

# The **CROWNDDEL**

Vol. 6, No. 7  
JULY-AUGUST 1954



**ROYAL CANADIAN AIR FORCE**



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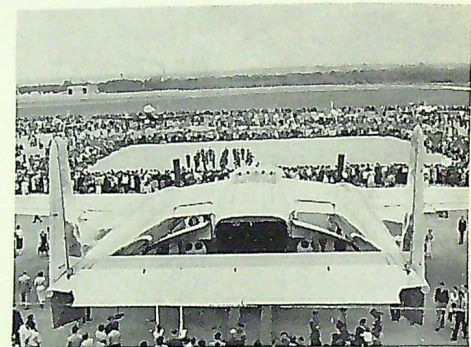
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*This Month's Cover*



An unusual shot of the C-119 taken at R.C.A.F. Station Rockcliffe on Air Force Day, June 12. Visitors to the station numbered somewhere in the region of 40,000.

**EDITORIAL OFFICES:**  
**R.C.A.F., Victoria Island,**  
**Ottawa, Ont.**

# SGT. SHATTERPROOF WILL NEVER LEARN

Sir:

This month I write neither to encourage nor to chastise. The sword sleeps in its sheath, the buckler of Q.R.(Air) is laid aside. The warrior has, for the moment, given place to the connoisseur, and the clash and fury of flying memoranda reach me only like the remembered sound of thunder. Urgent in my ears, the voice of Canada's native Muse speaks from the manuscript on the desk before me.

The poem you are about to read was written in shorthand on the back of an old copy of Station Standing Orders which Cpl. Spyder was using to touch up his shoes. Ever alert to the menace of possible pornography or subversion, he immediately brought the matter to my attention. You may judge how great was my amazement when, after the script had been deciphered, I realized the significance of Cpl. Spyder's discovery. Not since the publication of Clam's masterpiece\* in the February 1950 issue of "The Roundel" has a brighter gem been added to the diadem of Canadian literature.

Who wrote it, Sir, we shall never learn. Was it some disillusioned and long-since forgotten stenographer, passionately warning her successors before she ended it all by marrying a Pilot Officer? Or was it one of the many girls who still ply their loyal pencils on our station? Personally, I incline to the former theory; for although not every member of our present female clerical staff could justly be termed an intellectual giant, so far not one is reported to have taken the recommended way out . . .

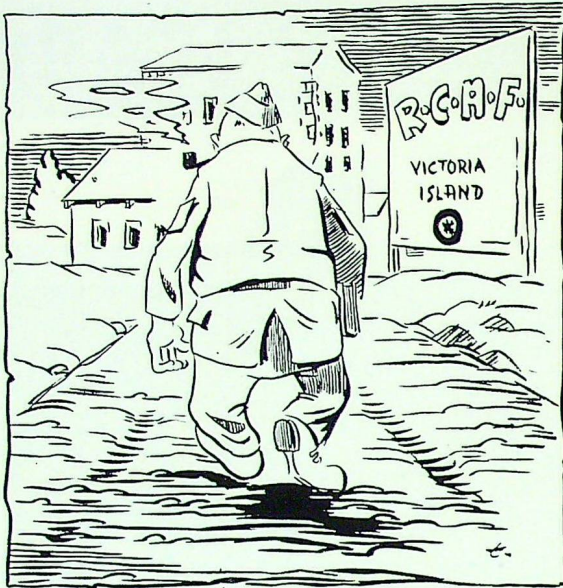
\*"Out of the Night Comes Shatterproof", by ex-Corporal Clam, first president of the Sockeye Wing of the R.C.A.F. Association and author of many outstanding poems, notably, "Charter Night in Pilchard Pass", "Spawning-Time at McGuire's Cannery", "Hand Me My Rubber Trousers, Pal", etc.—EDITOR.



## ALL IS NOT GOLD

*Oh, golden is the glitter of an Air Vice-Marshal's hat,  
And glamorous the gatherings that you will meet him at;  
But although the Air Vice-Marshal may look thoughtfully  
at you,  
He's considerably older than the artful A.C.2.*

*Now, never be so prudish that you stamp yourselves as  
bores  
By rejecting the advances of approved Air Commodores —  
For why should the Air Commodore, when all is said and  
done,  
Not press his suit as often as the pressing A.C.1?*



*Group Captains, in this list of mine, are obviously third,  
And many a Group Captain is a pretty wily bird;  
But experience will teach you, as it's painfully taught me,  
That no bird is so wily as the wily L.A.C.*

*The Wing Commander brings another tricky problem up:  
You'd best decline politely if he asks you out to sup.  
Yet, should the Wing Commander from the eager chase desist,  
Remember that the Corp'ral's an applied psychologist.*

*Were I the Squadron Leader, I'd revise my whole approach.  
I needn't be specific, for I don't intend to coach  
The gallant Squadron Leader; but I'll tell you this for sure —  
I never showed the Sergeant any gimmick but the door.*

*The subtle Flight Lieutenant and the no less subtle "Flight",  
Regard with circumspection, girls, and only when it's light,*

*Then make your way to pastures new, and pause again —  
for lo!  
Here stands the Flying Officer beside the Warrant O.*

*But though the one looks strong as steel, the other tough  
as oak,  
The fragile reed could never be more permanently broke.  
So let us face the facts of life with cheerful resignation:  
Let's catch the Pilot Officer — AND KEEP HIM ON  
PROBATION!*

And now that we have paid our tribute to genius, Sir, the connoisseur bids you good-bye and we can turn in less Athenian mood to page 18 of the May issue. There you state that "Wing Commander Redpath succeeded Air Cdre. Tylee as Director (of the Canadian Air Force) on 22 March 1921, and was in town succeeded by Wing Cdr. Scott on 13 July."

Now, Sir, I fully appreciate that even to the greatest of historians the remote past can never be a completely open book. I do not, however, feel that the year 1931 is sufficiently remote to justify your apparent ignorance as to who succeeded Wing Cdr. Redpath *in the country*. It might be as well to provide that information as soon as possible, for doubtless many of our older taxpayers will demand to know how many Directors or Chiefs of the Air Staff have, without their (the taxpayers') knowledge, been on the Air Force payroll at any one time.\*

\*Our older taxpayers may lower the standard of revolt. For "town" please read "turn".—EDITOR.

## 90 YEARS AGO

It is reported that "an ingenious, but visionary" Southerner claims to have invented a flying machine called the "Artisavis." He proposes to station 1,000 of them five miles from an enemy fleet or camp and send them thence into the air, each armed with a 50-pound explosive shell to be

dropped from a safe elevation upon the enemy. The Birds are then to return for reloading. The Confederate Congress, however, is "blind to the merits of his scheme".

("Army Navy Air Force Journal": U.S.A.)

# THE PARTY LINE

## PLANNING THE REGULAR OFFICER'S CAREER

By Group Captain D. A. Willis, D.F.C.,

Directorate of Postings and Careers, A.F.H.Q.

*("Am I qualified for a commission in the Regular Air Force? If so, where am I likely to end up?" Group Captain Willis here provides categoric answers to both questions. Many of our readers will recall Group Captain Willis' article of more than a year ago, in which he explained the R.C.A.F.'s promotion policy in respect to officers of the Regular Force. For the benefit of those who did not have the opportunity to read it, however, a comprehensive precis of it is included in the present article under the heading "PROMOTION".—EDITOR.)*

### INTRODUCTION

THE BUSINESS of planning its officers' careers\* is a never-ending commitment of the R.C.A.F.'s Personnel Branch. Times change, and with them the Air Force's needs and the availability of manpower. None the less, no matter what else may fluctuate, there can be no change in the three basic requirements that must guide those who are charged with seeing to it that the Service offers useful and rewarding careers to the officers who man it. These three basic requirements are:

- A balanced rank structure designed to provide adequate *opportunities* for promotion in future years.
- Standards of professional competence that must be met, at all levels, in order to provide effective manning and to enable the Air Force to fulfil its operational commitments.
- A rank distribution based on realistic requirements and capabilities.

Rather than guarantee each officer a career necessitating a minimum of personal effort on his part, the R.C.A.F. has planned for the progressive

advancement from level to level of those officers who, through demonstrated ability and initiative, justify such advancement. Thus, our career planners (bearing in mind the infinite variations possible in an officer's career) at all times conformed to certain principles which ensure the selection, training, employment, and promotion, of the personnel deemed to be the best officer material available to the Service.

### SOURCES AND SELECTION

Officers of the Regular Force are selected from five sources:

1. University graduates.
2. Canadian Services College graduates.
3. Men who are not university graduates (normally for the Air Crew List, the Flying Control, Ground Observer, Ground Defence, and Fighter Control branches only).
4. Promotion from the ranks.
5. Reserves.

With the exception of doctors, lawyers, nurses, and university undergraduates subsidized during their last year at university, all direct entrants who have had no previous Service experience are

\*Exhaustive information regarding the career fields of airmen is laid down in the ten-volume publication known as C.A.P. 471, R.C.A.F. Trade Specifications.



appointed as Flight Cadets. After indoctrination and basic training, they are commissioned as Pilot Officers.

Nurses, and university undergraduates who have been subsidized during their last year at university, are appointed initially as Pilot Officers. Doctors, although appointed as Pilot Officers, are promoted to the rank of Flight Lieutenant (with effect on the date of appointment) upon submitting proof of their license to practise. Lawyers are promoted to the rank of Flight Lieutenant upon completion of six months' satisfactory service as Flying Officers, which latter rank they are granted upon admission to the Bar. The rank which candidates in other categories are granted on appointment to the Regular Force is dependent upon their former Service experience and/or civilian qualifications. Those promoted from the ranks, except for aircrew training, are awarded a commission in the rank of Flying Officer, provided they hold a Flight Sergeant's or higher rank before their appointment.

#### TYPES OF COMMISSIONS

Two types of commissions are granted in the Regular Force, namely, Short Service and Permanent. The type of commission granted depends upon education, the List or Branch to which the candidate is appointed, and (qualifications and requirements permitting) upon the wishes of the individual.

As a rule, Short Service Commissions are granted initially to the following groups:

- Aircrew who are not graduates of a university or Canadian Services College.
- Direct entrants (not university graduates) in the Flying Control, Ground Observer, Ground Defence, and Fighter Control Branches.
- Female personnel, e.g. nurses and Messing Officers.
- Doctors (in certain circumstances).

Normally, Permanent Commissions are granted to:

- University graduates entering any List or Branch.
- Personnel promoted from the ranks, except those selected for aircrew training.
- Short Service officers selected in competition towards the end of their engagement period.

#### LIST AND BRANCH STRUCTURE

Having been selected for a commission, officers

are appointed to a List or in a specific Branch of a particular List. The List and Branch structure\* adopted by the R.C.A.F. takes into account the wide variety of skills and knowledge embraced by the activities of a modern air force and the inability of any one officer to have a sufficient working knowledge in all fields. It is to be noted that the R.C.A.F. List and Branch structure attempts to segregate general types of activity into homogeneous groups. To ensure that this structure is realistic and in keeping with Service requirements, an Officer Classification Committee conducts a continuous and searching review of the specifications for each area of officer employment.

In the General List, the various Branches lose their identity and amalgamate. For example, all officers of the Aircrew and Technical Lists, regardless of Branch, are placed in the General List upon reaching the rank of Group Captain.

While appointment in one or another List or Branch may to some degree limit an officer's ultimate rank, there are channels through which this level may be exceeded, and these tend to balance career opportunities available to officers of all Lists. In this connection, the minimum seniority requirements for promotion are the same for each List, and the ratio of officers in each rank within each List is similar, provided that the required qualifications are equal.

#### TRAINING AND EMPLOYMENT

After an officer has been selected and appointed to a commission in a particular List or Branch, the next step in the development of his career is the direction of his training and employment. In general, this plan is designed to provide adequate grounding and experience in basic specialities, e.g. in the Aircrew, Technical, Medical, or Supply field. The officer is then equipped not only to perform efficiently and to supervise in his field, but to continue his training and to extend his ability by means of specialist courses.

As an example of the type of training and employment which R.C.A.F. officers may expect to receive during their Service, the proposed form for

\*See under the final main heading of this article, "Established List and Branches".



the Aircrew List is set out below. This List has been chosen because it is the largest in the R.C.A.F., and much the same plan applies to other Lists.

#### Phase 1.

(First six years: Flight Cadet, Pilot Officer, Flying Officer, and Flight Lieutenant.) This phase covers the basic training and primary employment period of each officer until he has completed employment at squadron level.

#### Phase 2.

(7th to 13th year: Flight Lieutenant and Squadron Leader.) During this period the officer should attain to Squadron Leader rank. Phase 2 embraces advanced employment in keeping with the officer's capabilities.

#### Phase 3.

(14th to 18th year: Squadron Leader and Wing Commander.) During this period the officer assumes positions of junior command, and begins to originate instructions or plans as opposed to the simple execution of orders. More advanced specialist training is also provided. At this level (senior Squadron Leader or junior Wing Commander) the officer is normally employed in staff positions at A.F.H.Q., Command or Group levels, and in addition, if possible, as officer commanding an operational squadron or similar formation.

#### Phase 4.

(19th to 23rd year: Wing Commander and Group Captain.) In this phase, the careers of the majority of above-average officers will reach their limit. However, the most promising of these will be eligible for more advanced training and employment. At the beginning of this stage, they may be selected for senior staff courses of either a general or semi-specialist nature in preparation for the more responsible senior appointments. Moreover, during this phase, promotions to the rank of Group Captain are made by selection. Employment is normally at A.F.H.Q., Command Headquarters, or as Commanding Officer of a station or on important special assignments.

#### Phase 5.

(Air Commodore and higher ranks.) This, the final phase, applies only to those officers promoted to Air rank. Selection for very senior Staff College training, e.g. Imperial Defence College, is made near the end of the normal span of the rank of Air Commodore. Employment is at the most senior levels—for example, as an Air Officer Commanding a Command (or Deputy Air Officer Commanding) or as the head of a Division at A.F.H.Q. (or Deputy Division Head). The ultimate position, of course, is that of Chief of the Air Staff.

It is to be noted that the plan presents a goal and that it can be applied, ideally, only to the post-war Permanent Commission establishment. The cases of veterans of the Second World War present special circumstances and must be considered on their individual merits. Moreover, during the rapid expansion of the R.C.A.F., it has not been possible, in many cases, to give even non-veterans the ideal training and employment specified by the plan. None the less, it is intended that, when the approved manning ceiling is reached, the plan will be followed.

### PROMOTION

The general principles of the R.C.A.F.'s promotion policy are designed to ensure that:

- Only those officers who are suitable in all respects are promoted to higher rank.
- Officers of outstanding ability are granted due recognition by being promoted ahead of officers more senior but with significantly less ability and potential.
- The opportunity to progress at a reasonable rate to a reasonable level is given to the great body of average officers — on whom, of course, the general efficiency of the Service is largely dependent.

With the above principles in mind, a Central Promotion Board, consisting of the Senior Personnel Staff Officers of all Commands, convenes semi-annually with personnel officers at A.F.H.Q. to consider for promotion all officers eligible by virtue of minimum seniority. This Board reviews the officers' confidential files, which contain confidential personal assessments, promotion narratives, course reports, qualifying examination reports, and recapitulation of Service experience. The limitations of each of these sources of informa-



tion are generally appreciated, but they are being reduced by constant research and, more important, by education of officers with respect to their responsibility in assessing and counselling officers under their command.

The Central Promotion Board reviews the reports of Unit Promotion Boards' and Command Headquarters' remarks. These, taken in conjunction with the file study, are used to categorize officers finally recommended for promotion as "Very Suitable" or "Suitable". Candidates within each group are then listed in order of relative seniority, and are recommended for promotion to a Senior A.F.H.Q. Board, composed of officers whose rank is at least two levels above that of the officers being considered.

It is evident that the Central Promotion Board system, involving as it does the gathering together of all the "standard-setters", permits the adoption of a practical common standard in each of the categories of recommendation mentioned. It not only ensures a review of each individual's suitability for promotion, but also makes certain that each candidate is measured against a common standard without favour or prejudice. It goes with-

out saying that no promotion policy or procedure has been (or ever will be) designed that will please everybody. However, the R.C.A.F. has found that the system it is now using does serve the interests of both the Service and the individual.

#### SUMMARY

The foregoing remarks must be considered simply as an outline of the R.C.A.F. Officer Career Plan. It will be noted that no hard and fast limits have been defined. Any career plan must be sufficiently flexible to permit of its being carried out despite restricting factors and the overriding considerations both of the task in hand and of the immediate availability of suitably qualified officers. Suffice it to say that, in the final analysis, the rate and limit of an officer's advancement rest primarily with the officer himself.

\* \* \*

We have had occasion to make frequent reference to "Lists" and "Branches". In order to round out the present article, therefore, it may be as well to give a little more information concerning them. To that end, the following table is appended.

#### ESTABLISHED LISTS AND BRANCHES

LIST	BRANCH	DEFINITION	REMARKS
GENERAL		All officers promoted to the rank of Group Captain and above against the General List establishment.	The General List consists of officers qualified for senior command and executive occupations whose primary duties embrace general command and staff responsibilities having a major influence on the development and execution of Air Force plans.
AIRCREW	Pilot	All pilots of Wing Commander rank and below.	The Aircrew List consists of officers qualified for flying, command and air staff occupations, whose primary duties involve the operation of aircraft and associated airborne equipment, and the development and execution of plans, policies and procedures for air training and air operations.
	Navigator	All navigators and radio navigators of Wing Commander rank and below.	
	Radio Officer	All radio officers of Wing Commander's rank and below.	
AIR SERVICES	Meteorology	All meteorology officers.	The Air Services List consists of officers qualified for air support occupations whose primary duties involve the collection, interpretation and dissemination of meteorological information, the operation of aircraft detection, identification and control facilities, and the organization and supervision of measures for the defence of airfields and other R.C.A.F. installations against enemy attack.
	Flying Control	All flying control officers.	
	Fighter Controller	All fighter controller officers.	
	Ground Observer	All ground observer officers.	
	Ground Defence	All ground defence officers.	

