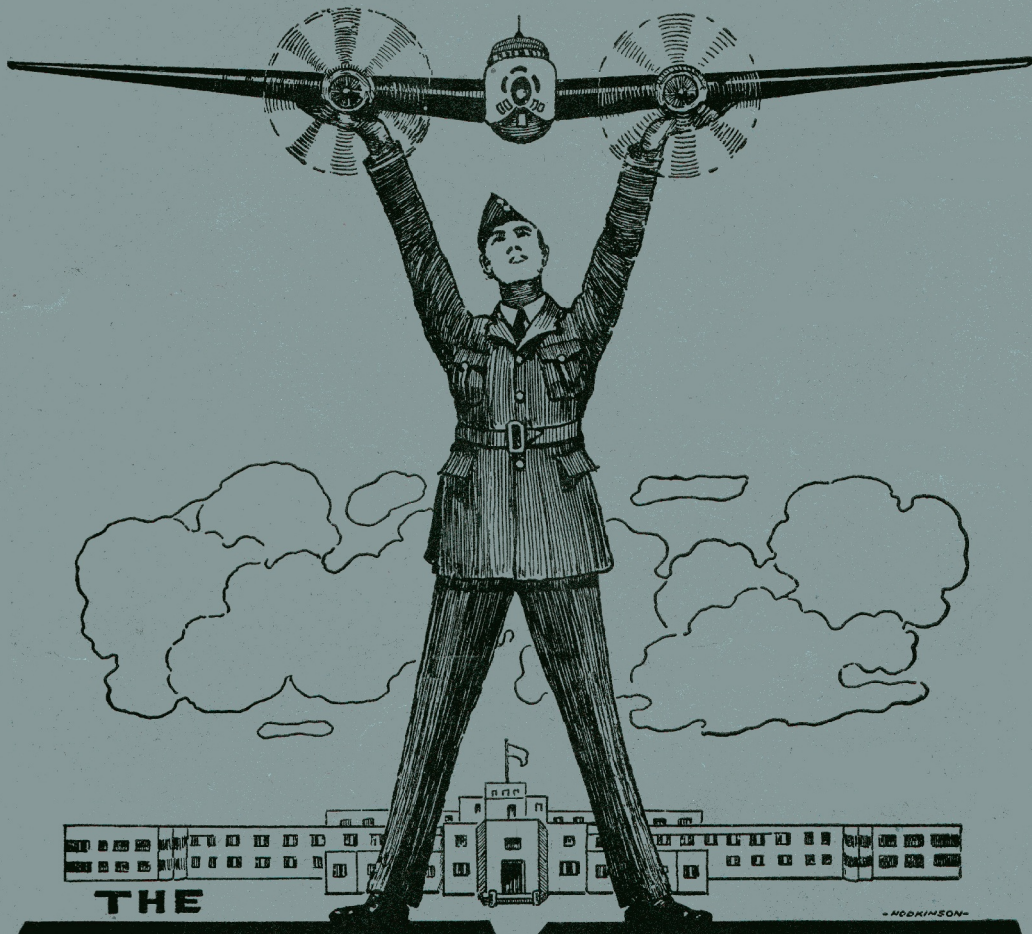


# THE *Aircraftman*

VOL. 3 - NO. 4

NOVEMBER 1942



THE  
**TECHNICAL TRAINING**  
ST. THOMAS **SCHOOL** ONTARIO

## STATION COMMITTEES

\* \* \*

### Officers' Mess

Wg. Comdr. B. H. Rolles (*P.M.C.*)  
Flt. Lt. P. S. Morton  
F.O. W. H. Pooler  
F.O. T. H. O'Rourke (*Secretary*)

### Sergeants' Mess

Wg. Comdr. N. McLeod (*Officer in Charge*)  
W.O.1 J. B. Spence (*Chairman*)  
W.O.2 L. J. Giroux (*President*)  
Flt. Sgt. Clements (*Secretary-Treasurer*)  
Two members

### Corporals' Mess

Sqn. Ldr. H. Lea (*Officer in Charge*)  
Cpl. Campbell (*Chairman*)  
Cpl. Filer (*President*)  
Cpl. Elliot, D. (*Secretary-Treasurer*)  
Two members

### Airmen's Mess

Sqn. Ldr. C. N. McLoughlin (*President*)  
F.O. W. H. Pooler (*Secretary*)

### Sports

Flt. Lt. G. H. Ross (*President*)  
F.O. J. M. Harris (*Treasurer*)  
S. M. McLennan, Y.M.C.A. (*Secretary*)

### Recreation Hall Committee

Flt. Lt. W. E. Cayley (*President*)  
F.O. G. W. Wilson (*Secretary*)

### Awards

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Sid McLennan, Y.M.C.A. (*Secretary*)

### P. S. I.

Wg. Comdr. N. McLeod (*President*)

### Welfare

Flt. Lt. J. G. Sparling (*President*)  
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### Education

Sqn. Ldr. A. A. Peebles (*President*)  
F.O. N. W. Wilde (*Secretary*)

### Band

Flt. Lt. W. E. Tuer (*President*)  
F.O. T. H. O'Rourke (*Secretary*)  
Flt. Lt. V. Smeaton  
Flt. Sgt. Green

### Library

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Flt. Lt. J. R. Ruel (*Treasurer*)

### Canteen

Sqn. Ldr. W. G. Cooke (*President*)  
Flt. Lt. W. E. Tuer (*Secretary*)

*Use This Page — Familiarize Yourself With Your Committee*

*The Aircraftman is distributed to Airmen  
without charge.*

The Picture of The Month



*F. O. D. A. Newson*

*O what a glory that this world put on  
For him who with the fervent heart goes forth  
Under the bright and glowing sky.*

*—Longfellow.*

# THE AIRCRAFTMAN

A Magazine of the R.C.A.F. Technical Training School  
Published Monthly at St. Thomas

By Permission of The Commanding Officer, Wg. Comdr. J. H. Keens, A.F.C.

VOLUME 3 - NOVEMBER 1942 - NUMBER 4



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**No. 2 Wing:** Sq. 1 — L.A.C. Churchill  
Sq. 2 — A.C.2 Scott, D. H.  
Sq. 3 — Cpl. Jorgenson, G. E.

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*"I have a great belief in man and his desire to be a good citizen. For I have seen him in his natural state, away from the atmosphere of false economics. I have seen him free from the temptation to make money his god; free even from the worry of staff pay or another stripe—in action. What did one find? True Peace in war, companionship, thoughtfulness, and the only real standard of success—a developed personality."*

DOUGLAS A. OWEN,  
Chaplain-in-Chief to Forces Overseas.

« « EDITORIALS » »

This issue of THE AIRCRAFTMAN marks the advent into this publication of the Press Club. This organization, consisting of airmen and airwomen of T.T.S., endeavours to present in the literary field the desires and wishes of the personnel of the Station. The thought behind the organization is the thought which is in every man today—to pass our leisure time in as profitable and entertaining a manner as possible.

**MANY CHANGES COMING**

A publication, to be indicative of the thoughts of any progressive group of people, must constantly be undergoing changes. In the present issue such an instance is seen. The pictures of many officers, previously presented as rather staid, have been lightened by the hand of humanness. Therefore, let not these less austere portraits be taken as a sign of frivolousness on their part, but rather as a sign that the requirements of progress are recognized.

**OUR LIFE BLOOD**

We, the Press Club, earnestly entreat that you submit your thoughts, ideas or stories of any kind to your Station Y.M.C.A. Office or your Orderly Room. We, acting as the pen in your hand, feel that so long as thought on any subject—sport, humour, technical or serious—is carried on by you, then so much more is our war effort accelerated and given greater incentive and purpose.

\* \* \*

**THE MEANING OF FREEDOM**

Recently our Prime Minister has defined Freedom as the “absence of fear” and he has set out to prove his point. There are, however, several aspects from which this elusive quality, Freedom, may be viewed. There is the freedom of the jungle, which in reality is no freedom at all. You are subject to no law, and you take what catches your fancy, and that is an excellent plan, something of yours catches the eye of another who is stronger than you. Such an existence is very bare, and devoid of the ease and comforts of civilized society, since there is no time to develop them.

Another form of Freedom is the Anarchical Society, which is really Democracy infinitely developed, and where there are no laws. It presupposes a highly civilized and well-educated society, which somehow knows how to behave best for the majority, and to co-operate with one another with effortless ease. With our very limited civilization such self-sacrifice would

prove too much of a strain and we should break down.

Our particular brand of Freedom glories in the name of Democracy—government of the people by the people, for the people—said Abraham Lincoln. But Democracy means a very great deal more than that simple statement. It is more difficult to live in a democracy than it is to live a Fascist slave. This may seem a little confused if your idea of Democracy is infinite licence—an all too common error. Democracy means freedom of speech. Yes, but freedom of speech does not give a man the right to cry “fire” in a crowded theatre, nor does it give him the right to state “I’m as good as you are, and what are you going to do about it?” That is merely unbridled licence.

Democracy is a great thing! It means Freedom of Conscience and Thought and Speech, and these carry with them a very grave responsibility—to use them all with discretion. The man who vaunts his freedom with irresponsible utterances and writings, which create only pointless rancor and bitterness, is defeating the very point of Democracy, and is a traitor to humanity. These freedoms should be used with a definite purpose in mind and only after mature consideration if the subject is controversial, and in times of war when it is so difficult to become well informed on the nature of things, even greater care is necessary.

