The ROUNDEL

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DECEMBER 1955

ROYAL CANADIAN AIR FORCE

The Roundel

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THE CHIEF OF THE AIR STAFF
Royal Canadian Air Force

Vol. 7, No. 11 DECEMBER 1955

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This Month's Cover

Erected outdoors during the Christmas season of last year, this Nativity scene was designed, constructed, and painted by the personnel of R.C.A.F. Station Sea Island. It was floodlit after nightfall, and Christmas carols were played through a concealed amplifier connected with a record-player in the nearby firehall.

EDITORIAL OFFICES:
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A Message from the Minister

The Royal Canadian Air Force throughout 1955 continued to build for the defence of Canada. You formed new squadrons and put them in the air, and you strengthened the Air Force at home in many other ways. You made excellent progress on the early warning radar systems, and you strengthened the Air Division beside our N.A.T.O. allies.

These are achievements in which you may well find satisfaction. The excellent accomplishments of this year are the result of hard work and devotion to duty, and I sincerely commend you for your achievements.

Let us always keep foremost in our minds the reasons for these efforts — the need for constant vigilance in a troubled world. You work and fly that men may live in peace and security.

At Christmas-time we are reminded afresh of life's values which we cherish and guard. Among the greatest of these is peace, to which you are dedicated. So to all members of the R.C.A.F. and your families, at home and abroad, I extend my warmest greetings for Christmas and my sincerest wish for a peaceful, happy New Year.

Ralph Campney

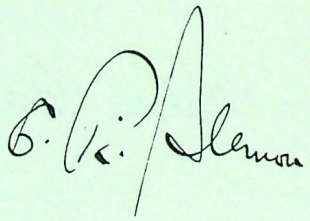
(Ralph Campney)
Minister of National Defence

A Message from the C.A.S.

THIS is the third occasion on which I have had the opportunity, in these pages, of wishing my comrades in the R.C.A.F. a Happy Christmas and a Prosperous New Year. For most of us, the hopes of 1953 and 1954, have, by God's grace, been fulfilled beyond our expectations. The first two years have been happy and prosperous to a degree probably never surpassed in our country's history.

This past year has also seen significant advances in the cause of world peace, advances that point encouragingly towards a better and more secure life for all people of all races. We may take great heart from this fact and feel proud of our contribution to it. Let us hope that the progress that has been so patiently achieved will continue on into the future.

To the Service and Civilian men and women of the R.C.A.F., and to their families, I send my heartfelt wishes that for them this Christmas may be a joyous one, and that the New Year may bring happiness and prosperity.



(C. R. Slemon)
Air Marshal
Chief of the Air Staff

NORTH OF FIFTY-FOUR

The Northern Operations of Air Transport Command

By Flight Lieutenant J. D. Harvey, D.F.C., Air Transport Command.

THE aircraft of Air Transport Command have been penetrating the Arctic Circle ever since the Command's early days as No. 9 (T.) Group, in 1947. Lately, however, the growing interest in Canada's Northland has added impetus to flights tracking 360 degrees. The northern shores of Canada remain uppermost in the minds of defence planning-teams when they discuss the most probable routes for bombers in the event of another war.

A.T.C. bases at Resolute Bay (74°N.) and Frobisher Bay (64°N.) are among the most northerly bases operated by the R.C.A.F. Goose Bay, Lab., considered a far-northern base during the Second World War, has now become only a semi-northern station.

* * *

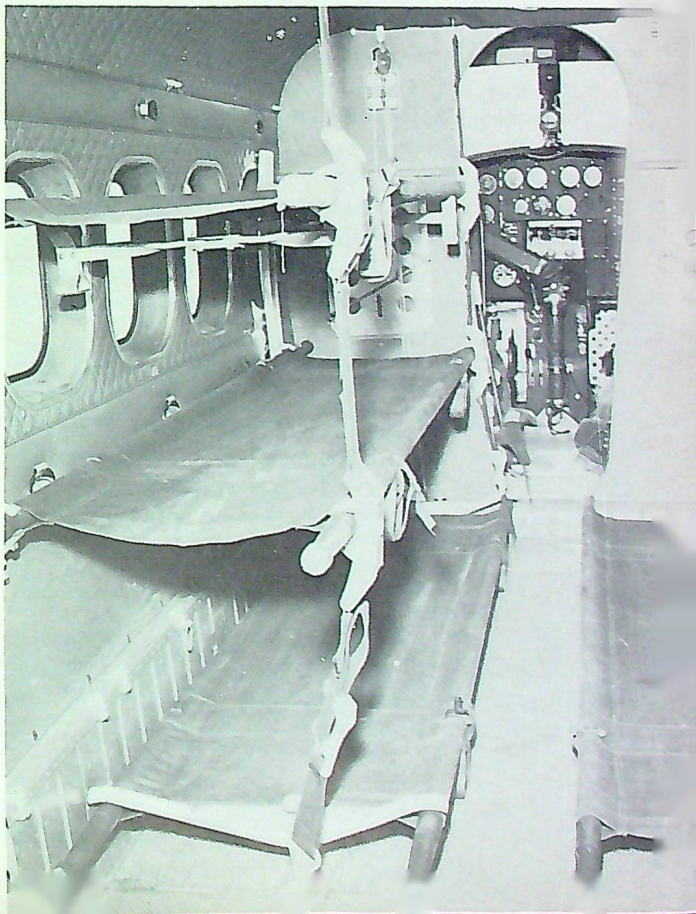
Leading A.T.C.'s parade of northern flights is No. 426 Squadron, based at Lachine, P.Q., which operates the only Canadian scheduled run as far north as the above mentioned latitudes. Twice-monthly flights to Resolute Bay, carrying supplies and personnel, are supplemented when necessary by special flights.

No. 426 Squadron also carries out many special operations throughout the year to the joint U.S.-Canadian weather stations, R.C.M.P. detachments, and Dept. of Transport weather and radio bases, scattered throughout the Arctic. Among these operations, of course, are the annual Christmas supply drops.

The spring and fall re-supply of the arctic bases, formerly carried out by No. 426 Squadron only, has been handed over to squadrons equipped with C-119 freight-carriers. Two A.T.C. squadrons, No. 435 at Edmonton and No. 436 at Lachine, now join forces on the job. In the spring and fall of 1955 the re-supply operations airlifted more than a million and a quarter pounds of all types of cargo.

During these flights, landings are made on ice-strips or crude runways scraped out on land. The

Four litters are set up in an Otter about to leave on a mercy flight



Arctic pixies.

spring-time landings are usually made on the sea-ice, while the autumn re-supply runs, when the ice is not thick enough, use the land-strips Although such landings call for extreme care and skill, they are not considered unduly risky. Lately, however, landings have been made during the dark periods, with make-shift lighting usually provided by flarepots fashioned from tin cans. With this type of illumination, approaches and landings over high hills on to small runways make for extremely tricky flying.

In any summary of northern flying, No. 408 (Photographic) Squadron, based at Rockcliffe, Ont., should be given special mention. Much of our northern flying would be greatly curtailed without the excellent maps and charts which are now used as a matter of course, but which did not exist six or seven years ago. No. 408 has, in fact, opened up Northern Canada not only for the aviator but also for civilian business as well. Mining and forestry, to mention only two industries, have been enormously aided by the accurate maps produced from the thousands of aerial prints taken each summer by No. 408.

The squadron's shoran (short-range navigation) programme, which it began in 1949 and which has been carried out simultaneously with its photographic work, now needs but two more summers to finish its complete chain of shoran stations, and so lock the map firmly into world charts.

The past summer proved a big one for No. 408 in that it photographed the last remaining portion of Ellesmere Island which had escaped the camera's eye for more than thirty years. Each summer the *Lancasters, Cansos,* and *Otters* take to the field, operating small detachments wherever adequate landing facilities exist. Contouring and profile-recording, by means of radar, have recently been added to their work. No. 408 was responsible for photographing the entire Mid-Canada Line preparatory to the actual installation of the radar sites. It has also used *Dakota* aircraft, equipped both with wheels and skis, to make a comprehensive on-the-spot survey of the entire Line, taking ground parties into the actual radar operating-sites for soil and topography checks, and conducting tests to determine the thickness of ice and snow. This winter, ski-equipped *Dakotas* will back up the main civilian airlift of Mid-Canada Line materiel.

The *Cansos* of No. 408, still droning dependably over the Northland, have now discontinued their former summer task of magnetic operations (tracing the North Magnetic Pole), but they continue to give support to shoredetic (coastal land) and shoran survey parties. The *Canso* air crew

The treeless wastes.

An Otter landing on choppy water.

have visited more virgin territory than any other R.C.A.F. air crew during their many trips to remote areas of the North. Landing the big amphibians in the uncharted waters of the arctic islands takes no mean degree of skill.

The winter months find A.T.C.'s *Lancasters* on regular scheduled ice-reconnaissance patrols throughout the Arctic. Such flights demand navigation of a high order, and in this regard the R.C.A.F. has been largely self-sufficient. Constant use is made of the Twilight Computer and other devices designed by Wing Commander Keith Greenway three or four years ago.

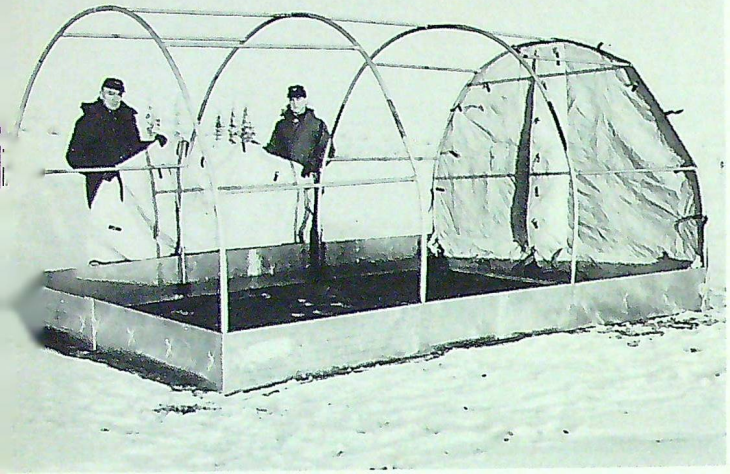
Arctic flying in the R.C.A.F. owes much of its present efficiency to the in-line *Merlin* engine, whose unmistakable growls have brought reassurance to everyone living in those treeless regions. The *Merlins* of our *Lancasters* and *North Stars* have actually been started, without preheating of any kind, at temperatures as low as 45° below zero.

No. 412 Squadron, now based at Uplands, does not ignore the Arctic, although its flights into areas above the Circle are less frequent than those of the other squadrons mentioned. Training flights are carried out as far north as the Pole, with landings usually at Resolute Bay, Thule (Greenland), and Goose Bay or Coral Harbour. The scheduled *Dakota* flight to the R.C.A.F. unit at Fort Churchill has been deleted from the squadron's list of duties. Its chief tasks are, at present, the airlifting of "V.I.P.s" throughout the world and the taking of National Defence College and Staff College students on the tours which form part of their respective courses. Before the unfortunate grounding of the *Comets*, however, No. 412 Squadron carried out many northern flights in co-operation with Air Defence Command and its radar units across the Pinetree Chain.

No. 435 Squadron, based at Edmonton, carries out scheduled runs to Whitehorse, stopping at Fort Nelson. It also takes care of the winter support runs into Cambridge Bay, on Victoria Island, to supply the Winter Survival School. In addition, the squadron supports the Army units stationed in Western Canada throughout their many northern manoeuvres.

Over on the other side of the continent is Goose Bay, Labrador, another A.T.C.-controlled base. Although much of the flying is done by the U.S.A.F., which occupies half the base, the R.C.A.F. flies many hours on mercy missions and emergency flights of various kinds. For such purposes it uses a *Dakota* (on wheels and skis) and an *Otter* (on wheels, skis, and floats). Lately the Goose Bay flight has concentrated on those mercy

Arctic detachment. Norseman and Canso aircraft of No. 408 Squadron.



A Janesway hut being erected by R.C.A.F. personnel during a joint Army/R.C.A.F. exercise.

missions which are beyond the range of civilian operators in the area. Since the civilians have only single-engined aircraft, the R.C.A.F.'s *Dakota* takes care of the flights into Baffin Island and the Hudson Strait area.

Moving back towards the centre of the continent, we find another A.T.C. detachment at Fort Churchill. Equipped with *Otters,* this unit conducts searches, emergency evacuations, and limited tactical operations throughout the region. Operating over the barren lands north of Churchill, its aircraft roam as far afield as Baker Lake.

In the past year, helicopters of No. 108 Communications Flight have begun operations throughout the north. Quartered at Bagotville, P.Q., No. 108 has been training its pilots on H-19 and H-21 helicopters and has been charged with lifting the fuel supplies (delivered to lake-head sites by civilian contractors) to the actual radar sites of the Mid-Canada Line. The Flight has conducted two cross-country runs on the Mid-Canada Line, carrying scientists on their top-priority work. This winter, No. 108 will be busy airlifting construction men and materials into each site.

Not long ago the Flight began to make use of H-34 Sikorsky helicopters, the big brothers of the already proven S-55s. With more than thirty pilots, No. 108 is now the biggest helicopter operator in Canada, and the majority of its work is north of fifty-four.

Another A.T.C. unit, No. 1 Overseas Ferry Unit, crosses part of northern Canada during its "Random" operations across the Atlantic. Responsible for the delivery of jet fighters to No. 1 Air Division, No. 1 O.F.U. goes through Goose Bay, Greenland, and Iceland. Since its aircraft cross the 64th parallel of latitude, it is, in effect carrying out one of the R.C.A.F.'s most northerly single-seater fighter operations.

Also periodically engaged in northern flying is No. 4 Operational Training Unit, located at Trenton. Each course must participate in flights to Goose Bay, Whitehorse, and overseas — and, when time permits, it usually manages to cover Churchill and Resolute Bay as well.

Memoirs of a Canadian in the R.A.F.

PART TEN

By Wing Commander A. L. Bocking, D.F.C.

(*Part Nine of these memoirs brought us to Greece in the winter of 1940, before the intervention of Germany so disastrously turned the tide of that particular phase of the war.* EDITOR.)

It was inevitable, I suppose, that some of my old Middle East friends should have ended up in the Postings and Careers Branch at Air Ministry. That, anyway, was my immediate thought when, on 1 December 1940, I was suddenly promoted to the rank of Squadron Leader after only eleven months as a Flight Lieutenant. Another possible reason may have been the fact that a promotion would necessitate a posting and a posting would reduce the number of Canadians in No. 30 Squadron by one. Such a reduction must certainly have been a relief to the "Old Man", who liked Canadians individually, but who — probably not without very good cause — found us a bit trying collectively. After all, pilots who, when faced with the choice, would rather go on a raid than visit the Acropolis on an organized sightseeing-tour, were open to suspicion.

Be that as it may, I was about due for a posting after having been on operations almost continuously since October 1938, with only brief periods of respite in what I considered to be the more dangerous occupation of all, that of instructing. So, in the spring of 1941, I was posted back to the country I knew so well — Palestine. I was to be Senior Air Staff Officer to the A.O.C. Palestine and Transjordan, Air Commodore S. D. Cully, D.S.O.

A *Sunderland* flying-boat brought me from Suda Bay, in Crete, to Alexandria. The sight of that sweeping waterfront, the tall white buildings glistening in the brilliant sunlight, and the awesome might of His Majesty's Mediterranean Fleet riding at anchor in the West Harbour, gave me a sense of security and personal well-being that had been missing for many a weary day.

I planned only a short stop in Alexandria before proceeding first to Ismailia, in order to pick up my wife, and then on to Jerusalem, where I would get my feet planted under a solidly anchored desk.

The author leading a raid on Damascus.

A Blenheim shot down by Vichy French fighters over Beyrouth, June 1941.

That desk was a symbol and a dream. Over many an enemy target I had said to myself, over and over, "Let me get home just this once more. Let me get my feet firmly settled under an H.Q. desk. Then — never again!" Well, I had it now — a desk located in a splendid office on the top floor of the swank King David Hotel, with picture-windows overlooking the Mount of Olives. I determined that my first action would be to visit a very expensive tailor and order a new uniform of the best and lightest-colored gabardine in his stock. Thus accoutred, I would join the "gabardine swine" in their rounds of cocktail parties in the backwaters of the war.

Thoughts of new uniforms, however, brought to mind the inevitable question of finances. Before going to Greece, I had arranged for my rather miserable Middle East allowances to be paid into an Alexandria bank. This money, upon which my my wife could draw in addition to her personal allowance, was just sufficient to keep the four-legged kind of wolf from her door while I was in Greece. (With the two-legged variety she seemed well able to deal. On one occasion she stopped to pick up a "Free French" officer in her car to give him a lift to Ismailia. He accepted the offer with a small bow, and climbed into the front seat. A little later, as they were driving along the Rue Negrelli, Ismailia's main street, he leaned over with a leer and said: "Madame, may I kees you?" No French scholar, my wife none the less managed to convey to him rather forcefully the immediate necessity that he "ouvrez the ruddy porte and scram, if he valued continued possession of his dents." It must have been quite a scene.)

To get back to money matters — I paid a visit to the bank manager. He was a rather pompous individual, and he immediately treated me to a lecture on the thoughtlessness of young officers who left their wives with very little money and then went gallivanting (his very word) off to Greece! I caught the drift of his dissertation long before it ended, and it came as no surprise when he announced in a voice of doom that a healthy over-draft existed and what was I going to do about it? Eventually, a bit of financial juggling sorted things out more or less satisfactorily, but the interesting fact emerged that it appeared from records that not one cent, piastre, or penny of Middle East allowances had been deposited to my account since I had set foot in Greece. H.Q. Cairo later confirmed that this was so: "After all, old boy, the Balkans isn't the Middle East, you know. There's no regulation to cover such payments." This bit of chicanery was matched only by the Army pay-system that cut off the soldiers' Middle

A Blenheim at dispersal in Palestine.

