



The Royal Canadian Air Force

CANADA'S AIR FORCE GAINS CONFIDENCE WITH ITS GROWING STRENGTH

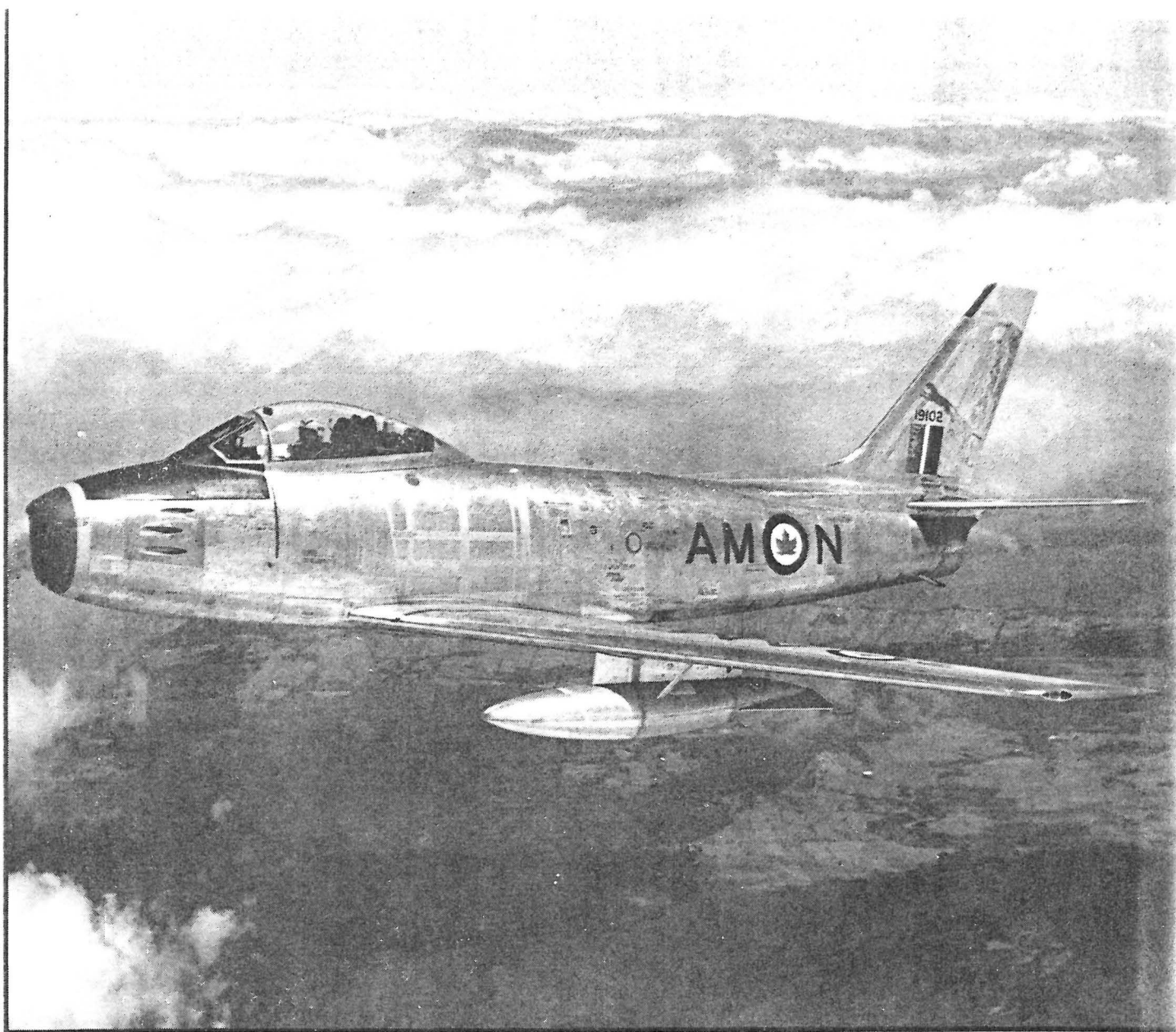
HUSTLING, bustling, the Royal Canadian Air Force emerged from World War II a husky 21-year-old. The Air Force had gone into the war a stunted youth all the kids laughed at; it had come out exuding all the confidence of the physically perfect man who is well aware he is over six feet tall and weighs 200 pounds.