Democracy implies strong self-discipline and without it there can be no Democracy—the two are complementary, and neither will exist without the other.

We must guard and watch jealously our freedoms, and as they disappear, as so many of them must in these troublous times, we should yield them willingly, strong in the knowledge that after the Peace is with us again, that by our own self-discipline we are worthy of them, and can press with calm determination for their full restoration.

\* \* \*

**SECOND FIDDLERS**

Considerable comment has been noted regarding the later issues of THE AIRCRAFTMAN. The editors are very pleased with this manifested interest, especially concerning the introduction of the centre spread, in the form of a pictorial plan. The popular motto that was used in the September issue, namely, “*Palman Qui Meruit Ferat*”, has brought forth the question of its meaning.

Those of you who have studied a little of

## THE AIRCRAFTMAN

ancient history will recall the Olympic games and the presentation of the laurel wreath in honour of the winning athlete. No other award was given to the winner other than the wreath; the official prize and some consideration being directed to the second man. The translation in English is "Let him who has won the laurel wear it", from which may be taken a rather interesting and inspiring reaction.

The laurel wreath was presented to the winner and an official award similar to the modern prize was presented to the second man.

The Romans believed that had the second man failed to encourage and extend the first man to the point of winning the winner would not have achieved success. A great deal of glory and honour in winning a wreath was created and it was felt quite sufficient to be given as the first award.

In the long stretch of time that has elapsed between the Olympic games and our present day, there have been many changes. Modern teachings and education have neglected the second man not only in the field of sport but in business and professional life. We are all guilty of this attitude and, unfortunately, have neglected to consider the other man who has encouraged us and made our efforts greater and brought about success in one form or another. There is no doubt that this old Roman philosophy has something to offer and each of us should take stock of those people whom we call our friends and be certain that they are given due consideration. We must remember that money can buy an exceedingly fine dog but we must also bear in mind that it will not buy the wag of its tail.

\* \* \*

### WITH THE R.C.A.F. OVERSEAS

When pilots of one of the Royal Canadian Air Force Spitfire Squadrons in Great Britain go into action, the ground crews are much too impatient to wait for their return in order to get news on the operation. Instead, they have fixed a radio set which can pick up the messages flashing between the aircraft as they speed into the fray, and frequently even while combat is in progress.

Whenever the squadron goes off on an operational flight, the ground crews cluster around the loudspeaker of this receiving set and listen breathlessly to the messages which it picks up. Often they can get a pretty good idea of the combat in which their squadron's Spitfires are taking part.

Responsible for the scheme are Sgt. John (Jack) Moffat of Regina, Sask., who is in charge of the unit's wireless section, and his two assistants, Cpl. George Mellen of Montreal, Que., and Cpl. Ernest Miller of Quebec City, Que.

A radio set similar to those used in the Spitfires themselves, and mainly intended for use by the squadron wireless section in testing work, picks up the messages transmitted from the aircraft. The receiver is connected with the amplifier so that many men can listen at one time to the loudspeaker instead of having to listen individually through earphones.

"On days when reception is good, and when the aircraft are flying high, we can listen in up to quite surprising distances", says Sgt. Moffat.

"Often we can hear one member of the squadron shouting a warning to one of his comrades: 'Look out, there's a Messerschmitt right on your tail.'

"If there's a big show on, the excitement gets pretty keen around here. The boys who have to stay on the ground think it's swell to listen in when the squadron is really engaged on a job. It helps the ground crews, too, because they know when the aircraft are coming back and so can be ready for them."

Often, the uncensored nature of what comes out of this particular loudspeaker makes it one of the most entertaining radio programs in existence. One day, when one member of the squadron was making his circuit preparatory to landing after returning from a show, another aircraft cut across his path. "If you don't get out of my way, you ———," roared a wrathful voice out of the loudspeaker, "I'll heave you in the lake the moment I get down . . ."

\* \* \*

### APRÈS LA GUERRE

During the last war the phrase "*après la guerre*" was uttered with every possible meaning. It was spoken mockingly, fretfully and hungrily. Although it is not said as much during this struggle, the thought must be in the back of most minds. Of course when one begins to think of after the war there immediately arises the question of what he will be doing. What will be his work, or even, will there be any work for him? It is generally concluded that this war will give a tremendous impetus to air travel. A flivver plane in every family will be the rule rather than the exception. To the present chain of R.C.A.F. airdromes all over Canada will be added a supplementary series of fields, making pleasure hops on the same scale as the Sunday afternoon spin we used to indulge in by car, before gas rationing. It is, therefore, quite conceivable that all men with the ability to service and repair aircraft will be greatly in demand. "*Après la guerre*" is being thought of in many ways — longingly and hopefully. When it comes it will mean the training we have put in on this Station, and will apply on other stations, will bring us work, and a place in the world.

# ADMINISTRATION DEPARTMENT

*(This is the first in a series of features of different departments of this Station.)*

## Commanding Officer

"The Station is my hobby."

When an interviewer receives this answer to his first question he is slightly taken aback. When it is said simply and naturally you gain an insight of the man who is the Commanding Officer of this Station. He is quiet-voiced, heavily-built, with a moustache just on the border of red. His presence suggests calmness and ability. You walk past him and Winnie, the Station mascot, in the halls or out on the grounds. Saluting, possibly you notice that his hair is greying. He may walk in on a class or be standing by you as you leave the Mess Hall. Seen thus, watching the Station, listening to the wise cracks you have just shouted, he is indulging in his favourite recreation. He regards these sounds, the manner in which the men walk, play their sports, and study, as a physician takes heed of the symptoms of a patient. You see, the C.O. thinks of this Station as a living thing. It does not consist of grey stone, and pipes and men who exist here—it has beauty, talent and it has a heart. And when he "browzes" through the corridors he is keeping his finger on the pulse of this being.

A sportsman—an all-round sportsman in younger days, which were spent in Toronto, Ontario—the C.O. retains some of his former ability in a present-day game of golf. He isn't very good at the game; he admits it. His rôle generally consists of being a strenuous spectator at the many sports which are around the Station. Regretful of the transportation problems, which make outside games almost impossible, he nevertheless thinks that our calibre of play and sportsmanship would be hard to top.

The Wing Commander feels that THE AIRCRAFTMAN is an integral part of the Station. Possibly if the men were to realize that it was a record of our activities as well as a place to express themselves, it could be of more value. The people back home should be given a clearer conception, such as THE AIRCRAFTMAN offers, into our training period. He suggests it be used not only as a morale builder for the men here, but also for the folks who so eagerly await the coming of our letters. By means such as these, a firmer link is established on all sides. When he says farewell to the out-going drafts, he asks that they write back to their former instructors, to request information or even a word of remembrance. Conscious that



WING COMMANDER J. H. KEENS, A.F.C.

ofttimes the men are anxious to get off this posting, and concerned over this fact, his hope is that they will realize that here is an opportunity for learning which may not be repeated. He is an ardent well-wisher of any activity which is the desire of the airmen; he lets your enthusiasm guide his judgment, and your support, his sanction. Of course, these sentiments are easily discernable after talking with the C.O. You see, the Station is his hobby.

## Senior Administrative Officer

The man who acts as a filter of Station Administration for the Commanding Officer. This is how Wg. Comdr. McLeod has described his many functions as the Senior Administrative Officer. His statement might be expanded into saying that he is responsible to the Commanding Officer for the smooth and efficient functioning of the Administrative machinery of the Station. His duty is to detect faults and weak points, and to recommend improvements or modifications for the approval of the Commanding Officer.

The Senior Administrative Officer is a man of many parts. He is President of the P.S.I., which controls the expenditure of non-unit funds, such as Canteen money, for sports and entertainments. He is Honourary President of the Sergeants' Mess, and the Awards Committee, which supervises awards for sports and the medals for Honour Students. And in addition, he is President of the Salvage Committee.

Personally, Wg. Comdr. McLeod has a native quality of brevity, and an air of efficiency, which fits very well into his job. He is a very keen gardener, and more enthusiastic than a skilful golfer. Formally, he used to play cricket for Essex County in the Old Country.

His Service career is very interesting. He joined the Royal Engineers in 1915, was in France by 1916 and transferred to the R.A.F. in 1918, but the Armistice forestalled the coveted Wings. We find him again in the R.A.F. in 1926, with his Wings, at No. 4 (Army Co-operation Squadron, R.A.F.) until 1931. And again in 1936 an appointment as Station Adjutant at No. 8 Flying Training School, where he remained until he was sent to Canada in January, 1940.

Wg. Comdr. McLeod has travelled widely and has visited Australia, New Zealand, South Africa, Ceylon, Egypt, Aden, Malta and other points in the Mediterranean.



Wg. Comdr. McLeod stressed in his interview the great need for keeping fit to enable an airman to carry out his duties efficiently. He pointed out the many facilities for sport on this Station, and observed that it was up to the airmen to make full use of them.

\* \* \*

### WHAT'S IN A NAME?

Confusion doubly confounded descended upon the batmen in the Officers' quarters. It appears that a number of the Officers left written instructions regarding the time when they desired to be awakened. Opposite one Officer's name appeared this notation, "Daily, 0700 hours."

Early the following morning mental chaos descended upon the batmen. Said one, "Who is this fellow Daily?"