ESTABLISHED LISTS AND BRANCHES (Cont'd.)

LIST	BRANCH	DEFINITION	REMARKS
TECHNICAL	Telecommunications	All telecommunications officers of Wing Commander rank and below.	The Technical List consists of officers qualified for engineering and technical management occupations whose primary duties involve the maintenance of aircraft, airborne telecommunications, armament, photographic and safety equipment, ground defence equipment, and radar networks; the operation and maintenance of mobile equipment, marine craft, photographic production facilities, communications systems, and station utilities; and the construction and maintenance of structures, roads, and runways. Included are design, development, inspection, and technical liaison duties associated with the procurement of material, and technical advisory duties pertaining to air plans and operations.
	Photography	All photographic officers of Wing Commander rank and below.	
	Armament	All armament officers of Wing Commander rank and below.	
	Aeronautical Engineering	All aeronautical engineering officers of Wing Commander rank and below.	
	Mobile Equipment Engineering	All mobile equipment officers of Wing Commander rank and below.	
	Construction Engineering	All construction engineering and fire protection Officers of Wing Commander rank and below.	
SUPPLY		All supply officers.	The Supply List consists of officers qualified for supply administration and control occupations whose primary duties involve requirements planning, procurement, cataloguing, receipt, storage, transportation, stock control, issue and disposal of all material.
ACCOUNTS		All accounts officers.	The Accounts List consists of officers qualified for financial administration and control occupations whose primary duties involve the disbursement of and accounting for public and "mess and institute" funds, the control of material accounting, the preparation of financial estimates and the control of financial expenditures.
PERSONNEL	Messing	All messing officers.	The Personnel List consists of officers qualified for administrative, and personnel management and control occupations whose primary duties involve recruiting, selection, movement, academic education, recreation, welfare, placement, and records of personnel. Included are duties pertaining to security and law enforcement, the provision of legal advice, and the collection and correlation of information for release to the public.
	Administrative	All administrative, records and statistics, drill and movements officers.	
	Special Services	All officers whose specialties are recreation, welfare, or bandmaster.	
	Legal	All legal officers.	
	Security	All security officers.	
	Education	All education, training aids specialist, and northern specialist officers.	
Public Information	All public relations and air historian officers.		
MEDICAL	Medical Officer	All medical officers.	The Medical List consists of officers qualified for professional and administrative medical occupations whose primary duties involve the provision and administration of general and specialist medical services.
	Nursing	All nursing, occupational therapist and physiotherapist officers.	
	Associate	All officers accepted for medical associate duties.	
	Secretarial	All officers accepted for secretarial duties.	
CHAPLAIN	Protestant	All Protestant chaplains.	The Chaplain List consists of officers qualified for spiritual welfare occupations whose primary duties involve the provision and administration of religious and humanitarian services.
	Roman Catholic	All Roman Catholic chaplains.	
UNIVERSITY		All officers undergoing training in the Regular Officers Training Plan scheme and all serving airmen attending university under R.C.A.F. auspices.	The University List consists of officers undergoing training in the Regular Officers Training Plan scheme and of serving airmen attending universities or Canadian Services Colleges under R.C.A.F. auspices.

# No. 19 Auxiliary WING

By Flying Officer J. A. Emery, D.F.C.

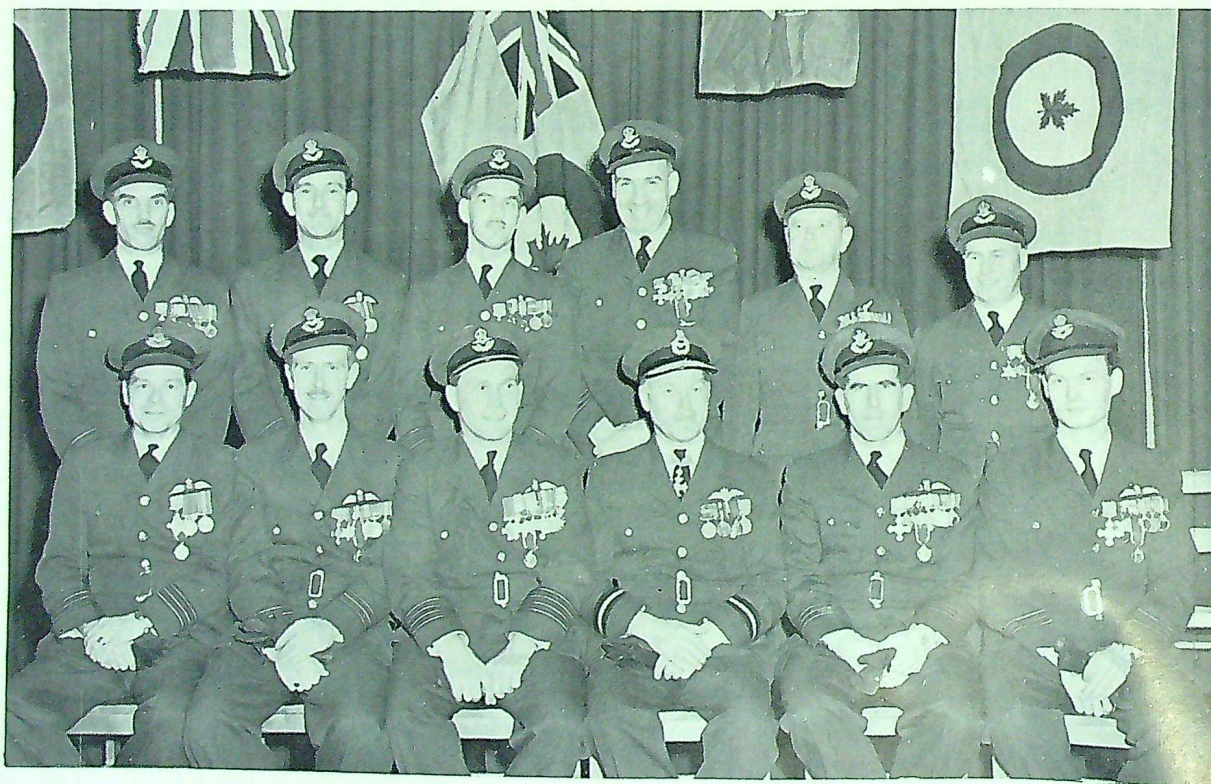
## INTRODUCTION

IN AN ARTICLE on the R.C.A.F. Reserve which appeared in the January 1954 issue of "The Roundel", Wing Cdr. D. C. Evans, D.F.C., described the Auxiliary units as being "the first-line reserves required to bolster the Regular Force air defence shield. They provide the mobile strength needed to prevent the shield from buckling." One of the larger Auxiliary units is No. 19 Wing at Vancouver, and the following article gives a general factual description of the Wing and its component units. Before we begin the story of 19 Wing, a brief historical note on the

Auxiliary as a whole might be of interest.

The Auxiliary Force had its origin on 1 April 1924, when provision was made for a Non-Permanent Active Air Force as a component of the permanent R.C.A.F. But the N.P.A.A.F. actually remained as a paper organization until 5

*A photograph taken after a presentation of Coronation medals. Front row (l. to r.): Wing Cdr. E. A. Alexander, A.F.C.; Wing Cdr. R. B. Barker, D.F.C.; Group Capt. G. W. Northcott, D.S.O., D.F.C.; Air Cdre. W. A. Orr, C.B.E. (A.O.C. No. 12 Air Defence Group); Wing Cdr. A. A. Smith, D.F.C.; Sqn. Ldr. G. M. Smith, D.F.C. Back row (l. to r.): Sqn. Ldr. F. H. Sproule, D.F.C.; Sqn. Ldr. R. O. Hetherington; Sqn. Ldr. R. D. Thomas, D.F.C.; Sqn. Ldr. E. W. Smith, D.S.O.; Sqn. Ldr. W. J. Mooney; Sqn. Ldr. W. M. Martin.*





*The annual Mess Dinner.*

October 1932, when approval was given for the formation of one wing (although no action appears to have been taken until, in 1938, Wing headquarters were authorized at Vancouver, Toronto, and Montreal) and squadrons at Toronto, Vancouver, and Winnipeg.

Nine more squadrons were added during the pre-war years, and when the Auxiliary Active Air Force (as it had been renamed in 1938) was put on full-time Air Force duty on 3 September 1939, seven of the 12 squadrons nominally in existence were placed on active service along with the personnel of the Permanent Air Force. The other five squadrons, which were still in the preliminary stages of organization, were disbanded shortly after the outbreak of hostilities.

The distinction of being the first R.C.A.F. unit to go overseas went to an Auxiliary squadron, No. 110 (City of Toronto), strengthened by Permanent Force personnel, arrived in England in February 1940.

After the Second World War ended and the R.C.A.F. began building up its peace-time organization, seven Auxiliary squadrons were authorized on 15 April 1946. The post-war years have seen a great expansion in the Auxiliary component of the

R.C.A.F. In particular, in contrast to its pre-war predecessor, the scope of the Auxiliary has been enlarged to include many activities in addition to flying training. Typical of this growth has been the expansion of the Auxiliary on the West Coast, where the one squadron of 1946 has grown to a wing headquarters and eight units.

#### **WING HEADQUARTERS**

No. 19 Wing Headquarters came into being in October 1950, and was formed to co-ordinate the increasing activities of Auxiliary units in the Vancouver-Victoria area. A support unit of the R.C.A.F. Regular Force is also part of the Wing.

From its formation, No. 19 Wing has been commanded by Group Capt. G. W. Northcott, D.S.O., D.F.C., a distinguished fighter pilot in the Second World War and a Trans-Canada Air Lines pilot in civilian life, to whose energetic leadership the present size of the Wing is largely due. Other long-serving officers at headquarters include: Wing Cdr. A. A. Smith, D.F.C., Sqn. Ldr. W. C. Lee, Sqn. Ldr. R. O. Norman, and Flt. Lt. E. T. M. McBride. All the above-mentioned have been with



the Auxiliary since the first squadron was formed in 1946.

The headquarters of the Wing is in down-town Vancouver, and an active place it is, both by day and by night. Although most of the units do their practical training at R.C.A.F. Station Sea Island and in other R.C.A.F. establishments throughout the city, each component of the Wing has office space at headquarters in which to do administrative work. Practically every night of the week will find personnel from one or the other of the units on the job. During the day, Regular Force personnel in the support unit, Auxiliary personnel on continuous employment, and the Auxiliary recruiting unit, help to make the centre what amounts to an almost round-the-clock operation.

In addition to its rôle as a co-ordinator, Wing Headquarters is designed to provide administrative services for the units, to train Auxiliary officers as staff officers for higher formations on mobilization, to provide an outlet for the experience of Auxiliary officers who have completed operational duties, and to plan and carry out programmes designed to foster interest in the Auxiliary in the Vancouver-Victoria area.

Functional and administrative control of No. 19 Wing is exercised by the Air Officer Commanding, Air Defence Command, through the Group Commander of No. 12 Air Defence Group.

### FIGHTER SQUADRONS

The first post-war Auxiliary unit to be formed in Vancouver was No. 442 Squadron, which was reactivated at Sea Island on 15 April 1946. Its war-time story was published in "The Roundel" for July-August 1951. It was initially equipped with Harvard aircraft on which pilots were given refresher training prior to converting, in the spring of 1948, to Vampires — the aircraft used at the present time.

The commanding officer of the squadron during its period of recruiting and organization was Wing Cdr. R. F. Begg. The present C.O. is Sqn. Ldr. G. M. Smith, D.F.C., a Second World War fighter pilot, who took over his duties recently from Wing Cdr. E. A. Alexander, A.F.C. (now Staff Officer Operations at Wing Headquarters).

No. 442 Squadron personnel have frequently presented air and ground shows on Air Force Day, at the Pacific National Exhibition, carnivals, and air shows. They have also co-operated with the Americans on air exercises and flying displays for U.S.A.F. Day and U.S. Armed Forces Day. Their first summer camp was held at Comox in 1948. In 1949 and 1950, summer training was conducted at Gimli, Manitoba, and in both those years No. 442 won the Gimli Trophy, emblematic of the highest efficiency of all units attending camp. Summer camp during the summer of 1951 was spent at Abbotsford, B.C., and in the following year at Uplands, Ontario. Last summer the squadron operated with the U.S.A.F. at Paine Air Force Base in Washington.

On 1 September 1951, No. 443 was re-formed at Vancouver as a fighter squadron in the Auxiliary. (A review of its war-time career appeared in "The Roundel" for June 1952.) For some months before this occurred, No. 442 Squadron had been recruiting and training personnel for the new unit, and one of its officers, Wing Cdr. R. B. Barker, D.F.C., was appointed the first commanding officer, a position which he still holds. Wing Cdr. Barker had served during the war with No. 442.

The squadron was equipped with Mustang aircraft, and the first summer camp was held at Uplands in 1952. Last year, training was carried out with the U.S.A.F. at Geiger Air Force Base in Washington.

Both fighter squadrons do their flying chiefly on the weekends, and they also have one night a week at Wing Headquarters, where lectures are given on ground subjects and general topics.

The emphasis in both squadrons is on youth, and there is a definite minority of pilots with Second World War experience. Most of the pilots have been selected for training from the ranks of the Auxiliary units, and enter the Regular Force on a short-short-service commission basis. They take the same training as Regular Force pilots, and, after getting their wings, return to continue flying with the squadron which sponsored them. Before a man is selected for pilot training in No. 19 Wing, one requirement is that he must have served for at least a year in a ground-crew capacity



*Pilots of Nos. 442 and 443 Squadrons. Standing (l. to r.): Flying Officers W. R. B. Bell, C. J. Simpson, Flt. Lt. V. E. McMann, Flying Officer C. J. Gellatly, Flt. Lt. V. R. Bennet, Flying Officers J. D. Fisher, T. A. McAllister, J. Lamb, W. G. O'Rourke, F. W. Bone. Seated: Flying Officers J. F. Crosby, R. Young, J. D. Hannay, Flt. Lt. D. F. R. Aitken, Sqn. Ldr. G. M. Smith, D.F.C., Sqn. Ldr. E. W. Smith, D.S.O. (P.F.), Flying Officer R. A. McDonald.*

and must have reached trade proficiency.

The laid-down function of each squadron is, first, to conduct air and ground training covering all aspects of fighter operations, and, secondly, to supply a fully-operational fighter squadron in the event of a national emergency.

Maintenance and servicing are done on a joint basis by the squadrons' own crews and by the technicians in the support unit provided by the R.C.A.F. Regular. Commanding the support unit for the two fighter Squadrons is Sqn. Ldr. E. W. Smith, D.S.O.

#### **AIRCRAFT CONTROL AND WARNING SQUADONS**

The duties of Nos. 2442 and 2455 Aircraft Control & Warning Squadrons are to train Auxiliary personnel in all aspects of control and warning operations, and to maintain and operate radar and communications facilities. When the move is completed, the latter squadron will have one of the most modern establishments in the Auxiliary.

At summer camps, members of the squadrons have worked with the U.S.A.F. Regular Force and

taken their turns at shift work at American installations.

In addition to year-round training and summer camp for Auxiliary personnel, a large training programme is run during the summer months for airmen and airwomen of the Reserve Tradesmen Training Plan (Basic). This training provides instruction up to Group 1 standard for fighter control operators and for radar and communications performance checkers. Those in the R.T.T.P. (B) who stay with the Auxiliary will continue with more advanced training up to maximum grouping.

The subjects taken by fighter control operators include the organization of the A.C.&W. Squadron, radar theory, navigation, R.T. procedure, meteorology, and practical operations. Similar lesson plans are followed as those used in the Regular Force.

Similar training is conducted during the rest of the year for members of the Auxiliary, and courses are also run to train officers as fighter controllers. Most of the officers involved were in air crew during the Second World War. Two of No. 2442's



controllers, Flt. Lt. T. Ellison, D.F.C., and Flt. Lt. J. Gray, attended the U.S.A.F. controllers' course and made the highest marks on their respective courses.

Commanding officer of No. 2442 Squadron is Sqn. Ldr. F. H. Sproule, D.F.C., while Sqn. Ldr. W. M. Martin commands No. 2455. In charge of the support unit in Vancouver is Flying Officer J. M. Thomas, and Flying Officer W. T. G. Watson, D.F.C., is the support officer in Victoria.

### MEDICAL UNITS

There are two Medical Units in No. 19 Wing, and each has a completely separate function. No. 4000 is described as a general unit, while No. 4016 specializes in air evacuation work.

No. 4000 is, at the present time, located at No. 12 Air Defence Group Headquarters. However, new equipment is being installed in the Auxiliary Headquarters building, and the unit will soon be established there.

Although the unit is a component of the Auxiliary Wing, it is, in point of fact, operating on a daily basis. One medical officer is on duty each afternoon of the week to give examinations to applicants for the R.C.A.F. Regular. In addition, the centre is manned two evenings a week to do the work required for the Auxiliary. In 1953 alone, 1846 medicals were done for the Regular Force and 869 for the Auxiliary. The only part of the medical examination not handled at the present time is the X-raying of applicants, but X-ray equipment is being installed in the new location to make it a completely self-contained unit.

No. 4000 is commanded by Wing Cdr. G. R. F. Elliott, a Second World War medical officer with the R.C.A.F. and assistant to the Deputy Minister of Health for British Columbia in civilian life. On his staff are specialists in surgery, medicine, eye, radiology, gynaecology, and other fields. Also on staff is a nurse who is on duty all day.

In addition to their regular duties, the medical officers foregather once a month or so in order to hear talks on such subjects as crash investigation intelligence, and various other Air Force matters. Some of the officers go periodically to the Insti-

tute of Aviation Medicine in Toronto to take special courses. Most of the medical officers for the summer camps in Western Canada are provided by No. 4000.