East allowances every time they advanced out of Egypt into Cyrenaica. One is tempted to wonder whether some of the early retreats from Benghazi may have been caused, not by the Italians or Rommel, but by pressure from home that necessitated a quick withdrawal across the Egyptian border and back into the land of Middle East allowances in order to ward off a third enemy in the form of financial disaster.

* * *

We arrived in Jerusalem by train. The slow trip across the Sinai Desert to Lydda, and then through the Judean hills over the twisting line to Jerusalem, brought back many memories of the days (how remote they seemed!) when I had flown air-cover over this very train during the Arab rebellion. But now all was quiet. Jerusalem was a haven of peace in a world of turmoil. My wife and I moved into a cool and pleasant *pension,* and settled down to a routine existence.

Air Commodore Cully was an excellent boss. He had earned his D.S.O. in the First World War for shooting down a Zeppelin over London. Like Air Commodore Collishaw, he was a Canadian who had remained in the R.A.F. He set himself the task of making some sort of a Staff Officer out of me, and, if he succeeded to any degree at all, it was a powerful tribute to his own administrative ability. My new duties as S.A.S.O., of course, required that I have a secretary. My wife got the job, and, in modern parlance, we never had it so good. Nevertheless, within a month I was bored stiff and started a determined campaign to get back on operations. It took five months to do it, and all that eventually turned the trick was the growing unrest in the Arab countries.

Trouble arose in Iraq, Syria, and Iran (in that order). Iraq had been mandated to Great Britain—a mandate that had ended with Iraq's admittance to the League of Nations in 1932. After the war began in 1939, the Iraq government broke off diplomatic relations with Germany, but did not declare war. Iraq did not, however, break off diplomatic relations with Italy when that country entered the war; and in 1941 the Italian Legation in Baghdad was a hive of anti-British agents. The R.A.F. had two stations in Iraq: one at Habbaniyah, forty miles west of Baghdad, and one at Shaiba, near Basra. There were no operational squadrons based in the country at that time; the largest R.A.F. unit was No. 4 F.T.S. at Habbaniyah. Iraq was then under the regency government of the Emir Abdulla Ali. A change of government brought into power Rashid Ali Ghailani, who was known to British Intelligence to be in the pay of the Axis. Behind Rashid Ali were four Iraq Army generals with pro-Axis leanings, popularly known as the "Golden Square".

From these events arose the attack on Habbaniyah which took place on May 1st. Soon the whole of Iraq was aflame. The Regent fled to Basra and took refuge on a British warship, whence he was flown to Lydda, in Palestine. On May 4th, I was ordered to proceed to Lydda to fly the Regent, in a *Proctor* aircraft, to H4, a pipeline landing-strip. There he had consultations with other refugee members of his deposed government, and later the same day I flew him to Amman, in Transjordan, where he was met by the Emir Abdullah.

The Iraq troubles, while no direct concern of our H.Q. in Jerusalem, resulted, before they were finally quelled, in the appearance in Vichy-controlled Syria of German aircraft being ferried through to Iraq. This *did* concern us, and we began to take a good look at our operational airfield situation. It was not good. We had recently completed an airfield with hard-surfaced runways at Aquir, near Tel Aviv, and we also had the civil airport at Lydda. This latter we now took over, and I was appointed as C.O. during the take-over period. A determined effort was made to find other suitable locations for landing-strips. To this end I was given a group of engineers, an aircraft requisitioned from Palestine Airways, and instructions to survey the country and write an appreciation on the airfield situation in Palestine.

A word about the aircraft we used. It was a Short "*Scion Senior*", a high-wing monoplane with fixed undercarriage and four *Pobjoy* engines of about 90 h.p. each. It was a lovely aircraft to fly, and I believe it served as the original flying model for the Short *Sunderland* flying-boat. (There also existed in Palestine at this time a

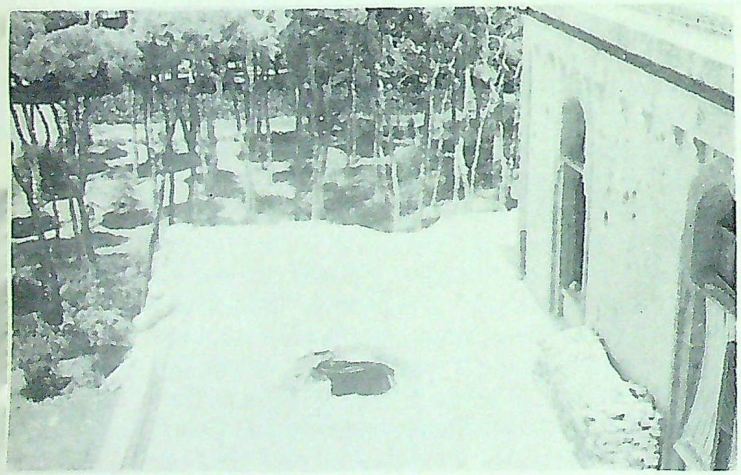
Short "*Scion Junior*", with two *Pobjoy* engines.)

Before the survey was finished, my already fairly comprehensive knowledge of the topography of this country had been greatly enhanced. I came to know every village and nearly every stone as we visited the far corners of the country by 'plane or car. I also received my first lesson on how to get on in the Service. I worked hard on the paper-work of my report, and, with sound advice and help from the Air Commodore, I was able to present a reasonably sound and detailed appreciation to H.Q. Cairo on the Palestine airfield situation. Imagine our chagrin when, about four weeks later, we received from Cairo a verbatim copy of my report, signed by a Group Captain, with a covering letter stating that the attached report, prepared by experts of the H.Q. staff, was forwarded for our information and action! I promptly redoubled my efforts to get back on operations.

* * *

Towards the end of May, the Air Commodore called me into his office. He stared at me fixedly through his monocle and said: "How would you like to command a *Tomahawk* squadron?" I replied immediately: "Yes, Sir." He studied me for a moment, then said: "Do you know what a *Tomahawk* is?" I admitted that my ideas on the subject weren't too crystallized, but I believed it to be an American aircraft. I added that it didn't really matter, though; if it had wings, I'd be glad to fly it. The Air Commodore's ensuing remarks led me to think that he pictured the *Tomahawk* as a twin-engined fighter. When I ventured to suggest that it was a single-engined fighter, probably built by Curtiss, he instantly floored me by saying: "Bocking, you're a Canadian. Tell me, what is a Tomahawk?" I said that, to the best of my knowledge, it was a sort of Indian axe. He pressed his point. "But what kind of an axe, eh? A two-headed axe, what? So — two heads, two engines." Against such irrefutable logic I was lost. As it happened, No. 3 (R.A.A.F.) Squadron got the *Tomahawks* (one engine), and I became C.O. of No. XI Squadron, which was equipped with Mk. IV "long-nosed" *Blenheims* (two engines).

The Residency of General Dentz after the raid on 29 June 1941.



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I took over command of No. XI squadron on 6 June 1941, at Aquir. I did a 20-minute circuit and bump to become familiar with this type of aircraft and also to get to know my new crew, Sgts. Mason and Winship. Two days later, and on our second flight with No. XI Squadron, we led nine *Blenheims* on a bombing-raid against the Vichy French aerodrome at Damascus. The team of Bocking, Mason, and Winship was a happy one. We eventually flew more than fifty raids together, and somewhere along the way His Majesty was kind enough to honour us, as a team, by awarding the D.F.M. to Winship and Mason and a bar to my own D.F.C.

Our first bombing-raid on Damascus was the opening of the air offensive against the Vichy French in Syria. As long as Syria lay open to German forces, Palestine and the vital Suez Canal were in danger. It was a war for aerodromes; and the British, for once, struck first. Anglo-French forces converged on Syria, making their main thrust up the coast towards Beyrouth. We bombed around the clock; and No. XI Squadron was over Syria every day but three from the 8th until the 31st of June. July was just as hectic, culminating in a victory flight of 27 *Blenheims*

from Nos. 211, 45, and XI Squadrons on July 16th.

Syrian operations were entered into — at least, by the *Blenheim* crews — with a rather casual disregard for the opposition. Most of us were veterans of the Western Desert and Greece, and we felt that this campaign would be a breeze. The Vichy French Air Force, small as it was, quickly disabused us of that idea. After three Dewoitine fighters had sliced upwards from Beyrouth and shot down three aircraft out of a nine-*Blenheim* formation, despite the presence of a (rather lax) fighter escort, we began to take things more seriously.

This small theatre of the Second World War was a real Mad Hatter's Party. On 28th June, we were briefed for a raid on the fort at Palmyra, in Northern Syria. I, as a Canadian, was leading a British squadron normally stationed in India. Our target was a French fort held by soldiers of the Foreign Legion who were in turn being attacked on the ground by the Transjordan Arab Legion led by Glubb Pasha, a British brigadier. In the air, we were given fighter escort by No. 3 Squadron of the Royal Australian Air Force flying American *Tomahawks* (one engine), and over the target we were attacked by American *Marylands*. Normally light bombers, the *Marylands* were now being used as fighters by Vichy French pilots.

Marylands from the aerodrome at Aleppo were making the odd raid on our oil installations at Haifa. It was decided to return the compliment by bombing the Aleppo strip just as they were returning to land. Accordingly, on the night of June 10th, we took off individually, about three minutes apart, and set course for Aleppo. As we passed Haifa, we could see A.A. fire and multi-coloured tracer and incendiary arching up into the sky, so we knew that the Vichy aircraft were active. After a two-hour flight we arrived in sight of the enemy aerodrome. The place was lit up like a Christmas tree. A full moon clearly outlined the mountains in the background, the hangar lights were on and the hangar doors open. The flare-path sparkled gaily in the blackness of the airfield, and several aircraft, with navigation lights a-twinkle, were signalling impatiently to land.

The only way to be inconspicuous in such a picture was to barge in in a stealthy manner. We turned on our navigation lights and joined the circuit. When our turn came, we signalled a "B" (which was our legitimate call-sign) and promptly received a green light from the No. 1 flare, giving us permission to land! As I swung into the cross-wind leg and got ready for my final turn, Sgt. Mason armed the four 250-pound bombs and made ready to drop them. At about 600 feet, I opened both engines wide, swung over the line of hangars, and let go the bombs. The results were most satisfactory. As the lights winked out around the airfield, the hangars blazed up, and the following *Blenheims* made their bombing-runs over a thoroughly disorganized bunch of Vichy Frenchmen. We tried the same procedure the next night, but with no success: the whole area was as black as the pit.

* * *

The harbour and the oil storage tanks at Beyrouth were among our favourite targets. Beyrouth itself was an open city, and we avoided dropping bombs on the civilian population. On June 28th, however, upon our return from a raid on Palmyra Fort, we found a most distinguished visitor awaiting us at Aquir. Air Marshal Tedder, the A.O.C.-in-C. of the Middle East, had flown in from Cairo. He had a special target for us in Beyrouth — General Dentz's official residence.

General Dentz was the Vichy French commander, and he was certainly a worth-while target. The Residency was, unfortunately, right in the centre of the Beyrouth residential area. Air Marshal Tedder briefed us personally. After poring over photographs of the target area, and having noted the fact that the Residency faced a race-course (a circumstance that would take care of any bombs which might overshoot or hang up momentarily), I was able to assure him that we could guarantee to hit the Residency without damage to other civilian areas. I asked for, and received, permission to bomb from 3,000 feet, with four *Blenheims* in diamond formation all bombing on the leading bomb-aimer, Sgt. Mason. I also got nine *Tomahawks* of No. 3 (R.A.A.F.) Squadron as fighter escort to keep the Dewoitines

off our necks. We bombed with four 250-pound bombs each — a total of sixteen bombs — with short delay fuses in order to permit penetration of the Residency roof before they exploded.

The raid went well. Of the sixteen bombs, thirteen went through the roof, one exploded in the courtyard in front, one fell on the race-course, and one failed to drop at all. Thanks to imperfect intelligence, we missed the General by fifteen minutes, but his staff was sadly depleted and his Residency was gutted. I understand the General was very upset. I met him later in Jerusalem, where he was being held in custody in the King David Hotel, but I did not mention the incident.

In an aerial offensive lasting some five weeks, the R.A.F. destroyed or damaged four fifths of the opposing air force at a total cost of twelve aircraft. On July 12th, an armistice ended the whole unhappy business. Lebanon and Syria were free of Germans, and a cleaner tricolour waved over a new Residency in Beyrouth. General Dentz went back to France, where he was arrested in Paris in September 1944, tried, and condemned to death. His sentence was subsequently commuted, and he died in prison in 1945.

* * *

The first week of August, 1941, saw No. XI Squadron packing up for a move to Iraq. On August 15th, the air party took off for Habbaniyah, while the ground party, several hundred strong, began the long haul by truck across the desert road to Rutba Wells and thence by the old caravan trail towards Baghdad and Habbaniyah. By August 20th we were well settled in. Our A.O.C. was an officer whom some of us knew well from the Greek days, Air Vice-Marshal D'Albiac.

Iraq, earlier known as Mesopotamia, was a country that most of the old-timers liked to stay away from — particularly during peace. No wives were allowed, and girl-friends left in England seemed to find it very difficult to remain faithful and true for the two long years during which their Air Force boy-friends or *fiancés* had to remain in Mesopotamia. "Dear John" letters (then referred to as "Mespots") were frequent, and it was customary to display them on the notice board for a week or so in order that the recipients' friends could append their opinions of such faithfulness. The letters could then, at the discretion of the owners, be sent back to their originators. Most of the comments, however, were of such a nature that it was too dangerous to send them through the mails; and they remained, yellowing with age, as a reminder to succeeding generations of the fickleness of the female heart.

All sorts of tricks were tried in order to get a posting back to the U.K. before completion of a tour of duty. One of the more elaborate was that of the airman who appeared on the tarmac at Shaiba one morning, complete with fishing-rod. He sat himself on the hood of a Hucks starter, and, as the sun crept up and the temperature climbed into three figures, he continued to cast out on to the blazing tarmac and then slowly reel in his line. Despite the urgings of his buddies, he refused to come into the shade. Eventually he was removed to the hospital by force, but any attempt to deprive him of his fishing-rod resulted in hysteria.

For several days, while the medicos watched suspiciously, he cast out and slowly reeled in over the foot of his hospital bed. Finally they decided he was really "round the bend", and he was put on a road-convoy heading for Egypt and Port Said. All the way across the desert his escort watched him cast out into the desert, then slowly reel in. Finally, he was marched up the gang-plank of the troopship *Somersetshire*. Half-way up he stopped, heaved a happy sigh, and tossed his fishing-pole into the greasy water. The escorts were astounded. "Don't you want your fishing pole?" they asked. "Not bloody likely, old boy!" he replied, as he stepped on to the deck of the "Blighty"-bound ship. "I've got what I've been fishing for."

I should mention that I had been promoted to Wing Commander (June 1941) on assuming command of No. XI Squadron. One of my officers, a Squadron Leader, was a most gullible gentleman on whom people just loved to play practical jokes. Spurious telephone calls, purporting to come from the A.O.C. personally, would send him scurrying around doing the most unlikely jobs. It was clear to everyone else that the calls came from jokesters in the other two *Blenheim* squadrons, Nos. 45 and 211, but eventually the inevitable happened: one day the A.O.C. *did* 'phone him. That, of course, was the occasion when the Squadron Leader decided to smarten up, and his reply to the A.O.C. ("Don't be such a bloody fool, old boy!") and the slamming-down of the receiver really started the wires humming.

My instructions to report forthwith to the A.O.C.'s office, bringing the guilty wretch with me, came as no surprise. We sat in the outer office for nearly three quarters of an hour, during which time the Squadron Leader talked away to himself, rehearsing what he was going to say. Passers-by looked at us suspiciously as he stared off into space, mumbling "Of course, Sir, I didn't realize . . . ", "I've been in the air all morning, Sir . . . ", and other similar gambits.

Eventually we were ushered into the presence. The A.V.M. fixed the Squadron Leader with a stern eye.

"What did you call me on the 'phone?"

No. XI Squadron moving from Syria to Iraq.

The other squirmed. "But, Sir — "

The A.V.M. cut him short: "I asked you what you called me."

"But — but — "

With some finality the A.V.M. said: "Stop making noises like a motor-boat. This is an order. Tell me what you called me!"

Sadly, and with an air of resignation, the Squadron Leader gave up the unequal contest. "A bloody fool, Sir," he blurted.

There was several seconds of pregnant silence. Then the A.V.M. said: "You may leave now." When the door had closed, he turned to me with a twinkle in his eye. "Do you think he needs any further punishment?" I said quickly that in my opinion sufficient punishment had already been meted out; and the matter ended there. As on several previous occasions, I was moved to reflect privately on the curious fact that the more senior an R.A.F. Air Officer became, the more human and understanding he seemed. Or perhaps that was why he got to be an Air Officer in the first place.

* * *

On August 25th, operations against Persia began. It had become clear that, if the hard-pressed armies of the U.S.S.R. were to hold the Germans, British and American supplies were badly needed. To that end, the route through Persia must be kept open, and, so long as Persia remained a field for enemy activities, this route was in jeopardy. An Anglo-Russian ultimatum was followed by joint military action. While the

Russians moved in from the north, British forces landed at the head of the Persian Gulf.

My squadron supported these land operations and carried out several pamphlet-raids. One of the longest raids we were to make took place during this campaign. Taking off from Shaiba, twelve strong, we set course for Isfahan, in the interior of Persia. We flew over some of the most rugged country it is possible to conceive. After dropping pamphlets on Isfahan, we set course south for Shiraz. The area between these two cities was shown on the maps as a flat blank area with "unsurveyed" written across it. The barren stone peaks, devoid of vegetation, life, or even snow, reached more than 10,000 feet into the air. We were glad to find Shiraz, and set course for home. When we arrived back at Shaiba, after five hours and ten minutes in the air, we agreed that the country over which we had just flown was the wildest and most desolate we had ever seen anywhere in the world.