Like the many of its members who had been untried youths when they enlisted, it found that in spite of a magnificent job done on the field of battle, the biggest fight was going to be adapting itself to a postwar world. Gone was the easy money, the seemingly endless store of the best flying equipment available, the enlisted strength numbering into the hundreds of thousands. War had made a man of the RCAF and it looked as if peace was going to drain all its strength away. From a peak strength of about 215,000 men who had manned some 48 operational squadrons, flown with RAF units, and trained some 131,000 aircrew for itself and other Commonwealth countries, it dwindled to 14,000 by 1949. The muscular 21-year-old of 1945 became skin and bone.

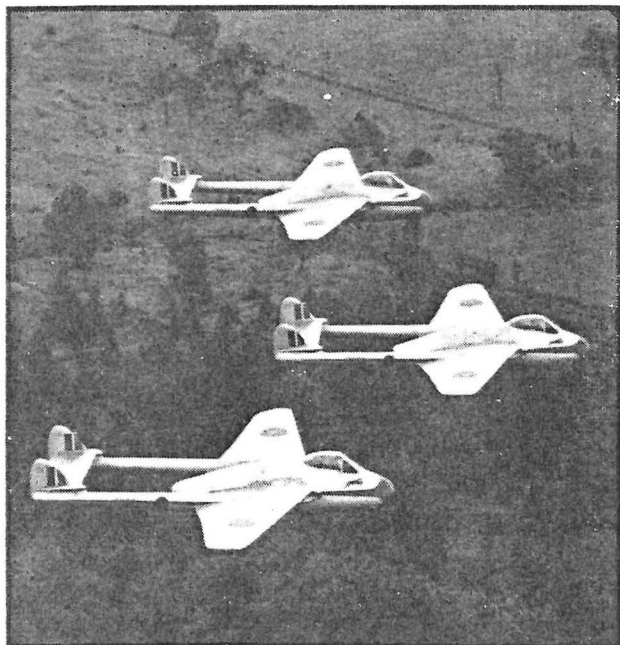
The first postwar years were not easy ones for the RCAF. The taxpayers were tired of war. They wanted to spend their hard-earned dollars on shiny new automobiles, not warplanes; on suddenly plentiful butter, not bombs. Even the Air Force hierarchy could not foresee that in a scant half dozen years it would be facing the possibility of battle with an even more cunning fanatic than the Nazi. It envisioned a postwar RCAF based on what everybody believed were the needs of a peace loving world. It was to be an infinitely smaller force than its wartime counterpart. It would take the very cream of the country's youth and train them to be superb flying men and leaders. They would fly, in time, the most modern fighter aircraft available. The training of the men was to be long and loving, so what did it matter if it was five, six, or seven years before the service began to get its CF-100s and F-86s in quantity? Putting muscle between the bones and the skin was to be slow and painstaking, directly proportioned to the money and manpower available.

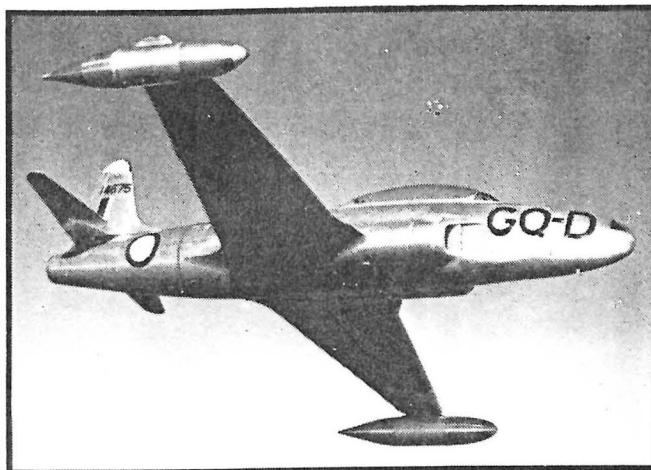
(Please turn to page 18)

1054



ON PAGE OPPOSITE, F-86E SABRES OF 410 AND 441 FIGHTER SQUADRONS LINE UP ON THE TARMAC AT DORVAL UNDER LOWERING SKIES. ON THIS PAGE ARE THE TYPES WHICH WILL FORM THE MAINSTAY OF CANADA'S AIR DEFENCES FOR THE NEXT FEW YEARS.