"Don't know," came the reply, "but that ain't the way to spell his name; should be

Dealy."

Thereupon a third interposed. "Seems to me his name should be spelled Daley."

"That can't be right," interjected a fourth, "should be Daleay."

After considerable mental anguish the batmen decided upon a policy of let matters be. Daily was never found and his whereabouts is shrouded in mystery. Such mental conflicts are not conducive to good service from that august body.

Officers, have a heart. Be literate.

## THE AIRCRAFTMAN

### Sqn. Ldr. McLoughlin

Sqn. Ldr. McLoughlin is one of the comparatively few Royal Air Force officers to have been in the Fleet Air Arm, a branch of the Services that has long since been taken over by the Royal Navy. He will tell of flying at dawn over the coast of North Africa or Portugal; he will describe a stormy night in the Bay of Biscay when his ship, the Aircraft Carrier "Furious" turned about to answer an SOS from a Japanese merchantman; he may even relate the story of how he bought a bottle of sherry for ten cents in Tangier and taught a Moorish boy how to juggle with three eggs. But whatever his previous experience, it is obvious that it has fitted him well for his present post of Squadron Leader Administrative at this Station, in which capacity he is looked upon as a clearing house for all the decisions, plans and statistics which pass daily through his hands.

He believes that the success or failure of any job during peace or war depends almost entirely upon the enthusiasm that can be raised on the part of the individual doing the task.

Sqn. Ldr. McLoughlin has many hobbies. A skilful golfer, his handicap of seven at St. Andrew's, Scotland, is something to be proud of. He is one of the very few amateur salmon fly dressers in the Dominion, regularly receiving letters from various parts of Canada and

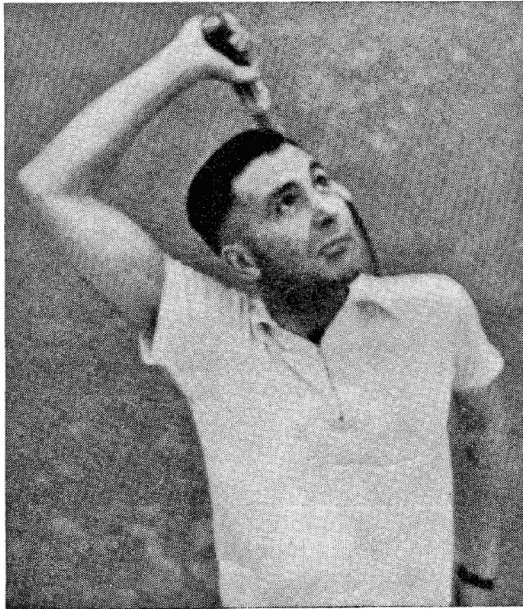
the Old Country seeking advice on salmon and trout flies. His interest in moving picture photography has resulted in many unique coloured studies of bird and animal life.

A man who will plan his leisure moments so carefully naturally has the serious side of



his life well organized. It is obvious to those who have had dealings with him that a perfect understanding exists between him and his office staff in the matter of every moment counting towards the fulfilment of their exacting duties. One of the Squadron Leader's favourite maxims is one which he once saw inscribed upon a card hung behind the desk of a high ranking R.A.F. officer—"If you don't know, say so."

\* \* \*



### The Station Adjutant

The Commanding Officer's right-hand man! Such is the Station Adjutant of T.T.S., F.O. Holroyde, who might be regarded as the contact man between the Commanding Officer and the various departments of the Station. The Adjutant will arrange your interviews, and keep the Commanding Officer up to date with any new developments on the Station. The Adjutant will inform members of a board that a meeting is to be held.

It is passing interest to note that most of the Adjutants of this Station have been posted overseas within a short time of assuming office.

F.O. Holroyde was Inspector of the Great American Insurance Company for six years before entering the Service, played hockey for the Winnipeg Victorias, and is an authority on the R.C.A.F. Drill Manual.

## THE AIRCRAFTMAN

### FLT. LT. ARMSTRONG

Flt. Lt. Armstrong doesn't like to talk about himself. Even though his duties include being in charge of the M.T. Section of the Station, he possesses none of the brashness which might be associated with someone who has to push men and motors to their limits in order to keep up with a terrific schedule. Rather, this ability to get things done is possibly the reason why he is Secretary of the Fire Department, which is most efficient. (Your interviewer timorously put forth a feeler to see if a spin on the fire truck could be wangled but, seeming to detect a hint of iron below his bushy grey eyebrows, dropped the suggestion.)

The Officer Commanding M.T. is a native of Oakville, Ont., married, and has two children. Educated at Upper Canada College and the University of Toronto, he was commissioned in the Canadian Field Artillery in 1915 and served from 1917 to 1919 with the Royal Flying Corps. Those of us who remember Flt. Lt. Armstrong as Officer Commanding in No. 1 Squadron, 2 Wing know and respect him as a just man, the kind of a person an A.C. can go to with his troubles and receive help and consolation. (Hence the nick-name "Daddy".)

Always an active man, he does not let down when he leaves the Station, but is keenly interested in all sports, especially swimming and golf.

(Continued on Page Twenty-eight)



### Motor Transport Section



FRONT ROW (left to right): A.C.1 Findlay, D.; Cpl. Fogg, L. S.; Flt. Sgt. O'Neill; Flt. Lt. R. K. Armstrong; Sgt. Coulson, R. L.; Cpl. Chapman, E. R.; L.A.C. Kingston, E.

REAR ROW (left to right): L.A.C. Zirk, W.; L.A.C. Conway, B. J.; A.W.1 Miller, J. W.; A.W.1 Jenckes, J. H.; A.W.1 Gordon, L. M.; L.A.C. Olib, C. A.; L.A.C. Stinson, T. M.

THE AIRCRAFTMAN



**PERMANENT FORCE**  
See Story on Page Ten



**HAPPY GANG**  
See Story on Page Ten

\* \* \*



**T.T.S. GIRLS**

*Those fair ladies we see working around the front offices are called the T.T.S. Girls. Always present in an emergency whenever Station entertainment is concerned, they have given many a grand night's fun at their weekly dances and parties.*

*FRONT ROW (left to right): Ethel Smith, Ruby Carr, Lila Axford, Margaret Agnew, Bernice Fountaine.*

*BACK ROW (left to right): Geraldine Elms, Dorothy Newcombe, Muriel Monteith, Margaret Bechtel, Thelma Hasselfeldt, Gloria Kennedy, Florence Smith.*

## THE AIRCRAFTMAN

### W.O. Banks

The Station Sergeant-Major holds a tough job with soldierly ease. Always a figure in all parades, Mr. Banks has come up from the ranks on this Station. He declares that he has worked in every possible department. A native

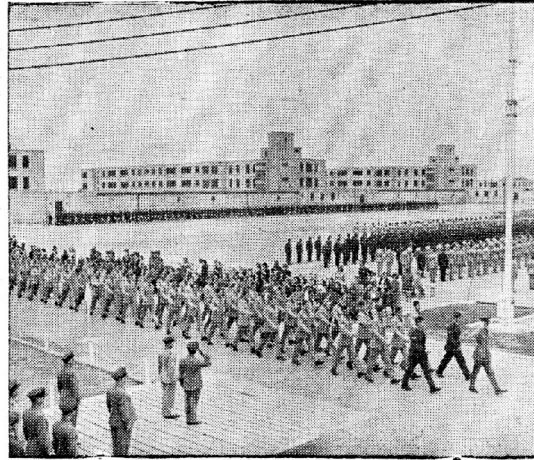


W. O. BANKS

of England, he has nevertheless spent considerable time in Canada. Before the war he was with the merchant marine and travelled a good deal in the West Indies and South America. Although he considers himself a Canadian, he still would like to return to his favourite city—London, England. His advice to the rookies is "Always conduct yourself as though the eyes of the Commanding Officer were upon you."

\* \* \*  
**BUY A VICTORY BOND!**

### THE PARADE GROUND



If the parade ground could but speak — of what would be its tales? Of winter mornings when the first cold light slants down on reared recruits — of summer evenings as the bugle sounds and all around stand in silence save a soccer ball, which continues its slowly lessening bounce — of spring and fall when slanting rains sheer off your face and mix with the wet below — of sweat and curse and moments proud when all the world stands for you "eyes right" — of the colours gently sifting the winds — thousands of steps, forward, rear . . . if the parade ground could but speak.

\* \* \*

*Every hour in a man's life has its own special work possible for it, and for no other hour within the allotted span of years, and once gone it will not return.*

—NOEL PATON.

\* \* \*

### PERMANENT FORCE

To say "Gus" Foran, W.O.1 i/c O. R., is a member of the Permanent Force is to put it mildly. He practically is the P. F. In the Service since 1924, he is known from coast to coast wherever the uniform of blue is worn. His genial informality has started more than one recruit on the way to the very top. During his service he has taken an active part in all sports, coached several championship teams and at present is feared in the Sergeants' Bowling League. He also acts as Honourary Chief of the Junior Commandos. You can't say much that hasn't been said before, so all we can add is "he's a great guy".

\* \* \*

### THE HAPPY GANG

These boys are known as the Happy Trio. With their finger in every pie on the Station they act as mother, confessor and advisant to all inquiring airmen. When "troops are moving" they are the original "one-armed paperhangers". Their idea of Valhalla is a spot where there are no postings, no parades and three hours for lunch. Left to right: Cpl. Martin, D. M.; Sgt. Treleaven, W. W.; Cpl. Tucker, G. E.