On the evening of August 26th, a combined force of *Blenheims*, constituting the greater part of No. 3 Squadron and led by No. XI, carried out a raid on a reported concentration of 10,000 Persian troops in the Pai Tak Pass. We were carrying 1,000 lbs. of anti-personnel bombs on each *Blenheim*, and, as I gave the order to release this load of destruction on the troops and tents huddled so far below in the shadows of the deep valley, it crossed my mind that I had never actually seen a Persian.

The Persian campaign came to a successful conclusion on August 28th, 1941, and it was with some relief that, soon after this date, we received our orders to move back to the Western Desert. Greece and Crete, Iraq, Syria and Persia — all these campaigns had passed into history since we had originally left the Western Desert; and it was almost like going home.

(To be concluded)

No. 22 Wing Girls Step Out

A drill team of airwomen from No. 22 (Aux.) Wing carried off the Jesse Clewlow Trophy on 17 September — Warrior's Day — at London's Western Fair. The trophy, donated by Mr. Clewlow, a veteran of the First World War, is awarded annually for the best marching by Service women's units on the Warrior's Day Parade. Also competing were W.R.E.N.s from H.M.C.S. *Prevost* and C.W.A.C.s from Wolseley Barracks. The Air Force girls were members of No. 3049 Technical Training Unit and had recently returned from their summer training.

Flt. Sgt. MacIntosh directed the preparatory two weeks' drill sessions, while Cpl. Terry Peers relentlessly beat away on the drum during rehearsals.

Our photograph shows (left to right): L.A.W. A. Duncan, Flying Officer F. Rapley, Cpl. F. Mahoney, and Cpl. K. Gilleno.

CLEAR WRITING

(A few months ago the Department of Transport published an extremely useful booklet entitled "The Preparation of Correspondence", designed to serve as a refresher for those members of the Department who had already received the course given on the subject by the Personnel Training and Welfare Division. The booklet, whose author is Mr. D. A. Wood, Chief of the Division, covers every phase of concise and accurate communication by the written word. While the subject of correspondence, from a strictly Service viewpoint, is adequately covered by C.A.P. 460, we believe that all our readers will be interested both by Mr. Wood's introductory remarks and by his chapter on dictation.—EDITOR.)

THE WRITTEN WORD

LONG before the discovery of the telephone, the telegraph, the teletype and radio, the written word was, next to speech, the most basic means of communication. Ancient civilizations crystallized their culture and their law on stone, so that a permanent record could be established and *referred* to. Others put their official rulings on brick, so that they could be *filed*. (It would appear that, in those days, the preliminary qualification for a filing clerk was an extremely strong back!)

In earlier times speech alone had served to pass custom and law from generation to generation, which inevitably caused great changes in interpretation through the years. In this respect the written word was immeasurably superior to speech, and it is noteworthy that many of the great directives that founded our civilization, because they were *written,* have come down to us today practically intact.

The discovery of paper, in the ancient form of papyrus, and an indelible form of ink, went hand in hand with the greatness of the ancient Egyptian civilization, a brilliant era famous for one of the most efficient civil service organizations in history. During the Roman Age, even the heads of departments were technically slaves of the Emperor, but they gained great power for themselves by the invention of a shorthand method known only among the scribes. They operated a vast civil service organization by means of minutes and memoranda in this secret shorthand.

It is worthy of note that again and again the term "scribe" or "writer" has been synonymous with "civil servant". The Honourable East India Company governed India for many years: their civil servants were known as "Writers to the Honourable East India Company". Even today, the classification of "writer" in the Navy provides the basic training for commissioning in the Administrative Branch of the R.C.N.

Many famous men have stated that the greatest *basic* invention underlying our civilization was the development of the printing press. This discovery brought about the widest dissemination of the written word. It is a fact that we have hardly any record of the speech, manners, customs, or laws of our ancestors during the Dark Ages. One of the major reasons for this great gap in our history was the loss of the art of making writing materials, and the consequent deterioration of scholarship and government. When we came into the Middle Ages, and paper and inks again became available, civilization again flourished, and with Caxton and his press it flourished at a rate unique since the ancient Greeks.

Let us remember that today this Department is partially operating on directives written by parliaments and civil servants now dead. Their written word still lives.

DICTATION

You will remember that during your course you saw a short movie on the subject of "Dictation". This picture gave some very graphic interpreta-

tions of the main "don'ts" on this subject. There was the man who could not find his previous correspondence and had only the haziest idea about what he wanted to dictate; there was the speed-shark with the 200-word-a-minute delivery; the mumbler "bumbling" away behind his cigar; the walker, aiming dictation out of the window, at the walls, the carpet, everywhere except at his secretary; the man who liked to day-dream while giving dictation; the one who held a stenographer through lengthy telephone calls; and all the others. These scenes represented definite dictation errors which occur often in many offices. Here is a résumé of the constructive facts on dictation that we discussed at the time.

Be clear and decisive, both in thought and speech. The worst dictation of all is a series of frantic little rushes, mixed up with vague corrections, such as, "No, I don't mean that" or "Wash that out," etc. Such remarks leave a stenographer uncertain as to how much is cancelled.

Remember the difficulty of making insertions in shorthand notes.

Instruct the stenographer to tell you if the dictation is too fast or too slow. Aim at a pace and tone that is fairly even without being a monotone. If you have a piece of straight reading occurring in the middle of dictation, read the extract at a slow pace, otherwise you may jump from 70 or 80 words a minute to 130.

Give names, place-names, references, technical terms, and unusual terms slowly, as they are normally taken down in longhand.

The amount of punctuation detail that should be given depends on your material and the ability of your stenographer, but you should always indicate paragraphs, sub-paragraphs, and sub-sub-paragraphs.

Help your stenographer by indicating the urgency and priority of your work, and by providing letters or files so that addresses and references may be verified.

Always remember that stenography is a difficult and exacting job, and that helpfulness and consideration can make the difference between good and poor stenographic work in your unit.

Adopt permanent procedures which will be used

constantly while dictating. It will help your stenographer to accustom herself to your methods, and will increase your speed and clarity of thought.

Take a good look at your present method of dictation and consult your stenographer. You may find that unknowingly you have allowed one or more "little habits" to creep in, which not only make the work more difficult for the person accepting your dictation, but which also may cause you yourself to be annoyed by a seeming lack of efficiency in your stenographer.

No stenographer can efficiently take down shorthand at speed in an uncomfortable position: have the stenographer seated within easy hearing distance.

State the number of copies required, always remembering to order as few as possible as a saving in time and paper.

Give the stenographer full instructions about spacing and general layout.

If you are dictating a short letter or simple draft, you should be able to dictate without notes, or at the most from a few key words jotted down in orderly sequence. If the matter is long or complicated, you should dictate from a skeleton of paragraph numbers and headings, with important or complicated sentences jotted down in rough.

If possible, give the stenographer the document to copy rather than dictate a piece of straight reading.

—AS SHE IS WRITTEN

Not inappropriate for publication as an appendix to Mr. Wood's foregoing article, is the following letter from **Flt. Lt. R. W. Butcher,** *of No. 14 Training Group H.Q., Winnipeg.*

Not long ago we received from Flying Officer Manhole, the Construction Engineering Officer at a western unit, a rather remarkable communication, which I quote in part:

"2. Please find attached the a/m A for P revised and re-estimated ask requested in accordance with drawing SK-32-11-1, for officers and nine boys only.

"3. The original estimate should have read $32,916.00 and not 9,216,00 due to a typigraphical error which was not noticed."

When Sgt. Backhoe, the Foreman of Works, received the letter in the Orderly Room, he seriously believed that it had been written sometime during the early years of the Air Force, when "boys" were in vogue, and he almost referred it to Personnel Staff before he realized that it was a construction engineering letter.

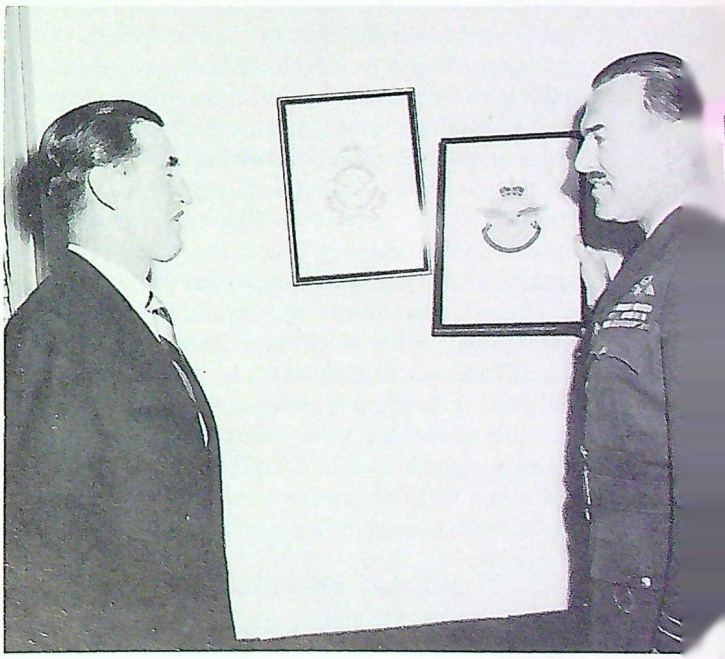
That evening, over a much-needed pre-prandial, he arrived at the conclusion that the structure under discussion was a refuelling tender garage and that para. 2 should have read ". . . as requested, in accordance with drawing SK-32-11-1; for offices and nine bays only." It apears ironic that para. 3 apologized for a typographical error.

NEW AIR CADET BADGE

A new official badge, approved by Her Majesty the Queen, has been presented to the Royal Canadian Air Cadets. The Chief of the Air Staff made the presentation recently to Mr. George Will, president of the Air Cadet League of Canada.

The badge is surmounted by St. Edward's Crown and is supported by a wreath of ten maple leaves, representing the ten provinces. Across the centre of the badge is a falcon which, being a smaller bird than the eagle, symbolizes the relationship between the Air Cadet movement and the R.C.A.F.

The new badge will be used on all official documents and publications of the League, and it may be worn on blazers by League members. It will not, however, be worn on the Air Cadet uniform.



The Chief of the Air Staff, Air Marshal C. R. Slemon, C.B., C.B.E., compares the new Air Cadet badge with that of the R.C.A.F. On left: Mr. G. A. D. Will, President of the Air Cadet League of Canada.

THE PARTY LINE

GROUND-CREW SELECTION IN THE R.C.A.F.

By Pilot Officer S. G. French

(In December 1954 we published an article entitled "Air Crew Selection in the R.C.A.F.", by Sqn. Ldr. E. P. Sloan, C.O. of No. 1 Selection and Training Analysis Unit. The present article is, in effect, its sequel. The writer wishes to acknowledge the considerable assistance he has received from both Sqn. Ldr. Sloan and Sqn. Ldr. G. L. Robertson, O.C. No. 1 Personnel Selection Unit (Airmen).—EDITOR.)

R.C.A.F. PERSONNEL PRODUCTION SYSTEMS

THE R.C.A.F. operates two distinct personnel production systems — one for air crew (officers), and the other for technical tradesmen (airmen). The aim of both systems is to produce personnel, in specified numbers, who meet with specified performance standards. The R.C.A.F. personnel production systems involve interrelated procurement, selection, classification, assignment, and training processes. These factors are so closely interrelated that a change in any one process produces effects throughout the whole system.

Organizationally, both R.C.A.F. personnel production systems consist of three basic elements. As an individual progresses through either of these systems he reports to a recruiting unit, from which he proceeds to a personnel selection unit, and thence to training schools. The only element common to both systems is the R.C.A.F. recruiting organization. At recruiting units candidates are divided into air crew and ground crew. Air crew candidates proceed to the Personnel Selection Unit (Officers), P.S.U. (O.), at London, Ontario, and then to aircrew training schools. Ground crew candidates proceed to the Personnel Selection Unit (Airmen), P.S.U. (A)., at St. Jean, Quebec, and then to appropriate training schools. The organization of the two systems is shown in Fig. 1.

R.C.A.F. RECRUITING UNITS

Responsible for the procurement of manpower for the R.C.A.F. personnel production systems is the Directorate of Personnel Manning, located in Ottawa at R.C.A.F. Headquarters. This Directorate controls twenty-two R.C.A.F. recruiting units which are located in cities throughout Canada. Although their primary function is procurement, they are also responsible for the preliminary stages of the selection process.

Procurement

All military organizations are, when recruiting personnel, governed by a number of factors and conditions. What number of personnel will be allowed by a compromise between the national budget and the country's defence requirements? What is the size and distribution of the available manpower pool in the country?

The R.C.A.F. is endeavouring to establish and maintain an unprecedented peace-time strength. The population of Canada is relatively small compared with that of other major powers. Canada is a bilingual country, and French is the language spoken by a large proportion of its people. For the R.C.A.F., in which the operational language is English, this means bilingual recruiting and selection procedures, and — later — language training. Military service in Canada is voluntary; hence, the R.C.A.F. is in direct competition for manpower with the other Canadian Services and with the ever-expanding and prospering industrial and professional life of Canada.

Two principal methods are used to interest qualified young men and women in joining the

R.C.A.F. These are advertising on a national and local scale and an extensive personal contact programme conducted by serving personnel. By means of newspaper, magazine, radio, and television advertisements, and by contact with members of the R.C.A.F., young men and women are encouraged to apply at one of the R.C.A.F. recruiting units. The process of selection begins even at this stage of the proceedings, when the people who are considering joining apply to themselves those prerequisite qualifications which are listed in the advertisements.

Documentation at the Reception Centre, R.C.A.F. Station St. Johns.

Selection

The individual who voluntarily applies at an R.C.A.F. recruiting unit has already selected himself as an applicant. He has probably compared those qualifications which are stated in the advertisements with his own qualifications. Recruiting advertisements specify only very broad standards of acceptability which the applicant may impose upon himself during the process of self-selection.

The next step in selection is when the self-selected applicant is interviewed by an officer at the recruiting unit. In this interview the officer determines which type of training the applicant is interested in, and confirms from the applicant's personal documents whether or not he or she satisfies the minimum requirements for such training. If this check is satisfactory, the applicant is given an intelligence test (known as a Classification Test) and a medical examination. The minimum score on the R.C.A.F. Classification Test for ground crew applicants at the present time is 31.

At this stage acceptance-rejection decisions are based on characteristics for which relatively simple objective methods of assessment are available and for which rigid cut-off levels may be established. For example, an applicant who gets less than 31 on the Classification Test, or who cannot meet the minimum eyesight requirement for ground crew, is immediately dismissed. The problem of standardization dictates that no attempt be made, other than through the interview, to assess interests, personality defects, or temperamental suitability.

All more complicated tests and interviews are left until the recruits arrive from the recruiting units at the Personnel Selection Unit (Airmen).

PERSONNEL SELECTION UNIT (AIRMEN)

Airmen and airwomen who have been accepted for technical training at recruiting units are sent to R.C.A.F. Station St. Johns, St. Jean, Quebec, near Montreal. With the exception of those who require instruction in the English language, personnel spend the first eight weeks of their Service careers at St. Johns. During this period they are processed through P.S.U.(A.) and undergo basic military training at No. 2 Manning Depot. The recruits requiring instruction in English are removed from the main flow of the course after the first four weeks. They are given basic language training at the R.C.A.F. School of English, which is also located at Station St. Johns. When they are sufficiently proficient in English to take further training they are injected into that course which is currently beginning its fifth week.

The operation of P.S.U.(A.) is closely co-ordinated with that of the other two units at St. Johns. Its staff is responsible, not only for the assessment of candidates, but also for their selection, classification, and assignment. The procedures of P.S.U.(A.) are integrated with basic military training throughout the eight-week period.

During his or her first week at St. Johns the new recruit is processed through the Reception Centre. Here the initial issue of clothing is made, and the

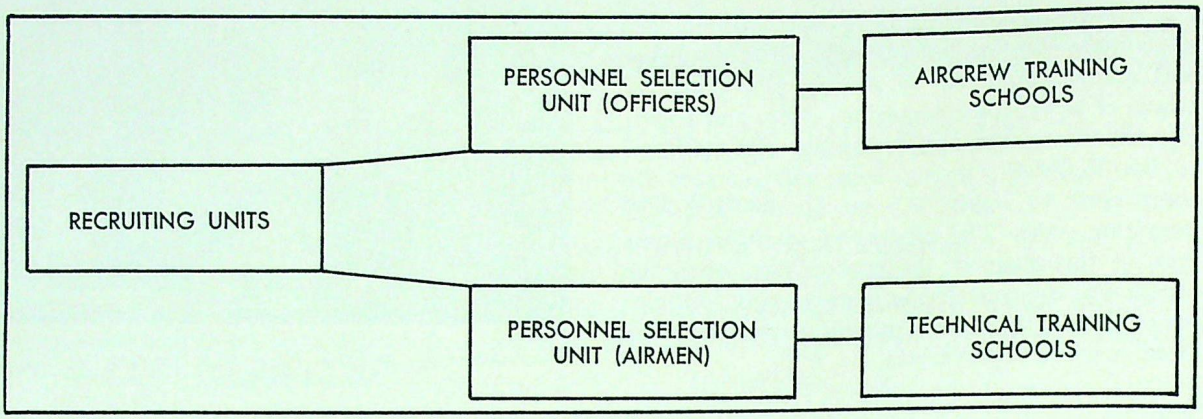


Fig. 1. The two personnel production systems.

many documents are completed. This first week also finds the recruit writing the series of tests known as the Airman Classification Battery. He then proceeds to No. 2 Manning Depot, where he undergoes basic training in all aspects of the Service from drill and general Service knowledge to a series of lectures and movies designed to enlighten him on the various types of training and employment available in the R.C.A.F.