SEVERAL REGULAR AND AUXILIARY SQUADRONS ARE EQUIPPED WITH MUSTANGS WHILE THE T-33 IS USED FOR ADVANCED TRAINING.

The planned result was to be a core, hard as a diamond and just as beautifully cut and polished. It was to be basically a fighter force. Its leaders, high and low in rank, were to be of such calibre that they would be capable of administering an organization many times larger than what was immediately available.

Not Without Critics: It need be said that the plans for the postwar Air Force and the speed with which they were being implemented were not without their critics. The opposition parties and the press were outspoken in their demands for more aircrew training, more modern aircraft, and a faster build up. On the other hand, the general public was more interested in higher and more readily available old age pensions, lower taxes, and government building projects that were of more direct benefit to the citizens. In short, the canny Canadian public was not receptive to the idea of spending millions to provide a small group of earnest young men with swift flying machines in which to cavort aimlessly (so it seemed) about the skies. In spite of glib references to millions by a most impressive echelon of opposition members and editorial writers, the public still clung to the idea of spending its defence dollar a penny at a time.

Through long experience, the Government in power gauged this public temper well. That is undoubtedly, its talent. When it plays the role of the statesman, it often hams up the part badly; when it dons the garb of the politician, it is depicting a character it knows and loves . . . that of the kindly and beneficent father of the little man. And it is a well known truth that for the first four or five postwar years the

little man knew little and cared less about how he could personally be affected by the earlier counterparts of the violation of an obscure place called Korea or the usurping of an oil refinery in Abadan. To him, "ask not for whom the bell tolls, it tolls for thee", was only a gloomy quotation from a poem, not likely to be construed as a warning.

Degrees of Influence: These things, then, all had varying degrees of influence on the formation of Canada's postwar Air Force. It was a compromise force, built within the limits of the political, economic, and strategic considerations. This is not to say that it was not a good compromise. Mistakes were made and always will be made, but the current rapid expansion of the Air Force indicates that its leaders chose their way wisely and well — *if time does not run out too soon*. The impact of Korea forced the government into speeding the build up of the Air Force and consequently accelerating its spending to the point where it expects to pay out nearly a billion dollars on the air defence program in the current fiscal year alone. Fortunately, by the time Korea happened, the public had become sufficiently impressed with the seriousness of the world situation and the necessity for Canada to have strong defensive forces. So it was with the blessing of the citizens that the money was suddenly made available to equip the gymnasium, and the muscle builders went to work in earnest.

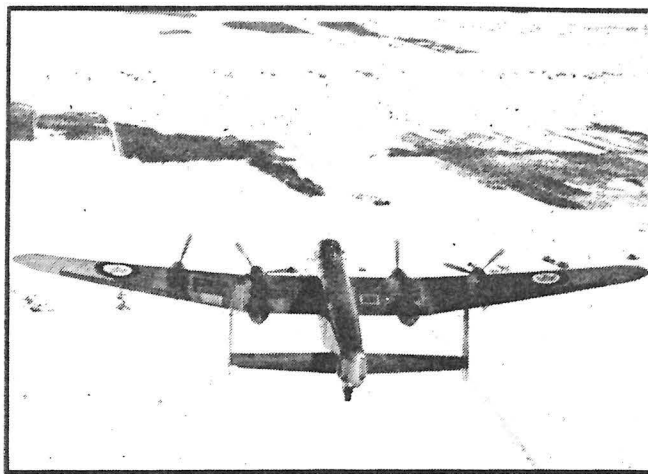
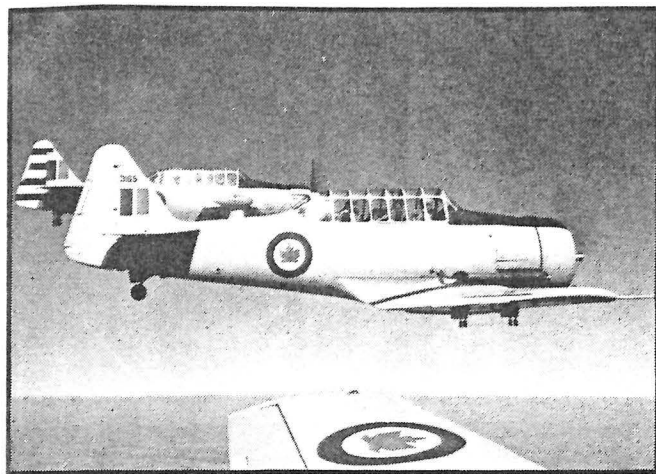
And now, more than one year after the beginning of the Korean War threw all the Western Nations into a flap, what has the RCAF got? Insofar as front line strength is concerned, not