The specific functions of No. 4016 Medical Unit, as laid down in the organization order, are: to provide a nucleus of medical personnel trained in techniques required during air evacuation and search and rescue operations, to support and augment the medical branch (particularly in connection with air evacuation and search and rescue operations), and to carry out research into the medical problems of air evacuation and other matters as directed by the Director of Medical Services at A.F.H.Q.

In this unit, the key personnel are the nurses and airmen, as they do the flying with the wounded on actual evacuation trips. The prime function of the medical officer is to train these personnel.

The formation of the unit was based on the fact that experience in moving injured and wounded during the Second World War and the Korean War proved that any person who is fit enough to be moved at all can be moved by air. This means that the injured man can be quickly taken where treatment facilities are better, and there is also the consideration that the morale of an injured person is raised when he can be sent to a hospital near his home.

Airmen who state a preference for this sort of work when they join the Auxiliary are trained by the unit in the medical assistants' trade, as laid down in the Regular Force syllabus. Their training as flight assistants comes later and is patterned after that used in the U.S.A.F.

The majority of the regular training is done at Sea Island, where lectures are given and where a mock-up of Dakota aircraft is to be set up for practice at getting stretcher cases in and out of the 'planes.

Last year the unit took its summer training at Travis Air Force Base in California, and the nurses flew as regular flight nurses, logging nearly 400 hours' flying with wounded Korean veterans being taken back to Washington. Flt. Lt. K. G. McIntyre, a nursing sister with the unit, recently completed a flight nurse's course with the U.S.A.F.,



during which she flew 50,000 miles between the U.S.A., Hawaii, Japan, and the Phillipines.

The commanding officer of No. 4016 is Wing Cdr. J. M. Mather, assistant professor of public health at the University of British Columbia. The rest of the medical officers are either students or practicing doctors, and many of them are former air crew who went on to study medicine after the war. Wing Cdr. Mather feels that the prime purpose of the unit is to provide a nucleus of personnel trained in air evacuation work, who, in turn, would be experienced enough to go out and train others in time of emergency.

#### **TECHNICAL TRAINING UNIT**

One of the principal jobs of No. 3055 Technical Training Unit, commanded by Sqn. Ldr. W. J. Mooney, a veteran of both World Wars, is to turn out tradesmen under the Reserve Tradesmen Training Plan (Basic). The recruits are mainly high-school students over the age of 16, some of whom take training at the T.T.U. during the autumn and winter and then receive nine weeks of concentrated training during the summer holidays;

*Flying Officer R. Douglas giving a lecture on air evacuation work to members of No. 4016 Medical Unit.*

but the majority are recruited just before the summer training period begins.

Courses are available on airframes, aero-engines, instruments, munitions and weapons, and on electrical, communications, and radar equipment. As far as possible, the recruit is allowed to take the course of his first choice. Any particular qualification, such as hobbies or other courses he might have taken, are taken into consideration when the selection is made.

The various courses are begun within two days of arriving in camp, and classes start which will give the recruit 240 hours of training in his particular trade. The rest of the time is spent in drill, in learning Air Force routine, and in sports and social activities.

Trade tests are written some time in November. Personnel who are successful (and who also have a minimum of six months' total service) become Group 1 tradesmen. The airmen who fail in their tests can take up to another 80 hours' instruction and have another try. Those who fail the second



*No. 5003 Intelligence Unit. Back row (l. to r.): A.C.1 C. R. Bailey, L.A.C. R. G. Oulton, Flying Officers H. A. Curran, E. N. Newton, Pilot Officer D. A. Duncan, Flying Officers J. H. Smith, R. S. Ross. Middle row: Flying Officer T. A. Williams, A.C.2 D. S. McCuaig, A.C.1 W. A. C. McKinnon, A.W.2 G. A. Green, A.W.2 M. P. Perron, Cpl. S. E. Hunter, Cpl. H. M. Coates, Flt. Sgt. L. H. Bates, A.C.1 A. J. Edwards, L.A.C. C. Elkan, Sgt. V. P. Weber (P.F.). Seated: Flying Officer M. Campbell, Flt. Lts. (acting) J. H. Betteridge, C. D. Myers, Sqn. Ldr. R. D. Thomas, D.F.C., Flt. Lt. D. G. Stewart, D.F.C., Flt. Lt. (acting) W. M. Cox, Flt. Lt. H. A. McKay (P.F.)*

time are released.

Since the airmen who are trained under this plan are all in the Primary Reserve, each has his choice, once camp is over, of going into the Auxiliary or the Supplementary Reserve, or of getting a discharge.

While the concentrated summer training is over, the T.T.U. goes back to training Auxiliary personnel. Standard Group airmen from the squadrons are brought in and given 100 hours of instruction (one night a week and Sunday). At the end of their training, they write the Regular Force trade tests and return to their own units.

The facilities of the T.T.U. are also used by the Regular Force, when airmen are sent in for two weeks of trades training before writing their trade examinations.

The support unit of No. 3055 is headed by Flying Officer E. A. MacKay, and is made up of skilled technicians with top grouping in each of the trades taught. The support unit is responsible for writing the syllabi, preparing lesson plans, and

drawing up the training programme.

The building in which the T.T.U. is set up is well equipped with the latest training aids for Harvard aircraft, and many additional aids have been designed and made on the unit itself.

#### INTELLIGENCE UNIT

The function of No. 5003 Intelligence Unit is to train personnel in various types of intelligence duties so that a pool of trained airwomen, airmen, and officers will be available in the event of mobilization. Most of the officers are former air crew, and others have special qualifications which make them of value to the unit.

Regular courses are conducted in order to bring personnel up to operational standards. The subjects taught include administration, organization, maps and geography, photo interpretation and the "mechanics" of Air Force intelligence. Another phase of the training consists of holding briefing and "de-briefing" exercises.

The unit, as a group, has no summer training

period, but individuals are sent out to work with the U.S.A.F. and R.C.A.F. at stations and control centres, or to take a course on some special feature of intelligence work.

The commanding officer is Sqn. Ldr. R. D. Thomas, D.F.C., and his support officer is Flt. Lt. H. McKay.

### RECRUITING

Recruiting for No. 19 Wing, and also for personnel for the Primary Reserve, comes under Flt. Lt. R. M. Bauman. The office, which is located in the Headquarters building, is open daily as well as on three nights a week.

The 1954 campaign to recruit for the Reserve Tradesmen Training Plan (Basic) began in February and ended in June. The target was set at approximately 250, and most of the recruits came from the high schools and the Air Cadets.

During the rest of the year, the recruiting unit is concerned with filling the ranks of the Auxiliary units and enlisting former Air Force personnel with

experience in a trade or in administrative work.

The recruiting centre enjoys excellent liaison with the University Squadron at the University of British Columbia, and this squadron has been a good source of administrative, intelligence, and other specialist officers. The Auxiliary unit also works closely with the Regular Force recruiting unit. Applicants are frequently sent from the one to the other, according as their qualifications best suit the Auxiliary or the Regular.

\* \* \*

Brief as the foregoing account of No. 19 (Aux.) Wing is, it is hoped that it will give a reasonably accurate idea of the multifarious activities of a progressive R.C.A.F. Auxiliary organization. The purpose of the Auxiliary, as has been stated earlier, is to provide units and trained personnel to bring the R.C.A.F. up to war-time strength should the need arise. No. 19 Wing has every reason to be proud of its share in fulfilling this purpose.

## R.C.A.F. PARARESCUE BADGE

A new badge for all qualified R.C.A.F. para-rescue personnel has been approved. It will be worn by the nursing sisters, medical officers, airmen, and N.C.O.s who have completed the pararescue course held at Edmonton and Jasper. The introduction of the badge marks the first time female officers of any Canadian service have worn a Canadian badge emblematic of aerial operations.

To date five doctors, seven nursing sisters, and 44 airmen have passed the 18-week pararescue course. All students on this course are volunteers, chosen on a basis of general fitness and mental alertness. On completion of the course, they are ready to cope with climbing mountains or parachuting into heavily timbered country to aid aircraft crash victims.

Each graduate makes ten jumps before qualifying for the badge. The syllabus also includes



150 hours of first-aid instruction, many hours of lectures and demonstrations, and learning to live in the open with a minimum of equipment.

# Crossword Puzzle

(Crossword puzzles are an innovation in "The Roundel", and we would ask our readers' views on the subject of their desirability. While we are waiting for the tide of letters to start rolling in, here is a crossword puzzle sent to us by Sgt. G. J. Langill, of R.C.A.F. Station Lac St. Denis. "The Concise Oxford Dictionary" is the reference both for spelling and definitions. Answer on page 47. — EDITOR.)

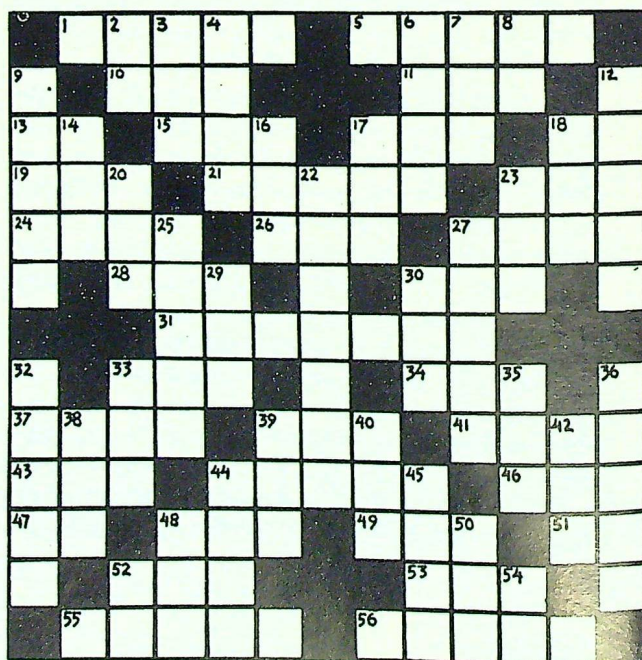
## ACROSS

1. We said "Good-bye" to it in the May issue of "The Roundel".
5. An aircraft in France.
10. Though indispensable to the navigator, it is impolite to apply it to his face.
11. If she bears a bow and arrow, ignore her and you'll see one of her curves.
13. There are no E.A.s in Texas, tho' there is a transmitter.
15. Anathema to bulls.
17. Or eat.
18. An Air Force allowance or a learned fellow.
19. Sn. to the chemist.
21. The snare is somewhat confused.
23. Something fishy about this bill, though so Sabre flies without one.
24. At all times.
26. Intelligence.
27. Toils painfully or go up in smoke.
28. A reformed drunkard frequently mentioned in Orderly Rooms.
30. A high note or, in short, height or depth in general.
31. A batty sort of aircraft.
33. A decoration, or the bug-eyed monster dear to science-fiction fans.
34. Female persons who have undergone drastic change by losing their Financial Encumbrance.
37. Of all races, these fly best without a head.
39. A nice one never means a successful one.
41. Untrue if tall.
43. Ex-Service shortly.
44. A measurer.
46. A medium-sized star with nine major planets.
47. Two thirds of a hostelry.
48. Properly speaking, to swindle.
49. If it's original, one isn't personally responsible for it.
51. You'd better cut down on the telotype or else go on the wagon.
52. In Brazil, a saint; in the R.C.A.F., an important officer on a station.
53. The gentler female is reputedly unmoved by 15 across.
55. A cavalryman's sword and a jet-pilot's steed.
56. Chilly war-time aircraft encountered over the Pacific.

## DOWN

2. Men who suffer a reverse are apt to have their centre wiped out.
3. An organization which has saved the lives of many R.C.A.F. personnel and civilians in the bush and the Arctic.
4. A better state for a mind than for a mouth.
6. Large tubs.
7. Removal of father's head will cause anger.
8. Though not a commanding officer, this officer is commanding.
9. A web-footed aircraft in the R.C.A.F.
12. Straitly is this aircraft named.

14. Fourteen in ancient Rome.
16. With a worm on its tail, this condensation is much sought after by fishermen.
17. Guinevere may have referred to her husband thus.
18. A famous Alley south of the Yalu River.
20. Recoiling, the gun has lost its head.
22. Ships of the sky dock here.
23. Take her from father and you won't get thin.
25. 500 head of cattle have been lost.
27. Speedy — but, as a training 'plane, it wasn't.
29. An uncle with some 150,000,000 nephews and nieces.
30. A weapon that becomes a fleet if it stands before a lady's name.
32. A thrush.
33. We'll wager that Elizabeth is very short.
35. Initially, an air station belonging to the Navy.
36. An obsolete aircraft that was not (as one might well imagine) named for the shape of its wings.
38. No blame here unless the end is sure.
39. Two years short of C.D.
40. The sort of man who lives in the Land of Nod.
42. Not only the tears of his wife were salty.
44. Shakespeare wrote a play about one who smothered his wife.
45. If you live on the polished kind, beriberi will get you.
48. Not necessarily hansom.
50. A negative that is positive to a sailor.
52. An Air Force allowance in which sex appeal might be expected to play a large part.
54. The Minister of National Defence is certainly no cynic, but this is the only man he'll warrant as first class.



# THE SENIOR OFFICER

*(In a recent article by Air Marshal C. R. Slemon in the University of Manitoba's "Slide Rule", he discusses the rôle of the engineer in the R.C.A.F. of today. Since most of what he has to say was directed specifically to the young engineers and applied scientists who are graduating from the University this year, we are not reprinting the article in its entirety. Towards the end of it, however, the Chief of the Air Staff makes the following remarks about the desirability of a wide range of interests in the ideal senior officer.— EDITOR.)*

A sound understanding of all matters connected with the physical operation of an air force will not, of itself, make its possessor the most desirable sort of executive officer in the senior ranks of the Air Force. No matter how great his professional excellence, the executive officer of an armed service should also be an informed and intellectually balanced human being. His life is lived largely in the public eye; his duties, both military and social, will bring him into close contact with people of widely divergent interests. He must, sooner or later, move among statesmen, soldiers, industrial leaders, scholars, physicists, and so forth — of many nationalities and political creeds; and he should be able to confer with them with competence, with a reasonable appreciation of their viewpoints, and with some insight into their problems. Only thus can he worthily represent his Service and his country; only thus can he hope to assist in establishing and maintaining that respect which will ensure to both of them the co-operation which they need from the rest of the world.

Professional men — and perhaps engineers more than most — are all too often guilty of a materialistic self-assurance, of a conviction — frequently subconscious — that the answer to all problems lies

in a correct understanding of the laws of cause and effect as applied to the known and measured. They tend to forget sometimes that a scalpel cannot cut more than a tiny thread in the Gordian knot of human perplexity; that a balanced budget does not necessarily reflect a nation's equilibrium; that a slide rule is a time-saver, not a sceptre. Such forgetfulness, though not usually disastrous in a surgeon, a fiscal expert, or an engineer, can militate seriously against the effectiveness of a senior officer who must help to plan the future of an armed service.

I cannot, therefore, too strongly urge upon any young men who propose to make careers for themselves in the R.C.A.F. that they should never depend *solely* upon professional excellence to carry them through. By this I do not wish to imply that they should spend all their leisure in the study of Greek, anthropology, or the arts; but I do mean that they will be far more valuable Air Force officers if they are reasonably acquainted with what the Greeks had to say, with the beliefs of other races than their own, and with the manifold forms of expression with which great artists have clothed their ideals. Let me leave it at that.

SUFFICIENT UNTO THE DAY . . . ?  
If you do not think about the future, you cannot have one. (John Galsworthy.)

# The ROYAL CANADIAN AIR CADETS

## PICTORIAL REVIEW

C. Douglas Taylor, Honorary President of the Air Cadet League of Canada, chats with Major General Lucas V. Beau, National Commander of the U.S. Civil Air Patrol, during C.A.P. Wing Commanders' Annual Conference in Washington. Mr. Taylor headed the small Canadian delegation which attended the two-day conference and was called upon to address an audience of 750 U.S.

aviation and government leaders at Washington's Shoreham Hotel.

Something different in annual inspections was tried out this year in Windsor, Ontario, when an Air Cadet Squadron, a Sea Cadet Corps and a U.S. Civil Air Patrol cadet unit from Detroit joined forces for a combined inspection. The photo shows representatives of the three Cadet forces on parade saluting the newly approved Sea Cadet ensign presented to the Windsor Corps by Commander W. G. Currie, R.C.N.(R).



Regina Air Cadets pictured at the start of their annual Tag Day, which is the major source of funds for the promotion of Air Cadet activities



in the city. The tag day was a big success despite a very bad break from the weatherman.

A popular feature of Air Cadet life in No. 518 (Rosemount) Squadron has been a series of conducted tours through business organizations and manufacturing concerns in and around Montreal. This photo was taken when the cadets



visited the head office of the Bell Telephone Company of Canada to see their "panorama of telephone progress". Other tours arranged by the squadron have permitted the Cadets to observe at first-hand the workings of a radio station, a modern bakery, a soft drink plant, and a huge food-distributing warehouse.

On May 19th the Hon. Louis Breithaupt, Lieutenant-Governor of Ontario, inspected the Armouries at Sault Ste. Marie, where cadet corps of the three Services formed a special guard of honour. Sqn. Ldr. D. W. Murray was selected to be parade commander, and music was supplied by



the band of the Army Cadets. After the inspection, which was followed by an address from the Lieutenant-Governor, cadet officers and instructors were guests at a reception in the officers' mess. Shown with the Lieutenant-Governor are (l. to r.) Sqn. Ldr. Murray, Major H. Tolley, and Major Stratton. ("Sault Daily Star" photo.)

No. 500 (Larocque) Sqn. held its annual inspection on May 11th. Our photograph shows members of the squadron holding trophies won by them. Left to right: Pilot Officer T. J. Robertson; M. Lacasse, winner of trophy for best junior cadet; Cpl. C. Legros, winner of best all-round cadet trophy; Flying Officer G. H. Seguin; Flt. Lt. J. L. Groulx, Commanding Officer; W.O.2 G. Roy, winner of trophy for leadership; Group Capt. L. G. G. Archambault, A.F.C., reviewing officer; R. Patry, winner of trophy for attendance; Mr. R. St-Amour, sec'y-treas., civilian sponsoring committee; Cpl. B. Primeau, winner of trophy for co-operation.