Selection and Classification

Selection may be defined as the process whereby a total group of applicants is divided into two subgroups: those who are considered acceptable for service in the R.C.A.F., and those who are to be rejected and returned to civilian life. Selection in this sense is essentially a negative process where the emphasis is on the elimination of unsuitable material. The term "classification" differs from "selection" as defined above. It can, indeed, be viewed as the reverse process of selection. Instead of comparing the measured characteristics of the man against established standards (as in selection), classification compares the requirements for various trades against the measured characteristics of the man. Theoretically, in classification, all the people under consideration are suitable for service in one trade or another. The problem is to place each individual in the particular area of employment wherein he will achieve maximum personal success and satisfaction and in which he will contribute most capably toward the efficiency of the Service. In this sense classification is a positive process where the emphasis is on maximum economy in the use of available manpower resources.

Selection and classification, as carried on by P.S.U.(A.), is divided into five phases:

1. Airman Classification Test Battery.
2. Medical Selection (Personality).
3. Assignment.
4. Interview.
5. Trade Information.

1. Airman Classification Test Battery. Approximately thirty technical training courses are given by the R.C.A.F. Graduates from many of these basic courses are further subdivided and given advanced specialist technical training. An unskilled airman or airwoman entering the R.C.A.F. must be given training in one of the basic trade schools before he or she can be employed in any capacity.

The present R.C.A.F. Airman Classification Test Battery has been in operation since 1951. The battery consists of five pencil-and-paper tests: mechanical knowledge, clerical aptitude, rapid calculation, science information, and spatial relations. By means of weights (developed through pass/fail validity analyses and multiple regression techniques), scores of these tests are combined to

yield three aptitude indices: clerical, electronic, and mechanical. The majority of trades in the R.C.A.F. have been grouped in one or the other of these three aptitude clusters.

These tests measure aptitude or *kind* of ability. There is another breakdown made within each aptitude cluster in terms of *amount* of ability (i.e. intelligence) required. On the basis of validity data for the Classification Test, trades have been categorized as requiring either "A", "B", or "C" levels of ability. The application of the results of these tests will become more explicit later when we discuss assignment and give an example.

2. *Medical Selection (Personality).* A personality assessment is formulated on all trainees in an endeavour to determine their suitability as permanent members of the R.C.A.F. While at P.S.U.(A.), they complete a psychological questionnaire which is called a Personal Inventory. The answers which the trainee puts to the questions on the Personal Inventory are clarified by a process of medical screening done by the Medical Selection Officer. The M.S.O. rates the recruit in terms of his emotional and temperamental suitability for Service life.

3. *Assignment.* Assignment is the term which has been chosen to cover the process whereby selection and classification information is integrated with Service requirements. Assignment is a non-technical administrative task, the purpose of which is to ensure that the proper flow of trainees into trade schools is maintained so that operational commitments may be met on target dates. In the R.C.A.F., quotas are unstable, and requirements for the different trades and branches of the Service may differ each week. Such instability is reasonable, since operational plans and commitments change with every development in strategic or tactical techniques and with every change in the international situation. An important factor is the recognition that assignment has priority over both selection and classification. Selection standards may be lowered when requirements are large and raised when requirements decrease. Classification may produce quite valuable information which will have to be ignored or even contradicted when R.C.A.F. requirement quotas do not agree with the numbers that have been placed into trades on the basis of classification data.

When aptitude indices and ability levels have been computed, this information, along with certain background data, is presented on a "testing and assignment record card" (see Fig. 3) to the Assignment Officer. This officer uses the following pertinent factors for evaluation: physical fitness, educational background, age, previous Service and civilian employment, temperamental suitability for Service life, learning-ability as indicated by testing, aptitudes as indicated by testing, and the requirements of the R.C.A.F. The problem of assigning 200 men and women to approximately 30 different trades in order best to further the efficiency of the Air Force is a very complex one.

The two-dimensional classification system which he uses is illustrated in Fig. 2. All trades fall into

Fig. 2. Classification of R.C.A.F. Trades.

ABILITY LEVEL.	APTITUDE AREA		
	CLERICAL	MECHANICAL	ELECTRONIC
A			
B		X	
C			

AC2 P. MARSHALL

TESTING AND ASSIGNMENT RECORD CARD

MD Crse .....

Rank Init. Name

Number 316 754

Age 18. 1936

RU REGINA

Date Enrol. 8 AUG. 55

Educ. 10 ROAD SASK

RU/CT 48

IPSU(A)/CT 51

Pers Inv "A" 2

"B" 8

CVN CDS CDU

ENGAGEMENT 5YRS.

TEST RESULTS

TEST	R.S.	STANINE	APTITUDE AREA CLER.	ELECT.	MECH.
MKT	46	7	XXXXXX	XXXXXX	7
CLAT	60	2	2	XXXXXX	XXXXXX
SR	23	4	XXXXXX	4	XXXXXX
R.CAL	93	6	6	XXXXXX	XXXXXX
SC	35	7	XXXXXX	7	7
OCCUPATIONAL INDICES			8	11	14

PRE-INTERVIEW

1 AE Tech

2

I.O. Recommendation

1 AE Tech

Ability Index A (B) C D

APTITUDE AREAS 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

Clerical

Electronic

Mechanical

ASSIGNMENT AREA TRADE

DATE Assignment Officer (Over)

Fig. 3. Testing and Assignment Record Card.

one or other of the nine squares shown in this diagram. Aptitude indices and ability level derived from the testing programme are available for each recruit. Airmen or airwomen can only be considered for assignment to trade training in those trades for which they possess both the minimum aptitude and minimum ability levels established by R.C.A.F. Training Command Heardquarters.

The Assignment Officer makes a tentative assignment of each recruit, which he enters on the individual's assignment record card. This, in turn, is passed on to the Interviewing Officer.

4. *Interview*. When the tentative assignments have been completed, each candidate is interviewed. The interviews are conducted in a friendly and informal atmosphere. The primary purpose of this interview is to inform the candidate of the trade to which he has been assigned. The interviewer attempts to stimulate the candidate's interest in the chosen type of training so that he will be successful in his training during the ensuing months. It is possible for the candidate to be reassigned if he wishes, as long as the change will be beneficial for himself and for the Air Force. Because the Assignment Officer is responsible for the meeting of quotas, all reassignments are subject to his confirmation.

5. *Trade Information*. Trade information is given both before and after assignment. During the first and second weeks of basic training, the recruit receives trade information lectures from P.S.U.(A.) staff officers. By means of the film "Ground Crew" (see "The Roundel", May 1954), specially prepared for the R.C.A.F. by the National Film Board, the trainees are given an insight into the make-up of the Service trades to which they may be assigned. This film is followed by more lecturing, projected pictures, and discussion, in order to provide the recruits with as complete a picture as possible. In the past, at this point in the trade information programme, the recruits were given a trade preference form upon which they listed, in order of preference, the four trades that most interested them. This method is no longer followed, because it was found that the recruits would base their preference on personal factors ("My friend is going to be an A.F. Tech., so I want to be an A.F. Tech.") rather than on abilities and aptitudes of which they themselves were not aware.

Nowadays, after the recruit has been assigned to the trade which will best advance his own and

the R.C.A.F.'s efficiency, he is given further trade information on his own particular trade. In cases where it is possible, recruits are taken to view their own newly assigned trade in operation at Station St. Johns. Those trades (mostly technical) which are not exemplified at St. Johns are represented to the recruits by means of elaborate static displays.

The trade information lectures and training aids are designed to give the recruit a picture of the ground-crew team working together to carry out the R.C.A.F.'s primary function — flying. In doing this, it is hoped that the recruit will leave St. Johns highly motivated to make a success of his training for himself and for the R.C.A.F.

Flying Officer A. R. Erwin supervises recruits during trade test at R.C.A.F. Station St. Johns.

SELECTION AND TRAINING ANALYSIS UNIT

Since this system was introduced, a continuous check has been maintained on its predictive efficiency. Vitally important in the improvement of selection and classification techniques is the work done by the Selection and Training Analysis Unit, at R.C.A.F. Station Toronto. The function of S.T.A.U. is research in the development and refinement of selection and classification techniques, and a continuous validation of the Airman Test Battery. This unit follows the progress of all airmen and airwomen in order to see how accurately the R.C.A.F.'s tests do in fact predict success, not only on the trade courses, but on the actual job.

The results achieved with the present relatively simple classification system have been very satisfactory. Continuous experimentation with new test materials, such as the U.S.A.F.'s ACB Tests, has been conducted. The results of these studies indicate that little if any increase in predictive efficiency would be gained by elaboration of the present system. In other words, the system now in use at P.S.U.(A.) is working well for the R.C.A.F.'s current plans and commitments.

CONCLUSION

Let us conclude this study by giving a hypothetical example of the assignment of an airman to a trade. Assume that the airman has already passed through the recruiting unit in Regina and has written the six P.S.U.(A.) tests named above. He has obtained the scores recorded on the Testing and Assignment Record Card (Fig. 3).

His Classification Test score is recorded as 51 and is converted into an Ability Index "B" by using a conversion chart (not shown here). The raw scores (R.S.) of each of the five aptitude tests are recorded in the first column from the left. In the next column these scores have been converted into stanines,* also by means of tables not shown. For instance, A.C.2 P. Marshall received a raw score of 46 on his Mechanical Knowledge Test and this has been converted to a stanine of 7.

The stanines are then transferred to the appropriate spaces in the Aptitude Area columns. The reader can see that, under each column (Clerical, Electrical, and Mechanical), three of the five squares have been blocked out. This is because it has been worked out that the two squares left blank represent those two tests which, in combination, provide the greatest predictive efficiency for the particular aptitude concerned. Marshall's Occupational Indices are obtained by adding the stanines in each aptitude area column. As may be seen, he has a clerical aptitude of 8, an electrical one of 11, and a mechanical one of 14.

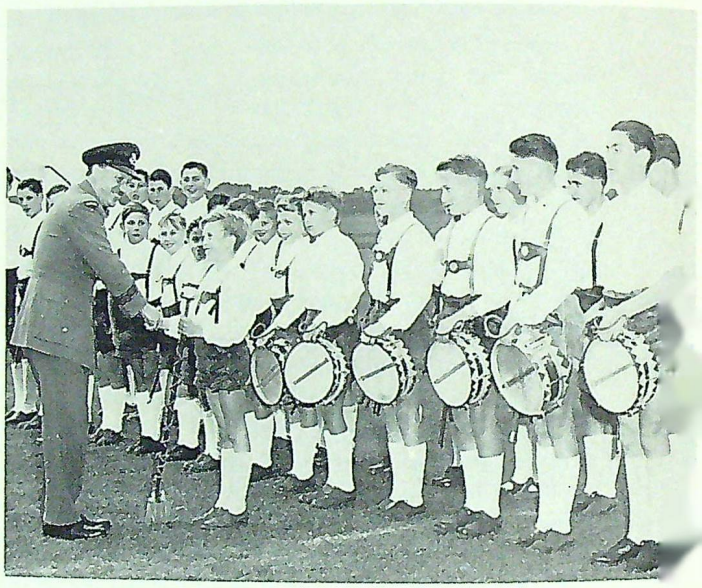
*The term "stanine", which is used to describe aptitude ratings, is a contraction of the cumbersome expression "standard nine-point scale" Stanines are computed by dividing the range of scores for a test or group of tests into nine intervals.

To be considered eligible for training in a trade, an airman should have an occupational index of at least 5 in the area in which the trade has been listed. Marshall has an occupational index of 14 in the mechanical area, and his ability index is "B". Therefore, with reference to the chart showing the classification of R.C.A.F. trades (Fig. 2), we discover that A.C.2 Marshall is best qualified for assignment to training listed in the square marked "X". Among the trades available in this square are those of Munitions and Weapons Technician, Aero-Engine Technician, and Airframe Technician. The Assignment Officer, using the methods and criteria listed above under *Assignment*, decided that A.C.2 Marshall would best satisfy his own desires and capabilities, and the requirements of the R.C.A.F., by assigning him to the trade of Aero-Engine Technician.

BAND COMPETITION AT BADEN-SOELLINGEN

Last September witnessed (and heard) the first inter-station band competition of Canada's Air Division. Locked in diatonic conflict were the bands from Nos. 2, 3, and 4 (Fighter) Wings and No. 30 Air Materiel Base.

But despite the blares, thunderings, and chimings of the R.C.A.F.s trumpets, drums, and glockenspiels, the show was almost stolen by the fifes and drums of a boys' band from the nearby town of Buehl. Though No. 4 Wing's band has played in Buehl on a number of occasions, this was the first time that the talented group of eight-to-twelve-year-olds had put in a guest appearance on the station. They performed with a gusto and a precision that brought them enthusiastic applause from the large audience.



The leader of the boys' band is congratulated by Sqn. Ldr. E. A. Kirkwood, the R.C.A.F.'s Supervisor of Music.

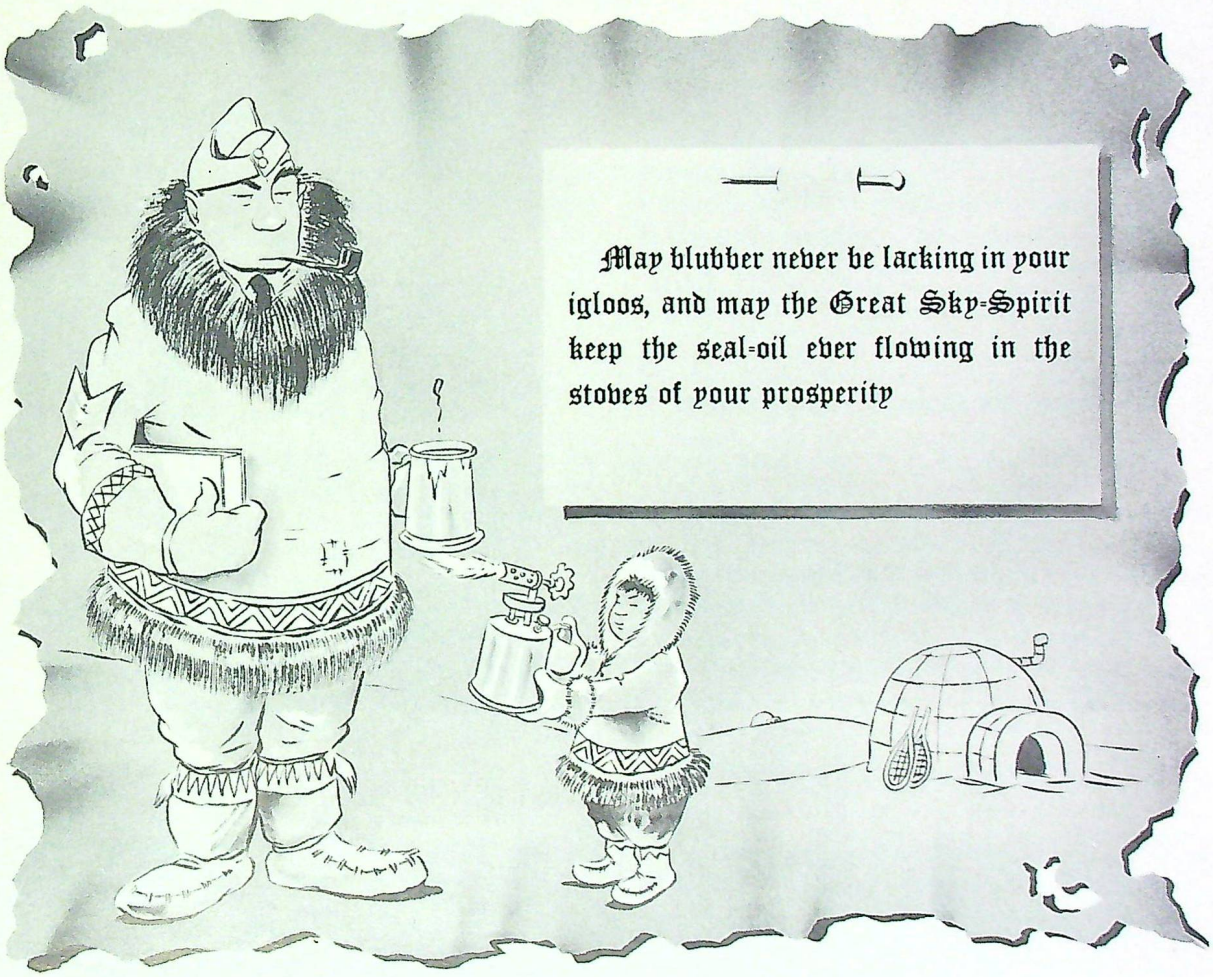
Sgt. J. W. G. Fortier receives the trophy from Wing Cdr. J. F. Allan.

The band of No. 4 Wing, playing on home ground, won by a narrow margin, and the handsome trophy was presented to Bandmaster Sgt. J. W. G. Fortier by the station's acting C.O., Wing Cdr. J. F. Allan. The pipe band of No. 1 Wing, now stationed at Marville, was unable to compete, on account of a sudden outbreak of polio in the Marville area.

(*Flying Officer T. D. Nelson.*)

A Yule-Tide Pelt from Shatterproof

The Commissionaire stopped me at the entrance to Victoria Island. "Got something for you, Sir," he said; and disappeared into the Guard House. Emerging a moment later, he handed me through the car window what appeared to be the skin of some small fur-bearing animal. "It came last night, not long after quitting-time," he said. "George — he's the chap that was on duty — says it was brought by a little Eskimo character driving a dog-team. Gave him quite a turn, it did." He paused, eyeing me thoughtfully. "He's a teetotaller, too, George is. Got a silver plate in his head." I have not yet had a chance to question George, but this is what was revealed when I unrolled the skin.— EDITOR.