too much. It's when you start looking at the way its organization has grown and improved that you notice the difference. Its training strength is also in much better shape, with new schools being opened in Western Canada almost as fast as quarters can be readied for them.

strength in numbers

ACTUAL strength of the RCAF consists of 24 Regular and Auxiliary squadrons, only 12 of these being full-time units. The Regular squadrons break down into six fighter squadrons, two maritime reconnaissance squadrons, one photo survey squadron, and three transport squadrons. The Auxiliary units are all fighter squadrons, except for Nos. 406 and 418, tactical bomber units based respectively at Saskatoon and Edmonton.

The operational equipment situation is still not good, but there is excellent reason to believe that it will improve rapidly soon. Only two regular squadrons, Nos. 410 and 441 (both temporarily based at Dorval, P.Q., but normally based at St. Hubert, P.Q.) are considered to be fully equipped F-86E units. A third fighter squadron, No. 421, is preparing to return to Canada from the U.K. (where its place will be taken by 410), at which time it will undoubtedly re-equip with F-86Es. It has been flying borrowed RAF Vampires while in the U.K. Its own Vampires were left at its home base of Chatham, N.B., when it went overseas at the beginning of 1951, but these have certainly been put to work with other units by now. The fourth fighter squadron, No. 416, is a Mustang outfit based at Ottawa's Upland Airport. Also



RCAF STANDARD BASIC TRAINER IS THE EVERGREEN HARVARD. ONE PHOTO AND TWO MARITIME SQUADRONS USE THE LANCASTER.

being formed at the Ottawa fighter base is No. 439 Squadron, to be equipped with F-86s, as will 416 when the runway extension program at Uplands is complete. Another squadron, in the formative stages at the new Bagotville, P.Q., fighter base, is 413, to be equipped initially with Vampires. It will eventually become the first CF-100 all weather squadron.

Recent news reports have indicated that deliveries of F-86s from Canadair Limited have been slow. While basically true, this is somewhat misleading. Actually, over 100 of these aircraft have been completed. However, the first 40 were the "A" model and the bulk of these are still undergoing conversion to the "E". The result will be that during the last months of this year the RCAF will probably be receiving F-86Es at a far greater rate than Canadair is producing them. Total strength by the end of 1951 should be at least 100 aircraft, so that all the existing squadrons slated to be equipped with the F86E should be at peacetime readiness in the next few months.

In Fine Fettle: The Auxiliary is in excellent shape, with ten of its twelve squadrons having been in existence for a sufficient length of time to have attained a high degree of efficiency. It has two squadrons at Vancouver (442 and 443), two at Montreal (401 and 438), two at Toronto (400 and 411), one each at Winnipeg (402), Calgary (403), Saskatoon (406), Edmonton (418), London (420), and Hamilton (424). Vampires are used by the units at Toronto, Winnipeg, Montreal, and by 442 at Vancouver. The other fighter squadrons at Vancouver, Hamilton, London, and Calgary use Mustangs.

The tactical bombing outfits at Saskatoon and Edmonton fly Mitchells. In addition, each Auxiliary squadron has a complement of Harvards, the ratio generally being eight Harvards to four of the operational type of aircraft.