# The Imperial Defence College

*(Every year a senior R.C.A.F. Officer, normally of Air Rank, is sent to the United Kingdom to attend the course given at the Imperial Defence College, in London. From the Department of External Affairs' monthly publication, "External Affairs", we are reprinting the following brief account of the purpose of I.D.C. and the methods by which it is achieved.—EDITOR.)*

THE Imperial Defence College came into being in 1927 at a time when much thought was being devoted to improving the machinery for the higher direction of war, and after Sir Winston Churchill, who foresaw the future need for combined staffs, had propounded the idea of a College where senior and carefully chosen officers of the Fighting and Civil Services, drawn from all parts of the Commonwealth, should study jointly the problems of the higher direction of Commonwealth defence.

Experience had shown that defence involved almost every aspect of a nation's life. The military and civil effort had become so integrated that it was obvious that those taking part in strategic planning and direction had to possess, besides a specialized knowledge of their own field, a sound appreciation of all other aspects of the national effort. It followed, therefore, that the object of the Imperial Defence College should be "to produce throughout the Commonwealth a body of senior officers of the fighting Services and Civil Services who will be capable of holding high commands and key appointments in the structure of Commonwealth defence both in peace and war".

The experiences of the Second World War not only confirmed the need for such an institution for training on the highest level, but enabled many past students of the Imperial Defence College to provide the most convincing evidence of their value in key appointments all over the world. At the end of hostilities there was complete unanimity among the Governments and Services of the Commonwealth that the College, which had had to close at the beginning of the war, should resume its

work. In 1946 it reopened in Belgrave Square, London, with General (later Field Marshal) Sir William Slim as Commandant. Not only were the new premises much more suitable for their purpose, but the number of students attending was more than double the pre-war number.

It is natural that in organization and in method of study there should be much in common between the Imperial Defence College and the National Defence College in Kingston, since the former was the prototype after which the latter was to a large extent modelled. The Imperial Defence College is administered by the United Kingdom Ministry of Defence. At its head is a Commandant, who is responsible to the Chiefs of Staff Committee for the instruction at the College. The Commandant is drawn in turn from each of the Fighting Services of the United Kingdom. The Directing Staff is supplied, in equal proportions, by the Royal Navy, the British Army, the R.A.F., and the U.K. Civil Service. Members are selected not only because of their background as administrators, commanders or planners, but because they have all had considerable experience of the widest aspects of defence.

A study of the higher direction of the effort of the Commonwealth countries in war covers, as will be realized, a vast field — military, economic, scientific, social, industrial, political and financial. It entails a knowledge of national trends, of the relations of Commonwealth countries with other powers, of the development and importance of the United Nations and other international organizations, and of the world economic situation and its effect on almost every field of activity within the



Commonwealth. In order to increase and clarify the students' knowledge and thinking on this very broad range of subjects to be examined, a series of problems is studied by student syndicates, or seminars, consisting of members of the Services represented at the College in balanced proportions, with the assistance of lectures by the highest authorities available on the various subjects under discussion. The lectures are given by Cabinet Ministers, ex-Ministers, Ambassadors, Commonwealth High Commissioners, Service Chiefs of Staff, Heads of Government Departments, Naval, Military and R.A.F. commanders, civil servants, university professors and lecturers, together with leading political theorists, economists, writers, businessmen, trades union officials, scientists, and specialists on the particular problem under discussion. There is no need to emphasize the advantage, from the point of view of obtaining lecturers of the kind just mentioned, which the College derives from being situated in London.

The studies in the College are supplemented by visits to specialized Navy, Army and R.A.F. establishments in the United Kingdom, as well as to a wide variety of industrial undertakings including heavy and light engineering, electrical, and chemical plants, coal mines, shipyards and others. In the summer recess the students have an opportunity of visiting a number of parts of the world. They are divided into three groups: one

spends five weeks in North America, mostly in Canada; a second spends the same time touring a wide area of the Middle East; and a third spends just under three weeks visiting Western European countries.

In this way the students are afforded a practical and most valuable insight into some of the many and varied problems which have to be considered not only at the Imperial Defence College, but wherever they may be serving afterwards. To the practical value of the College must be added the more intangible but equally important benefits which the students derive from associating with one another. There are fifty-eight of them on the course, of whom about one quarter are from Commonwealth countries other than the United Kingdom (there are usually four from Canada each year). By being brought to work together intimately but informally for a year, these men deepen their understanding of each other's part of and special interest in the Commonwealth, sharpen their appreciation of the ties which bind the Commonwealth countries to each other, and thus cannot fail in their ensuing career to make some contribution to the preservation and strengthening of those ties. Finally, the friendships which they form at the College are themselves a not insignificant contribution to the Commonwealth tradition of informal, friendly and, when necessary, very close co-operation.

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## “PERSONNEL MOVEMENTS”

Numerous letters from readers during the past year have expressed the feeling that, unless we can publish the movements of *all* personnel, the interest of this section is too limited to warrant its continuance. Unfortunately, a complete list of transfers would take up more space than “The Roundel”

could afford for the purpose. It has therefore been decided by the Editorial Committee to dispense with “Personnel Movements” in future issues. Thanks are expressed to all those readers who have taken the trouble to acquaint us with the general point of view in this matter.— Editor.

# The Suggestion Box    ★    ★    ★

The Chief of the Air Staff has written letters of thanks to the undermentioned personnel for original suggestions which have been officially adopted by the R.C.A.F.

Flt. Sgt. T. D. Holmwood, of the Institute of Aviation

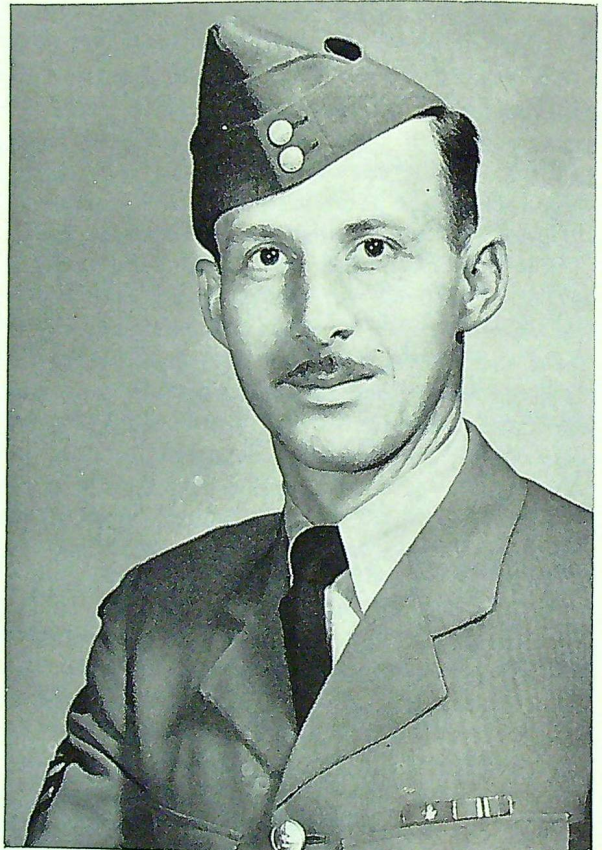
*Flt. Sgt. T. D. Holmwood.*



Medicine, designed a modified pack-board which facilitates the stowing of rigging lines. His modification will simplify the work of parachute riggers.

Cpl. N. W. Tetrault, of R.C.A.F. Stn. Uplands, re-designed the Operations Record of the Historical Return (Form R. 92), thus effecting considerable economy of both time and paper.

*Cpl. N. W. Tetrault.*



## DEAR MONSTER

Vice . . . is a creature of such hideous mien, . . . that the more you see of it the better you like it.  
(*F. P. Dunne.*)

# Pin-Points in the Past



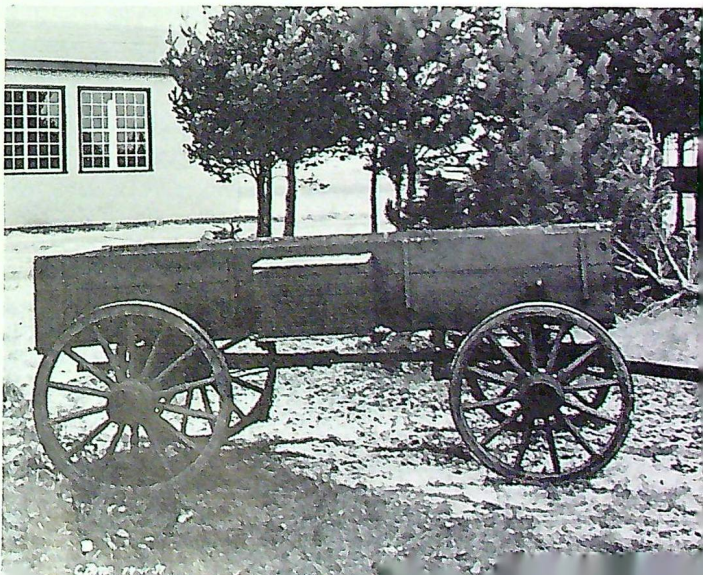
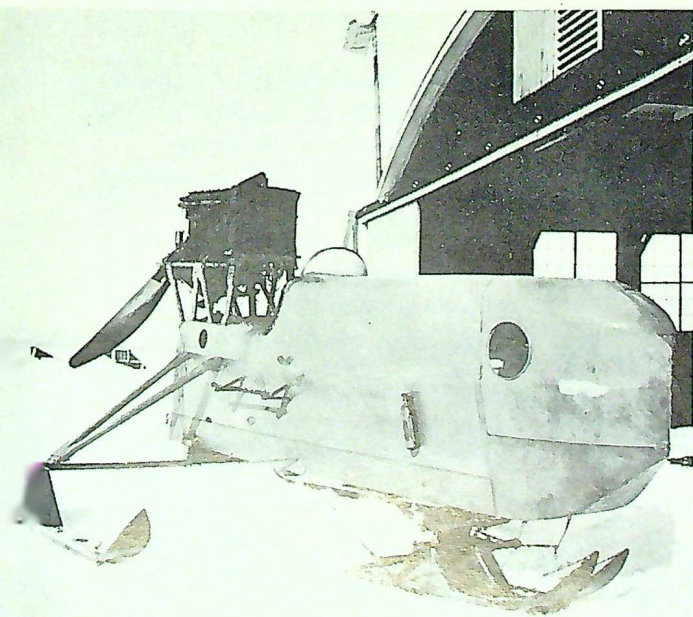
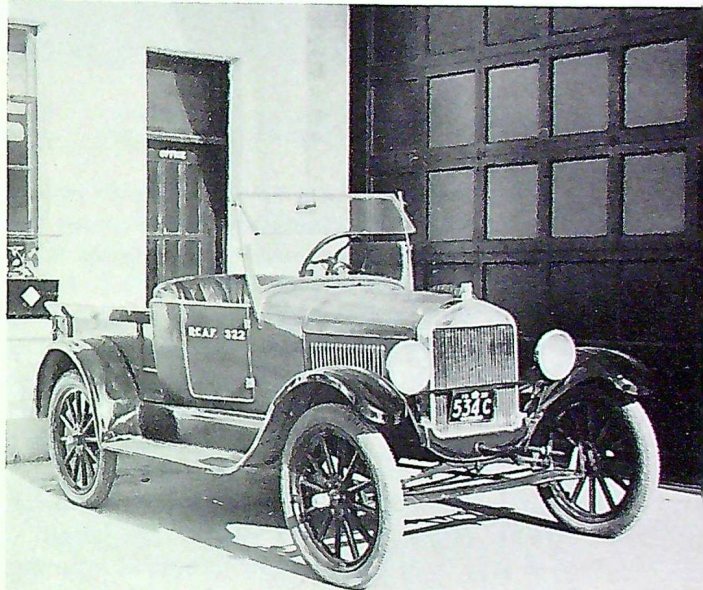
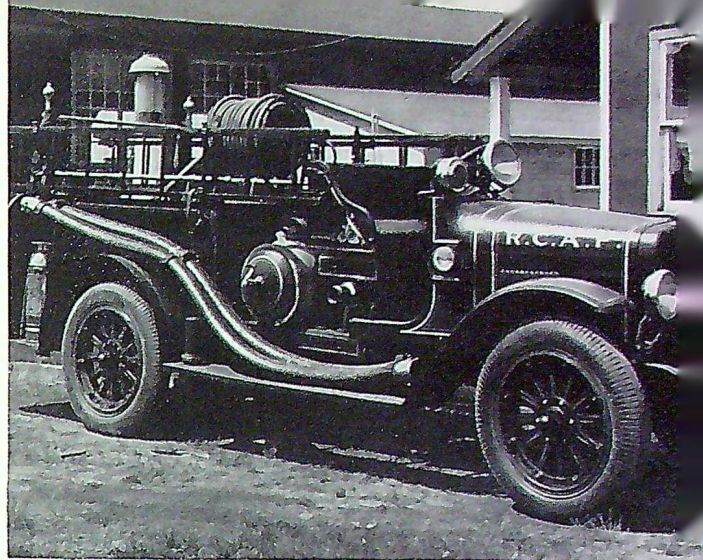
During the 'twenties Camp Borden boasted a dazzling array of mobile equipment. This month we show four of its most notable vehicles: the Snowmobile, the Fire Truck, Personnel Carrier No. 322, and Vehicle No. 35. We are indebted to Sqn. Ldr. L. A. Harling for the first, and for the other three to Sqn. Ldr. W. G. Cousins.

The snowmobile was used as an aerodrome ambulance during winter flying. Its body was originally a gondola from an early "blimp", and its propeller was driven by an old Rolls-Royce engine.

The fire truck, purchased in 1928, was the R.C.A.F.'s first mobile fire-fighting equipment. Before its arrival, the fire-bucket had been the Service's sole answer to any sort of conflagration.

The old model-T Ford, which had served for nearly fifteen years as a chariot for the R.C.A.F.'s lowly and exalted alike, was still in service at Trenton (where this photograph was taken) at the outbreak of the Second World War.

As regards Vehicle No. 35 — well, we wonder how many old-timers will heave a nostalgic sigh as they seem to inhale again the old-world atmosphere it recalls.



# PROOF and PROBABILITY

By Flight Lieutenant H. B. Prendergast

(*Flt. Lt. Prendergast, as the reader will learn if he turns to this month's "Letters to the Editor", here takes his stand upon one or two points of mathematical honour. During the war Flt. Lt. Prendergast did a tour of operations as a pilot with the R.A.F.'s No. 74 Squadron, in the Middle East, and with the R.C.A.F.'s No. 417 Squadron, in Italy, and then spent three years in graduate work at the University of Chicago. For the next two years he lectured on Mathematics at the University of Manitoba. In 1950 he rejoined the R.C.A.F., and is at present employed in the Directorate of Armament Engineering. By the time this is published, he will have been transferred to the Air Armament Evaluation Detachment of the Central Experimental and Proving Establishment, at Cold Lake, Alta.—EDITOR.*)

"Mathematics possesses . . . supreme beauty". — Bernard Russell.

"WHAT'S THE SCORE?", in the April issue of "The Roundel", contained twenty questions that were all related, in a greater or less degree, to the science of mathematics. The Editor, full of editorial guile and honied words, having enlisted my assistance (for what it was worth) in their preparation, has now sent me a blithe little note to the effect that he's "awfully sorry, old boy, but would you mind just jotting down a couple of paragraphs in reply to these letters?"

He refers to certain letters that he received concerning questions 19 and 20. For the benefit of those who have forgotten the questions, here they are:

19. If, in a race between a man and a boy (who runs half as fast as the man), the boy receives a 100-yard start, proof that the man will overtake the boy at the 150-yard mark can only be provided by the use of:
- (a) Logarithms
  - (b) Calculus
  - (c) Geometry
  - (d) Binomial theorem
20. In a game of crap, the probability of a "successful roll" is:
- (a) 1/5
  - (b) 32/51
  - (c) 244/495
  - (d) 121/273

The answers were given as (b) and (c), respectively.

Ignoring the obvious misprint (in question 19) of "150-yard" for "200-yard", I still maintain that

the above answers are correct.

The important word in question 19 is "proof". It is one thing to get the correct answer to a mathematical problem, but quite another to *prove* that your answer is correct. Now, if we wish to go from velocity to distance travelled, we are forced to define velocity; and the only valid definition of velocity is as the derivative of distance travelled with respect to time:

$$v = \frac{ds}{dt}, \text{ whence } s = \int_{t_0}^t v dt$$

(Note that there is no assumption of constant velocity in the problem as stated, merely that the man always runs twice as fast as the boy.)

It is true that, by considering average velocity over the interval ( $v = \frac{s}{t}$ ), we can arrive at the correct answer by algebraic means. However, a mathematician would demand proof that the use of average velocity is justified in this problem. The proof of this is simple, but requires the use of calculus.

Readers who consider the above argument to be a trifle captious are referred to Bishop Berkeley's very cogent arguments against Newton's develop-



ment of the calculus. These arguments were not resolved until Cauchy and others put this branch of mathematics on a more rigorous logical basis. (See also Zeno's famous paradox of Achilles and the tortoise.)

I must also disagree with Flt. Lt. Daw in his appraisal of the skill of the Editorial staff in the game of "African Golf". Its members are no better than average, as I will now attempt to show:

There are 36 ways of throwing a pair of dice. These are distributed as follows:

Number	Ways of throwing number
2	1
3	2
4	3
5	4
6	5
7	6
8	5
9	4
10	3
11	2
12	1
	36

Any readers who still cling to the old fallacy that there are only 3 ways of throwing a 7 (3-4, 2-5, 1-6) and 2 ways of throwing a 4 (2-2, 1-3), are invited to a game with the writer, who will cheerfully give them 3-2 odds against 4 points all evening.