WHAT'S THE SCORE?

(Here is the second instalment of Sgt. Shatterproof's several thousand questions about the Commonwealth of Nations. In the letter with which they were enclosed, he remarks: "As you will note, Sir, this month I am pottering around in the Pacific. I regret the occasional intrusion of my own family into this series, but the record of history may not be ignored." The answers, also supplied by the old potterer, appear on page 48.—EDITOR.)

1. The land-surface of the earth is roughly 52,000,000 square miles, of which the Commonwealth's 600,000,000 people inhabit about 14,435,000. Canada's share of the total area is:
   (*a*) 6,000,010 sq.m.
   (*b*) 3,845,144 sq.m.
   (*c*) 2,565,482 sq.m.
   (*d*) 1,997,633 sq.m.

2. Spurred, no doubt, by the example of Six-Brush Shatterproof, the Botticelli of Beaver Bend, several distinguished artists formed themselves into the Group of Seven, Canada's first "national" group of painters. *Not* one of them was the celebrated artist:
   (*a*) Tom Thompson.
   (*b*) Frederick Horseman Varley.
   (*c*) A. Y. Jackson.
   (*d*) Lawren S. Harris.

3. Nor, among the names of Canada's poets, is that of:
   (*a*) Louis Fréchette.
   (*b*) Oliver Goldsmith.
   (*c*) Frederic Horseman Varley.
   (*d*) "Tekahionwake."

4. Australia (which includes Tasmania) has a population of almost 9,000,000. It possesses two cities:
   (*a*) Inhabited entirely by "black fellows"—i.e. aborigines.
   (*b*) Which have (between them) 47 theatres devoted to "live" drama.
   (*c*) Each of which contains less than 1000 people.
   (*d*) Both of which are larger in population than either greater Montreal or greater Toronto (according to the 1951 census).

5. The area of Australia is approximately:
   (*a*) 870,563 sq. miles less than Canada's.
   (*b*) Twice that of Ontario (363,282 sq. miles).
   (*c*) Half that of Canada.
   (*d*) 654,862 sq. miles greater than that of Quebec (523,860 sq. miles).

6. Australia was probably first sighted by white men in 1522, but the first systematic exploration of its coast was made by:
   (*a*) Captain James Cook (1770).
   (*b*) Dirk Hartog (1616).
   (*c*) Henry Shatterproof the Navigator (1654).
   (*d*) William Dampier (1699).

7. A programme of assisted immigration to Australia (from Great Britain) began in:
   (*a*) 1788.
   (*b*) 1912.
   (*c*) 1840.
   (*d*) 1867.

8. During the First World War, 400,000 Australians enlisted out of a population of less than five million. By the end of 1939, the population had grown to almost 7,000,000. Australia's gross enlistment during the Second World War was:
   (*a*) 401,800
   (*b*) 850,000.
   (*c*) 993,000.
   (*d*) 605,000.

9. Suggested by the name of Australia's largest city was the name of:
   (*a*) The now-obsolete aircraft, the Vickers *Victoria*.
   (*b*) Dame Nellie Melba (Mrs. Helen Armstrong).
   (*c*) Britain's jet bomber, the *Canberra*.
   (*d*) Florence Austral, the operatic singer.

10. 234,000 New Zealanders either voluntarily enlisted or were called up during the Second World War. The country's present population is about:
    (*a*) 3,400,000.
    (*b*) 2,102,580.
    (*c*) 4,200,000.
    (*d*) 2,450,000.

11. Although Tasman sighted the Southern Alps of New Zealand in 1642, Captain Cook was the first white man to circumnavigate its two islands (1769-1770). The people whom he found there, the Maoris, now number about 100,000. They are related to the:
    (*a*) Mongolians.
    (*b*) Melanesians.
    (*c*) Indo-Europeans.
    (*d*) Polynesians.

12. Of the 80 seats in New Zealand's House of Representatives, the number held by Maoris is:
    (*a*) 4.
    (*b*) 0.
    (*c*) 8.
    (*d*) 15.

13. Closely allied (racially) to the Maoris are the 50,000 natives of the Tonga (or Friendly) Islands, a self-governing British protectorate with an area scarcely larger than the Isle of Man. Ruled by their sovereign in accordance with a democratic constitution, the Tongans are completely autonomous:
    (*a*) In all matters.
    (*b*) Save in time of war.
    (*c*) Except that British consent is required to the employment of Europeans in the Tongan government service.
    (*d*) Apart from the fact that they may not make use of the Tongan Air Force for commercial transport in international air-lanes.

14. New Guinea, an island about 100 miles north of Australia, is divided politically between the Netherlands and the Commonwealth. Australia holds the trusteeship of 93,000 sq. miles. Such a trusteeship:
    (*a*) Is held, under an agreement with the United Nations, on behalf of a backward people.
    (*b*) Is a form of absolute rule.
    (*c*) Entitles its holder to certain commercial rights in return for an annual payment to the Crown.
    (*d*) Obliges the territory in trust to furnish the U.N. with a predetermined number of men in time of war.

15. The British Solomon Islands, first visited in 1568 by Alvaro de Mendaña, were rediscovered by the British 199 years later. A much-publicized island in this protectorate is:
    (*a*) Midway.
    (*b*) Guadalcanal.
    (*c*) Leyte.
    (*d*) Guam.

16. Pitcairn Island, a tiny British colony (2 sq. miles) mid-way between Australia and America, was first settled in 1790 by mutineers from H.M.S. *Bounty*, a vessel commanded by the celebrated Captain:
    (*a*) Nordhoff.
    (*b*) Laughton.
    (*c*) Christian.
    (*d*) Bligh.

17. The total area of the archipelago known as the New Hebrides is about 5,700 sq. miles. It is administered by an Anglo-French *condominium*. A distinguished visitor in 1790 was:
    (*a*) Our old friend Captain Cook.
    (*b*) Captain Laughton, after being set adrift in an open boat by the *Bounty*'s mutineers.
    (*c*) Captain Bligh, after a similar experience.
    (*d*) Captain Nordhoff, in search of material for a book.

18. Hong-Kong, with a population of 2,250,000 is:
    (*a*) A British protectorate.
    (*b*) A British colony and leased territories.
    (*c*) Held by Britain in trusteeship.
    (*d*) An independent republic allied with Britain.

19. In volume of trading, the second largest stock exchange in the world is that of:
    (*a*) London.
    (*b*) Hong Kong.
    (*c*) New York.
    (*d*) Toronto.

20. The Gilbert and Ellice Islands, scattered over 2,000,000 sq. miles of ocean, have a combined area of only 369 sq. miles. Though, with one exception, all of them are mere coral atolls, the natives are remarkably evolved politically. The official discoverers of the islands were:
    (*a*) The various British naval officers who sailed those waters between 1764 and 1924.
    (*b*) Captains Laughton and Bligh.
    (*c*) Captain Cook and William Dampier.
    (*d*) Captains Gilbert and Ellice.

JET DECIBELS

The sound created by twenty-six jet planes warming up is roughly equivalent to that made by 1,000 symphony orchestras playing simultaneously, according to a study by the United States Navy. ("*The New York Times*")

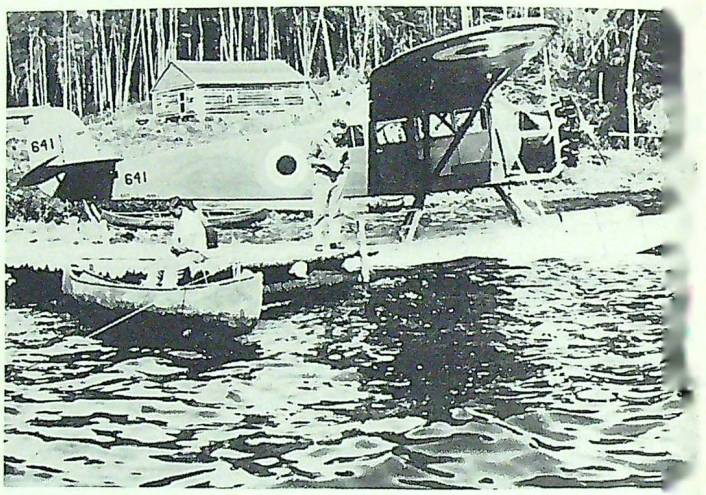
Pin-Points in the Past

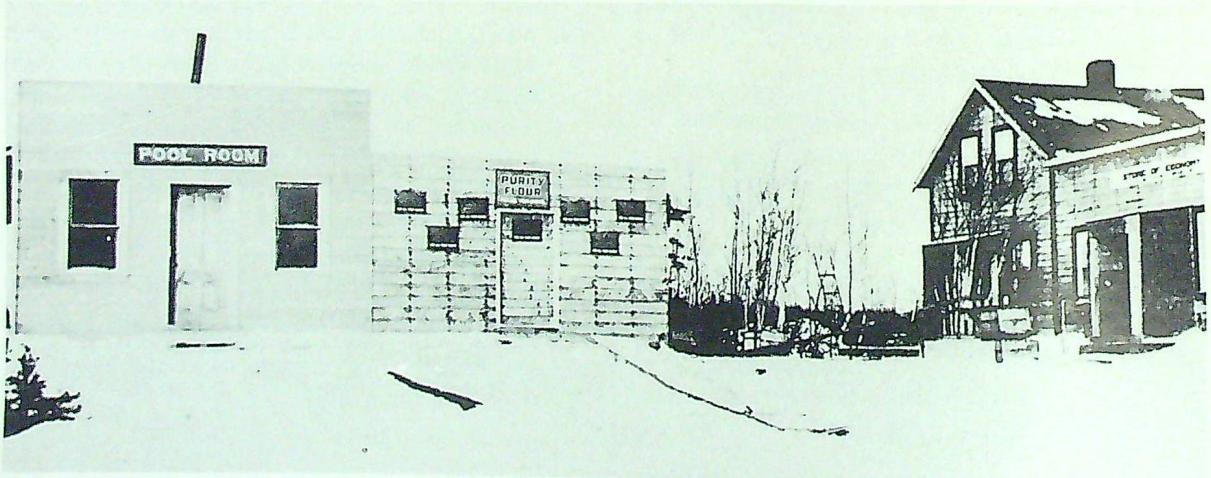
Again we are indebted to Wing Cdr. R. I. Thomas, A.F.C., the manager of the Canadian Owners' & Pilots' Association, for this month's pin-points.

The snow-covered flying-boat is a Vickers *Vedette* caught in an October blizzard at Ladder Lake, 90 miles west of Prince Albert, during forestry patrol operations in the autumn of 1930. In flying helmet is Sgt. J. M. Ready (Flt. Lt., ret.), and behind him stands Sgt. R. I. Thomas.

Cormorant Lake, in 1931, was the site of an R.C.A.F. sub-base of Winnipeg Air Station. Some 42 miles west of The Pas, it served as a base for forestry patrols during the summer and as a centre for aircraft overhaul during the winter. The pool room and store shown in our photograph offered the only urban delights which were available to the handful of fishermen, fur-traders, and provincial forestry and R.C.A.F. personnel in the settlement.

On the dock beside the Fairchild 71 are Sgt. Thomas (left) and L.A.C. Howard Shaw. The photograph was taken at Windigo (or Spirit) Lake, some 200 miles north of Sioux Lookout, in the summer of 1935.





Progress Report

Night-Flying at Rockcliffe Flying Club

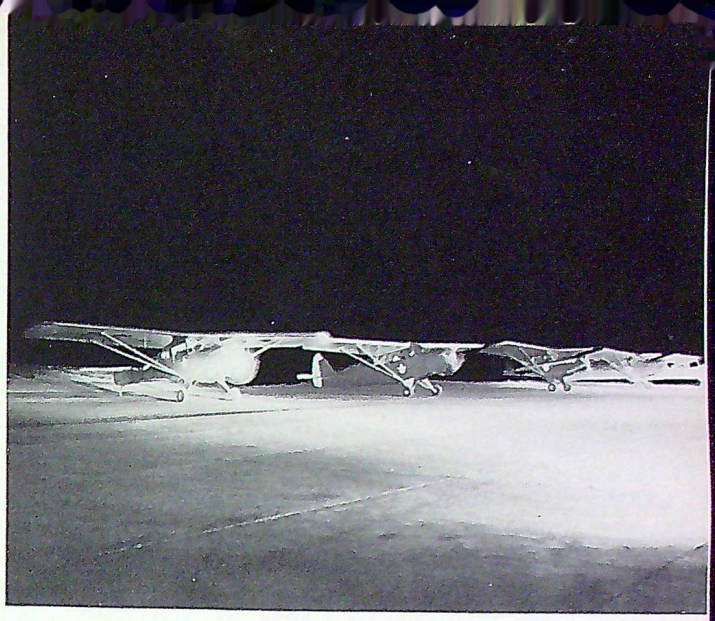
By Flying Officer T. G. Coughlin

Things have been happening at the Rockcliffe Flying Club since the appearance of the first story about it in the April issue of "The Roundel".

Now in its tenth month of existence, the club has grown in size until it is one of the largest of the 38 clubs in the Royal Canadian Flying Clubs Association. The roster shows an enrolment of 109 members, including four senior officers — one Wing Commander and three Squadron Leaders. Of this number, 43 have taken the big step and sailed off into the wild blue by themselves. Thirty-four of these have gone on to qualify for their Private Pilots' Licenses, two others have received a Commercial Pilot's License, and two are remustering to air crew.

The R.F.C. employs seven instructors and a civilian engineer — the latter working full-time. Since the club began operating, on 29 January 1955, more than 2000 hours have been flown. May was the busiest month, with 406 hours logged. When the club was authorized by the Department of Transport to give courses leading up to a Commercial Pilot's License, instrument-flying and night-flying were introduced.

This, of course, meant equipping the aircraft with two-way radios and adding gyro instruments to the standard instrument panel. The panel of at least one of the club's five aircraft now bears no resemblance to the original factory product; it has been completely remodelled, and equipped with a wealth of aircraft instruments. This normally would involve considerable expense, but with numerous volunteer welders, electricians, and instrument technicians, the club engineer had all the help he needed, and the cost of installation was kept to a minimum. The Rockcliffe Flying Club has one great advantage over all other flying clubs in Canada: many of its members are themselves tradesmen, so that maintenance and modifications pose no problems.



Four Fleet Canucks and a Piper Super-Cruiser lined up for night-flying at the Rockcliffe Flying Club.

Much of the healthy growth of the club can be attributed to the whole-hearted support of Group Captain A. M. Jardine, A.F.C., Commanding Officer of R.C.A.F. Station Rockcliffe, and Air Vice-Marshal J. L. Plant, C.B.E., A.F.C., the A.O.C. Air Materiel Command, who gave the club permission to move on to the station from its former location at Carp Airport, 20 miles from Ottawa. Although based at an Air Force station, however, the club in no way interferes with Service routine, as all club flying is done after normal working-hours. A monthly hangar rental is paid to the Government for each aircraft, and all gasoline and oil consumed is paid for through the Accounts Section.

Flying out of Rockcliffe will bring at least two changes to the Rockcliffe Flying Club. First, the aircraft will operate off wheels all the year round instead of switching to skis in winter-time; and second, with docking facilities available, it will now be possible to put aircraft on floats to check-out those interested in seaplane flying.

Not only has the R.F.C. been a boon to flying locally, but its influence has started to spread. The Rockcliffe Flying Club was the inspiration for the Trenton Flying Club which is now being organized at that station by Flt. Lt. D. M. Payne, D.F.C., A.F.C., and enquiries about forming a flying club have come from R.C.A.F. Stations Greenwood, Cold Lake, and Namao.

"What Possibilities We Had!"

The German Fighter Force in the Second World War

A Review-Article by Wing Commander F. H. Hitchins

THE "ifs" of history — the length of Cleopatra's nose, the wind off Calais on 10 August 1588, Grouchy's error on 18 June 1815, the accuracy of Booth's aim — have long been a fertile field for speculation; and possibly no period has been so replete with ifs as Hitler's regime in Germany and particularly his direction of the Nazi armed forces in the Second World War. If, after the conquest of Poland, Hitler had not launched the *blitzkrieg* in the West . . . ; if he had made an immediate attack upon Britain after the fall of France . . . ; if he had persisted in Operation "Sea-Lion" instead of turning to Russia . . . ; if he had not intervened in the production and use of jet aircraft . . . Anyone interested in speculation upon possibilities such as these will find much to ponder upon in General Galland's history, recently translated into English, of the Luftwaffe's fighter arm.*

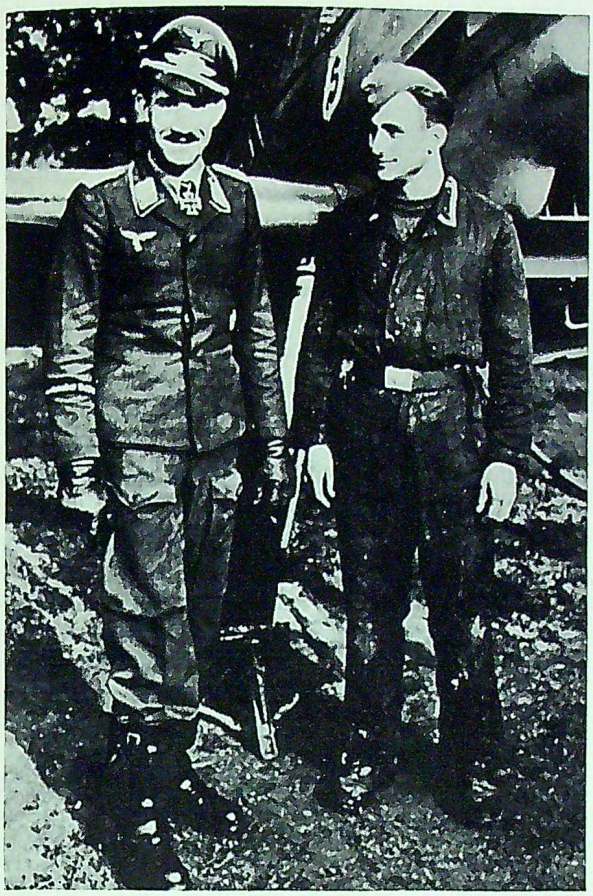
In the past few years several German airmen have published accounts of their war experiences— Rudel, Osterkamp, Knoke, Henn, Heilmann, Bloemertz, and the woman pilot Hanna Reitsch. Galland's book differs from these in that his story has much a broader background. It is not so much the story of a fighter pilot (descriptions of air combat are but a small part of the book) as it is a history of the policies and weaknesses that contributed to Germany's defeat in the air. Additional interest attaches to the volume because its author, who returned to Germany early in 1955 after six years in the Argentine as air force adviser to General Peron, has been rumoured to be the prospective head of the new Luftwaffe in rearmed western Germany. This new German Air Force, it is said, will be a purely tactical air force, with a strength of some 80,000 and comprising about 1400 aircraft divided into 14 wings of fighters and fighter-bombers and two wings each of all-weather fighters, tactical reconnaissance and transport types — a total of 60 squadrons.