The other Regular squadrons carry out a variety of tasks. The transport squadrons maintain lines of communication, and support the operational squadrons. Best known is the work of 426's North Stars in the Korean Air-lift, but good solid yeoman duty is also being carried on by 435 Squadron, based at Edmonton, and 412 Squadron, based at Rockcliffe, near Ottawa. The latter two units fly Dakotas mainly, though 412, which is classed as a communication squadron, also operates the Canadair C-5 and an Expediter. It is expected that another transport squadron may shortly be formed, and that some C-119 Fairchild Packets may be obtained. No. 408 Squadron, a photo survey outfit, uses Lancasters, as do the two maritime reconnaissance squadrons, 404 and 405. The maritime reconnaissance squadrons are both based at Greenwood, N.S., and are at present limping along with a small complement of aircraft. Here again, aircraft are nearing the final stages of conversion at Canadian aircraft plants, and the two squadrons should be up to full peacetime operational strength within a very short time.

administration by commands

ADMINISTRATION of the far-flung stations and operations of the RCAF is accomplished through a system of four commands which are responsible directly to AFHQ, and a

number of groups which are responsible either to one of the commands or to AFHQ. The commands are Training Command, Trenton; Air Defence Command, St. Hubert; Air Transport Command, Lachine; and Air Materiel Command, Ottawa. Responsible to Air Defence Command is the subsidiary 12 Air Defence Group, with headquarters at Vancouver. The Tactical Air Group, with headquarters at Edmonton, and the Maritime Group, with headquarters at Halifax, are directly responsible to AFHQ. No. 14 Training Group at Winnipeg comes under the control of Training Command HQ at Trenton, Ontario.

This system, it will be noted, is one of functional commands, rather than geographic. During and after World War II, many of the RCAF's commands were of a geographical nature, with each command being more or less self sufficient. This proved to be unsatisfactory and with the recent passing of North West Air Command, the changeover to the functional system was completed.

There are two additional groups that have not been mentioned yet. These are the Toronto Auxiliary Group and the Montreal Auxiliary Group, each having control over all the extensive Auxiliary activities in areas concerned. They are directly responsible to Air Defence Command, since they are composed of fighter squadrons and supporting ground elements. Some measure of control of these groups is also exercised by Training Command, which formulates their training policies and plans.

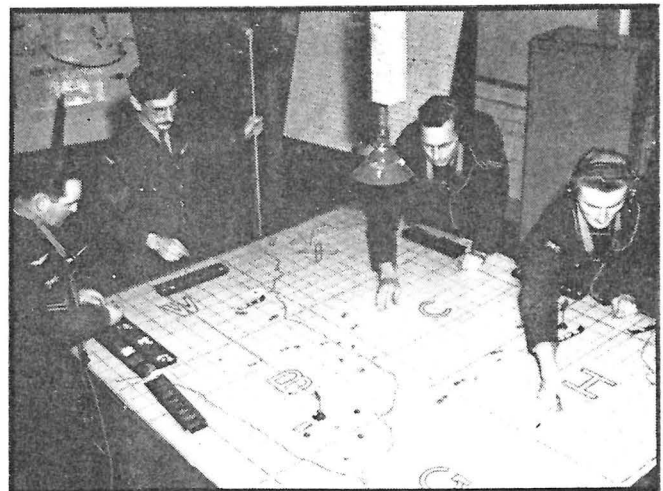
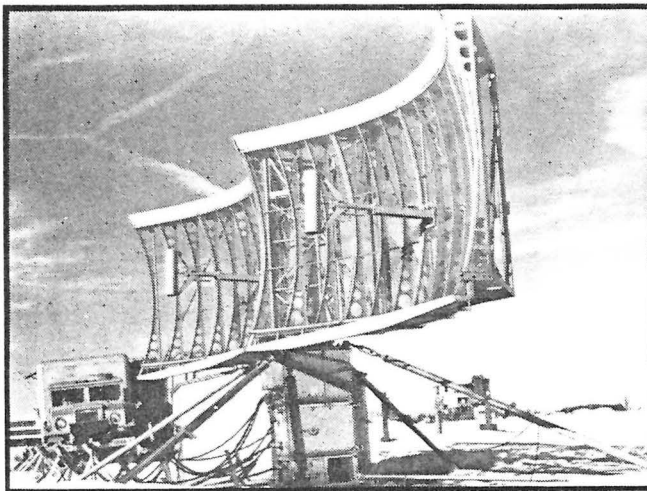
Next in Line: Moving down the line of command, the next adminis-

