy was won by the Kananen rink from Barons. The runners-up were rinks from Milk River, Calgary and Moose Jaw.

Mr. and Mrs. Tom Martin presented Del Martin Memorial Trophy to Barons winning rink (l. to r.): E. R. Kananen, skip; Roy Lyons, third; Milson Hodson, second; K. V. Ousley, lead.

The Tip Top Tailor Trophy was won by the Froehler rink from Calgary. The Turner rink from Lethbridge was runner-up.

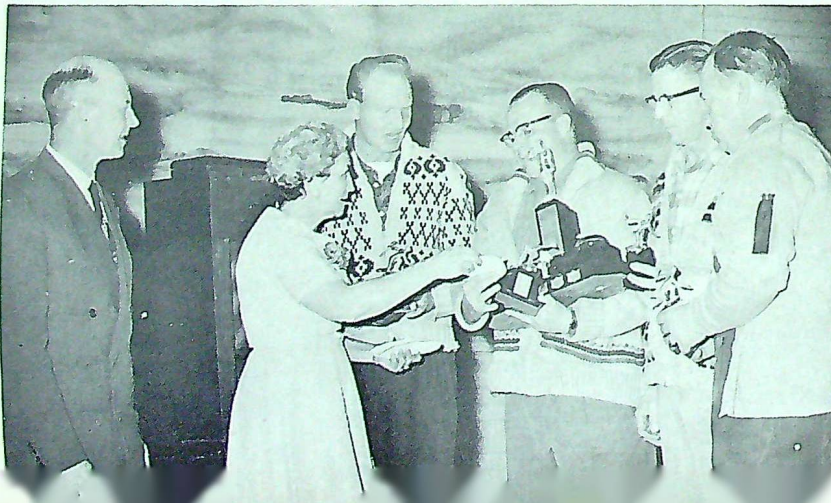
The Fenby rink from Calgary was the winner of the Pall Mall Trophy event and the Hunter rink from Cold Lake won the Art Batty Trophy which was in competition for the first time.

The event was concluded on Saturday evening with the curlers enjoying the Annual Wing Banquet at Fort Whoop-Up.

HISTORY OF A HISTORY

JUST a little more than a year ago the R.C.A.F. Association concluded arrangements to sponsor the publication of a history of the Royal Canadian Air Force. Thus was culminated a suggestion made to the Association by the R.C.A.F. several months earlier, and it began one of the largest national projects the Association had undertaken in its ten-year history.

It is too early to predict just how widely read and how popular the book will be with the general public, but it is not too early to assess the value of the Association's undertaking. By the terms of the contract under which the book was published the Association was obliged to accept from the publisher 6,000 copies of the volume. Four weeks after the release of the book the Association could count some 7,000 copies sold and report that all its contractual obligations



had been met. The project, therefore can only be termed a complete success.

As in most success stories, teamwork and co-operation were the essential elements. In the beginning the Association's administrative sub - committee, composed of A/V/M F. W. Wait, George Ault and Jack Gray, investigated the terms under which such a book could be written and published. In liaison with A/V/M J. G. Kerr, G/C W. L. Gillespie, G/C G. F. Jacobsen and W/C F. W. Hitchins of the R.C.A.F. they successfully completed an agreement with Messrs. Clarke Irwin and Company, Ltd., and the author, Mr. Leslie Roberts. The assistance and co-operation given Mr. Roberts is acknowledged in his preface to the book and the list is a good indication of the great numbers of persons it was necessary to contact and talk to in the preparation of a history of this kind.

Equally important to the success of the whole project was the co-operation of the Association Wings across Canada in ordering quantities of the book to sell to their



Charter members of No. 441 (Barrie) Wing pose with president H. E. Partridge (front centre) after a meeting in February at which the wing charter was presented by A/C J. B. Harvey. Organized last year the new wing now has 75 members. On Mr. Partridge's right is Group Capt. F. R. West, R.C.A.F. Station Camp Borden C.O.

members and the public in their communities. The R.C.A.F. placed a special order with the Association for copies for station libraries and for sale through R.C.A.F. canteens. The National Office received these orders and arranged distribution.

To pretend that all went smoothly from start to finish would be indeed an untruth but the delays, misunderstandings and errors which did occur were met in most instances gracefully and have

tended to make the success of the project a more satisfying one.

The first reaction to "There Shall Be Wings" has been most encouraging. The consensus is that Mr. Roberts has presented a superbly written account of the first 35 years of the R.C.A.F. The R.C.A.F. Association is grateful to him, to Clarke, Irwin and Company Limited and to the R.C.A.F. for joining with the Association in making this Anniversary Year project such a rewarding success.