The rules of crap state that the man rolling the dice wins if he:

- (a) throws a 7 or 11 on his first roll, or
- (b) throws a 4,5,6,8,9 or 10 on his first roll and repeats this throw before rolling a 7.

The player loses if he throws a 2, 3, or 12 on his first roll, or throws a 7 before duplicating his initial roll as stated in (b) above.

It will be noted that since there are 3 ways of throwing a 4, and 6 ways of throwing a 7, the odds are 2 to 1 against making a 4 point — *i.e.* the

probability of making a 4 point is  $1/3$ .

With these preliminary remarks we are now ready to measure the probability of a successful roll.

The probability of throwing a 7 on the first roll is:

$$6/36 \dots (1)$$

The probability of throwing an 11 on the first roll is:

$$2/36 \dots (2)$$

The probability of winning on a 4 point will be calculated by multiplying the probability of throwing a 4 on the first roll by the probability of repeating the throw before throwing a 7 — *i.e.*

$$3/36 \times 1/3 = 1/36 \dots (3)$$

The probability of winning on other points will be similarly calculated:

$$5 \text{ point} - 4/36 \times 2/5 \dots (4)$$

$$6 \text{ point} - 5/36 \times 5/11 \dots (5)$$

$$8 \text{ point} - 5/36 \times 5/11 \dots (6)$$

$$9 \text{ point} - 4/36 \times 2/5 \dots (7)$$

$$10 \text{ point} - 3/36 \times 1/3 \dots (8)$$

Adding (1) to (8), we arrive at the total probability of a successful roll:

$$244/495$$

This tells us that the odds against the man rolling the dice in a crap game are 251 to 244, which explains why professional gamblers are "wrong-betters", and why a house game does not pay you if you bet against the dice and then turn up 2. This keeps the "percentages" in favour of the house.

\* \* \*

Mathematics does, I agree, possess a supreme beauty even exceeding that of a lovely woman; but, unless the reasoning is flawless, we shall achieve nothing even as acceptable as a Hollywood pin-up.

*When a cat wants to eat her kittens, she says they look like mice. (Turkish proverb.)*

## AIRMEN'S MESS DINNER

A function which was the second of its kind to occur in Ottawa, was held in the recreation hall of Beaver Barracks on May 11th. It was a mess dinner for all members of the Airmen's Mess who are stationed at A.F.H.Q. and A.M.C.H.Q. The guest of honour was Air Vice-Marshal F. G. Wait, C.B.E., Air Member for Personnel; and other guests included Wing Cdr. J. H. Giguère, O.B.E., Sqn. Ldr. P. F. Greenway, and Sqn. Ldr. R. F. Wilson. In his after-dinner address, the Air Vice-Marshal stated that, although only two

dinners of this kind had taken place in the R.C.A.F. — both of them in Ottawa — he hoped that the custom of holding them would eventually be generally adopted throughout the Service. The accompanying photograph shows the head table at the dinner. Left to right are: L.A.C. L. Bell, Flying Officer R. M. Henderson, Cpl. J. Rinfret, Sqn. Ldr. P. F. Greenway, L.A.C. G. Umlah, Air Vice-Marshal F. G. Wait, Wing Cdr. J. H. Giguère, Cpl. J. Stewart, Flt. Lt. M. E. Ferguson, L.A.C. R. Bordeleau.



# Feminine Gen

## CHEECHAKO

By L.A.W. "Benny" Benson, R.C.A.F. Station Whitehorse

### TO WHITEHORSE!

Visions flashed across my mind of a lonesome wind-swept land, in which bunches of boys kept whooping it up in Malemute Saloons. The land of the Yukon — where every poke was filled with gold and every bar-room with brawls!

However, it was the land to which I was transferred, so I donned my cumbersome parka and heavy boots and climbed aboard the C-119 at Edmonton. Then, for 967 miles I watched the barren and beautiful heights slide by beneath me, fascinated by the sight of the occasional tiny cabins snuggled on the shores of frozen lakes. What manner of men lived in them? Memories of Robert Service flitted thro' my mind, and I marvelled at the hardihood of the pioneers of whom he had sung.

I suppose I must have half-expected a dozen or so Eskimoes and a pack of huskies to meet me when we landed at Whitehorse. Instead, the air-woman disciplinarian corporal, Joan Chapman, was there, smiling a welcome and waiting to whisk me off through the 30-below-zero night to the airwomen's warm barracks with their cosy double rooms. There I found an atmosphere of friendliness that surpassed that of any station I have ever been on.

The following week-end I made my first trek — four miles downhill — to town. There I received another surprise. Whitehorse is a town of vivid contrasts and contradictions. Side by side stand ancient frame buildings and modern cocktail lounges, log cabins and fine new stucco homes. On one corner of the main street there is a completely modern hotel, with tavern and cocktail lounge,



*The log cathedral is visited by (left to right) L.A.W.s Pek, Mitchell, Britton, and Renouf.*

*In the Indian cemetery.*





*In front of Sam McGee's cabin are (left to right): Cpl. Lalonde, L.A.W. Johnson, Cpl. Batters, and L.A.W. Lestander.*

and just down the street an inn with its bar still bearing the scars of miner's boots and of battles fought, years ago, over claims and women.

A new Federal building is under construction to house the Territorial Capital offices. Though the main streets have modern plumbing, residents on some of the side-streets must buy their water from a tank truck, at 50c. a barrel. The Armed Services Radio Station (CFWH) is run by Service and civilian volunteers, and provides wonderful opportunities for budding announcers and disc-jockeys. Shop-owners pride themselves in carrying goods that are presently in fashion in "outside" department stores. They also sell Yukon-made buckskin jackets and beautiful fur-trimmed mukluks. A speciality is jewelry made from gold nuggets, local jade and ivory, and the famous black diamonds (a species of quartz peculiar to the district).

There is no lack of colour for those interested in the rich legend of the country. If you're a Robert Service fan, you can visit Lake Laberge, the scene of "The Cremation of Sam McGee"—or even Sam McGee's cabin itself, in the city. A few miles away you can go and see Miles Caynon and Whitehorse Rapids (so called for the treacherous white water that boils between the rocky walls). Two hundred men lost their lives in this short stretch of the Yukon River during the summer of the mad stampede of '98. On the river-bank,

below town, are the weather-beaten old stern-wheelers which once carried thousands of gold-hungry men into the gold fields, and which now sedately ply the Yukon River between Whitehorse and the Dawson City, carrying tourists and freight. Near the depot of the Yukon and Whitepass narrow-gauge railway can be seen the original six-team cutter and wagon which transported mail and passengers over the raw wilderness road of fifty years ago. An Air Force bus now runs twice weekly to Takhini Hotsprings, where one may swim in the open-air pool at 30° below zero.



*At Takhini Hotsprings. Left to right: Cpls. Norma Nash, Lyn Floata, "Lollie" McDonald, and L.A.W. Pat Egan.*

This, then, is the Land of the Midnight Sun, where, despite all the modern conveniences, one feels that the lusty timeless era of yesterday has not completely vanished. The spell of the Yukon still lingers, the "glamour" still falls upon all who come here. Maybe that's the reason why the airwomen of Whitehorse usually apply for at least one six-month extension of their tours.

In fact, maybe it's the reason why I'll apply for mine.

### A LIBATION TO THE LADIES

When Sgt. Shatterproof, during a recent visit to Ottawa, caught sight of the accompanying photograph on the editorial desk, he shook his head like a saddened stegosaur. Questioned as to the cause of his melancholy:

"Sir", he said, "it is not grief that overwhelms me. It is the deeper emotion that stirs the breasts of all who stand together in the last ditch. Well may the Totalitarian Titan pause ere he lift his sword to such girls as these!— girls who, undismayed by the hardships of the past three years, willingly offer themselves up for yet further excoriation of the flesh, torment of the spirit, and exposure to 'The Roundel'!"

We did our best to explain to the old wardog that he hadn't quite caught the spirit of the thing, but he was in too heroic a mood to listen. Suddenly, however, a distant chime from the Peace Tower brought him to earth. He excavated his watch from a trouser-pocket. Then:

"I have a conference to attend", he said, "in the Sergeants' Mess. But let the airwomen of Canada know, Sir, that I shall dedicate this day's pre-prandial to those undaunted ones among them who are even now hurling themselves once more beneath the remorseless wheels of the Service juggernaut!"

\* \* \*



*Wing Cdr. R. I. Thomas, A.F.C., congratulates Cpls. Evelyn Peer and Elizabeth Brown upon their re-engagement in the R.C.A.F.*

Cpl. Peer and Cpl. Brown are only two of quite a number of airwomen who haven't found it hard to make up their minds in this season of decision — for "season of decision" it is for all those girls who signed on the dotted line 'way back in the summer of 1951. Some have renewed their engagement for a further two years, some for five. Cpl. Peer's re-engagement, by the way, was happily climaxed by a posting to No. 2 Fighter Wing, in France. Cpl. Brown, who has spent the last two years at Rockcliffe, wants to stay there indefinitely — if she can't get overseas.

### HEALTH INSURANCE IS CHEAPER

Contentment preserves one even from catching cold. Has a woman who knew that she was well dressed ever caught cold? — No, not even when she had scarcely a rag to her back. (Nietzsche.)

# ROYAL CANADIAN AIR FORCE

# Association



AT THE Fourth National Convention, held in Ottawa on May 17th and 18th, Air Vice-Marshal G. E. Brookes, C.B., O.B.E., was returned by acclamation as National President for the ensuing year.

More than 125 representatives from across Canada attended the meetings, as well as several officers acting as observers for the R.C.A.F. The latter have been recently appointed to act in a liaison capacity with the Association in the field.

*The Minister's address had its lighter moments.*



A target was set at 5,000 for increase in membership during the current year, and it was decided to increase renewal membership dues from \$2.00 to \$3.00, effective 1 April 1955.

The National Executive Council for 1954-55 is as follows:

- Grand President: Air Vice-Marshal A. L. Morfee, C.B., C.B.E.
- National President: Air Vice-Marshal G. E. Brookes, C.B., O.B.E.
- First Vice-President: A. F. Wigglesworth
- Second Vice-President: B. E. Crane
- Third Vice-President: L. N. Baldock
- Fourth Vice-President: Air Vice-Marshal K. G. Nairn, C.B.
- Chairman: Air Vice-Marshal K. M. Guthrie, C.B., C.B.E.
- Vice-Chairman: P. E. Burden
- Legal Adviser: E. R. Hopkins
- W.D. Rep. (National): Miss Marion M. Graham
- W.D. Rep. (Central): Mrs. Alice S. McGowan
- W.D. Rep. (Eastern): Mrs. C. M. R. Sabourin
- W.D. Rep. (Western): Miss E. A. Raeside
- Hon. Chaplain (R.C.): Rt. Rev. J. E. A. Charest
- Hon. Chaplain (Prot.): Archbishop R. J. Renison

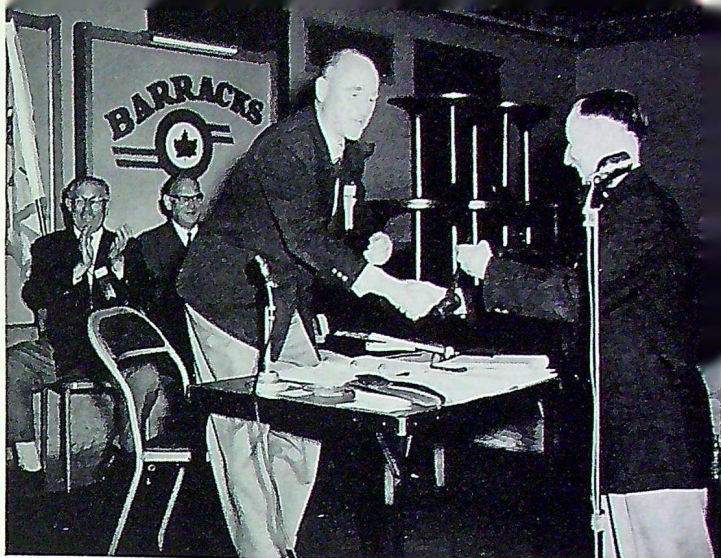
Air Vice-Marshal Brookes, in accepting the Presidency for a second term, expressed his gratitude as follows:

"Thank you very much for the support you have given during the last year. It has been more than a pleasure to represent you. One does not undertake a position like this at all lightly. Even though the work means long hours, we are always meeting old friends. I would commend to your attention the addresses we have had by the Minister of National Defence, the Chief of the Air Staff, and our dinner guest speaker, Dr. Solandt. If we were not banded together in this Association, we would not have this privilege."

The Honourable Brooke Claxton, Minister of National Defence, speaking at the opening session, stressed the importance of the outstanding contribution being supplied by the R.C.A.F. in the defence of Canada. The Minister also commended the members of the Association for the good work they were doing in keeping before the public the value of the R.C.A.F. as a Service which young Canadians are proud to join.

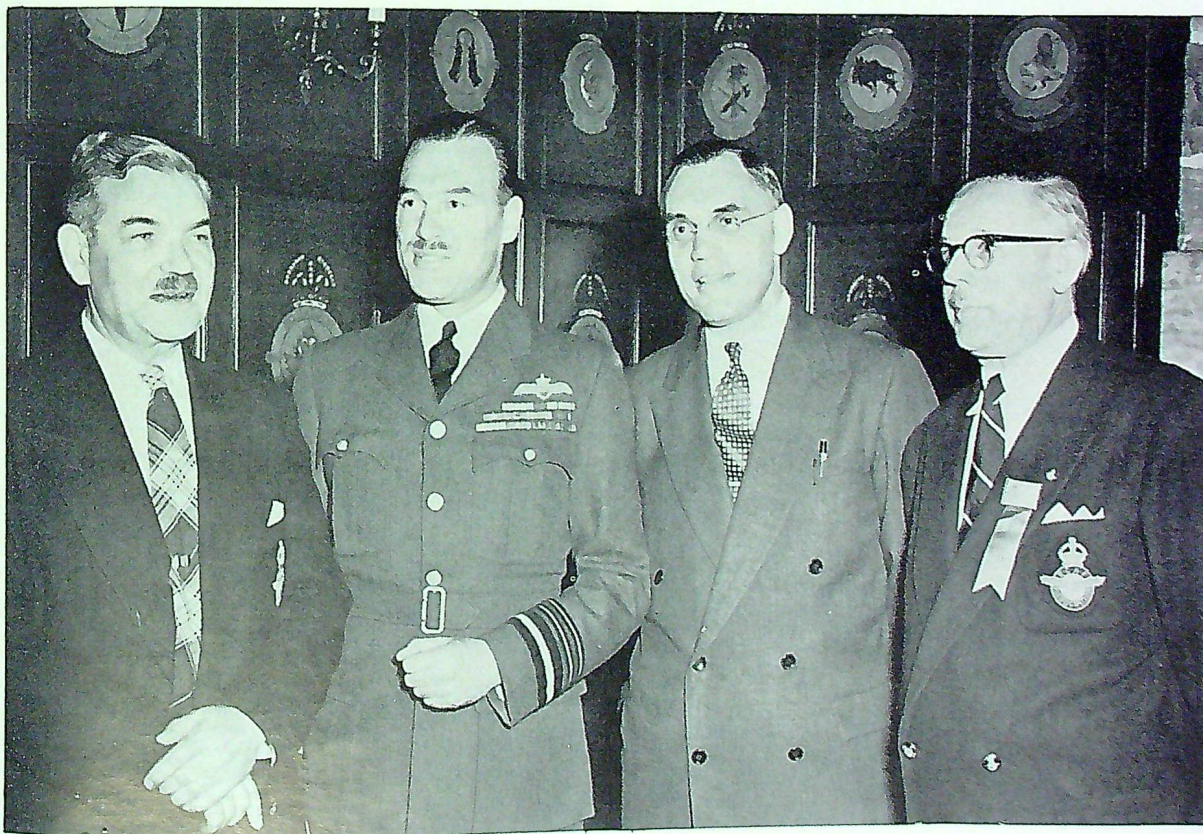
Dr. O. M. Solandt, O.B.E., Chairman of the Defence Research Board, was the guest speaker at the Convention dinner. Dr. Solandt explained the work of the Defence Research Board, and stressed the significance of the H-bomb and its terrific operational superiority over the conventional atom bomb. He also sketched the probable development of the guided missile.

Air Marshal C. R. Slemon, C.B., C.B.E., addressed the delegates on Tuesday morning. The



*T. C. Segsworth, on behalf of the Alberta Group, presents gavel to Air Vice-Marshall Guthrie in token of the Group's appreciation of his long and untiring service to the Association in Alberta.*

*In the Mess ante-room. Left to right: Air Vice-Marshall Morfee, Air Marshal Slemon, Dr. Solandt, Air Vice-Marshall Brookes.*



Chief of the Air Staff commended the members of our Association for the enthusiasm they displayed, and stressed particularly the work done by the Association in connection with the aircraft detection corps, sponsorship of Air Cadet squadrons, and also the *bon voyage* parties which were

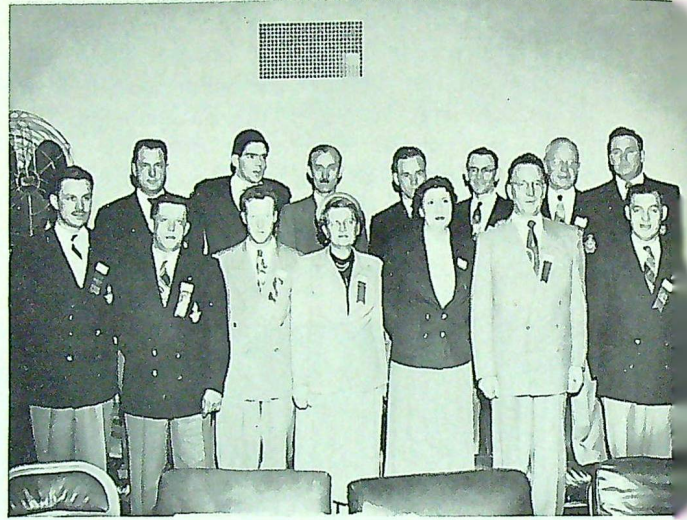
given to airmen and their families on their departure to the Continent. His address, in which he spoke of the work done by the Air Force and its contribution to the defence of Canada, was enthusiastically received by the delegates.