trative unit is the Wing, so far used mostly in the administration of the Auxiliary. For instance, recently formed are 14 Auxiliary Operational Wing and 15 Auxiliary Technical Training Wing, both at Toronto; 16 Auxiliary Wing at Hamilton; 17 Auxiliary Wing at Winnipeg; 18 Auxiliary Wing at Edmonton; and 19 Auxiliary Wing at Vancouver. At Montreal, No. 1 Radar & Communications Wing has been in existence for more than two years. Each of these wings is responsible to an appropriate Auxiliary or Regular group. One Regular Wing, recently formed is No. 1 RCAF Fighter Wing, based at North Luffenham, England. This wing

defence by radar

SO FAR most of the talk has been about units engaged in flying operations. That's because a fair amount of information about these operations and the equipment necessary to carry them on has been made public by the Air Force over the past few years. On the definitely restricted list are any details about the radar screen that is being built up across the Canadian North and around key Canadian cities, although enough information has leaked out from time to time to hint that there is plenty going on in this segment of the air defences. Because

system is therefore being developed as a connecting link of the American chain, concentrating on early warning and "target-area" defence. Manned on a skeleton basis by the Regular Force, the system would have to be bolstered by Auxiliary personnel should hostilities break out. Exact locations of permanent radar installations are classified, though it has been revealed that there are Auxiliary Aircraft Control & Warning Units at St. Anne de Bellevue, P.Q., Sherbrooke, P.Q., Quebec City, Montreal, Ottawa, Toronto, Hamilton, Winnipeg, Vancouver, Victoria, and London. Each of these units is equipped with an eight-vehicle radar convoy



RADAR PICKS UP INFORMATION WHICH IS FED THROUGH TO THE FILTER ROOM (RIGHT) WHERE AIRCRAFT MOVEMENTS ARE PLOTTED.

will administer the first three RCAF fighter squadrons to go overseas.

The activities of the Auxiliary and the Regular forces are closely integrated. In fact, attached to each Auxiliary squadron is a detachment of permanent force officers and men known as a Regular Force Support Unit. The Auxiliary groups are commanded by Regular officers who have a small staff of permanent force NCO's and airmen. The Auxiliary units are in many instances closer to being operational than people realize, and in case of war they are immediately on active service. They have the necessary organization functioning at all times and their aircrews put in sufficient time in the air to keep proficient. Assuming that they could be equipped with their full complement of aircraft and associated equipment (radar, etc.), they could be raised to battle efficiency in very short order. The success of the Americans with reserve squadrons which have been called up for active service in the Korean war is proof of this.

there has been so little publicity on radar, its importance is generally underestimated. Let there be no doubt, however, as a defensive weapon it ranks with the most up-to-date fighter aircraft. Without early warning from radar, all the F-86s and all the CF-100s to be built in the next umpteen years, would be little better than useful things to have for air shows.

The glimpses that have been caught of the plans for Canada's radar defences show that there are a lot of holes in the radar fence, but that with the help of the U.S., these are being rapidly plugged. This U.S. participation is a bit galling to those who are apt to be upset by such apparent manhandling of Canadian sovereignty, but practically speaking, obtaining U.S. help was the only course that could be chosen, since Canada could not hope to cover her entire length and breadth with radar stations without crippling the country's economy.

Connecting Link: The Canadian

of a type known as the A.M.E.S. II (Air Ministry Experimental Station) which, though it has limited coverage, helps to supplement the Regular Force system.

The RCAF's place in the sun is not just as a defender of Canada. It is part of a larger scheme of things which include defence of North America from attack from the North, and defence of Europe from attack from the East. In the first role it therefore carries a large burden of the responsibility of defending the U.S., as well as Canada, against attack from the North. Hence the willingness of the U.S. to pour literally hundreds of millions of dollars into radar defences in Canada. This does not mean that the RCAF is providing all the fighter defences across the North. The U.S. is building up a strong force in Alaska, the logical line of attack, so that the operations of the RCAF and the USAF are closely integrated.

(Continued on page 99)

service, an RCAF staff officer might find that motherhood is a drawback.

Recruiting of women for the Regular Force has been going on at the rate of 200 a month since May, and the Auxiliary started enlisting the first of about 2,000 women on September 1. Emphasis is being placed on the radio and electrical, clerical, medical, and fighter control trades. These include the trades of communications operator, communications technician, radar technician, aircraft control assistant, fighter control operator, clerk administrative, clerk typist, clerk accountant supply technician and medical assistant. There is also room for a few women in the trades of meteorological observer, security police and tailor.