50th Anniversary of Flight Celebrations

At Windsor Air Cdr. J. B. Harvey, R.C.A.F. Training Command chief staff officer, spoke at anniversary dinner arranged by Len Baldock and committee. Honoured guests included U.S.A.F. Maj.-Gen. R. E. L. Eaton and retired Air Cdr. Sir James Easton, British consul in Detroit.

Honoured by No. 254 (Chatham) Wing were two former R.F.C. members, D'Arcy McGrath and F. M. Delaney. As R.C.A.F. Station Chatham C.O., Group Capt. N. W. Timmerman, looks on, Mr. McGrath and Mr. Delaney are presented pins by wing president Wilfred Gorman.





Stepping out in spring's finest fashions, these ladies held the spotlight at the Second Annual Fashion Show and Tea held by the Ladies Auxiliary of No. 433 (Rentrew) Wing. Proceeds of the successful event were given to the Wing's Air Cadet Fund.

Royal Canadian Air Cadets

(This section of THE ROUNDDEL is prepared by Air Cadet League Hdqts., 424 Metcalfe St., Ottawa.)

FREDERICTON, N.B. — Lord Beaverbrook has donated eight side drums, one base drum and 17 bugle crooks to the band of No. 333 Lord Beaverbrook Air Cadet Squadron. The band formed a guard of honour for Lord Beaverbrook on his arrival at Fredericton last summer and gained favourable comment from the Canadian-born peer.

Another item of interest from Fredericton concerns the ham radio station being put into operation by No. 333 Squadron. VE(1) OQ will go on the air for the purpose of providing advanced training for cadets interested in electronics. Backbone of the installation is a Johnson Viking Ranger, a highly effective transmitting unit provided by the R.C.A.F.

EDMONTON, ALTA. — Twenty members of No. 664 Cold Lake Squadron participated in a sports meet with No. 533 St. Albert Squadron during a recent weekend. At Station Namao a small bore rifle competition and volleyball game was held. Later the cadets were driven to St. Albert for curling, basketball and table tennis. The St. Albert Lions Club provided a dinner Saturday evening and the two groups attended church parade Sunday morning.

RIVERS, MAN. — Members of No. 320 Rivers Squadron made a recent camping-out trip to the Pas. Airlifted by C119 aircraft, 17 cadets and three squadron officers made the trip.

HAMILTON, ONT. — No. 62 Hamilton Squadron is the first Air Cadet squadron in Canada to own an Orenda jet engine. Valued at

\$70,000 when it was new, the engine was purchased by the squadron sponsoring committee from Crown Assets Disposal Corporation for \$125. The engine was sold by Crown Assets under the same deal given to universities for the purchase of surplus material.

BARRHEAD, ALTA. — The Air Cadet Award for Bravery was posthumously awarded to Air Cadet Stuart Larkins, in recognition of his heroism in saving Miss Carol Bassani from drowning in the Paddle River in 1958. The award was presented by Air Commodore H. H. C. Rutledge, Group Commander, 14 Training Group, and was received by the parents of Cadet Larkins, Mr. and Mrs. E. D. Larkins, Barrhead.

The accident occurred when Miss Bassani, with a number of other teenagers, was swinging over the banks of the Paddle River on

a rope. She lost her grip and fell into the fast flowing river. Cadet Larkins plunged into the river and was successful in pulling Miss Bassani to the bank where she was assisted to safety. However, Cadet Larkins had so expended himself that he could no longer fight the swift-flowing current and he was drowned.

Earlier recognition of Cadet Larkins' brave act was the award of the Royal Humane Society's medal for bravery.

TRURO, N.S. — After carrying on its activities in various locations over the past number of years, No. 77 Truro Squadron has finally found a permanent "home". The squadron is now quartered in the top floor of the old post office building in Truro. Having quarters of its own has been a big boon to the squadron which now numbers 125 cadets, four officers and four instructors, and a 22-piece trumpet band. No. 77 Squadron is sponsored by No. 102 Colchester Wing of the R.C.A.F. Association, with Norman Wright as chairman of the sponsoring committee. The

Dr. C. C. McCullough, seated, founder of the Air Cadet League in the Lakehead area, being presented with commemorative plaque by League past-president J. G. Le Droit. W. J. Griffiths, chairman of Northwestern Ontario Zone, looks on.