*We Invite All*

# R.C.A.F. MEN

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## THE AIRCRAFTMAN

### SPORT STORES

By Joe Airman

My name is Joe Airman. As far as this article is concerned, my Wing and Squadron matters little. Rather, I would be regarded as one of the average airmen around T.T.S. Not perfect in any sport, but I like to try them all at one time or another.



Little wonder, therefore, that Sport Stores with its seemingly unlimited and wide variety of sporting goods appealed to my interest in a big way. Here one can find practically everything in the way of sporting equipment from a table tennis ball to a complete hockey player's outfit. Located here is the equipment to play baseball, hockey, tennis, volleyball, ping-pong, lacrosse, volleyball, soccer, cricket, boxing, wrestling, badminton and all the many activities that go to make up our athletic world. Any of this equipment I can use for the asking, the only stipulation

that I return whatever article or articles on the same day.

Today I made one of my many trips to Sport Stores for equipment and a strange thing happened to me. The stock keepers were in the throes of compiling one of those nightmarish affairs called an inventory. I became interested and for the first time took the time to get a little insight to the work entailed in keeping a stock control of equipment in such a place as Sport Stores. I'll not bore you here with a lot of detail, but sufficient to say it's really a big job. Here, however, is where the strange happening took place. I was shown all the broken baseball bats, tennis racquets, etc., the torn baseballs, ripped footballs, etc., and it brought home to me forcibly how careless I had been in the handling of sporting equipment.

You know I never did stop to realize when in any angry or excited moment in the heat of a game when I pounded a tennis court with the racquet, heatedly banged a baseball bat against a screen iron, or smashed a badminton bird or table tennis ball into ruin, just what would happen to our equipment if every airman acted as silly as I do on occasions. You see I never stopped to figure equipment I damaged had to be replaced because the next fellow would not

(Continued on Next Page)

### GROUND MEN AND SPORT STORE KEEPERS

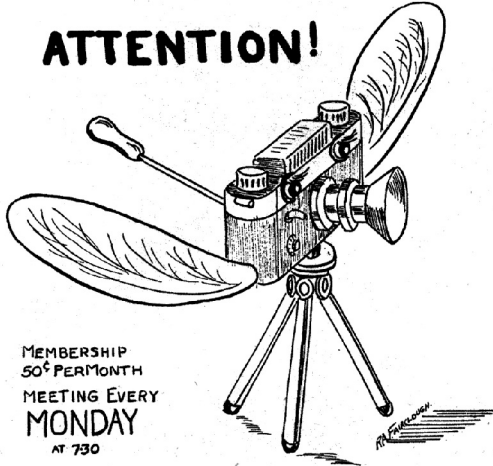


FRONT ROW (left to right): B. Gagen, N. Weir, A. Carrothers, R. Haggith, (absent, J. Luxton).

BACK ROW (left to right): W. Jagoe, R. Weir, D. McRaid, G. Vaughan, E. Duncan, C. Walker, F. Stevens, W. Anderson.

# PHOTO BUGS

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50¢ PER MONTH  
MEETING EVERY  
MONDAY  
AT 730

## T.T.S. Camera Club

Become a member and sit in on a round of good fun, ideas, talks and other features. Come and use our dark-room. More information from members at the "Y" office in "Drill Hall"

← SOUNDS GOOD, SEE YOU THERE. →  
(Security Guard Lecture Room) turn south from 2 wing Mess Hall

\* \* \*

### SPORT STORIES

(Continued from Preceding Page)

use damaged equipment (I know I never wanted to). It never occurred to me that, due to present conditions, equipment is becoming exceedingly difficult to replace and in some cases an impossibility altogether.

In my day I have handled a considerable amount of sporting equipment and when the boys in Sport Stores allowed me to look over the damaged equipment it was obvious a considerable portion of the damage was more or less wanton and was, to say the least, entirely unnecessary.

Anyway, I have reformed; from now on any equipment I take out I'll use as if it were my own. I'll also make sure to return same on time (and thereby save the stock keepers a lot of headaches). The boys at Sport Stores are human fellows, even as you and I and they like to make their work as easy as possible.

I'm quite sure T.T.S. has the finest and best selection of sporting equipment in the Service and Joe Airman for one, from now on, is going to do his bit to keep it so.

\* \* \*

Joe Airman broadcasts the latest news three times weekly before the movies are shown. These features are arranged and edited by the members of the Press Club. Make it a habit to listen to these broadcasts and to send your ideas or criticisms to "Joe Airman", c/o "The Aircraftman".

### WELCOME R. C. A. F.

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Where Good Friends Meet"



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COFFEE SHOP

THE AIRCRAFTMAN

« T.T.S. Air Women's Section »



R.C.A.F. (W.D.)

SEATED: S.O. E. A. Collier. STANDING: (left to right): A. Cpl. Garden, E. M.; A.W.1 Reich, A. M.; A.S.O. Fenton, J. E.; A.W.1 Hamilton, V.; A.W.1 Thoms, P. A.; A.W.2 Tripp, E. E.; A.S.O. Milligan, K. M.; A.W.2 Boggust, M.; and A. Sgt. Edward, A. N.

\* \* \*

W.D. ORDERLY ROOM

The people who make the W. D. Orderly Room go round and round are from all parts of Canada. S.O. Collier, O.C., hails from Watson, Sask. Her adjutant, A.S.O. Fenton, comes from Orillia, Ont. Both these ladies have travelled extensively over Canada following their college graduation. Miss Fenton was very active in sports while at the University of Toronto and was at one time the President of the Athletic Society. Miss Collier, as well as her assistant, has spent considerable time in Britain and they both have a very keen appreciation of the situation over there. Their job on the Station also embraces the entertainment of the W.D's, which calls for considerable "motherly advice" on all occasions. Miss Fenton has designed the costumes for the coming Variety Show and is a keen enthusiast in the entertainment season.

\* \* \*

*Lost! Somewhere between sunrise and sunset, two golden hours, each set with sixty diamond minutes. No reward is offered, for they are gone forever.*

—HORACE MANN.

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*Low Fares for Airmen*

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\* \* \*

BUY A VICTORY BOND!

# « C.B.C. MIKES T.T.S. »

## CPL. DAVIES OF E. & I. ANNOUNCER FOR STATION

The visit of Air Vice-Marshal G. O. Johnson to the Station took on added significance with the presence of a C.B.C. mobile recording unit and F.O. McDermott of the R.C.A.F. Radio Publicity Department. Recordings of the inspection of the airmen by Air Vice-Marshal Johnson and of his address to them were made in the morning and will form part of the C.B.C.'s regular Friday night show, "Comrades in Arms". In addition to these, interviews with Aircraftman John M. King of Winnipeg, recipient of the 20,000 student scroll, with Flt. Lt. Smeaton and Aircraftman Lee of the Security Guard, and with instructors and classes in the Instrument School and the Airframe Section were recorded. These contrasting scenes from daily routine of the Technical Training School formed part of the "Comrades in Arms" programme heard on Friday, October 30th, over the National Network of the C.B.C.

## THREE AND ONE TAKES THE DRILL TROPHY THIRD TIME RUNNING

Sgt. Maclean Does It Again

The Commanding Officer's Drill Trophy was won for the third consecutive occasion by No. 3 Squadron, 1 Wing. The Squadron commanded by popular Sgt. Maclean put on a neat display of precision and skill, and took the Trophy with 90 points. This is the fourth time Sgt. Maclean's teams have won the Trophy in two months, and the second time this team has met with success.

The prize was very keenly contested and the standard of drill was high. The audience, which was moderately large, containing a number of civilians, was highly appreciative of the efforts of the boys. A pleasant note was struck by the presence of the A.O.C., Air Vice-Marshal G. O. Johnson, M.C., as guest for the evening.

The second place was held by No. 3 Squadron, 2 Wing, led by Sgt. Connor, and the third place was taken by No. 2 Squadron, 1 Wing, with Sgt. Bayliss in command.

The A.O.C., who had consented to present the Trophy, said he was delighted by the spirit displayed during the contest. He shook hands with Sgt. Maclean and presented him with the prize.

## A. O. C. VISITS STATION

On October 28th, Air Vice-Marshal G. O. Johnson visited the Station. During his stay he had an excellent opportunity of seeing the T.T.S. "spirit". He expressed a keen appreciation of the showing made by the men in the C.O.'s Drill Competition, and also had a chat with A.C.2 J. M. King, the 20,000th student to pass through this School. Following his inspection he was guest of honour at a banquet held in the Officers' Mess.

First Recruit: What do you think of this war?

Second Recruit: I think it's a wait-and-see war.

First Recruit: What do you mean by that?

Second Recruit: Well, Goering's got the weight and Churchill's got the sea.

## ENTERTAINMENT COMMITTEE PROMISES BIG NIGHT IN GALA OPENING

Singers, dancers, chorus girls and musicians — all these are on the Station. The job is simply to weld them together in a show that vibrates with laughs and sparkles with sound. This has been done by the Entertainment Committee. Using the wealth of directorial material which is at T.T.S., even of Hollywood calibre in one instance, the producers of the event have fashioned a fast-moving revue, which should be especially enjoyed by our airmen.