With 105 aerial victories to his credit, Galland was one of the leading "aces" of Goering's Luftwaffe. He was one of the first to serve with it when the cloak of camouflage was thrown off in March 1935, and he was one of the last to fly with it on operations ten years later. For three critical years — 1942 through 1944 — he was in command of the Jagdflieger arm and then was glad to be relieved and sent back into action. He was much happier on the airfield, in the cockpit of a Messerschmitt, than sitting behind a desk at headquarters. What his own political views were — if he had any —he does not disclose. He was never a "yes-man" to Goering or Hitler and indeed was regarded as the *enfant terrible* of the Luftwaffe. (It was Galland who asked Goering for *Spitfires* for his fighter group.)

* * *

Galland's flying career began in 1927 when, as a 15-year-old schoolboy in his home-town, Westerholt in Westphalia, he became interested in "the young German gliding-sport (which had) developed in an atmosphere of national frustration" because of the restrictions of the Versailles treaty. His experiences through the next few years illustrate how, despite those restrictions, Hitler and Goering went about building up a secret air force.

*Adolf Galland: "The First and the Last. The German Fighter Force in World War II." With a foreword by Douglas Bader. Translated by Mervyn Savill. Methuen & Co., Ltd., London, Eng., 1955. Pp. xii-368; illustrated; index. Distributed in Canada by British Book Service, Toronto. $3.75.



Adolf Galland (on left).

On graduation from school, Galland gave as his chosen profession "a pilot", and in 1932 he applied for admission to a school for air-line pilots at Brunswick. Although there were less than 20 vacancies for the 4,000 applicants, he was one of the lucky 18 who passed the stiff 10-day examination. His training at Brunswick, Schleissheim, and Warnemunde included aerobatics and a clandestine fighter course — which seemed rather strange for one who was supposed to be a civil pilot.

Before Galland's course in the civil school was finished, Hitler became chancellor (30 January 1933) and Goering started to build up Germany's air strength. In July 1933, Galland was one of a group of German pilots who, disguised first as "art students" and then as *avieri* in Mussolini's Regia Aeronautica, went to Grottaglie in Italy for further training on fighter aircraft. In the autumn he returned to Brunswick, still officially a civilian airman but in fact "an almost perfectly trained fighter pilot". After passing his final tests at Brunswick, Galland flew for a time with the Lufthansa on the Stuttgart-Barcelona run. In February 1934 he elected to go "active" with the still-secret Luftwaffe and was given military training with the army at Dresden, receiving his commission as Lieutenant on 1 October 1934. Then, since there was still no Luftwaffe officially, he went back to civil aviation at Schleissheim, where the airline pilot school had been converted into a camouflaged fighter school.

Finally, in March 1935, the by now very thin disguise was dropped and the Luftwaffe openly emerged before the eyes of the world. Galland was posted to the new Jagdgeschwader 2 (Richthofen), but two successive crashes almost ended his career. Although medically boarded as unfit for flying, he managed to fool the doctors on an eyesight test and continued to fly. With the Condor Legion in Spain — where the Luftwaffe developed the technique it later applied on blitzkrieg campaigns — Galland made over 300 sorties on He.51s on army support operations. Then, after a tour considerably longer than the normal, he returned to Germany in August 1938 for a brief, unhappy tour at Air Ministry, where he was regarded as a "ground support" expert.

In the *blitzkrieg* against Poland, Galland put his Spanish experience to use by flying 50 sorties in 27 days, for which he won the Iron Cross (2nd Class) and promotion to captain. The finest reward, however, was a transfer later in 1939 to a fighter unit, Jagdgeschwader 27, at Krefeld. Galland's heart always was (and, he says, still is) with fighters.

In his third campaign, the Battle of France in the spring of 1940, Galland quickly distinguished himself as a fighter pilot. His first three victories, on 12 May 1940, did not give him any particular thrill; they were "child's play". With 14 kills and a probable to his credit, he was transferred to

Jagdgeschwader 26 (Schlageter), given command of a wing and promoted to major. After refitting in Germany, the group returned to the Channel coast for the Battle of Britain — Galland's fourth campaign. At this point the autobiographical theme becomes secondary to the broader historical picture. When the early stages of the Battle began, Galland had just been decorated with the Knight's Cross of the Iron Cross following his 17th victory; on 24 September 1940 he scored his 40th and received the Oak Leaves to his Cross — the highest award in Hitler's range of decorations in those days. He was the third German to receive this high honour, just three days after his rival Moelders. Goering had promoted both Moelders and Galland to command of their groups in an attempt to get younger blood in command of the fighter units and to revive their aggressive spirit, the lack of which, Goering bitterly asserted, was responsible for the Luftwaffe's failure to subdue Britain. Galland, fearing he would see less action, asked in vain to be left as a wing commander.

When Hitler prepared to turn his forces against Russia, Galland's JG.26 was one of two fighter groups left in the west to oppose the R.A.F.'s daylight offensive over northern France and the Low Countries. On 21 June 1941, his 29th birthday and the eve of Operation "Barbarossa" against the Soviet, Galland brought down two *Blenheims* and a *Spitfire* in a series of combats with "circuses" during which the German ace himself was twice shot down. To mark his 70th victory he became the first German officer to receive a new award, the Oak Leaves with Swords to the Knight's Cross. Although officially grounded now, he continued to fly and fight, and by the end of 1941 had run his score up to 94. Hitler honoured him again with Diamonds for the Knight's Cross*, and, because the Fuehrer was no judge of jewels, Goering presented him with a second set, whereupon Hitler gave him a third, and, when this was destroyed in a raid, Galland received a fourth set of "sparklers".

Meanwhile he had been given a new, and unwelcome, appointment. When Moelders was killed in a flying accident in November 1941, 29-year-old Galland was named to succeed him as General der Jagdflieger, or A.O.C. of Fighter Command. He was very depressed at the thought of leaving the field of action, but Goering insisted, and, feeling very unsure of himself and with only a hazy idea of his new duties, Galland took up the post which he was to hold through three troubled years.

One of his first tasks was to plan the fighter "umbrella" for the *Scharnhorst* and *Gneisenau* as they sailed through the Channel and Strait of Dover from Brest to home waters. The author describes this successful operation in detail. Thereafter, however, his task might well be compared to that of Dame Partington pushing back the Atlantic with her mop, except that he had several "oceans" to sweep back, and his position as General of Fighters was troubled not only by assaults from without but also by dissension within. What his duties were are not too clear. His rôle seems to have been to advise rather than to command, and he remarks bitterly, "occasionally (his ideas and suggestions) were even put into practice". After a succession of disagreements with Goering, he asked to be relieved of his command and sent back to the front, but he was kept on at his post for another year. In keeping with his belief that a commander should also have first-hand operational experience, he resumed combat flying in the autumn of 1943 to see what his pilots faced in the air defence of Germany. Three times he tried to build up a fighter reserve to protect the Reich and three times he saw it destroyed in the shambles of the invasion, the retreat from Normandy, and the Ardennes offensive. The last battle, Galland says, was the "death-blow" of the Luftwaffe; continuance of the struggle lost any sense for him then, and he was glad to be relieved of his post, in January 1945, and given a more congenial task of organizing an Me.262 jet fighter group.

Lt. Gen. Galland ended the war as he had begun it, as a fighter leader in action against the enemy. With a group of outstanding pilots, he formed his J.V. 44 at Brandenburg-Briest in January 1945, took it to its operational station at Munich-Riem

*As in the Great War, awards to German fighter pilots appear to have been allotted usually on a mathematical basis. Galland was surprised to receive his "Diamonds" when he was still six short of the 100 "quota".

at the end of March, and there made his last war flight on 26 April when he attacked a formation of *Marauders* and was himself shot down by a *Mustang*. The last of his jets were burned at Salzburg on 3 May, as American tanks rumbled on to the airfield.

* * *

So much for Galland's own career. Of even greater interest is his description of Germany's air policy between 1940 and 1945, as seen from the point of view of a fighter pilot and leader.

To the end of June 1940, Germany's military operations had gone "according to plan". The three *blitzkrieg* campaigns against Poland, Denmark and Norway, the Netherlands, Belgium and France, had been model demonstrations of the technique of army air co-operation. But once France fell and Britain refused to knuckle under to the Fuehrer's overtures, Hitler was "caught with his plans down". Against the one remaining insular foe the *blitzkrieg* technique could not be applied, and the Luftwaffe wasn't organized, trained, or equipped to operate on its own as an independent arm. Goering's boast — "I will do it with my Air Force"— misfired for the second (and not the last) time. Already at Dunkirk it had been demonstrated that German air strength was inadequate to destroy the B.E.F. single-handed, and this, Galland believes, "should have been an emphatic warning to the leaders of the Luftwaffe".

When the air assault began to open the way for "Sea Lion", the German High Command had "no clear plans for the further pursuit of the war". To Hitler the campaign against Britain was merely "a necessary evil" to be coped with somehow, just how he was not quite sure. On the German side, Galland attributes the failure of the offensive chiefly to the limited operational range of the Messerschmitt 109. Its 80 minutes' tactical flying time, of which 60 were consumed in the flight out and back across the Channel, left only 20 minutes for its mission over Britain. "This was the most acute weakness of our offensive." The Messerschmitt's limited operational range of 125 miles meant also that only a small part of Britain was battleground. "This unfortunate state of affairs could only have been changed effectively by an efficient long-range bomber"— of which the Luftwaffe had none, because the *Stuka* and medium-range bomber (He.111, Ju.88 and Do.17) were sufficient for *blitzkrieg* tactics. When the medium bombers began daylight attacks on London, the short range of the Me.109 became more and more of a disadvantage. So from the abortive "Sea Lion" Hitler turned to "Barbarossa" — and Britain was left "to become the aircraft-carrier used for the destruction of Germany from the air"

Against Russia the well-tested *blitzkrieg* technique again was successful at first, but the campaign also demonstrated once more that "to annihilate the enemy's air force we should have needed a much larger strategical air force with a considerably longer range. This did not exist."

When, in the spring of 1942, the R.A.F. began area-bombing with large formations at night and the threat of daylight attacks by the U.S.A.A.F. began to loom closer, Galland hoped for "some positive reaction on the part of the war leaders" in concentrating on the defence of the Reich and pushing through Milch's programme for the construction of 1000 fighters a month. But Goering "closed his eyes" to "alleged American production-figures" and expressly forbade the Luftwaffe to count on — or even mention — them. Hitler's reply to Lübeck and Rostock was to order an immediate retaliation raid on Exeter. "The motto was now more bombers for retaliation and no more fighters for the defence, a motto which was adhered to right up to the collapse."

Germany had lost the initiative. "We had been driven out of the rôle of attacker into that of defender. An air force is by nature an offensive weapon. Air supremacy is, of course, essential for this. If this has been lost, then the fighter force has to be strengthened first of all, because only the fighter force can achieve this essential supremacy so that the bomber, and with it the entire air force, can go over to the offensive once more. Britain had just given us a practical demonstration of this. It is amazing and shocking that this thought never occurred either to Hitler or Goering." For the protection of the Reich, Goering relied upon

peripheral and objective defence, which meant that the available fighter force was split up into "penny packets" tied down to the protection of specific objectives.* (The pilots complained that defence "followed the latest bomb-crater" from target to target.) Galland favoured central defence by concentrating the fighter force to regain air supremacy over Germany, but he was unable to take any steps in this direction until the spring of 1944.

* * *

In the Mediterranean, the Allied tide swept over the North African coast and Sicily and began to lap at Italy. "The Luftwaffe was burning up in the southern theatre of war." At home, the roof over Germany, which Goering once had boasted would never be penetrated by Allied aircraft, had been burnt piecemeal since June 1941. By various means, the holes in the roof had been patched a bit and the situation did not appear too desperate until the night of 24 25 July 1943, when the R.A.F., using "window" for the first time, opened a series of "extermination raids" against Hamburg. "The Terror of Hamburg" spread a wave of fear across the Reich. "The war is lost" could be heard now in high political and military circles. Galland believed that by a radical reorganization of the defences, by giving absolute priority to the air industry and especially to increased fighter production, the situation could still be saved. The High Command of the Luftwaffe for once was in full agreement on the steps to be taken, and, at the end of July 1943, Goering went to see Hitler to secure his approval of the plans. "In this hour the fate of the Luftwaffe was decided." The Fuehrer rejected all the proposals, refused to change over from the offensive to the defensive in the air war, and ordered more attacks upon Britain — a counter-terror to meet the terror.

The defence problem was now further complicated by frenzied changes of command, by an acute shortage of leaders, instructors and aircraft, by the declining quality of pilots rushed through the training schools, by the lack of reserves, and, above all, by the appearance in the skies over Germany of long-range American fighters escorting the formations of daylight bombers. Towards the last menace Goering reacted as he had towards American production figures; he acted as if they did not exist and insisted the German fighters should concentrate on the bombers.

To overcome the lack of able leaders in the fighter arm, Galland increased the size of the units and desperately tried to build up a reserve which he proposed to use in a concentrated force to deliver a sudden blow to regain air supremacy over the Reich. By the end of May 1944, he had accumulated a reserve of 450 fighter pilots. Then came the invasion, and his reserve was soon used up, trying in vain to stem the Allied tide. Again Galland built up a reserve which, by early August, totalled 700 pilots and aircraft. And again the High Command intervened, ordering the reserve thrown into the battle in the west instead of being held for the defence of the Reich. Speer and Galland tried to intervene with Hitler (Goering was "not well"), but the Fuehrer curtly forbade any interference with his operational measures and, "in a screaming rage", threatened to dissolve the fighter arm and depend upon flak batteries for defence. So Galland's second reserve was engulfed in the chaos of the retreat.

By this time (September 1944) the G.A.F. was suffering an "unbearable" shortage of petrol as a result of the large-scale Allied attacks upon the German fuel supply which had started in May 1944. The success of this campaign was another "death-blow" to the Luftwaffe. For the third time Galland reorganized the fighter forces and built up a reserve in readiness for a rumoured "Great Blow" which he believed was to be — at last — a decisive air battle against the bombers. To his surprise and dismay, the "Great Blow" proved to be the Ardennes counter-offensive in December 1944, and once again the reserve was thrown into the holocaust. At this point Galland was relieved of his command and returned to the field of combat.

* * *

The final chapter in the tragic history of the Luftwaffe was the jet fighter, which fell under the

*Goering himself once tried to control the fighters during a raid, with very grotesque results.

withering blight of Hitler's interference. In April 1939 the Me.163 rocket-propelled fighter made its first flight, and on 27 August 1939 the He.178, the first jet, took to the air — exactly one year before the Italian Caproni-Campini, almost 21 months before the British Gloster-Whittle, and over two years before the American Bell *Aira-comet*. But this early German lead in jet propulsion was largely lost when Hitler, in August 1940, anticipating an early end of the war, ordered the indefinite postponement of all technical and developmental experiments that would not be ready for use within 18 months. Despite the Fuehrer's orders, Udet, who was then in charge of aircraft development, had experimental work continued on a modest scale, and, on 10 May 1941, the Me.163 attained a speed of 623.85 miles per hour.

Thanks to Hitler's ban, so great was the secrecy cloaking the experimental work that even Galland did not learn about it until early in 1942. A year later, in May 1943, he made his first flight in a Me.262 and was deeply impressed. "It was as though angels were pushing . . . This was not a step forward. This was a leap! . . . Today I still believe that it was not exaggerated optimism to expect from a mass action of Me.262 fighters a fundamental change in the German air defence, even at that late hour." Goering shared his enthusiasm, as did Milch; but Hitler, distrusting the Luftwaffe, whose promises of technical development had failed too often in the past, refused to sanction their plans for a quick development of the jet fighter and, instead of mass production, he authorized only the tests of a few prototypes. So six more precious months were lost while the Allied assault upon Germany increased in strength.

Finally, at the close of 1943, the High Command agreed to mass production and the jets received a very high priority in the armament programme. Hitler, however, regarded the Me.262 as a fighter-bomber, a "blitz-bomber", to repel the impending invasion; and he "foamed with rage" when he learned that it was being produced as a fighter. No one was allowed to refer to the 262 as a fighter! The result was that, thanks in part to Allied air attacks which further delayed production (60 "blitz-bombers" were destroyed on the ground in one U.S. raid on the Messerschmitt factory at Augsburg), not one jet bomber was ready to meet the invasion on 6 June, and they first came into use only at the end of August 1944. Another set-back to the Me.262 programme was the decision in September 1944 to produce the He.162 *Volksjaeger* which was to be flown by teen-age pilots!