GROUP REPRESENTATIVES



Maritime Group (1).

Quebec Group.



Maritime Group (2).

Ontario Group (1).





Ontario Group (2).



Manitoba-Northwestern Group.



Saskatchewan Group.



Alberta Group.

British Columbia Group.



#### LETTER FROM H.R.H. PRINCESS ALICE

In reply to a letter from Miss Marion Graham, President of No. 602 Wing, congratulating her on her 50th wedding anniversary, H.R.H. The Princess Alice has written as follows:

Kensington Palace  
6th May, 1954.

My dear Marion,

Both my husband and I were delighted to receive your letter congratulating us on our Fiftieth Wedding Anniversary, on behalf of the Members of the Women's Division, Royal Canadian Air Force Association.

It is always a great pleasure to be remembered and some of my happiest times in Canada were when I was able to find myself among the members of the Women's Division. It was a delight to be able to do anything for them and I felt very proud of the admirable service given by all members during the war.

I am still not quite out of touch because I sometimes hear from Sylvia Evans. In fact, I was happy to see her when she came over for the Coronation.

Affec'y yours,  
(Signed) Alice Mary



Miss Graham worked under the Princess while serving overseas in the Women's Division of the R.C.A.F. during the war.

### YORK MINSTER MEMORIAL

Below is the transcript of a letter from Lord Deramore, the honorary treasurer of the York Minster Thanksgiving Memorial, to Mr. H. E. Langford, honorary treasurer of the York Minster Memorial Fund in Toronto.

The Manor House,  
Heslington,  
York.  
21st May, 1954.

Dear Mr. Langford:

Once again my rather inadequate pen must try and express the very real and sincere thanks of our Committee, to you, your fellow officials, and indeed, everyone who has helped you to reach the figures of £2,150 — a magnificent sum under any circumstances, but when one remembers that the majority of the people who have given to the fund can have no hope of ever seeing the Memorial itself, it is absolutely staggering. It tells many things; the amazing generosity of the Canadian people; the enthusiasm of the Committee and the officials; the tremendous amount of work which must have been put in by everyone concerned; and lastly — and this makes us feel quite humble — the faith that has been shown in us to install something that will be really worthy to honour the memory of so many of your countrymen. I can only say "thank you", but I say it for all of us, and it comes from the bottom of our hearts.

At our last meeting we met Professor Richardson who has designed the Memorial. We did wish that some of your people could have been there and heard him speak of the Memorial. We trust, however, that many of you will be able to come over when it is unveiled in September, 1955, and that when you see it you will feel very proud that you have helped so substantially towards it.

Yours very sincerely,  
(signed) Deramore

### HOW TO DRAG DOWN AN ASSOCIATION

Mr. S. Malach, former 3rd vice-president of the National Executive, last April sent out to Saskatchewan members the following hints on how to ruin a voluntary organization.

1. Don't come to the meetings.
2. If, however, you do come, come late.
3. If the weather doesn't suit you, don't think of coming.
4. If you do not attend a meeting, find fault with the work of the officers and the other members who do.
5. Never accept an office, as it's easier to criticize than to do things.
6. Nevertheless, be indignant if you aren't appointed to a committee — but, if you are appointed, don't attend committee meetings.
7. If asked at a meeting to give your opinion regarding some important matter, reply that you have nothing to say. After the meeting tell everyone how things ought to be done.
8. Do nothing more than is absolutely necessary, but when other members roll up their sleeves and unselfishly help matters along, howl that the organization is run by a clique.
9. Hold back your dues as long as possible. Better, don't pay at all.
10. If you don't receive a bill for your dues, don't pay.
11. If you receive a bill after you have paid, resign from the organization.
12. Don't tell the organization how it can help you, but if it does not help you, resign.
13. If you receive service before paying dues, do not think of paying.
14. Let the Secretary worry about getting new members.
15. When a banquet is given, tell everybody that money is being wasted on blow-outs which accomplish nothing.
16. When no banquets are given, say the organization is dead.
17. If asked to sit at the speakers' table, modestly refuse.
18. If you are *not* asked, resign from the organization.
19. Agree with everything said at a meeting, and disagree with it outside.
20. *When all else fails, curse the Secretary.*

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### DICTIONARY FOR DIPLOMATS

We would also be wise, I think, not to get unduly exercised over the meaning of every Kremlin word or gesture. We might recall the good advice of Harold Nicholson when, in discussing the practice of diplomacy, he said: "... it is better to concentrate upon rendering your own attitude as clear as possible, rather than to fiddle with the psy-

chology of others." Nicholson then quoted the words of an experienced diplomat, and they seem particularly apt at this time: "Don't worry so much about what is at the back of *their* minds; make quite sure that they realize what is at the back of *yours*."

(Hon. L. B. Pearson)

# A DATE WITH DRACULA

By Eric Nicol

*(We have already reprinted several of Mr. Nicol's little masterpieces of Service humour, written while he was in the R.C.A.F. during and immediately after the war. This particular effort strikes us as one of his very best.—EDITOR.)*

WITH the relaxation in security regulations subsequent to the passing of the war, it is possible for me to tell the story of how I bled for my country with a fat-free breakfast and a floy-floy.

For years, like many other people, I had postponed visiting the Red Cross blood clinics. I knew I should go, but somehow never got around to it. Every time the clinic 'phoned about an appointment for a donation I seemed to have something else to do — like hanging on to my blood, for instance.

One day, however, I was drained for democracy. The affair started when a questionnaire was circulated around our R.C.A.F. station asking whether we had given blood. Naturally, I replied that I hadn't, explaining that my blood was part French, Italian, English, Irish, and Chili sauce, and not much good to anybody but myself.

My excuses were not accepted in good part. A few days later a nursing sister phoned me to ask:

"When will it be convenient to give your blood?"

"Gimme that again?" I asked.

"How about Wednesday morning at eleven?" she continued in a charming voice. "Would that be all right?"

"Did you say blood?" I asked. "B-L-O-O-D, blood?"

"I'll put you down for eleven then. Goodbye!"

This was my first intimation that the Air Force would stop at nothing to reduce our establishment. My blood ran cold as I felt invisible forces closing in on my varicose veins.

Wednesday at eleven I entered the door of the clinic wearing an etched smile. A little grey-haired woman sat at the reception desk. With

mock nonchalance I addressed her.

"Good morning, I believe I have an appointment with one of your vampires."

Well, you should have heard the old dear laugh. She hardly had strength enough to propel me into the waiting room and hold me in a chair with her knee. After extracting my name, she went off gaily to inform the proper authorities that there was Another One waiting.

For some time I sat in the lounge waiting my turn at the bottle, reflecting glumly on the world of difference between emptying one and filling one. Abruptly I was hustled into a small booth, where another elderly soul sat ready to make out a card for me, in case any questions were asked after they had taken me away to wherever they took unsuccessful cases.

From her I went to a third old lady who sat behind a sort of manicurist's table. She took my right arm with a disarming smile.

"How are you today?" she enquired, simultaneously jabbing my forefinger with a sharp instrument.

"Fine," I screamed, making a short flight towards the ceiling. "My finger hurts a little but you probably know about that."

She chatted about this and that as she squeezed the blood out of my forefinger on to a glass slide which she placed under a microscope and began examining avidly. I then noticed a sign over her head saying "Haemoglobin Count," and I realized she was counting my haemoglobin. She didn't count long and for an instant I hoped I wouldn't have enough haemoglobin to make the grade. God knows it never did anything for me.

Instead, she marked down "100%" on my card. This seemed like a pretty fair average and I rose to leave.

"I'll drop in again some time," I said, "and make another donation."

"But that was only a sample," she laughed. "You run along upstairs now!"

I ran along upstairs at a slow crawl, finding the second floor of the establishment a hubbub of activity, with people dashing back and forth, some with bottles of blood, others without the blood in the bottles, but everybody with something in common. A hostess in a blue smock sailed up to me with an engaging smile, saying:

"Good morning! I hope we've been keeping to our prescribed diet, haven't we?"

"I don't know about you, lady," I murmured, "but I have."

"Is this your first time?" she chirped. "One airman has been here 39 times."

"It wasn't me," I said.

I was told to remove my shirt and don a white apron, the sacrificial robe. Shortly I was lined up with a couple of other donors in a corridor beside the room in which a number of persons lay on their backs on tables, quietly bleeding away. They had a calm, laid-out look that I disliked. I was glad I hadn't worn a tuxedo.

A large nurse with the clinic's standard motherly smile took my bare arm and swabbed around the inside of the elbow joint. I realized immediately what she was up to. That was where they intended to attach the faucet. If my blood had any sense, I thought desperately, it would get out of that vicinity, and fast.

In a few seconds I was in the bleedery. A nurse beckoned me to a vacant table upon which I lay down without a word. After a while another nurse came up, and from her friendly, motherly smile I knew she was the one who was going to give me the works.

"Nice little place you have here," I commented hoarsely.

"Yes," she said. "Just hang your left arm over the side of the table."

I hung my left arm over the side of the table.

"Whadya hear from Dracula and the boys at the



head office?" I whinnied, feeling that now would be about the right moment to awaken from the nightmare. That nurse was undoubtedly the result of consuming a grilled cheese sandwich before retiring. The apparatus she was attaching to my left wing was merely the concoction of a bilious subconscious. In a moment I would wake to laugh at my silly dreams. In a moment . . .

"My, what a lovely vein!" exclaimed my nurse, running her finger affectionately over my inner elbow.

I stared at her closely. She wasn't any grilled cheese sandwich. This was the real thing. This was it. We've had it, chaps.

"I'm glad you like my vein," I muttered. So. My blood was on her side, was it? After all the Scott's Emulsion I had swallowed to help it. Glad to skip out on me, eh? Sitting up nice and pretty in a big, fat vein. Bitter, bitter, bitter existence in which a man can't even trust his own blood.

The nurse was getting in amongst my vein now, intruding a length of rubber hose terminated in the bottle.

"I suppose this sort of training simplifies your gasoline problem?" I enquired wheezily.

"The vein is flowing nicely," she said.

No doubt. I hoped they would be very happy together.

"How much are you taking?" I asked after a while, sensing that my eyes were revolving like gas-pump meters with the passage of several gallons.

"Oh. we only take 450 cc's," she replied.

"How much is that in bushels?" I whispered.

She laughed merrily.

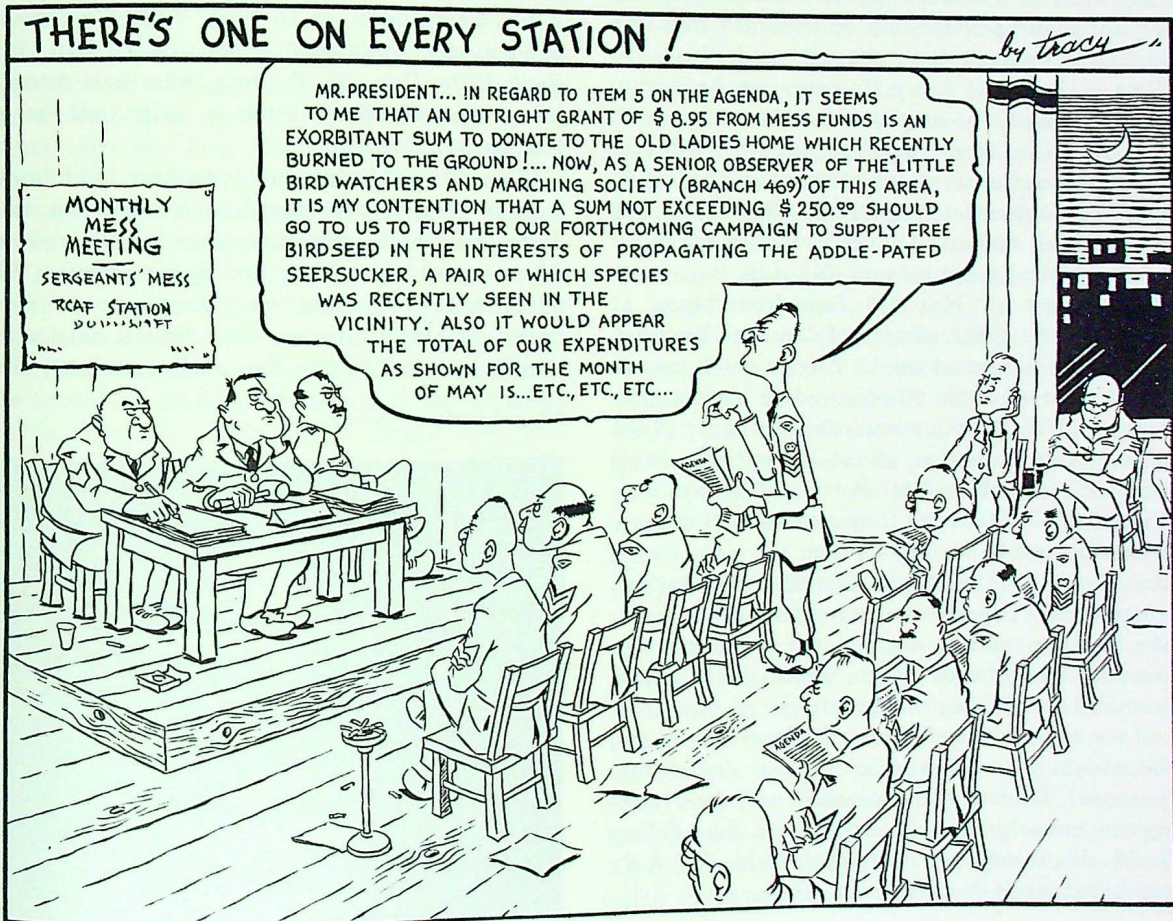
"It's only a pint. You won't miss it."

I shook my head. Why should I miss a pint of blood — any more than a leg, or a pailful of those silly old organs that clutter up my abdomen?

Suddenly the nurse was removing the tourniquet.

I was amazed, however, to find my powers of locomotion virtually unimpaired. In a few minutes I was walking out of the clinic, a free man. I knew then the satisfaction of being bottled in a good cause. My blood was in the fight.

But now that the war has been over these past seven years, I'd appreciate it if the guy who got my 450 c.c. returned them at his earliest convenience. That stuff was on my inventory.



# The War History of NO. 414 SQUADRON

By Wing Commander F. H. Hitchins, Air Historian.

WHILE the Second British Army was advancing from the beach-head in Normandy to the shores of the Baltic Sea, its reconnaissance requirements were supplied by No. 39 (R.) Wing, R.C.A.F., in No. 83 Group of Second Tactical Air Force. The three squadrons which comprised this wing during the last months of the war all stemmed from the original Canadian overseas air unit, No. 110 (City of Toronto) Army Co-operation Squadron, which arrived in England in February 1940. No. 110 was later redesignated No. 400 and provided a nucleus from which the second R.C.A.F. Army Co-operation Squadron, No. 414, was formed. Nos. 400 and 414 then supplied nuclei for the creation of the third unit, No. 430.

The story of No. 414 Squadron began at Croydon, the great airport of London, England, where it was formed on 13 August 1941 from a detachment of eight officers and 69 airmen provided by No. 400 Squadron, the remainder of the ground crew personnel, about 200 initially, being supplied by the Royal Air Force. A few days later Wing Cdr. D. M. Smith took command of the new squadron, which he led through the next eleven months while the pilots carried out intensive training on Tomahawk and Lysander aircraft. Much of the training was devoted to innumerable exercises with the Army, on which the squadron practised the technique of ground-air co-operation, and tested both the efficiency of its equipment and the adequacy of its establishment in aircraft and personnel. During this prolonged period of training one casualty was sustained when Pilot Officer G. M. Dunaway, an American in the R.C.A.F., was killed while flying over Dorset.

Early in June 1942, No. 414 began re-equipping with Mustang aircraft, the type on which it flew through the next two years; and at the end of that month three pilots used their new mounts to carry out the squadron's first operation, an uneventful defensive patrol along the south coast of England. A few weeks later, on 18 July, Wing Cdr. Smith handed over command of the unit to Sqdn. Ldr. (later Wing Cdr.) R. F. Begg, who had recently joined the squadron after a long tour as an instructor in Canada.

When No. 414 celebrated its first birthday in August 1942, it had logged about 3000 hours of flying, of which only nine were on operations. After a year of nothing but flying training, the pilots were beginning to "bind" about their operational inactivity, but they did not have much longer to wait. The past few weeks had been filled

*Wing Cdr. D. M. Smith.*





*Flying Officer H. H. Hills.*

with "alarums and excursions" of an impending major operation, which finally materialized on 19 August in the combined attack upon Dieppe — and Sqn. Ldr. Begg's pilots at last had an opportunity to carry out the rôle for which they had trained so long.

No. 414 was one of four Army co-operation squadrons detailed to reconnoitre the roads leading to Dieppe to watch for enemy troop movements into the area. Between 0445 hours and 1130 hours the pilots flew eighteen sorties on this task, and, although they found no enemy activity on the roads, they did encounter intense flak and had several brushes with hostile fighters, in the course of which Flying Officer H. H. Hills, an American member of the squadron, destroyed an F.W.190. His companion, Flt. Lt. F. E. Clarke, was forced to ditch his Mustang in the Channel near a destroyer, which soon rescued him. The squadron shared in the congratulations sent to the Army co-operation wing for its part in "Jubilee," and two pilots were mentioned in despatches for their work.