Variety is the keynote ranging from a superb basso profundo to "a guy who makes with the words". Recruited from the W.D. recruits. There's an A.C. who can imitate everything from that Sgt.-Major mating cry to the wail of the beerless on the night afore pay. Anyway, it looks like a big night — so I'll see you there.

## SCROLL TO 20,000th TRAINEE



The presentation made by Air Vice-Marshal G. O. Johnson, M.C., air officer commanding No. 1 Training Command, to A.C.2 J. M. King, Winnipeg, Manitoba, of a scroll in recognition of the young aircraftman being the 20,000th trainee to pass through the R.C.A.F. Technical Training School. The presentation ceremony took place Wednesday morning, October 28, before nearly 3,500 officers and men on review on the parade grounds. A similar ceremony took place just about a year ago when the 10,000th trainee was graduated from T.T.S. By a coincidence, the 10,000th trainee was also from Winnipeg, Manitoba. He was Ernest Dean Smith, aged 24 years, a prairie farmer and a native of Stockport, England. He graduated as an air-frame mechanic. Aircraftman King, the 20,000th graduate, is 21 years old, a native of Scotland. He graduated as an aero-mechanic and was an invoice clerk before enrolling in the R.C.A.F. He has been posted to Vulcan, Alberta.

## 2 - 2 COPS C.O.'s TROPHY



### THE WINNER OF THE COMMANDING OFFICER'S TROPHY FOR OCTOBER

For the fifth month in succession this Squadron has won the Commanding Officer's prized and much coveted Trophy. What is this secret of success?

Let's peek into their Squadron and see what makes their sportsmen tick at such a fast rate as to enable them to be perpetual winners.

On entering, we are met by the Officer Commanding, F.O. Wilson, one of the key men in their success. Why? Because he is very much interested in sports and is at every game encouraging the players. He, in turn, is supported by staunch go-getters, who steadily search for talent; make sure each man turns out for the games; and build the sports up to make for keen interest. These men are worthy of mention as they give a great deal of their time and energy. They are Sgt. Goodmanson, who looks after and coaches all the teams, and Cpl. Charlton, who is always in there pushing the boys on to victory. Cpl. Rozinski and Cpl. Stewart are also doing their part well.

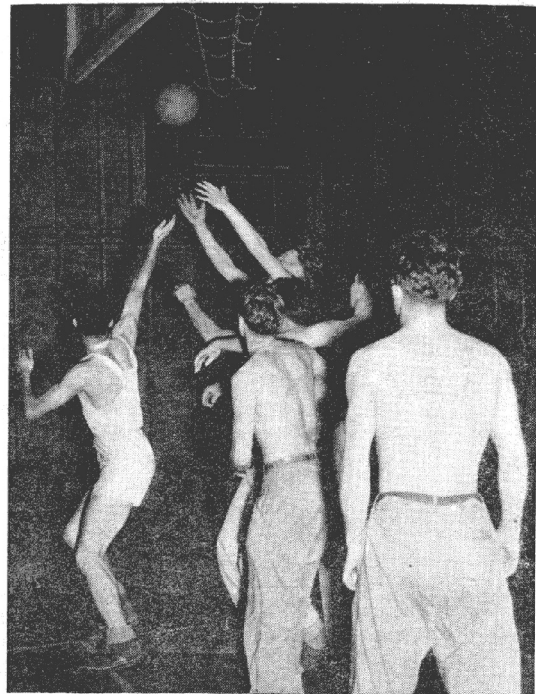
No less credit must be given to the men themselves—they have all been good in their own sports and No. 2 Squadron, 2 Wing has been fortunate in getting good material. Their spirits have been high and they have always worked hard to win.

Congratultaions, men, from the whole Station!

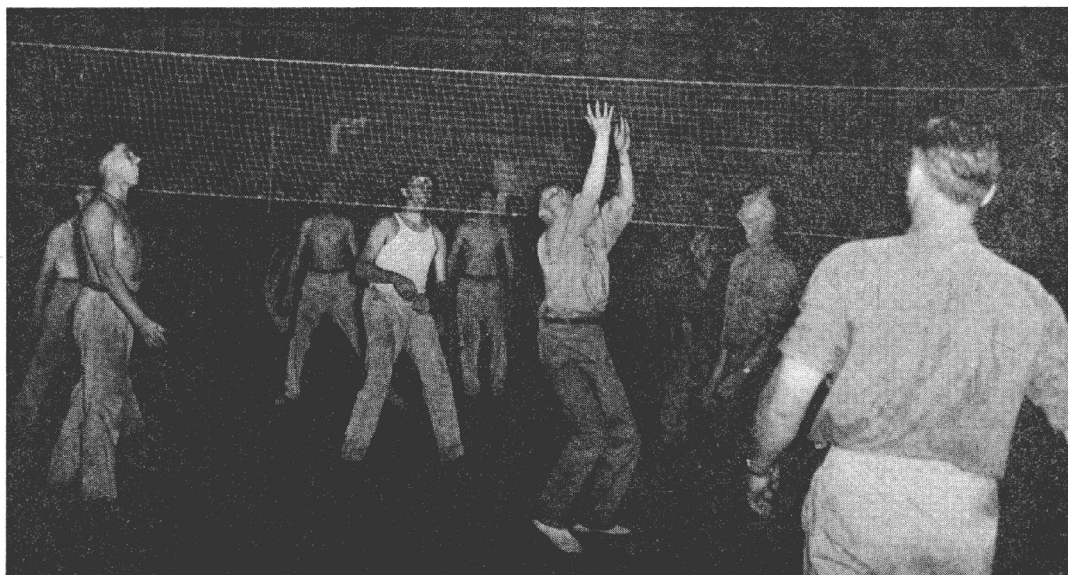
\* \* \*

"What's holding the wedding up?"

"Oh, the bride's father is a plumber and he forgot to bring her."



# FOR THE FIFTH TIME!



## SPORT SPARKS

Taking a quick backward glance into the past few months, it would appear that No. 2 Squadron, 2 Wing, would look about as bare as a fan dancer after a high wind, without the Commanding Officer's Trophy. Because for the fifth straight time that seemingly unbeatable Squadron nabbed the coveted pewter.

We tried to find a good reason for Two and Two's straight run of winners. Sergt. Bill Goodmanson, pilot of the winning Squadron, offered little help. That worthy merely deepened the mystery by pointing out several obvious things — first, that the Squadron was the smallest in the entire Station, and second that by winning the Commanding Officer's Award for five times they had created a new record on this Station. And then, add to that that the men of Goodmanson pocketed every single sport medal for the month.

Three sports were played this month: basketball, volleyball, and badminton. In the first case, the winners lost only one game. As far as competition went, 2 Squadron, 1 Wing were the only ones who offered any. AC2's Bloomfield, Fair and Ulrich get the pat on the back for the basketball win. The first named cager was formerly with a prominent Montreal outfit, and the other two played with fast Western leagues. From the grapevine, we did manage to learn that at the start of this month's sport doings Two and Two were a little worried as to the basketball outcome as their ace cager, Bob Baker, who in September was the mainspring of the team, had been posted. Baker, you will remember, was formerly with the Vancouver Dominoes and was one of the smartest players to toss a ball in this Station.

Continuing our quiz, we found out that Cpl. Don Charlton takes the orchid for the volleyball successes. This worthy comes in for no small amount of credit from all connected with sports. It would seem practically any sport just comes along to him as sort of a

"ntaural" and his help was termed the "best". Which, coming from the source we picked it up from, is quite a compliment. This sport must be an N.C.O.'s game for Sgt. D. H. Smith, who is of that Squadron's technical staff, was mentioned as quite an aid.

Again in the badminton section, the winners lost only one game. That one to 1 Squadron, 1 Wing. In case this is beginning to read like a life history of Two and Two, it might be well to add that the race for the trophy wasn't any cinch. With a few breaks, One and One, or Two and One, might have turned the tables. But they didn't and Two and Two set the new Station record.

From all the members of the winning teams came words of praise for Sergeant Bill Goodmanson, who has devoted a great deal of his spare time in the interest of sports in that Squadron.

One thing everyone mentioned was this fact. Spectators seemed about as scarce as pickpockets at a policemen's convention. Come on, Squadrons, come out and support your teams. They richly deserve all the support you can give.

Most of the Squadrons will have much the same teams as last month. The pace setters are counting on obtaining Cpl. Harwood for their volleyball team, which could stand some strengthening. Even constant gazing into the faithful crystal ball fails to show what's coming up for next month. Best bet seems to be "wait and see".

\* \* \*

A.C. Foster of Security Guard considers himself lucky. During a visit to Detroit last month he was asked if he would like to meet someone rather special. He arrived at the Cadillac Hotel, spruce and trim at the appointed hour. For the next hour and a half he was entertained by singing, dancing and pleasant company. We also think A.C. Foster was lucky. His one-man show was put on by Rita Hayworth.