Speer had arranged for Galland to get a few Me.262 fighters for testing, and eventually, in October 1944, Goering ordered him to form a jet fighter wing. The successes of the jet fighters in action at last convinced Hitler, and he authorized the expansion of the wing into a group. Some Me.163 rocket units had also been formed for "objective defence" of the Leuna and Politz synthetic oil plants. (Most of these aircraft fell into Russian hands at the end of the war.) But it was much too late now for the jets and rockets to turn the tide, and Germany derived no benefit from her pioneer work in that field. If she had started mass production of them three years earlier . . . ? "What possibilities we had!"

* * *

Body and soul a fighter pilot, Galland naturally emphasizes Germany's weakness and errors in that arm. The fighter force, he says, was the "Cinderella" of the Luftwaffe. "German fighter production started very sluggishly and only reached its peak when the war was practically lost . . . Had the fighter production of the year 1944 (2500 a month) been reached in 1940, or even in 1941, the Luftwaffe would never have lost air supremacy and the outcome of the war would therefore have taken an entirely different course." But "Hitler's strategical thinking was exclusively directed towards the offensive", in which the bomber was the major weapon. "The fighter arm was not regarded as part of the strategic air arm. It was looked upon as a tactical weapon"; subordinate to the bomber and accepted only as "a concession to the unpopular act of defence". Even in its bomber arm, however, as Galland occasionally admits, the Luftwaffe had concentrated on the tactical weapon, the *Stuka* and the medium-range Heinkel,

Dornier, and Junkers, and had neglected the long-range bomber.

Basically, the failure of the Luftwaffe can be attributed not so much to "weakness" in the fighter arm as to the fact that Germany's military and political leaders, despite their lip-service to Douhet's doctrines, had no conception of the air arm as an independent strategic weapon. To them it was essentially a tactical weapon to be used in conjunction with and in support of offensive ground operations. In its army support rôle the Luftwaffe performed brilliantly in Poland, Denmark, Norway, the Low Countries, France, the Balkans, and Russia; but when it was used alone in a strategic or in a defensive rôle, it failed because it had not been designed for such a task. Finally, when the air blanket had to be spread over several fronts — the West, the Reich, the East, and the Mediterranean — it proved all too short.

Lord Tedder summed it up in a lecture in 1948, in which he disagrees with Galland's thesis. "The Germans, fortunately, fell into the error of thinking that fighter defence was the answer to the Allied bomber offensive . . . No. The most effective defence against air attack is to stop it at its source . . . The bomber and the fighter are complementary to each other — the straight left and the right guard. And without the air superiority which it is the rôle of the joint force to secure, no effective military operations are possible on land or at sea — nor indeed can the normal industrial and economic life of the country be maintained."

THE "SKY LANCERS"

The Canadian Air Division's aerobatic team, the "Sky Lancers", stationed at No. 2 Fighter Wing, Grostenquin, France, has been participating, for the past year, in international air shows as well as staging demonstrations for visiting dignitaries.

The "Sky Lancers" took part in one of West Germany's first air shows since the lifting of the post-war ban on aviation in that country, and gave displays at the Netherlands Air Force Day celebrations at Volkel, in Holland, and at the French International Air Shows at Tours, Auxerre, and Frescaty.

The "Sky Lancers", like their predecessors "The Fireballs" (No. 3 Fighter Wing), fly the regular operational Mark V Sabre. The four members are all regular pilots with their squadrons, and carry out normal flying duties in addition to giving their aerobatic performances.

Members of the team are: Flt. Lt. T. Hannas (leader), Flying Officers L. M. Eisler, B. R. Campbell, and G. C. E. Theriault.

The "Sky Lancers". (Photograph taken by L.A.C. J. Scrimger, No. 2 Wing.)

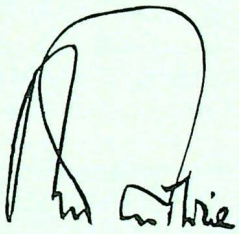
ROYAL CANADIAN AIR FORCE Association

A CHRISTMAS MESSAGE FROM THE NATIONAL PRESIDENT

As you read these lines, another year in the history of the Royal Canadian Air Force Association is drawing to a close. It has been in many ways a good year and we can take pride in our accomplishments.

On behalf of the Association I would like to express our thanks to the Chief of the Air Staff and to the Royal Canadian Air Force unit commanders from coast to coast for their splendid co-operation in our work.

And now I would like to express to each and every member of the Association, and to their families, my very best wishes for a Happy Christmas and a Bright and Prosperous New Year.



(K. M. Guthrie)
National President
R.C.A.F. Association

PRESENTATION OF R.C.A.F.A. TROPHY

At a meeting of the Ontario Provincial Committee of the Air Cadet League of Canada, held in Toronto on October 22nd, the R.C.A.F. Association Trophy, awarded annually to the most proficient squadron in Canada, was presented to No. 398 Squadron, Port Hope, Ont., by Air Vice-Marshal G. E. Brookes, C.B., O.B.E., Grand President of the Association. The meeting was held in the Royal York Hotel, with approximately 150 League members and guests in attendance. The two main speakers on this occasion were Mr. G. A. D. Will, President of the Air Cadet League, and Air Vice-Marshal J. G. Bryans, C.B.E., A.O.C. Training Command.

The trophy, parchment, and cheque for $75.00 were presented to Mr. B. M. Osler, chairman of the squadron's sponsoring committee.

ONTARIO GROUP EXECUTIVE MEETING

Members of the Ontario Group Executive met in Toronto on October 22nd.

Air Vice Marshal Brookes presents R.C.A.F.A. Trophy to Mr. B. M. Osler, chairman of civilian sponsoring committee of No. 398 (Port Hope) Sqn., R.C.A.C.

Those in attendance were:—

Air Vice-Marshal G. E. Brookes	Toronto
J. P. Frame	Ottawa
L. N. Baldock	Windsor
J. DeLaurier	Windsor
D. Cain	Kingston
A. Kernot	Kingston
H. G. Williamson	Cornwall
J. Kendall	Guelph
D. L. Rumble	North Bay
A. R. Wicks	St. Thomas

The main topics of discussion were the forthcoming national convention (to be held in Windsor) and Wing membership in Ontario. It was decided that an attempt would be made to amalgamate all Wings in the Toronto area into one strong united body.

It was also decided that the Ontario Group Meeting, at which delegates from all Ontario Wings attend, would be held in Kingston, Ontario, on 22 February 1956.

No. 306 Wing. Left to right: H. Shee, G. Harrison, Mrs. Sylvia Feldman, G. Copeman, S. Shernofsky, and G. Ellis. (Kalb photograph.)

WING NEWS

No. 306 (Maple Leaf) Wing, Montreal.

No. 306 Wing got off to a good start at its first meeting of the autumn, with some 125 members and guests present. The meeting was held in the Headquarters of No. 401 (Aux.) Squadron.

The Preston (Lancashire) Branch of the Royal Air Force Association, which was presented with a suitably inscribed pewter stein and an Association lapel-pin by Bill Clegg during a recent visit to England, reciprocated the gift. The token of esteem, a mounted and engraved replica of the Royal Air Force Association insignia, together with an R.A.F. Association lapel-pin, was presented to President Greig Harrison by Bill Clegg on behalf of the Preston Branch.

The Wing had the pleasure of the presence of Mrs. Sylvia Feldman, widow of the late "Buck" Feldman. No. 306 will long remember Buck (past-president, 1952-53), whose organizing ability, far-sightedness, and hard work, helped to build the Wing to its present enviable position. An Honorary Life Membership in No. 306 Wing and in the Association was presented to Mrs. Feldman by Quebec Group President George Ellis.

The guest speaker, Mr. Jimmy Dunn, assistant coach and scout for the Montreal Alouettes, was introduced by Andy Murdoch. Mr. Dunn gave an informative and informal talk on football tactics. Following a question-and-answer period, a film of a recent Alouettes-v.-Ottawa Roughriders game was shown, during which Mr. Dunn analysed the particular plays and defensive strategy. The presentation to Mr. Dunn of an official tartan tie, by President Greig Harrison, symbolized the Wing's appreciation of a delightful evening.

No. 416 (Kingston) Wing.

On October 20th, No. 416 Wing presented the play, "Arabian Nights", for members and guests. One and a half hours of laughs and fun were provided by the Domino Theatre Players, of Kingston.

Mr. Fred Hewett, a member of the Kingston Wing, and probably the most active Association member in assisting the R.C.A.F.'s recruiting effort, has been transferred to the Department of Veterans' Affairs in London, Ontario. Fred was responsible for obtaining more recruits for the Air Force than all other Wings in the Association combined.

No. 251 (Madawaska) Wing, Edmundston.

Guest speaker at a recent monthly meeting of No. 251 Wing was Sqn. Ldr. H. V. Peterson, D.F.C., Liaison Officer from R.C.A.F. Station

No. 406 Wing's executive officers. Standing in centre is Mr. J. C. Gray, the General Secretary of the Association.

Chatham. His talk, which was most instructive, was on the subject of training on the Air Force's stations. Later, A. Daigle, Chief Observer in the Ground Observer Corps, who recently attended lectures at Moncton, spoke of the Corps' need for more official observers.

No. 700 (Edmonton) Wing.

No. 700 Wing moved into its new quarters at R.C.A.F. Station Edmonton during October. The building is a former Airmen's Lounge and has sufficient space to allow the Wing separate rooms for all types of entertainment — games, T.V., dancing, etc. During the month of October, the Wing held several "Do It Yourself" nights, and the interior has now taken on an entirely new appearance. The Edmonton membership has already increased considerably since these new quarters were obtained.

No. 705 (Rocky Mountain House) Wing.

On October 21st, Air Vice-Marshal K. M. Guthrie presented the Charter to No. 705 Wing. Members from the Wings in Lethbridge, Edmonton, and Red Deer, and several personnel from R.C.A.F. Station Penhold, were in attendance.

Mr. G. Greenway, who was responsible for the formation of the Wing in Rocky Mountain House, has re-enlisted in the R.C.A.F., and the Wing will hold its elections in December to elect a new president in his place.

Negotiations are under way by the Wing to sponsor an Air Cadet squadron in Rocky Mountain House.

The new chairman of the Saskatoon Air Cadet Committee congratulates winners of Flying Scholarships. (L. to r.) Flt. Lt. B. Tupper (C.O. of No. 107 Sqn.), Flying Officer G. Avery, Mr. W. Laing, Cpl. H. Volk. and Cpl. B. Motyer.

ANNUAL CHARTER NIGHT BALLS

No. 431 (Renfrew) Wing.

The Ball was held on October 26th at the local golf club. The R.C.A.F. Central Band provided the music during the dinner-hour and for the dance which followed. Group Captain L. G. G. Archambault, A.F.C., Director of Personnel Manning, was the guest of honour.

No. 310 (Wilno) Wing, Montreal.

The Annual Blue Ball took place at the Ritz-Carlton Hotel on November 12th. Music was provided by the Central Band, and the guests of honour included:

Air Vice-Marshal G. E. Brookes, C.B., O.B.E.
Air Vice-Marshal K. M. Guthrie, C.B., C.B.E.
Air Vice-Marshal A. L. James, C.B.E.
Air Vice-Marshal L. E. Wray, O.B.E., D.F.C.
Dr. T. Brzezinski, president of the Polish Canadian Congress.
Mr. G. R. Ellis, president of Quebec Group, R.C.A.F. Association.
Mr. L. E. Fulton, president of No. 313 Wing.
Mr. William Hamilton, M.P.
Mr. G. G. Harrison, president of No. 306 Wing.
Mr. Gordon R. McGregor, O.B.E., president of T.C.A.
Mr. J. G. Notman, O.B.E., president and general manager, Canadair Ltd.

No. 431 (Krakow) Wing, Hamilton.

No. 431 Wing held its Annual Charter Night Ball on November 4th.

TOUR BY CENTRAL BAND

The R.C.A.F. Central Band visited four of the Northern Ontario Wings from the 17th to 22nd October, playing a concert in each city and for the dances which followed. Wings visited were Nos. 406 (North Bay), 402 (Sudbury), 423 (Chapleau), and 432 (Sault Ste. Marie). Mr. Jack Gray, the R.C.A.F.A.'s national secretary, accompanied the band on this tour.

"But What Good Came of It at Last?"

(Reprinted by courtesy of "The World Veteran".)

In this month of August, 1954, a ceremony that was both amusing and strangely moving was held in the sleepy German village of Blenheim, on the banks of the Danube, population 500.

Amusing in that the local innkeeper brewed a special beer for the occasion and served it in goodly quantities to war veterans from half-a-dozen European countries. The town band often played a tune familiar to millions as a nursery song: *Malbrough s'en va-t-en guerre* (Marlborough goes off to war). A definitely odd occasion, since the purpose was to unveil a memorial to an old near-forgotten battle fought 250 years ago — the Battle of Blenheim.

The 82-year-old Archduke Joseph of Austria, who commanded an Imperial Austrian army in the 1914-18 war, was among those who attended the ceremony. There were French, German, and Dutch veterans. From England came members of famous regiments, the Royal Scots Fusiliers, the South Wales Borderers, the Royal Scots Greys, the King's Regiment — the same regiments that fought on the field of Blenheim two and a half centuries ago.

Why celebrate a near-forgotten battle in an altogether forgotten war — the War of the Spanish Succession?

First let us tell the story of the battle. The France of Louis XIV, *le roi soleil,* was disputing the supremacy of Europe with the Austrian Empire. England was mainly a naval power, but was allied with Austria-Hungary, Spain and the Netherlands, to halt the victories of France and her ally Bavaria. The war swept back and forth across the Continent.

Heading the English and Austrian armies was a picturesque figure — the first Duke of Marlborough, son of a Dorset farmer, Winston Churchill, ancestor of Britain's last prime minister. The Duke had become such a great man that King William III of England feared his power — and sent him off to command armies on the Continent, to be out of the way. Altogether, Marlborough marched up and down Europe for twenty-odd years.

His army was a motley collection. As well as Austrians, Spanish and Dutch, he had recruited Irish "wild geese," Prussians, Germans, mercenaries "drawn from every nation in Christendom", states the history book. It was an 18th century Foreign Legion. The comradeship in arms was said to be the finest ever known.

At Blenheim village Marlborough encountered the *élite* troops of France and Bavaria. It was a terrific battle for the times, and the French were outgeneraled though they fought bravely. Marlborough, at the head of the cavalry, broke the Franco-Bavarian line in the centre, while the infantry under his relative General Charles Churchill chopped the opposing army into segments. Twenty-four French infantry battalions and four regiments of dragoons — the pick of Louis XIV's army — surrendered, while many hundreds of men were driven into the Danube. French domination of Europe was ended and the British army began its real history.

But the Battle of Blenheim really settled nothing. In the space of a few years the former allies were reassorted. The men who fought and survived at Blenheim forgot what it was all about.

How many wars since then have had much the same sequel — but with greater cost in death and suffering.

Though in the history books Blenheim became a battle-name among a multitude of names, somehow it became more than that to the common people. Perhaps it was because men of nearly every race in Europe were on both sides. Somebody in France wrote a long ballad: *Malbrough s'en va-t-en guerre*. It described how nobody knew when the war would end. It described how the girls wept for their soldier-sweethearts and how the soldiers found new sweethearts — "it is not girls who lack," runs the song. In time the origin of the song was forgotten and it became a favourite of every child who has ever learnt French.

In England a magnificent palace — Blenheim — was built, which is a show-place to this day. But more important, the Lakeland poet Robert Southey wrote a poem, "The Battle of Blenheim."

The poem tells of an old war veteran to whom a Blenheim village boy brings a skull he has found in a field. He asks what it is. The old soldier tells him it is all that is left of one who died in the great battle. With memory-lit eyes, he tells the story of Blenheim.

Always the boy, with a child's wish for certitude, asks the question: "But what good came of it at last?" As for the old veteran: "Why that I cannot tell," said he; "But 'twas a famous victory."

Now, more than two hundred and fifty years after, Blenheim has a meaning. Germans, Austrians, English, French — hereditary enemies — in a brand-new brew of strong Bavarian beer, drank to the end of Blenheims, needless battles fought for rulers by men with wives, children or sweethearts, homes, countries — everything except a reason for war. If the spirit that brought the veterans together on the banks of the Danube lives on and spreads to veterans everywhere, then, indeed, Blenheim will have been a famous victory.

SUBMERGED CANOPY EJECTION

If a carrier-based aircraft is unfortunate enough to suffer a forced alighting, the odds are that it will hit the sea and not land. Furthermore, it is possible that it will sink at once, and this raises problems in the design of canopy-jettison gear. M.L. Aviation Co. Ltd., of White Waltham, Berks, have developed a mechanism which can be applied to any clam-shell type of canopy hinged at the rear and secured at the front by an orthodox latch. The device is used on the de Havilland *Vampire Trainer* and *Sea Venom*, both of which are in squadron service with the Fleet Air Arm. The M.L. arrangement will not only throw off the canopy in flight but will also force it open even if the aircraft is deeply submerged in water. Successful tests have been carried out with a canopy immersed at depths greater than 10 ft. in all attitudes, with a total water force on the canopy of over three tons. ("*Flight*": U.K.)

What is Air Power?

By Major Alexander P. de Seversky

(*Reprinted by courtesy of "Air Force": U.S.A.F. Association.*)

AIR POWER is the ability of a nation to assert its will via the air medium. The military instrument by which a nation applies its air power is an air force. In time of peace the very existence of an air force of proper size and capabilities — what is termed an *air force in being* — can be used by a country to implement its national policy.

In time of hostilities, the primary use of air power is for the establishment of command of the air, the condition in which one side retains its freedom of air navigation and has the ability to deny that freedom to the enemy. Freedom of air navigation, when maintained by one side through successful sustained combat, is known as *air superiority*.