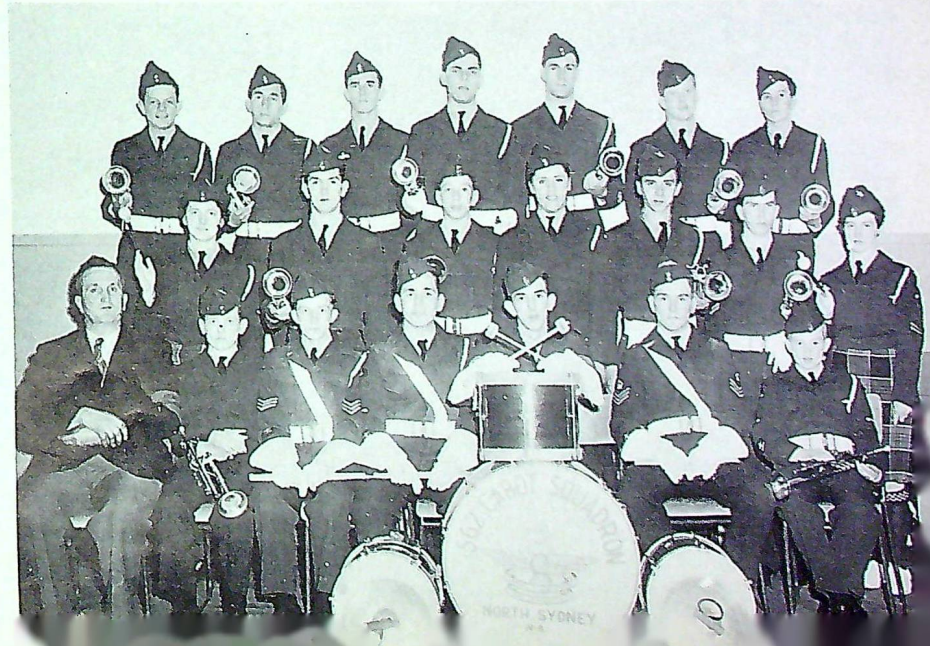
No. 585 Smiths Falls Squadron members inspect a B47 during their visit to Strategic Air Command base at Plattsburg, N.Y.

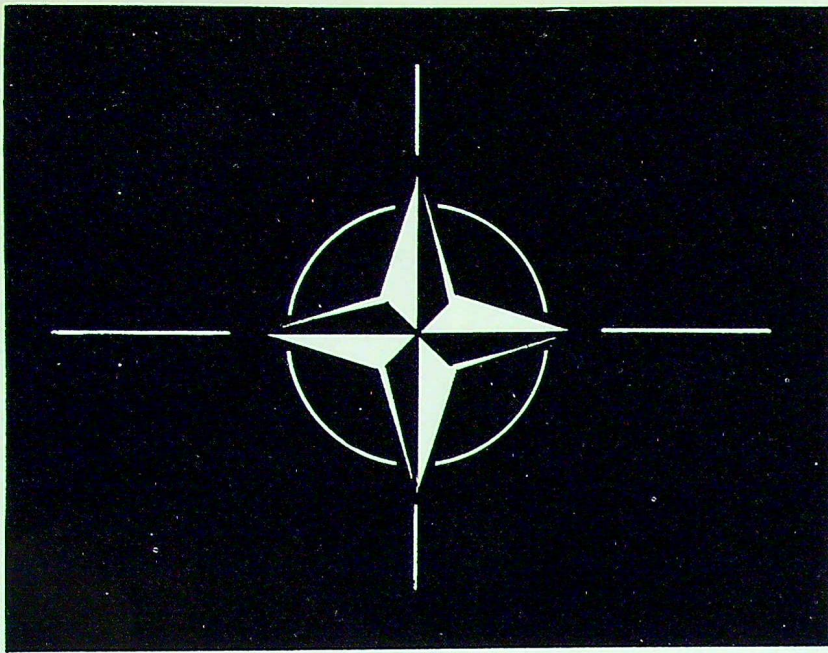
squadron is commanded by Sqn. Ldr. Andrew Elliott, with Flt. Lt. Peter Sanders as adjutant.