# Frank Jolly Buys \$1000 V-Bond!

## VICTORY LOAN WELL UP IN SCHEDULE

Swarming to the banner of Canada's Fourth Victory Loan, the personnel of T.T.S. exceeded their daily quota on the first day with ease. Airmen dug deep and fully as they produced the cash to fight this war, in addition to the brawn and brain power. A.C.2 Frank R. Jolly, A.E.M., No. 2 Squadron, 1 Wing, made a precedent when he stepped up and bought a \$1,000.00 bond, for cash. A.C.2 D. J. Whitcomb, A.F.M., No. 2 Squadron, 2 Wing, assured his future with \$400.00 worth of freedom. Both of these boys are from the West, the former from Onoway, Alberta. The East was not lacking in representation. Several buyers from Montreal took lots at \$150.00, and the drive isn't over yet. A civilian on the Station, T. Heard, also took a \$1,000.00 box seat at Hitler's funeral.

The objective for the Station is not specified—but if we can't reach \$40,000.00 then we deserve to have our 48's cancelled.

\* \* \*

## NO. 2 SQUADRON, 1 WING

No. 2 Squadron 1 Wing have displayed excellent sportsmanship and interest, which is proven by their high record for the month of October with the indoor sports programme. Their Officer Commanding, Flt. Lt. Tuer, with the capable assistance of Cpl. Laskin and Cpl. Marrs, has developed the teams from a last place position to a second and potential first place teams. Each evening the Officer and two N.C.O.'s with a great group of Airmen can be found in the Drill Hall planning their points of attack for the evening's activity. This new spirit that has developed in No. 2 Squadron, 1 Wing Orderly Room is permeating throughout the Squadron and the voice of the Squadron has stated that the Commanding Officer's Trophy for the month of November will appear in their Orderly Room. Success brings success and may No. 2 Squadron 1 Wing win the trophy for November.

\* \* \*

## STOP PRESS

*It is with a sad heart that we stop the press to pay tribute to a fine man who has passed away, Wg. Comdr. Van Vliet. May our condolences be added to the thousands of others which rise over this country.*

*He was a fine man.*

## *We Appreciate* YOUR PATRONAGE

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# CITY DAIRY

ST. THOMAS

*Doubly-Protected Pure Pasteurized  
Dairy Products*

## This Month We Present:

### U.S.A. ALLY

Robert Anthony Fraser Johnson, usually known as "Fray", age *nineteen*, was born in Moncton, N. B., Canada, in May, 1923. At the age of *two* years he moved with his parents and brother and sister to Springfield, Mass., U.S.A., where he received his schooling. He graduated from the Technical High School there in June, 1941. While attending "Tech" High he belonged to the "Tech Hi Y", which meant and does mean a lot to him as well as many other young fellows. On graduating from "Tech" he went to work for his father, who is a carpenter contractor in Springfield. At the last of November, 1941, he went to Moncton, N.B., where he took a four and a half month's course in Aero Engines. At the end of that time he was sent to Toronto, Ontario, for his Basic Training in the Royal Canadian Air Force. He was then sent to St. Thomas, Ont., for further schooling. "Fray" hopes to re-muster to pilot after a time.



\* \* \*

### P. RICCIO

L.A.C. Riccio, P. (Pat to you), is a Toronto boy. Of Italian-Canadian descent, he practically lives on music. Although his present-day assignments seem to tie him down to band music and the occasional "Blue Room Stomp", Pat is inside a lover of the classics, which possibly explains why he spent his last pay on a set of Stravinsky recordings. "Riccy" is also a composer in addition to his arranging music for the Station Band. Recently he collaborated on the production of a new waltz written by a member of this Post. His favourite instrument is the sax, which he has played in many bands, such as Frank Bogart's.



"PAT"

Western boys prefer simple, sweet tunes, but Easterners prefer more sophisticated tunes is the conclusion he has reached. As for the boys in the band, they like jazz. His favourite dream these days is a night of symphony music for the Station. "It would surprise a great many people", he says, "to see how many boys on this Station could enjoy a night along those lines." We agree.

\* \* \*

### SGT. NOEL PAGE, R.C.A.F.

Over in the peace and quiet content of the Medical Section there is a sergeant who goes quietly and efficiently about his duties. If you happened to catch him at an odd moment with a far-away look in his eyes and offered him a nickel for his thoughts he'd probably reply, "I was just thinking how swell it is to be able to go about your job without worrying about a bomb dropping down the back of your neck."

He has seen plenty of bombing and admits that there are lots of things he'd sooner see dropping out of the skies than bombs. His name is Sgt. Noel Page and he originated in Aylmer, Quebec Province, but his first toddling steps were taken in Hamilton, near by. Life in Hamilton was just another of those things until, several years later, he discovered that if the R.C.A.M.C. was not his chosen profession it would do until something else came along. Something else did. The R.C.A.F. formed their own medical unit and Sgt. Page changed khaki for Air Force blue.


June, 1940, saw him leave for overseas with R.C.A.F. H.Q. in London, with duties which kept him in close touch with the R.A.F. on a semi-liaison basis. He takes a good deal of pride in the part he played in helping to set up a system based on the R.A.F. method of Medical Statistics.

To get back to those bombs. Sgt. Page saw the London Docks go up in flames in August, 1940, and as a voluntary fire watcher was kept busy. This gave him his first distaste for bombs and the following 449 air raids he experienced didn't serve to make him like them

[Continued on Page Twenty-four]



# AMONG THE SQUADRONS



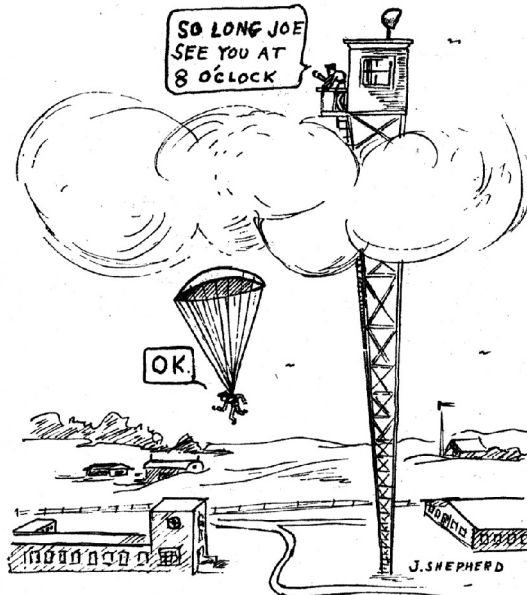
## 1 SQUADRON, 1 WING

By Sgt. McFarland, E. B.

Once more a month has slipped away on us and we haven't won the Commanding Officer's Trophy. But the winter or indoor season is here and we can always hope that the basketball, volleyball and badminton teams are the ones that we have been looking for to win the prize for us. Come on gang, there is always room on the team for another man. If you can't play, come out and let us teach you. We can do it.

### Things We Would Like To Know

What A.C.2 (now Cpl.) found out that the W.D's have their own medical parade, and that it takes more than looks to crash it?



SECURITY GUARD

\* \* \*

R. C. A. F. Welcome To The  
**THREE LITTLE PIGS "PENTRY"**

Food, Fun and Frolic

Owned and Operated by Earl Nichols  
Wharncliffe Rd. at undas London, Ontario

## 1 SQUADRON, 2 WING

By L.A.C. Churchill

### This Might Have Been at Dieppe

#### Act 1

Men disembarking from small landing barges, wading through the shallow water and being met by a withering hail of bullets from the strongly defended beach. Fighting desperately, they take their objective and accomplish their mission.

#### Act 2

Their number sadly depleted, the ranks of those brave men carrying the wounded and leaving the dead along the beach fight their way back to the barges.

#### Act 3

Safely on board, the wounded are being treated. Transfusions are given to those who have left their blood behind on that awful hell-torn beach. Suddenly, the M.O. snaps out a command, "Bring more blood". Dead and sickening silence answers him. Then an Orderly answers him, "Blood all gone, Sir." And then some brave man may die because "Blood all gone, Sir."

Well fellows, the above hasn't taken place yet, but it could; and will happen unless the calls for blood are answered and answered now. Leave your name at the Orderly Room and arrangements will be made for the greatest investment you will ever have the opportunity to make. Are we going to let these men down?

\* \* \*

R. C. A. F. Welcome to the  
**WHITE SPOT**

Good Food - Pure Hamburgers - Quick Service  
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**CAPITOL  
THEATRE**  
for  
20 Years

**STEELE'S**

**2 SQUADRON, 1 WING**

*By Cpl. Laskin*

**Introducing the Orderly Room Staff**

When an A.C.2 came in the other day and called Sgt. Gadsden "Corporal" because he had his jacket off, I thought it time that we straighten the whole business up by an informal introduction. It won't be easy, for our N.C.O.'s are sensitive when their private doings are exposed. But then a must is a must, so here we go:

**Sgt. Gadsden**—The ever smiling, always willing to help, but disappointing many. You will find him everywhere for he is "The Chief" in the Orderly Room.

**Sgt. Eacrett**—Carries a lot of troubles and worries on his shoulders. It is his certain duty to assign certain N.C.O.'s to the unpleasant task of working late into the night. And until now, it seems he always selects the wrong men for the wrong nights. But then, this war can't last forever.

**Sgt. Bayliss**—Tall, rather handsome (ahem?), always on the go. Does everything from giving you drill to showing you how to launder your shirt.

Ah! These are the men you love—they give you P.T. bright and early. They lovingly help you out of bed, and with a smile on your face, you do their bidding: knees stretch, heels lower, etc.