Because the aim of war is to impose the will of one side upon the other, the enemy must be disarmed; his industrial power to make war and the stockpiles of his armed forces must be neutralized. For that reason, the offensive air force must carry the threat of a lethal dose of destruction.

Though the main objective of war is to disarm the adversary, it must be assumed from the outset that the belligerents' industrial vitals and other sinews of war will be properly shielded by a defensive air force and that access to the decisive targets will be challenged. It is for this reason, as well as to deprive the enemy of his retaliatory capacity, that the primary mission of the air force must be the elimination of the opposing air force, through (1) the destruction of its operational facilities and equipment on the ground and (2) combat in the air. This is termed *air battle*.

In the past, when the range of aircraft was limited, it was possible to maintain local command of the air. Global command of the air could be achieved only after the establishment of a world-wide complex of air bases so located that, in terms of a given practical range of aircraft, their air peripheries would interlock to form an uninterrupted air canopy over the theatres of operation. This arrangement was not unlike the system maintained in the nineteenth century for sea power, which, for the exercise of its global functions, required the establishment of bastions of naval strength on foreign soil throughout the world.

There are emerging among the major powers, however, aircraft that, for all practical purposes, possess global range. They can rise directly from their respective home bases, strike at any target in the northern hemisphere, and return non-stop. At the current rate of advance in aeronautical science, it is only a matter of a short time before aircraft of a truly global range (25,000 miles) will be a reality. In the meantime, global range is being achieved through the perfection of in-flight refuelling.

Because of this global range, air power can be applied directly from the continental base of its industrial origin without intermediate bases and the international complications attendant upon their establishment and maintenance on foreign soil. In that respect, air power represents, diplomatically, an instrument of national policy that is superior to its predecessor of the last century, sea power, the world-wide deployment of which was often branded as imperialistic and aggressive. With the development of the global range of aircraft and the advent of nuclear weapons, local control of the air anywhere on the face of the earth, except over the continental base of air power containing the source of its industrial origin, can no longer be maintained. Thus, intermediary bases have become not only unnecessary

but actually untenable. It follows that the base of air operation should be so located that any attack against it will involve for the attacker the risk of engaging the entire air might of the nation. (This proposition, incidentally, defines the air power of the British Isles. Although an insular nation, Britain possesses a vast industrial complex and a large technologically skilled population. She is a source of air power of global significance that is capable of accepting a challenge to her air sovereignty.)

It follows, also, that because local control of the air cannot be maintained, air power can no longer be applied on a sustained basis against a continent from intermediary bases located on its periphery, whether those bases are fixed on land or are floating, as aircraft carriers. If, for example, a floating base ventures beyond the protective canopy of a friendly continental air force, it becomes untenable. It stands to reason that, like an intermediary base, a floating base can never contain enough air power to challenge or ward off the entire air force of a hostile continent. Further, with the development of nuclear weapons of a size conveyable by small, supersonic aircraft, the floating base, like any other intermediary base, becomes extremely vulnerable and, once destroyed, has no powers of recuperation.

From the above assumptions, it becomes clear that command of the air means a global command, exercised directly from the continent of its industrial origin. Either one controls the entire air ocean clear around the globe or one controls nothing.

In defining air power, military experts have invariably paraphrased the historic definition of sea power, maintaining that air power includes a nation's air force, the military aviation of its other services, its civil aviation and civil air transportation system, its aircraft industry, and the aeronautical skills of its population. In other words, they have held that air power comprises that entire portion of the national effort that expresses itself in aircraft, their crews, and their operational facilities.

In the strict military sense of differentiating the respective strategic rôles of the land, sea, and air forces, such a definition of air power can be challenged. The reason the sea power formula is not applicable to air power is that the movement of ships is naturally confined to their medium, the water, and cannot directly participate in, or compete in parallel with, overland movement. It is logical, therefore, that the national effort that culminates in ships, their crews, and their operational facilities, constitutes strictly sea power. On the other hand, it has never been claimed, for example, that army ordnance facilities and skills, although applicable to the production of naval guns, constituted sea power — the reason being that those facilities were irrevocably committed to the maintenance of the army.

Unlike seacraft, the aircraft is an extremely versatile vehicle, which not only participates in and competes with all methods of transportation on land and sea but, with the development of hovering machines such as helicopters, extends its application to other forms of motion, serving in effect as gigantic elevators, escalators, and hoists. As in the foregoing example of army ordnance facilities in relation to sea power, it can be argued that aircraft designed for and committed to surface forces do *not* constitute air power. It is quite possible for a nation to have an amorphous mass of aircraft, even in prodigious numbers, and still have no air power.

To put it another way, it is utterly immaterial whether an airplane rises from land or from water or from a catapult. What determines its definition as a land, sea, or air weapon is what it is designed to do after it becomes airborne. If designed to assist and increase the efficiency of land and sea forces in attaining their objectives, it is *not* an instrument of air power. Only when an aircraft is designed to assist and increase the efficiency of the air force in its task of establishing command of the air is it an instrument of air power.

A *strategic force* can be defined as a military force capable of assuming the command of its own medium by its own combat resources. Until the advent of the airplane, the army and navy were valid expressions of the nation's ultimate military power on land and sea, respectively. With the

development of aircraft, however, that ceases to hold true. No longer the masters of their own mediums, in which air power can at will decisively interfere with their functions, those forces have lost their strategic significance. Conversely, the surface forces cannot on their own initiative interfere decisively with the functions of the air force. Consequently, the air force is the only strategic force, because it is the only force that can attain command of its own medium by its own combat resources. Thus, the air force has become the primary instrument of the nation's military strength.

Because, in a major conflict, surface forces can no longer successfully fulfill their missions unless the air above them is controlled by a friendly air force, command of the air becomes the crux of war and an end in itself. (This principle, of course, is not applicable in the case of limited, localized conflicts, the conduct of which is often governed by political considerations in defiance of military logic. Thus, in Korea, the United Nations' air forces were confined to the support of ground forces and were prohibited from attacking the enemy's air bases or the industrial sources and stockpiles of his military strength.) Only when undisputed command of the air has been established can these other military services carry out their mission of exploitation, on the surface, of a climactic decision won in the air. Until then their efforts must be directed toward supporting and assisting the air force in its primary task.

In order to acquire maximum air power, a nation must adhere to these principles of military art: singleness of purpose, unity of command, and concentration and economy of force. This means that the entire air power potential of a country must be unified, under a single air command, into a single force — an air force in being that can go anywhere and do the necessary.

Therefore, it can be stated that air power may be considered the supreme expression of military power and rests upon the entire human and material resources of the nation.

NOTE

Major de Seversky wrote the above definition of air power in July 1954. In February of this year he added the following notes:

The term "defensive air force" embraces defensive aircraft and their ground operational facilities, together with the nation's entire detection and warning complex and ground-to-air missile and vehicle systems.

An important fact to be kept in mind is that the advent of nuclear weapons does not change the nature of air power. With atomic warheads becoming common to all military forces, the supremacy of the Air Force as an instrument of war lies not in the nature of the explosive it employs, but in its superior and global combat mobility through the air medium, as contrasted with the inferior and geographically limited combat mobility of land and sea forces in their respective mediums.

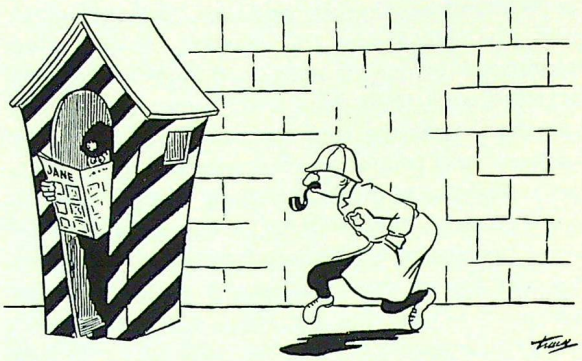
The acquisition of aircraft by land and sea forces *for logistic purposes* does not alter that axiom. The acquisition of aircraft by those forces for air combat is tantamount to creating separate, competitive Air Forces, an act which defies the basic military principles of economy of force and unity of command, with resultant overall weakening of the air power of the nation.

ROYAL CO-OPERATION

The Scotland Yard inspector in charge of guards at Buckingham Palace and Clarence House in London was a suspicious man — he'd show up unexpectedly at just any old time to see that his men were on the job.

The men stationed a spy where he could spy on the spy. When the inspector started on one of his surprise visits, the guards would get a telephone call that "Old Cod's Eye's on the prowl again".

One night the telephone rang in the sentry-box when the guard was elsewhere. It rang several times. Then the operator transferred the call to another telephone in Clarence House. The Duke of Edinburgh had just come in, so he answered.



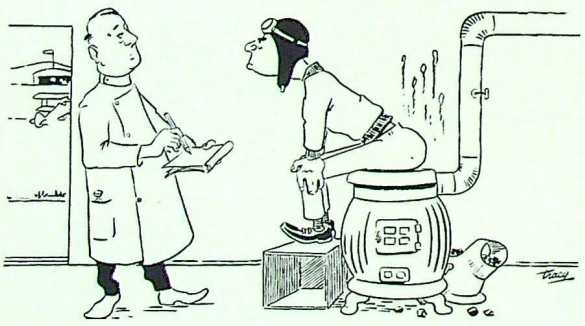
He listened curiously to the laconic warning from the spy, who thought he was talking to the guard.

Then the Duke went to the window, flung it open and shouted to whomever it might concern down in the courtyard: "Old Cod's Eye's on the prowl again, whatever that means. Good night."

(*"Blue Bell": Bell Tel. Co.*)

COLD STERN MAN

Remember the old adage, "a pilot flies by the seat of his pants?" Dr. H. Strughold, a former Luftwaffe specialist in aviation medicine, decided to carry out an experiment with the object of discovering whether in fact a pilot received assistance in the form of "gravity reports" from nerve impulses transmitted through his seat. He injected his buttocks with novocaine, and, when they were completely anaesthetized, he was carried aboard an aircraft. He instructed the pilot to take off and perform a number of slow rolls, loops, and other aerobatics.



As the doctor sat on his frozen posterior and was rolled around the sky, he discovered that he had lost all ability to orient himself. Although, in the course of other medical experiments, he had accumulated many hours of aerobatic flying without undue discomfort, he proved that when he had lost the anchor of gravity appreciation — the seat of his pants, in the saying — the psychological effect produced was one of fear, nausea, and absolute disorientation.—(*Ronald Hamilton, in "Contact": N.Z.*)

Letters to the Editor ★ ★ ★

AIRLIFT RECORD?

Dear Sir:

A propos of Flt. Lt. Harvey's article in the September issue, "Spring Re-Supply in the Arctic," you may be interested in the following piece of information.

During the operation, C-119 no. 221222, one of No. 435 (T.) Squadron's aircraft, airlifted approximately 370,000 lbs. in less than twelve days. Perhaps the R.C.A.F. now holds a world-record.

Flt. Lt. J. E. McFadden,
No. 435 (T.) Squadron.

NO. 6 S.F.T.S.'s TENTH REUNION

Dear Sir:

Some of your readers may be interested in learning that the war-time personnel of No. 6 Service Flying Training School, Dunnville, Ont., held their 10th annual reunion in Dunnville on September 24th. More than 70 former Air Force types, and their wives, attended. Those who arrived on the evening of the 23rd were entertained at the home of Vic Collins.

The famed "Clare Thunder-Mug II" Golf Trophy was won by Ken Gordon, of Toronto. Other prizes went to Bill Brittain (Wyoming), Fred Clare (Preston), "Nibs" Vale (Galt), Jake Robertson (Indianapolis), and Tom Moreton (Washington, D.C.). The non-golfers were quite content to sit and reminisce in the club-house.

At 1600 hours a chartered bus took the happy group, amid the strains of Air Force war-time songs, to the old station, where battles were re-fought on the now-barren tarmacs and runways. The disembarkation and the "fall-in" were filmed for showing at the reunion next year.

New officers were elected: Chairman, Jim Buchanan (Maryland); Vice-Chairman, Doc Mills (Dunnville); and Sec. Treas., Frank Scholfield (Dunnville). A letter from a well-known former C.O., Air Commodore A. H. Hull, now of Vancouver, received a loud ovation, and he has been invited to attend next year as an honoured guest.

The wives were entertained by Mrs. "Red" Guest. They joined the men at the Golf Club (after the banquet) for dancing and bridge.

Members were present from places as far apart as Maryland, Indiana, Washington, Wyoming, Toronto, Hamilton, Windsor, Sault Ste. Marie, and Timmins. Plans are already under way for a bigger and even better celebration in 1956.

I append a time-table of the activities:

Friday:	2000 hrs.	Cocktails at Vic Collins' (his wife Florence presiding).
Saturday:	0030 hrs.	Poker at the Victoria Hotel (Art Harrison presiding).
	1000 hrs.	Golf and conversation at the Dunnville Golf Club (John Barleycorn presiding).
	1600 hrs	A visit via chartered bus to what is left of No. 6.
	1630 hrs.	A fall-in and march-past at the Control Tower (Tom Morton presiding). This spectacular event was filmed for showing next year.
	1900 hrs.	Banquet and business session (Ken Gordon presiding).
	2030 hrs.	Film of the 1952-53-54 reunions (Jim Buchanan presiding).
	2100 hrs.	Dancing, bridge, dominoes, and cardboards (Bill Farr and "Doc" Mills presiding).
	0100 hrs.	Bull session in local restaurant (no presiding officer could be found).
Sunday:		Farewells (Alka Selzer presiding).

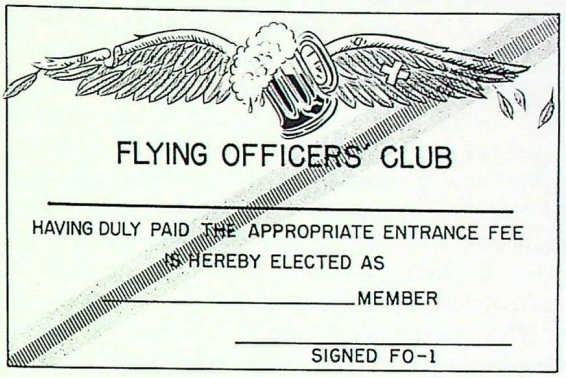
Frank Scholfield (R.C.A.F.A.),
Sec'y, No. 6 S.F.T.S. Reunion Committee,
Box 814, Dunnville, Ont.

THE FLYING OFFICERS' CLUB

Dear Sir:

Popular belief to the contrary, there *are* flying officers at Air Force Headquarters. In order, however, to prevent the species from following the dinosaur into extinction, a unique non-profit organization has been formed.

The qualification for membership is uncomplicated but (at A.F.H.Q.) somewhat rare: the candidate must be a Flying Officer. Invitation and initiation into this select group is brought about at club meetings where the potential member, if considered worthy of the honour, is allowed to buy his peers a round of drinks. His acceptance thus symbolized, the new member is expected to act with the dignity appropriate to his exclusive position in the Service.



In the unlikely event that a member of the club should reach the rank of Flight Lieutenant, he must resign. The way out is strikingly similar to the way in — via the pre-prandial. All is not completely lost, however, for the club offers honorary membership to a chosen few and (if among them) he may buy his way in again. Numbered among these men of distinction are four senior officers, two of whom are Group Captains.

The Flying Officers' Club meets inadvertently, infrequently, and informally, but its meetings provide an unfailing forum in which its members can recast the policies of the Air Force to their own satisfaction.

The Club's membership card, it will be noticed, bears the insignia of a pre-prandial superimposed on a pair of clipped wings.

Flying Officer T. G. Coughlin,
A.F.H.Q.

★ ★ ★

LEADERSHIP

Every Air Force activity, no matter how great or small its apparent importance, requires some manifestation of good leadership. The quality of *every* effort depends to a great extent on the quality of the leadership that is provided.

(*No. 1 S.S.T.S. précis.*)

TEAM-WORK SAVES SABRE

The quick thinking of a man on the ground and the flying-skill of a man in the air recently combined to save Canada more than a quarter of a million dollars.

Off on a routine high-level training exercise from No. 2 (F.) Wing's base in France, Flying Officer R. A. Caskie, a pilot with No. 430 (Fighter) Squadron, retracted his undercarriage in the normal fashion just after take-off. A few moments later his flight leader informed him that his nose wheel was "cocked"— i.e. jammed at right angles to the direction of motion. The pilot immediately informed the control tower of his problem, and flew in circles around the field while awaiting instructions from the ground.

The Operations Officer of the day, Flt. Lt. L. Skaalan, rose to the occasion. He promptly ordered that a strip of fire-extinguisher foam be spread down the centre of the runway so that the cocked wheel would slide. The circling pilot was then cleared to land.

Having dropped his external fuel tanks in order to lighten the load and lower his landing-speed, Flying Officer Caskie came in on a long approach so that he could line up his aircraft with the white foam-strip. As he touched down he flamed-out his engine and held the nose-wheel up until the foam-strip passed under the aircraft. With his main wheels straddling it, he gently dropped the nose wheel down, and it skidded along easily until the braking action on the other wheels brought the 'plane to a stop.

Answers to "What's the Score?

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

★ ★ ★

$$\left[EY\left\{(X-A)(X+A)M+A^2M\right\}\right]\left[\left\{\frac{\frac{R+X}{X}+\frac{X}{R-X}}{\frac{X}{R-X}}\right\}-\left\{\frac{4AS}{3Y\left\{(X+E)^2-(X-E)^2\right\}}+\frac{4AS}{3E\left\{(X+Y)^2-(X-Y)^2\right\}}+\frac{4AS}{3X\left\{(E+Y)^2-(E-Y)^2\right\}}\right\}\right]$$

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.


The
ROUNDEL