AIR RACES

(Continued from page 70)

the Acrojets. All the Vampire show was carried out with four of the aircraft flying in formation, and the fifth putting on a solo display. Soloist was F/L Kelly.

Best Part: As previously mentioned, the static display was the highlight of the show. In this respect, the

Races are beginning to bear some slight resemblance to the SBAC show, though there was no manufacturer took advantage of the Races to display his civil wares, as is done in the U.K.

Among the military types at which the public could take a long look (and a close one in most instances) were: (for the USN) Grumman F8F, Grumman F6F, Corsair, McDonnell F2H-2P photographic Banshee, Chance-Vought XF 7U Cutlass, Grumman F9F-2 Panther, F2H2 Banshee, Douglas F3D Skynight, Martin AM Mauler, Douglas AD-W and AD-Q Skyraider, Grumman AF-2S and AF-2W Guardian, Lockheed P2V Neptune, Martin P4M Mercator, Fairchild R4Q Packet; (for the USAF) Fairchild XC-120 Packplane, Consolidated Vultee B-36, Douglas C-124, Lockheed Constitution, Northrop F-89 Scorpion, North American F-86E, Republic F-84E, Lockheed F-94B and F-80C, Douglas B-26 Invader, North American RB-45C Tornado; (for the Army) Cessna LC-126 ("195") L-20 Beaver, L-17 Navion, Sikorsky H-18, L-15 Boeing Scout, Bell H-130 Cessna L-19, Aeronca L-16.

THE RCAF

(Continued from page 20)

European Service: Canada has also committed herself to provide eleven fighter squadrons for European service. While this is a heavy commitment, it is in Canada's best interests to keep Europe from being overrun.

Although the RCAF is to have a total of 40 squadrons, according to existing announced plans, its Regular forces will still be spread fairly thin. This figure includes Auxiliary squadrons as well as Regular, so that if no new Auxiliary units are formed, there will be 28 Regular squadrons for service at home and abroad. With eleven overseas, there will be only 17 left at home, of which not more than 11 will be fighter squadrons. Since it is reasonable to anticipate the formation of another transport squadron (to help support the overseas units) and possibly another maritime reconnaissance unit, the number of Regular fighter squadrons to be based in Canada is brought down to nine. Thus the 12 Auxiliary squadrons will still be playing a highly important part in the air defence scheme.

The Home of Fine Workmanship For The Aircraft Industry

We Design And Fabricate

Aircraft Tooling

Jigs And Fixtures

Interchangeability Gauges

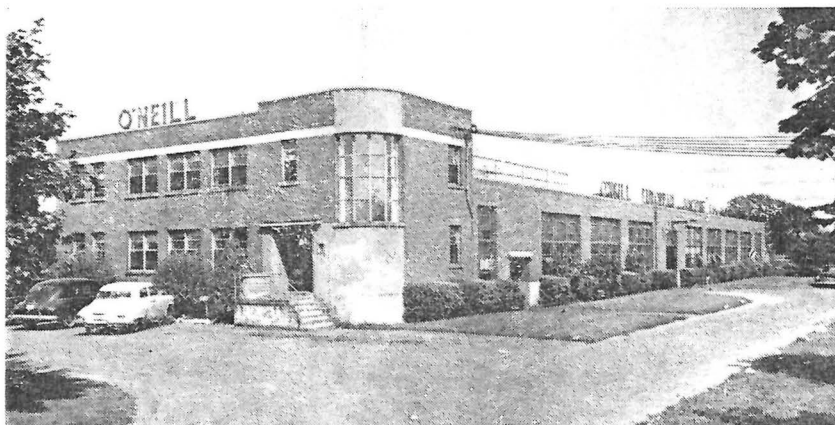
Production Parts

And Assemblies.

Your Inspection

Invited

R.C.A.F. Approved



View of Head Office and Plant in Ville La Salle, Que.

Our Engineers Are Experienced In Aircraft

O'NEILL EUROPEAN MACHINE COMPANY

Sterling Avenue, Ville La Salle, Quebec.