For five weeks after Dieppe the squadron reverted to its old routine of training and exercises until, late in September, it resumed operations to fly "populars" (photo reconnaissances) and "rhubarbs" (ground attacks) in the French coastal area. By the end of October, when these activities were suspended for the winter, the pilots had tallied three locomotives and half a dozen other targets damaged by their fire. Through the last months of 1942, most of the squadron's operational activity was on defensive patrol to guard the south



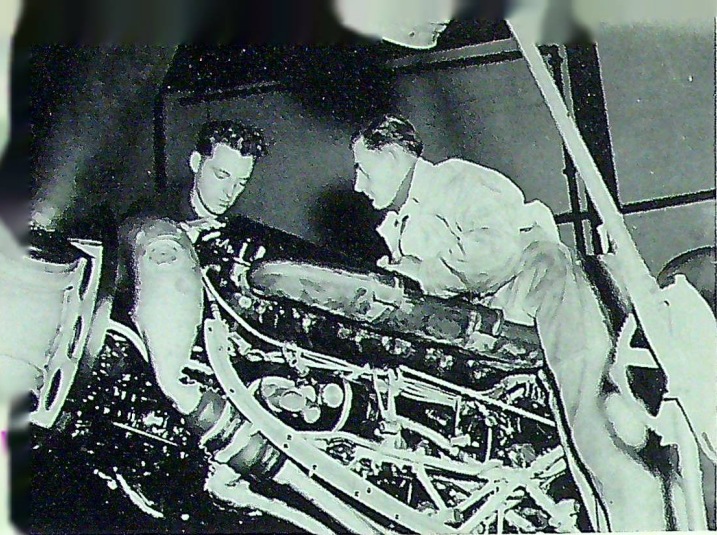
*Flying Officer C. L. Horncastle.*

coast against low-flying attacks by enemy fighter-bombers. Almost 400 sorties were flown by pilots detached to Tangmere for this duty, on which they had a few chases after hostile aircraft but no decisive combats. Flying Officer C. L. Horncastle was killed in a crash while taking off for one of these patrols.

In December 1942, No. 414 moved from Croydon to Dunsfold, a new airfield in Surrey which had been constructed by the Royal Canadian Engineers, and at the same time it joined No. 400 Squadron in No. 39 Wing, the new R.C.A.F. wing which had been formed in Army Co-operation Command under the command of Group Capt. D. M. Smith. A few weeks later No. 430 Squadron was created, from nuclei provided by Nos. 400 and 414, as the third component of the wing.

The first three months of 1943 were devoted to further training and exercises, until the advent of spring and better weather permitted a resumption of "populars" and "rhubarbs." In the next three months (26 March to 1 July) Wing Cdr. Begg's pilots accounted for 17 locomotives, the outstanding feat being that of Flying Officers R. T. Hutchinson and B. B. Mossing, who damaged seven engines on one sortie into Brittany. Bad weather and enemy flak were responsible for two casualties on these operations, Flying Officers H. D. Steeves and R. C. MacQuoid.

Defensive anti-rhubarb patrols off the south coast were also resumed in April when the squadron moved to Middle Wallop for seven weeks. Then it travelled farther west to Harrowbeer, north of Plymouth, for a few days before moving



*L.A.C.s J. Brannen and E. Blight at work on the engine of a Mustang.*

on to Portreath in Cornwall for a fortnight. One incident of this period was an air-sea-rescue mission over the Channel, on which two pilots located a dinghy, to which ten American airmen were clinging, and kept watch until their rescue was effected. The squadron's major activity during its brief stay at Harrowbeer and Portreath was fighter patrols far over the Channel to protect our anti-submarine forces engaged in the "Battle of the Bay." It was a tragic period marked by the loss of three pilots, Flying Officers L. A. Doherty, R. W. Potts, and Flt. Lt. Vaupel.

From the Cornish coast No. 414 returned to south-eastern England in June to continue its mobile life. After a few days at Dunsfold, during which Sqn. Ldr. J. M. Godfrey replaced Wing Cdr. Begg in command, the squadron moved to Gatwick (on 5 July) where it became a part of No. 129 Airfield, one of the two Airfields into which No. 39 Wing was now subdivided as No. 83 Group of Second Tactical Air Force began to take shape. At the same time the strength of the squadron was pared to the air crew plus a few ground personnel, the remainder being attached to the Airfield, where they later were formed into No. 6414 Servicing Echelon. Late in July, Sqn. Ldr. Godfrey was posted to command one of the new Airfields, and Sqn. Ldr. H. P. Peters, D.F.C., from 400 Squadron, succeeded him as C.O. of No. 414.

Another move in mid-August took the squadron to Ashford, in Kent, where it went under canvas and became more active operationally. A series of defensive patrols over the Strait and Channel, in

conjunction with a large-scale combined exercise, produced no encounters with the enemy; but other operations — reconnaissances and offensive forays — were more eventful. On photographic and tactical reconnaissances to get information which the invasion planners required, the pilots ranged from the Netherlands to Normandy in the face of usually intense flak opposition and occasional encounters with enemy fighters — in one of which Flying Officer R. E. Baker was shot down by an F.W.190 over the Strait of Dover. On offensive missions (which included some night sorties) two more pilots were lost, Flying Officers L. P. Theriault and D. H. Lewis; but the squadron could claim 28 locomotives, 19 electric pylons, five tugs and barges, and several gunposts as damaged, in addition to two enemy aircraft destroyed and two more damaged during the eight weeks that it spent at Ashford. Flt. Lt. R. T. Hutchinson, whose score of one He. 111 destroyed, another Heinkel and 21 locomotives plus several other targets damaged, placed him in the forefront of the "rhubarb" experts, received the first D.F.C. awarded to the squadron.

*Cpl. W. M. Everest and L.A.C. E. C. Wright charging radio batteries.*



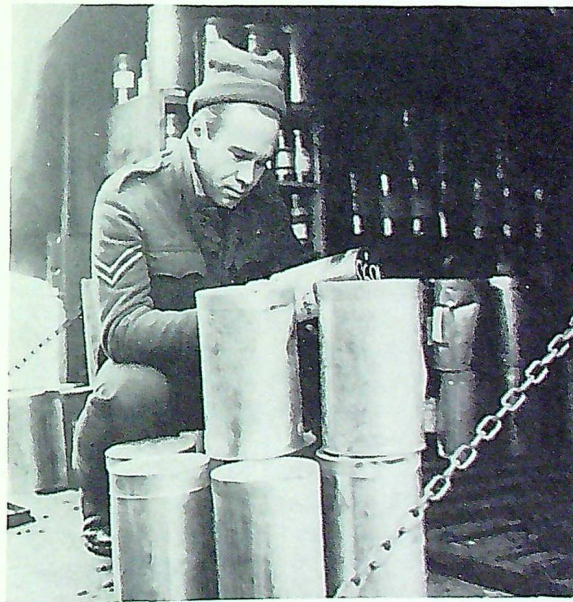
From Ashford, No. 414 moved to No. 128 Airfield at Woodchurch, in Kent, for a few uneventful days (5 to 15 October), and then accompanied the Airfield to winter quarters at Redhill. Offensive forays from this base added 13 locomotives and four aircraft to the squadron's score. Three of the aircraft were accounted for by Flying Officers L. F. May and R. C. J. Brown during a sweep around Paris on 31 October, when they shot down a Yale trainer bearing swastika markings, probably destroyed a Ju. 88 parked on an airfield, and then, meeting another 88 in the air, sent it down in flames. The fourth aircraft was an F.W. 190 which Flying Officers G. Wonnacott and R.O. Brown destroyed in a combat near Cambrai on a "rhubarb" sortie during which they also damaged four locomotives.

Leaving Redhill on 3 November, No. 414 Squadron rejoined No. 129 Airfield at Gatwick and settled down in winter quarters for a long stay. "Ranger" operations over France and the Low Countries were continued for a few days with considerable success — 15 locomotives, 10 pylons, 7 vessels and several flak posts being damaged, as well as a Ju. 52 destroyed on the ground — but Sqn. Ldr. Herb Peters and Flying Officer O. S. Peck did not return from their sorties. Command of the squadron then passed to Sqn. Ldr. C. H. Stover.

Unfavourable weather kept operations to a minimum through the winter months, the total number of sorties for the period November 1943 through March 1944 being only 170. Most of the work (140 sorties) was on photographic reconnaissance, with particular attention to the "invasion coast" around Caen and Bayeux. On one mission late in January, Flt. Lts. G. W. Burroughs and G. Wonnacott and Flying Officer R. O. Brown destroyed four enemy aircraft, all apparently Me. 109s, in two combats near Chartres, during which Bob Brown was shot down and killed. Operations were interrupted in February while the pilots attended an armament practice camp in Scotland, after which they travelled north again to take part in an exercise with the Navy and practice "spotting" for the gunners.

Shortly after the squadron returned to Gatwick it moved to Odiham, on April 1944, and went under canvas with No. 128 Airfield. The move coincided with a stepping-up of the Allied aerial offensive in preparation for D-Day, and in the next two months No. 414's pilots flew 293 sorties on photographic and tactical reconnaissance. About one-third of the tasks were concerned with "Noballs," the word used to designate the flying-bomb sites which the Germans were constructing along the Channel coast. Day after day the Mustang pilots went out to photograph these targets — before, during, and after bombing attacks upon them. They also took hundreds of pictures of the landing-beaches, the banks of the Seine, bridges, railroad yards and junctions, and coastal defences in the invasion area, and they recorded the progress of the campaign to seal off the battle area. Then, at the end of May, they played their part in blinding the radar eyes of the enemy, the last essential step before the invasion fleets set sail. The work which No. 39 Wing did during these weeks of preparation brought congratulations from Supreme Headquarters of the Allied Expeditionary Force "for the magnificent

*Cpl. J. Gilbert checking his library of negatives.*





*Ashford, September 1943. Seated (left to right): Flt. Lt. K. L. Morham, Flying Officer J. C. Davidson, Flt. Lt. R. J. Richards, Pilot Officer J. H. Donovan, Flying Officer W. T. Blakeney, Pilot Officer J. C. Younge, Flying Officers G. W. Zetterstrand, B. B. Mousing, S. C. Chapman, R. C. J. Brown, C. H. Stover. Standing: Lt. S. C. Nickle (Canadian Army), Flying Officers R. A. Bromley, D. H. Lewis, G. Wonnacott, Pilot Officer L. F. May, Flt. Lt. R. T. Hutchinson, Flying Officer G. W. Burroughs, Sqn. Ldr. H. P. Peters, Pilot Officer J. R. L. St. Hilaire, Flying Officer R. O. Brown, Pilot Officer C. B. East, Flying Officers M. R. Kehrer, J. L. A. Roussell, Pilot Officer M. H. Sinclair.*

way our demands for photography of all descriptions have been met."

With D-Day the squadron began to play the rôle of Army support for which it had been training and preparing for the past 34 months. During that long period its pilots had flown 1402 operational sorties; in the next eleven months they flew 4685, setting a record of over 900 hours of flying on 670 sorties in June. Prior to D-Day thirteen pilots had been killed on operations or training; after that date eleven went missing over the enemy lines, four of whom eventually returned safely.

The squadron's first task on D-Day was to "spot" for the naval bombardment of coastal defences from Le Havre to Cherbourg. Then it settled down to a daily schedule of tactical reconnaissances over the battle area and its approaches, watching for enemy road and rail movements. There were a few encounters with enemy aircraft, in which a Ju.52 was destroyed and an F.W.190 damaged, but the greatest opposition came from the flak defences which damaged many Mustangs and forced several pilots to bale out. Flying

Officer R. C. J. Brown came down in enemy territory and was captured. A few days later both Flt. Lts. J. A. MacKervie and R. A. Bromley were lost on a mission over Vire. Towards the end of June, Sqn. Ldr. Stover and Flt. Lt. N. F. Rettie were wounded in combat with a group of F.W.190s, and Sqn. Ldr. R. T. Hutchinson took over command of No. 414.

On 13 June, the pilots began using a landing strip on the beach-head as an advanced base for their operations, reducing by almost one-half the time required to complete a mission. At the end of the month No. 128 Airfield moved across the Channel to Sommervieu (B.8), where it was merged in No. 39 Wing, but No. 414 remained behind at Odiham, awaiting re-equipment with Spitfires, and continued to operate through July from both its base in England and the airfield in Normandy. The reconnaissance areas were now being extended farther eastward across the Seine as far as Amiens and Abbeville. In combats with enemy fighters during July, the squadron destroyed an F.W.190 and lost two pilots, Flying



Officer D. C. McLeod, who was shot down and killed, and Flying Officer J. A. Levi, who was wounded and held prisoner in a hospital in Paris until liberated by the Allied advance.

Operations on Mustangs ended early in August and, after converting to Spitfire IXs, No. 414 Squadron followed No. 39 Wing across the Channel to Normandy, on 15 August. The Wing had just moved up from Sommervieu to St. Honorine (B.21), about ten miles south-west of Bayeux, where Sqn. Ldr. Hutchinson's pilots arrived in time to take part in the holocaust of the Falaise "pocket". For a fortnight they kept watch over the escape routes of the Nazi army, reporting concentrations of vehicles and armour for the attention of our fighters and bombers, the total for one day running as high as 5000 M.E.T. (mechanized enemy transport) and 120 tanks. Then the Spitfires followed the German retreat eastward to the Seine crossings and beyond. The change from static to fluid warfare introduced a new type of mission, the contact reconnaissance, on which the pilots worked in co-operation with a patrol car moving with the forward elements on the ground. The car assigned tasks which the troops required — searches of areas immediately ahead, the presence of defences or road blocks, the condition of bridges, etc.— and in this way helped both to speed up the advance and keep Army headquarters informed of the location of its forces.

To keep in touch with the rapidly moving Army, the squadron advanced from St. Honorine to Illiers l'Évêque (B.26) in the last days of August, watched enemy transport "on the run" to the crossings over the Somme, and then, as the battle front again drew out of range, moved ahead to Poix (B.44), and thence, on 7 September, to Evere (B.56) on the north-eastern outskirts of Brussels. From this base the pilots carried out missions in support of the airborne landings at Eindhoven and Arnhem. During this period of rapid advance Flying Officer J. C. Younge was lost while strafing barges near Ghent and Flying Officer J. W. H. McEachern was killed in the crash of his Spitfire. After a fortnight at Evere, the squadron moved again to Blakenberg (B.66), near Diest, where it rejoined No. 39 Wing after three

weeks' separation. While operating from this field, the pilots destroyed another F.W.190 and also had their first views of the new enemy jets with which, in the weeks that followed, they had a few inconclusive brushes.

Blakenberg proved to be a mudhole in the damp autumn weather, and on 2 October the Wing pulled out to settle down at Eindhoven (B.78) for a long five-month stay, ending a mobile life which had seen six moves in seven weeks. Sqn. Ldr. Hutchinson completed his tour at this time and was succeeded by Sqn. Ldr. Gordon Wonnacott. The battle lines had now become stabilized along the line of the Maas, and the pilots spent the long weeks of autumn and winter reconnoitring over the front from Cleve to Roermond to report on enemy defensive activities, road and rail traffic, the condition of bridges, etc.— in brief, to gather the information which the Army required to ascertain the enemy's intentions. Repeatedly the Army expressed its appreciation of the pilots' work. Artillery reconnaissances, or "shoots", against hostile batteries became more frequent now as the battle again became static along the Maas front. Beyond the lines the pilots kept close check on enemy freight yards and recorded the progress of the campaign to strangle all rail traffic to the battle area. Persistent fog and rain greatly hampered the work of reconnaissance during these months. Increased opposition was also encountered from the flak defences which had got well dug in, and Flying Officers H. J. S. O'Brien and G. G. McLean were victims of the enemy's accurate fire.

In mid-December the enemy, shielded by the heavy fog which restricted aerial observation, launched a counter-offensive which drove a deep bulge in the Allied lines in the Ardennes. On the rare occasions when the weather permitted, Sqn. Ldr. Wonnacott and his pilots flew reconnaissances over the battle area to the south of their base in addition to the usual missions to the east. On 24 December, an exceptionally fine day, enemy aircraft appeared in some numbers, giving the Spitfires several combats in which they destroyed five of their opponents and damaged two more. In one action near Krefeld, Flt. Lt. D. I. Hall shot



*Odiham, June 1944. Front row (left to right): Flying Officer J. A. Levi, Flt. Lts. J. P. M. A. Brunelle, K. A. Brown, Flying Officer E. Garry, Flt. Lt. J. T. Seaman, Flying Officer W. G. Scherk. Second row: Flying Officer R. C. Ritchie, Flt. Lts. G. Wonnacott, G. W. Burroughs, Flying Officer D. C. McLeod, Flt. Lt. R. T. Hutchinson, Sqn. Ldr. C. H. Stover, Flt. Lts. J. C. O'Neill (M.O.), D. A. Bernhardt, N. F. Rettie, Flying Officers J. H. Donovan, J. C. Younge. Third row: Flt. Lt. J. A. Mackelvie, Flying Officer B. B. Mossing, Flt. Lt. J. M. Robb, Flying Officer J. L. A. Rousell, Flying Officer H. D. Cougler (adjutant). On propeller: Flying Officers L. F. May and R. C. J. Brown.*

down two Me.109s (and won the D.F.C.) when he and his companion were attacked by fifteen fighters. Later in the day, Flt. Lt. W. Sawers, who already had damaged an Me.109 on a previous sortie, engaged twelve of the enemy and added three 109s destroyed and another damaged to his score, a feat for which he too was decorated.

On New Year's Day, 1945, the Luftwaffe again came out in strength to attack Allied airfields in the Low Countries. At Eindhoven considerable damage was done to the aircraft of No. 39 Wing, but casualties to personnel were surprisingly light. LACs G. R. Bell and J. L. B. Williams, two airmen in 414's servicing echelon, were killed on the airfield, and two of the squadron's pilots and five

airmen were included among the wounded. Sqn. Ldr. Wonnacott was returning to base from a sortie when the attack was at its height, and he at once engaged the enemy, single-handed, destroying two and damaging, if not destroying, one more, thereby adding a Bar to the D.F.C. which he had won earlier. Flying Officer L. Woloschuk also encountered some of the enemy as they were flying home, shot down one and damaged another. Despite the damage and confusion caused by the attack, in which five of No. 414's Spitfires were shot up on the ground, the squadron continued operations with the available aircraft and was soon functioning again normally — when the weather permitted.