NORTH SYDNEY, N.S. — Presentation of the Price Trophy highlighted a regular parade of No. 562 Cabot Squadron held recently. The trophy is awarded annually to the top squadron in the four Atlantic provinces. This was only one of the honours to come to No. 562 Squad-

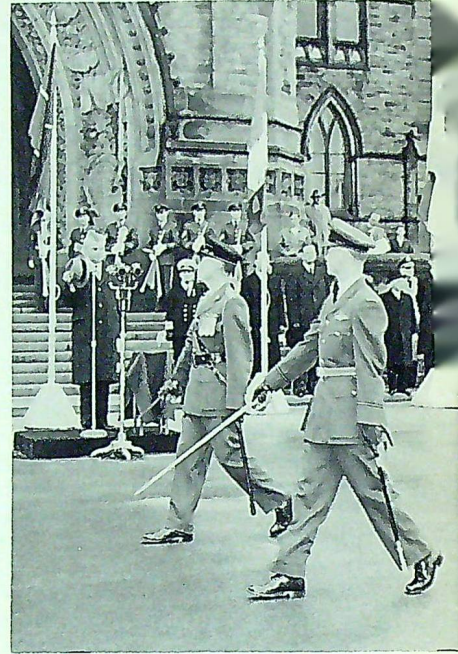
ron in the past year. The squadron sponsoring committee won the Founder's Trophy, a new and impressive award for the outstanding squadron sponsoring committee in Nova Scotia; the squadron as a whole captured the Alteen Trophy for the best Cape Breton squadron; and squadron sharpshooters captured two Strathcona Trust awards for rifle shooting in provincial competition.

Trumpet Band of Maritimes' leading squadron.





N.A.T.O.



The Prime Minister takes the salute

THE 10th anniversary of the North Atlantic Treaty Organization was celebrated recently with the R.C.A.F. participating in such widely separated points as Ottawa and Mainz, Germany.

At Ottawa, a 100-man detachment from Canada's three services, under the command of Flt. Lt. D. Williamson, marched past the Peace Tower where the salute was taken by Prime Minister John Diefenbaker. A medley of national anthems of N.A.T.O. countries was played by the R.C.A.F. Central Band and the Air Force's Coronation Trumpeters sounded two fanfares.

At Mainz, an arrowhead formation of jets flew past the reviewing stand, marking the first occasion in the history of N.A.T.O. that pilots of different N.A.T.O. countries have flown together as a single team. The Canadian contribution to the composite formation was flown by Flt. Lt. R. Scott. The nations represented in the flypast were: Belgium, Canada, France, U.S., Britain, West Germany and the Netherlands.

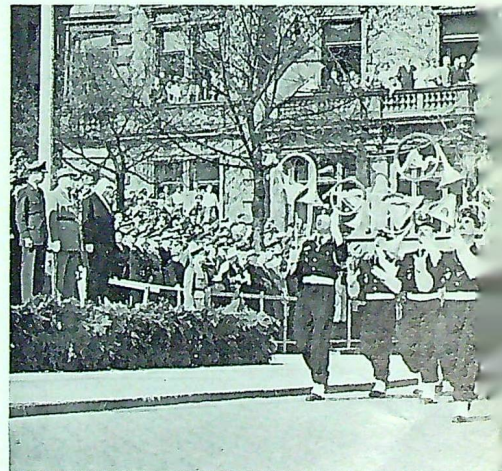
The composite formation was followed by 112 other aircraft in a string pattern of seven different

national groups of 16 aircraft each. These aircraft were: Belgium, Netherlands and German F-84 *Thunderjets*, Canadian *Sabres* and *CF-100s*, U.S.A.F. F-100 *Super Sabres*, F-101 *Voodoos* and F-102 *Delta Daggers*, British *Canberras*, and French *Mystères*.

In addition to staging the international air armada which flew overhead, nine N.A.T.O. nations rolled out their might on land and sea to celebrate the organization's 10th birthday. More than 100,000 persons lined the Rhine River promenade to watch the parade of 5,000 soldiers, sailors and airmen assigned to Allied Forces, Central Europe. A three-nation river flotilla represented N.A.T.O.'s naval might.

The colourfully uniformed troops were reviewed by General Lauris Norstad, Supreme Allied Commander Europe, and French General Jean Etienne Valluy, Commander-in-Chief Allied Forces Central Europe. They were accompanied by Air Chief Marshal Sir George Mills, Commander of Allied Air Forces Central Europe, and Vice Admiral H. Boss, Commander of Allied Naval Forces Central Europe.