**L.A.C. Hanna**—Our quiet but efficient clerk. A tonic in the Orderly Room. The only man who doesn't raise his voice.

**L.A.C. Dentry**—He'll make you sign a dozen papers when leaving anything with him, but then you know that you will have it when coming back. So men, don't be afraid of going into the hospital for fear of losing your kit—remember we now have L.A.C. Dentry.

**L.A.C. Staples**—Last but not least, the best-liked man in the Squadron. Through him you will be able to stay out late with your girl tonight. Yes, he dishes out the pass forms.

But remember, boys, they must be in early.

Credit is due to Sgt. Bayliss, who is fighting hard to bring our drill squad to the top. Twice in a row we've reached second place—which means we are due for first this month. So get behind your Sergeant and give him your best. We must win!

Well men, we are off to a marvelous start for this month's Commanding Officer's Trophy (the picture of which appears in this magazine). If there is any man who thinks he was left out and is good at these sports, report immediately to Cpl. Laskin, N.C.O. in charge of these sports.

Our basketball team is composed of many Western Senior "A" players, and other men of championship stock. In other words, we can't lose!

Badminton and volleyball have their share of good players, all fighting hard for No. 2 Squadron, 1 Wing.

Boxing is now starting to take a prominent place in Station sports and our Squadron is well represented with about a dozen men. But more are needed for the boxing tournament taking place about the middle of November. No news as yet, what the prizes will be—no doubt of high value. Flt. Lt. Tuer, our own Officer Commanding, is taking a personal interest in this boxing tournament.

**HUMOUR AND COMMENT BY OUR AC's**

Has the mess hall juke box sprung a spring?

One of these days Cpl. Laskin is going to burst a blood vessel. These Chicago hog farm boys really see a future for him, though.

**2 SQUADRON, 2 WING**

**NEWS OF THE DAY**

*By Flt. Sgt. May*

No. 2 Squadron, 2 Wing again led the field in Sports, and it is a record, one which is going to be very hard to beat. It is our aim to keep that spot in the corner of the Orderly Room bright with the reflection of the Commanding Officer's Sports Trophy for months to come. Every man of two and two is given an opportunity to get into sports, and to carry us through to the top. The Squadron is the smallest in the School and has the highest record of sports. Let us not forget those lads who have gone before and our high calibre of airman. We have a good all-round Squadron, scholastically, and in outside activity. Our boys and entire Squadron have the name of tidiness. Let us have this reputation continue. One "Jerk" in the whole outfit, like a bad egg, spoils it for others. Get rid of the offending "egg".

A.C.2 Burtonshaw, R. G., of Entry 116 was the honour student of the A.F.M. this week and to him special mention. A.C.2 Burtonshaw is a fine chap, a hard worker, dependable, and married. We are sorry to have him leave, but wish him every success in the coming posting.

We have invited each Entry to submit the name of one correspondent to give us news of his Entry for THE AIRCRAFTMAN. This news will be headed by Entry and kept in separate order—so that all news of your Entry will be in a row. The more news, the longer the column—let's see your Entry reporter—and have a little talk with him.

Badminton, volleyball and basketball players: We need a number of players on the teams as spares. Come on out, get behind our sports; do not let the Trophy get out of the Orderly Room.

Much credit goes to Sgt. Goodmanson; he certainly is the live wire of our Wing. We also appreciate the genuine interest our Officer Commanding, F.O. G. Wilson, takes in our sporting efforts. We hope to bring the Trophy back again this month.

**Things We Would Like To Know**

Why must we always be the first Entry on the drill square each day?

\* \* \*  
**BUY A VICTORY BOND!**  
\* \* \*

**MONTGOMERY'S**  
**CLEANERS**

*"Really Fine Cleaning"*

**UNIFORMS and GREATCOATS**

Opposite Dowlers

Telephone 67

**3 SQUADRON, 2 WING**

*By Cpl. Jorgenson, G.*

**SPORTS IN REVUE**

Our loss is someone else's gain—which is true of L.A.C. Ross, who was recently posted to Ottawa from our Squadron.

Everyone will agree that he did a fine job of keeping the boys happy from a clerical point of view, in spite of his interest in the big dictionary. (By the way, fellows, he took it with him.)

As a substitute, we have A.C. Costa, a well-known "paper presser" from 17.

We say farewell to two of the technical N.C.O's who have been with the Squadron for quite some time. Sgt. Downes, who is now at Centralia, and Cpl. Sandell, who recently obtained his re-muster and is now stationed at No. 1 I.T.S. in Toronto. Best of luck, fellows!

**WORDS TO THE WISE**

Hell is the misery of the memory of things left undone.

Always remember that noise is another name for inefficiency. (Take note of this, some of you hydraulic instructors.)

In misfortune the weak blame the events rather than themselves.

**GEMS**

Once to every man and nation comes the moment to decide, in the strife of truth with falsehood, for the good or evil side.—Howell.

We are not here to play, to dream, to drift—  
We have hard work and loads to lift.  
Shun not the struggle; face it:  
'Tis God's gift.

—Babcock.

\* \* \*

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Times await you every —  
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**HEADQTRS. SQUADRON**

**SPORTS**

F.O. O'Rourke's faithful band of athletes are making a determined bid to finish on top in the sports competition; time alone will tell of their success or failure. To start with, our strong basketball team of last season is nearly all intact with Davis, Gibbs, Black, Price and Pool forming a very capable squadron, strongly supported by reinforcements from the Fire Fighters and band in the presence of Gillespie, Sellors and Lee.

Our badminton team appears to be quite strong; the boys from the Dental Corps are proving that they can fill up the cavities left in our last season's badminton team as well as those in our teeth.

Volleyball has taken a turn for the better. We have been fortunate in securing Flt. Lt. Scott to handle the coaching end of it and, take it from me, he really knows the tricks of the game when it comes to volleyball. He has had a wealth of experience in the game, having played on many championship teams. His addition to our Squadron is more than welcome.

When we mention sports we cannot forget Flt. Sgt. Parks, who more or less supervises all three sports and hustles the boys and generally keeps up the interest at fever pitch. Flt. Parks was stationed in Vancouver for the past few months and his presence back with us is very pleasing to all.

So let's get in there, Headquarters, and try to get the Commanding Officer's Sports Trophy back with us once again.

**THROUGH THE ORDERLY ROOM DOOR**

The feminine touch has invaded this sanctum. We extend a welcome to A.W.2 Cowley, who now takes over some of the arduous typing and record work from our evergreen—but to hear him tell it—overworked—Cpl. Farrell.

We also extend welcomes to Cpl. MacDonald and Cpl. Nowell, our new members of the Gestapo, posted from Fingal, but don't hold that against them, boys. They look like a couple of good scouts.

At the same time, we regret to lose the following from our S.P's: Flt. Sgt. Smith, Cpl. Berger, Cpl. Evans. Good luck to each one in his new Station.

\* \* \*

**BAND**

The Station Band has had the honour of leading many parades, but a new item was added to their repertoire on October 2nd at Wallacetown Fair. On this occasion they had provided music during the afternoon and the grand finale was a parade of all the prize stock horses, bulls, cows, etc., headed by our band.

L.A.C. Nicoloff made expenses for one hour at the Fair, but changed boards and paid all the shekels back plus.

The boys believe in the old adage, "An apple a day keeps the doctor away", especially prize apples.

And to finish up, how the gang can wade through that good old home cooked meal—homemade bread, jellies, pickles, pies! Oh! what's the use.

We can expect to see all the band wearing sun glasses. They must help as it didn't take long for L.A.C. Seebin to become acquainted—maybe she took pity and thought he was blind.

\* \* \*

Tell the Advertisers you "Saw it in The Aircraftman".

# HONOUR MEDALLISTS

A.C.2 Peskett, J. H.	A.E.M.
A.C.2 Cook, C. A.	A.F.M.
A.C.1 Heggart, W. C. E.	A.F.M. (MR)
A.C.2 Holmes, B. J.	Elect.
A.C.2 Brown, J. B.	I.R.
A.C.2 King, B. H.	A.E.M.
A.C.2 Robinson, R. F.	A.F.M.
A.C.1 McClelland, T.	A.F.M. (MR)
A.C.2 Davidson, L. J.	Elect.
A.C.2 Mundell, W.	I.R.
A.C.2 LaFortune, W. F.	A.E.M.



A.C.2 Burtonshaw, R. G.	A.F.M.
A.C.1 Nickerson, C. H.	A.F.M. (MR)
A.C.2 McCall, A. M.	Elect.
A.C.2 Churchman, J. W.	I.R.
A.C.2 Pickering, J. T.	A.E.M.
A.C.2 Sabbe, A. L.	A.F.M.
A.C.1 McDonald, D.	A.F.M. (MR)
A.C.2 Claridge, W. T.	Elect.
A.C.2 Meloche, R.	I.R.
A.W.2 Nunn, D. E.	