For several weeks fog, haze, snow, and drizzle restricted operations, but the opening of the Battle of the Rhineland, on 8 February, to clear the enemy from the area between the Maas and the Rhine, was the beginning of a much more active period. A month later, when Montgomery's Army Group was drawn up along the left bank of the Rhine, No. 39 Wing moved from Eindhoven to Petit Brogel (B.90), in north-eastern Belgium, to prepare for the assault across the river at Wesel. At the same time Sqn. Ldr. F. S. Gilbertson replaced Gordie Wonnacott, who was tour-expired, in command of No. 414 Squadron. On the first day of operations from the new base, Flt. Lt. R. J. Cutting destroyed one F.W.190 and damaged another when he and his companion were attacked by twenty hostile fighters. One pilot was lost temporarily when Flying Officer W. A. Glaister was forced down behind the enemy lines by engine trouble and was taken prisoner. For a fortnight the squadron was busily engaged taking photographs required for the attack across the Rhine and reconnoitring the roads and rail lines running eastward from Wesel. For days the area around Bocholt, Coesfeld, and Dorsten was shrouded with smoke from fires started by our bombers as they pounded freight yards and other objectives. On 24 March, the day the airborne landings were made near Wesel, the pilots flew 46 sorties on anti-flak patrols, artillery shoots, tactical and contact reconnaissance. In the days that followed, they reconnoitred ahead of our troops as they advanced north-eastward from the Rhine, driving deeper and deeper into the crumbling Reich.

Leaving Petit Brogel on 10 April, the squadron began a series of rapid moves which carried it across the German frontier to Rheine (B.108), 50 miles north-east of Wesel, then (on 16 April) to Wunstorf (B.116), near Hanover, and finally (on 28 April) to Soltau (B.154), where operations ended with the surrender of the Nazi forces in north-western Germany on 4 May. While changing bases, No. 414 also changed commanders and equipment. When Sqn. Ldr. Gilbertson completed his tour early in April, Flt. Lt. L. T. Banner took temporary command until Sqn. Ldr. J. B. Prendergast, D.F.C., a veteran of fighter-recce opera-

tions with No. 430 Squadron in the same wing, arrived on 18 April as No. 414's last C.O. About the same time, the pilots began flying Spitfire XIVs in lieu of the Mark IXs on which they had been operating since August 1944.

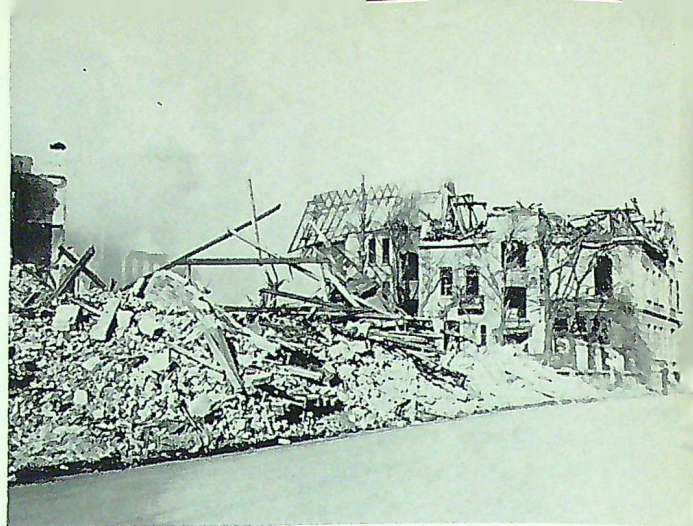
During these last weeks of hostilities, while the Second Army was driving across the Weser and Aller to the Elbe and on to the shores of the Baltic Sea, the recce pilots brought back vivid reports of chaos behind the enemy lines as refugees fled from the advancing Allied and Russian forces. Around Schwerin, in particular, the roads were writhing in the death throes of Hitler's Third Reich. On a mission near Hamburg on 24 April, Flying Officer F. R. Loveless was forced to parachute from his damaged Spitfire and was a prisoner of war for a few days. For No. 414 Squadron the campaign reached a final climax on 2 May. While on a reconnaissance near Neustadt, Flt. Lt. Doug Hall came upon a group of F.W.190s orbiting in line astern and, going down the line, he crashed three of the Focke-Wulfs and damaged one more; then, attacking a pair of Me.108s, he destroyed one and damaged the other. This coup, which brought his total score to seven destroyed and two damaged, won Hall a Bar to the D.F.C. Later in the day, Sqn. Ldr. Prendergast shot down two F.W.190s on a recce over Wismar, and, about the same time, four pilots scouting around Goldberg reported the first sighting of the advancing Red Army when they saw three Russian tanks rumbling through the streets of the town. Two days later operations ceased.

On V-E Day (8 May 1945) the squadron moved to Luneburg (B.156), where it settled down to a peace-time routine of flying training and sports. Towards the end of June it journeyed to England for a fortnight's air firing course, returning to Luneburg early in July. On the flight back to base, Flt. Lt. R. W. C. Davis and Flying Officer W. J. Hanna were lost when the Spitfires encountered bad weather over the Rhine valley. A month later, on 7 August 1945, No. 414 Squadron was disbanded at Luneburg, ending a tour which had started at Croydon four years previously.

In those four years, 28 members of the squadron and its servicing echelon had given their lives.



*Sqn. Ldr. J. B. Prendergast.*



*Wesel, March 1945.*

Nineteen pilots had been killed on operations and three had lost their lives in flying accidents; two airmen had been killed on the ground by enemy action and four had died from accidents or other causes. Four pilots forced down behind the enemy lines had baled out safely and were prisoners of war for a time.

Sixteen Distinguished Flying Crosses, two Bars, and three Mentions in Despatches, had been awarded to the squadron, the recipients being Sqn. Ldr. G. Wonnacott\* and Flt. Lt. D. I. Hall, both of whom twice won the D.F.C.; Sqn. Ldrs. C. H. Stover, F. S. Gilbertson, Flt. Lts. R. T. Hutchinson, G. W. Burroughs, J. M. Robb, W. Sawyer, J. P. M. A. Brunelle, J. L. A. Roussell, J. H. Donovan, F. R. Bartlett, L. Woloschuk, W. T. Blakeney, R. J. Cutting, and Flying Officer L. F. May (all D.F.C.s); and Flt. Lt. L. T. Banner, Flying Officers H. H. Hills and R. C. MacQuoid (Mentions in Despatches).

In the course of 7700 hours' flying on 6087 sorties the Mustangs and Spitfires of No. 414 had

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\*Ranks shown as at time of award.

destroyed 29 enemy aircraft, probably destroyed one and damaged eleven, the leading pilots being Doug Hall (seven destroyed and two damaged), Gordie Wonnacott (four destroyed, one damaged), and Bill Sawers (three destroyed, two damaged). On "rhubarbs" they had tallied 76 locomotives, 13 assorted vessels, 30 pylons and a score of other ground targets, with top honours going to R. T. Hutchinson, G. W. Burroughs, L. F. May, B. B. Mossing, and J. H. Donovan. But these statistics represent only one part — the secondary part — of their rôle as a fighter-recce unit. Their primary function — reconnaissance — cannot be summed up statistically, but it won repeated tributes from the Army units with which the squadron operated. After V-E Day, the G.O.C. of the Second Army sent his troops' thanks to No. 39 Wing for "its consistently splendid work". "In all weathers and in all conditions you have flown for us on your reconnaissance and photographic missions. The results you have achieved have enabled us to set about our business as fully equipped with information of the enemy as we could ever hope to be."

### NEW LAMPS ARE OLD

A "new thinker", when studied closely, is merely a man who does not know what other people have thought. (F. M. Colby.)

# TEMPERATURE and AIR SPEED RECORDS

In assessing the various attempts on records, it is well to bear in mind that these days we have to relate the speed of an aircraft to the speed of sound in air, since as everybody now knows, the resistance of an aircraft increases greatly as the speed of sound is approached. The actual speed expressed as a percentage of the speed of sound (Mach number) is a measure of the efficiency of the aerodynamic design of an aircraft. It is not generally understood, however, that the speed of sound in air is dependent on temperature, and since, to all intents and purposes, the top speed of a given aircraft in terms of Mach number is constant, the top speed measured in ordinary miles per hour units will vary with air temperature. Now the speed of sound increases with increase of air temperature at the rate of 7 m.p.h. per 10 deg. F., which is very significant.

Take the Hunter record (of last year) as an example. This was achieved at an air temperature of 74 deg. F., and if the prevailing temperature had been, say, 105 deg. F., which is not abnormal in America and other parts of the world, the speed could have been 21 m.p.h. faster. Actually, not quite all this gain would be realised, because there would be an inevitable reduction in engine power at the higher air temperature, but it may be assumed that the Hunter is capable of around 745 m.p.h. under suitable conditions. It is of interest to note that on the first attempt made by the Hunter when 722 m.p.h. was recorded, the air temperature was only 65 deg. F.

The recorded speeds on the final two attempts on Monday, 7th September, 1953, were:—

First Flight Run	Speed in m.p.h.	Air Tem- perature °F.
1	713.9	72
2	739.5	
3	714.3	
4	740.1	

Average 726.4 m.p.h.      Mach Number = .944

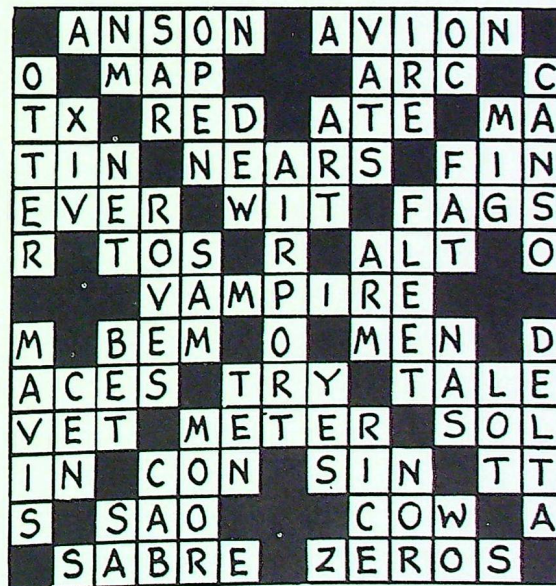
Second Flight	1	716.7	74
	2	738.9	
	3	716.6	
	4	738.7	

Average 727.6 m.p.h.      Mach Number = .943

The difference in speed on the individual runs is accounted for by the fairly strong wind component. No actual wind measurements could be made on the course, but the aircraft speed measurements indicate wind components of 13 and 11 m.p.h., for the 1st and 2nd flights respectively.

(Sir Sydney Camm, C.B.E., F.R.Ae.S., in the "Joint Services Recognition Journal": U.K.)

★ ★ ★



# Letters to the Editor ★ ★ ★

## FOUR BLASTS

Dear Sir:

Your April "What's the Score?" was without a doubt a "killer" designed to test even the most agile of mathematical brains. Unfortunately it was impossible to arrive at correct answers to questions 19 and 20 by convenient methods. Must it be assumed that "The Roundel" has discovered some new fundamental principles?

What seems more likely is that these questions were much too difficult to solve by inspection, and that the answers were reached by practical experiment. We have visions of a race being staged between Gallstone and Shatterproof, and can easily see that no matter who was given the initial advantage of 100 yards, the other could overtake him at 150 yards by running only twice as fast, provided of course that the finish line was marked by the Sergeants' Mess bar.

The second vision involves the whole of "The Roundel's" staff on their respective knees, rolling dice some fabulous number of times, with Twitterwhistle standing by recording the sordid statistics.

The results obtained from this practical experiment bring to mind another example of a phenomenon which could not have happened by chance alone.— A player throws 13 with a pair of six-sided dice. This is proof positive of abnormal behaviour on the part of either the dice or the player.

If the editorial staff of "The Roundel" really can make successful rolls of dice 244 times out of 495, it might be wise for them to move their quarters to some place more worthy of their skill with the "galloping dominoes".

Probably yours,

Flt. Lt. G. G. Daw,  
Quality Control.

Dear Sir:

The answer to question 19 may well be correct, but your statement is wrong entirely.

If the boy had a 100-yard start, he would be at the 125-yard mark when the man was at the 50-yard mark. Then the boy would be at the 150-yard mark, when the man reached 100-yards. It follows that by the time the man reaches 150 yards the boy will have gone another 25 yards, making it 175 yards. Further, by the time the man reaches the 175 yard mark, the boy will be at 186 yards, 1 foot, 6 inches and so on. You can use your calculus to figure it out from there on, but have I proved a point?

L.A.C. F. G. Rokosh,  
C.J.A.T.C.

Dear Sir:

I was reading my Dad's "Roundel" when I noticed what I think is a mistake.

In question 19 of "What's the Score?" of the April issue, it stated that if a man who could run twice as fast as a boy gave the boy a 100-yard start, calculus would prove that the man would overtake the boy at the 150-yard mark.

According to my calculations, however, proof could not be supplied at all, because the man would lose that race by 50 yards. If they both kept running, though, the man would overtake the boy at the 200-yard mark.

Robert Brewer (aged 13),  
R.C.A.F. Stn. Macdonald.

Dear Sir:

Can it be that the aspersions which Sgt. Shatterproof so often casts on the intellectual level of the editorial staff of

"The Roundel" are justified? I refer to question 19 of "What's the Score" in the April issue.

If the man overtakes the boy at the 150-yard mark under the conditions of the question, then some monkey business must be involved. Perhaps you have cunningly made (but not stated) a mental reservation that they run faster than the speed of light. If this is the case, I can well believe that "proof . . . can be provided only the use of calculus"—and then some! Otherwise, it seems that a few seconds' mental arithmetic shows that the man will overtake the boy 200 yards from the former's starting point. Moreover, a generalized mathematical proof of this requires only the simplest algebra.

Yours, more in sorrow than in anger,

Wing Cdr. J. W. McCalla,  
C.J.S., London.

*(Few things give us more pleasure than watching a joust between Knights of the Unknown Quantity. First, however, we must clear the arena of an obstacle that may distract the champions' attention from the stern business in hand. In question 19, the words "the 150-yard mark" were a misprint for "the 200-yard mark" — a misprint for which we take full responsibility.*

*Whether, however, calculus or algebra can provide proof that the man will overtake the boy at the 200-yard mark, and whether the probability of a "successful roll" in the game of crap is 244/495 — these are matters to be debated, not by us, but by our mathematical adviser, Flt. Lt. H. B. Prendergast, of the Armament Branch. His reply appears on page 25.*

*Incidentally, he asks us to commend L.A.C. Rokosh for his method of analysis, which, of course, implies a limiting process.—EDITOR.)*

## — AND A TICK-OFF

Dear Sir:

Reference is made to "The Suggestion Box" in the April issue of "The Roundel".

It would be advisable for the photographer and/or the photographic subject to refer to C.A.P. 6 for the correct wearing of the FIELD SERVICE CAP, BLACK TIE, and type of HAT BADGE.

Here at R.C.A.F. Station St. Johns, we teach the trainees the correct wearing of the uniform. We also advise them that one way to keep up to date with the history and organization of the R.C.A.F. is by reading "The Roundel".

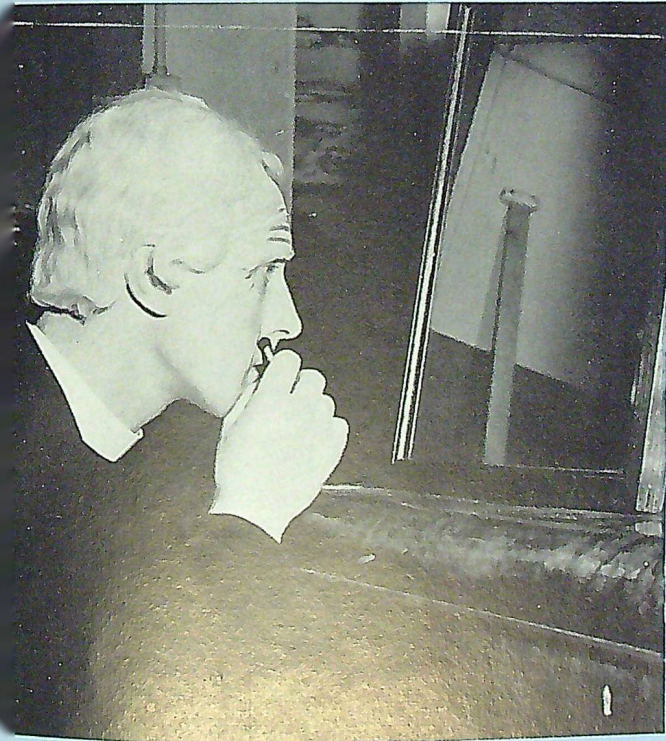
Our advice, however, is not likely to benefit them if "The Roundel" shows them, not what an airman *should* look like, but what he should *not* look like.

Cpl. J. A. Tremblay,  
R.C.A.F. Stn. St. Johns, P.Q.

*(We accept Cpl. Tremblay's tick-off as deserved. Our only excuse is (a) that the photograph of Flt. Sgt. Rootes was, we believe, taken before issue of the new cap-badges had been completed, and (b) that "Suggestion Box" photographs, which are taken on the subjects' units, are "personality" photographs rather than official Service portraits. The taking of perfect "dress" photographs takes quite a lot of time. Cpl. Tremblay is, however, quite correct in his view that "The Roundel" should not encourage, even by implication, carelessness in dress; and we thank him for drawing our attention to the matter. We shall endeavour to correct the situation when asking for "Suggestion Box" photographs in the future.—EDITOR)*



## THALIA AT LANGAR



*Two shots taken shortly before the performance of "Arsenic and Old Lace" given by the Thespians of No. 30 Air Materiel Base, Langar, England. In one, Cpl. Violet Quinlan rehearses her lines while L.A.W. Shirley Lockhart stands by to prompt her; in the other, Flt. Lt. Robin McLean prepares himself for his part as the Rev. Dr. Harper.*