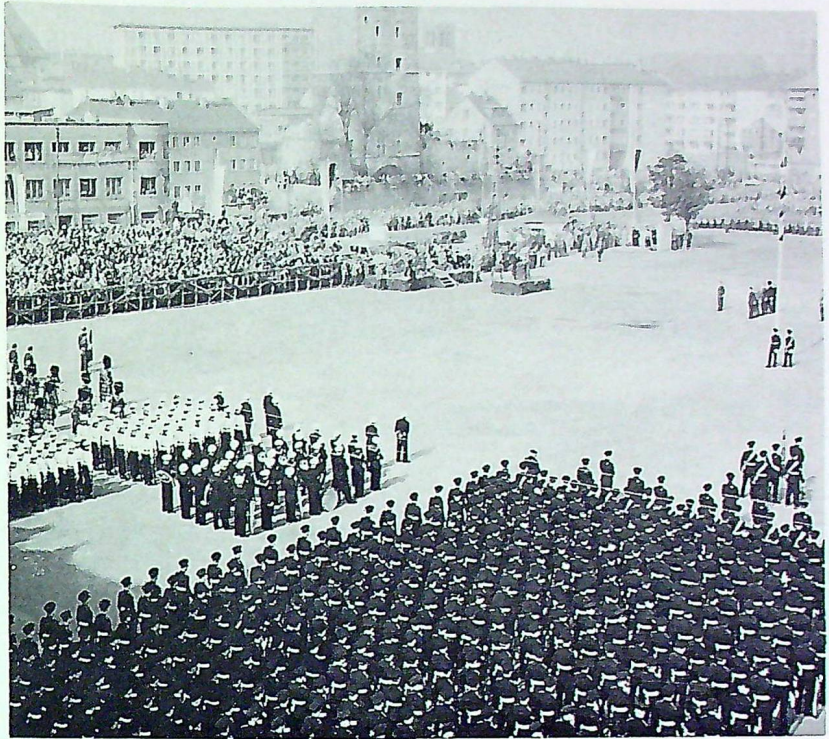
A French Army band passes the reviewing



LESTONE



parliament hill, Ottawa.



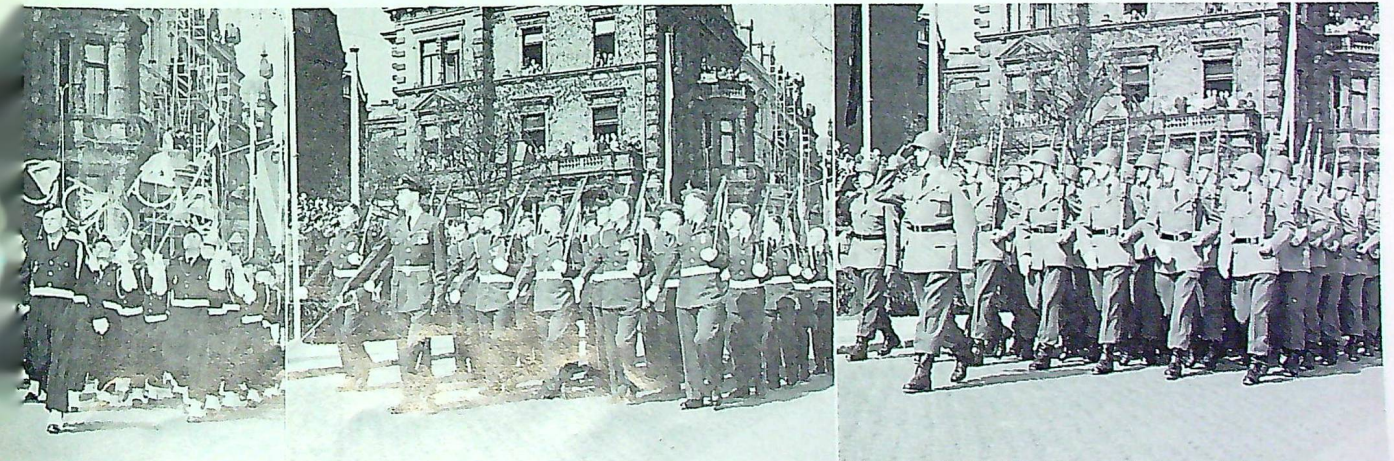
The Halleplatz at Mainz, Germany, where NATO 10th Anniversary ceremonies were held

(More pictures on page 32)

ed, followed by . . .

A flight of R.C.A.F. personnel and . . .

A detachment of the West German Army.





Top N.A.T.O. officials arrive at the Halleplatz. (L. to r.): Minister of the Federal Republic of Germany, Dr. Von Merkatz; Supreme Allied Commander Europe, General Lauris Norstad; Commander-in-chief, Allied Forces Central Europe, General Jean-Etienne Valluy.

Answers to "What's the Score?"

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



The pipe band from R.C.A.F.'s No. 1 Fighter Wing on parade at N.A.T.O. anniversary celebrations in Frankfurt, Germany.

The flags of N.A.T.O. and the VE nations forming the alliance, being raised during the ceremony at Mainz.



Comrades in arms relax after the N.A.T.O. ceremonies.





The R.C.A.F. Benevolent Fund

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

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

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

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

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ROYAL CANADIAN AIR FORCE