## SPORTS MEDALLISTS FOR THE MONTH OF SEPTEMBER

### TENNIS

Corp. Charlton, J. D.	R71855
Corp. Bjork, M. R.	R85277
A.C.1 Schnoter, D. A.	R162899
A.C.1 Woodcock, A. E.	R164849
A.C.2 Morgan, W. H.	R154314
A.C.2 Tucker, A. E.	R171081
A.C.2 Canzer, A.	R171086
A.C.2 Sutton, E. R.	R171090

### SOFTBALL

Corp. Crangle, E. C.	R144451
Corp. LeGrice, N.	R141500
A.C.2 McKrow, B.	R164018
A.C.2 McKrow, J.	R164017
A.C.2 McBride, H. E.	R172547
A.C.2 Doyle, F. M.	R153262
A.C.2 McCaw, E. A.	R114597
A.C.2 Chateauvert, P. L.	R161987
A.C.2 Germano, E. J.	R158826
A.C.2 Harper, T. A.	R139510

### SOCCER

A.C.2 Baker, F. H.	R166523
A.C.2 Baker, F. A. C.	R170519
A.C.2 Domoney, B. G.	R166546
A.C.2 O'Connor, E.	R170565
A.C.2 Campbell, N. A.	R162897
A.C.2 Schnoter, A. D.	R162899
L A C Barker, R. O.	R101857
A.C.2 Hobson, C.	R173119
A.C.2 Hewitson, G. L. V.	R165789
A.C.2 Reid, H. G.	R173147
A.C.2 Johnson, A. O.	R173122
A.C.2 Roenspiess, L. A.	R167847

### LACROSSE

A.C.2 Olsen, J. L.	R160704
A.C.2 Domoney, B. G.	R166546
A.C.2 Hendersson, J.	R166576
A.C.2 Bessette, M.	R144767
A.C.2 Baker, N. H.	R166523

A.C.2 Evans, W. E.	R162891
A.C.2 Parkinson, G. H.	R173309
Corp. Bowles, E. D.	R120339
Corp. Thomas, W. G.	R120351
Sgt. Goodmanson, W.	R80031

### PERSONNEL OF CRICKET TEAM 1942

Flt. Lt. G. H. Ross	C3839
Flt. Sgt. Thompson, D.	GB560931
Flt. Sgt. Ireland, R. C.	GB365124
Flt. Sgt. Drew, R. V. B.	GB363292
Sgt. Hunt, E. F. H.	GB528124
Sgt. Holland, C. J.	R51640
Sgt. Pudwell, A. D. D.	R116932
Cpl. Langton, W.	R75592
L.A.C. Sowden, R. E.	R101478
A.C.2 Watson, R. B.	R157806
A.C.2 Walker, J.	R156476
A.C.2 Roughton, C. D.	R166763
A.C.2 Sweeting, A. C.	R164797

## LIBRARY CORNER

The months roll by, Thanksgiving Day has already passed into another year; and now the Station Library is looking forward to a busy, useful winter season. It is only natural that more books are read during the winter months than at any other time of the year. Everyone can be assured that, this season, the Library will be one of the warmest and cosiest spots on the Station.

Already preparations are being made to insure a wealth of reading material in the future. We have, even now, added a great deal of new as well as discarded books to our shelves and hope to obtain even more. Here is good news for the French-speaking airmen: we have every reason to believe that several copies of French popular fiction and other books will be placed with us. So everyone will be able to enjoy the Library.

To keep up with the best, we recommend: *The Children*, Nina Fedorova; *Convoy*, Quentin Reynolds; *General Douglas MacArthur*, Miller; *Black Orchids*, Rex Stout; *Calamity Town*, Ellery Queen; *Past Imperfect*, Ilka Chase.

## STATION BINGO



The above photo shows a happy group participating in the popular pastime of Bingo. The first Bingo night was held recently in the Recreation Hall under the direction of a joint committee made up of the Recreation Hall and Station Entertainment Committees. The supervision is under the direction of the Station Entertainment Committee and supervision on Bingo night is given by the Y.M.C.A. on the Station. Sgt. Beard, W. S., N.C.O., who is well known in the Recreation Hall, assisted with the Bingo and will be on hand for the special Wednesday night entertainments.

# How About Some Free Theatre Tickets, Girls?



*If you are one of the ladies in this picture with a white circle surrounding your charming face, and will take time out from that turkey dinner to drop around to the Y.M.C.A. Office in the Drill Hall, you'll find a pair of tickets to the Capitol or Granada Theatres waiting for you.*

\* \* \*

## THIS MONTH WE PRESENT :

[Continued from Page Nineteen]

### SGT. NOEL PAGE, R.C.A.F.

any better. Something he can leave out of his daily diet and never miss is being buried under a collapsed building for about 12 hours. Another experience he claims shouldn't be repeated in one lifetime is to be caught by the blast of a land mine and blown across the street—he would much rather walk.

But he says that the treatment that bombing victims receive almost reconciles him to the experience. He is full of praise for the part the girls played, both civilian and enlisted—chasing about on a thousand different errands and bringing tea by the bucketful to air raid shelters.

This war game is a great game, the sergeant says, except for those darn bombs; but he admits they lend a little spice to life and he wouldn't mind trying it again.

\* \* \*

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## "SLAP-A-JAP"

The newspapers carried a story saying that Johnny Lee was anxious to get a crack at the Japs. This isn't exactly true.

Johnny Lee will take on Germans or Italians with equal pleasure. At present on the Station as Security Guard, he hopes some day to be a WAG. Coming from Hamilton, Ont., Johnny is a typical Canadian, proficient in sports and outdoor life. He has played with the Dominion Junior Basketball Champions, and for four years was a member of other championship teams. At present, he is playing for Headquarters



(but even his presence doesn't seem to help poor Headquarters very much). He has also starred on several Ontario collegiate rugby teams and is equally at home on the tennis courts. His ambitions are at present fairly limited. He says, "Let us win this war first, then we'll talk about our own selves." We think this is the attitude which is making Johnny's home-land, China, one of the toughest nations in the world today.



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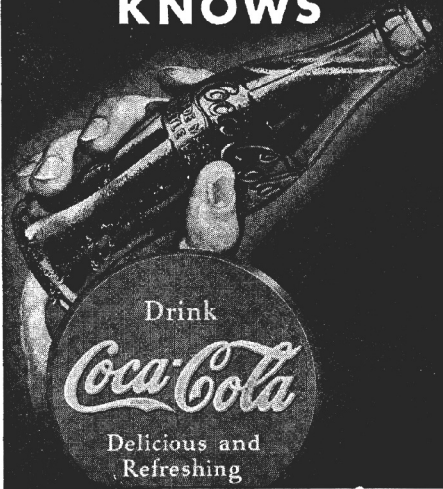
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**EVERYBODY**  
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We Welcome Visitors to Our Plant

More Free Theatre Tickets!



You can buy almost anything in the Canteen but theatre tickets, but if the four lads in the white circles in this photo will call at the Y.M.C.A. Office, Drill Hall, we'll gladly give them a pair for either the Granada or Capitol.

\* \* \*

**CAPITOL** Theatre  
St. Thomas

---

Sat., Mon., Tues., Wed. - Nov. 14th to 18th  
CLARK GABLE - LANA TURNER  
in  
**"SOMEWHERE I'LL FIND YOU"**

---

Saturday and Monday - Nov. 21st and 23rd  
STAN LAUREL and OLIVER HARDY  
with DANTE THE MAGICIAN  
in  
**"A HAUNTING WE WILL GO"**

---

Tuesday and Wednesday, Nov. 24th, 25th  
DON AMECHE and JOAN BENNETT  
in  
**"GIRL TROUBLE"**

---

Thursday and Friday, Nov. 26th, 27th  
LLOYD NOLAN - MARJORIE WEAVER  
in  
**"JUST OFF BROADWAY"**

**GRANADA**

COMING ATTRACTIONS . . .

Mon., Tues. and Wed. - Oct. 9th - 11th  
**"THE MALE ANIMAL"**  
Henry Fonda - Olivia DeHaviland  
Plus — **"Dudes Are Pretty People"**  
Marjorie Woodworth

---

Thurs., Fri. and Sat. - Oct. 12th - 14th  
**"TOUGH AS THEY COME"** Dead End Kids  
Plus — **"Gauchos of Eldorado"** 3 Mesquiteers

---

Mon., Tues. and Wed. - Oct. 16th - 18th  
**"MOSCOW STRIKES BACK"**  
Nazi Rout at Moscow  
Plus — **"Three Girls About Town"** Joan Blondell

---

Thurs., Fri. and Sat. - Oct. 19th - 21st  
**"DRESSED TO KILL"** Lloyd Nolan  
Plus — **"Call of the Canyon"** Gene Autry

---

Entire Week - Oct. 23rd - 28th  
**"PARDON MY SARONG"**  
Bud Abbott and Lou Costello

---

Mon., Tues., Wed., Thurs. - Nov. 30th - Dec. 3rd  
**"FLYING TIGERS"** John Wayne - Anna Lee

---

Friday and Saturday - Dec. 4th, 5th  
**"OLD BILL & SON"** J. Mills - M. Clair  
Plus — **"Stick to Your Guns"** Hopalong Cassidy

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*Offending's* the error—  
That's why the girls  
Think the Sergeant's a terror.

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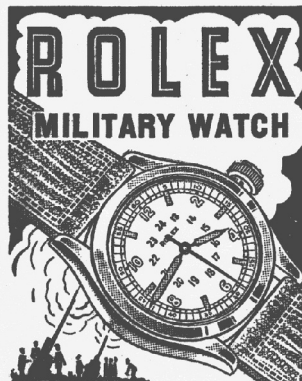


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ST. THOMAS, ONTARIO

## Still More Free Theatre Tickets!



When our picture man caught these boys they didn't know they were slated for some free theatre tickets. Call at the "Y" Office in the Drill Hall, fellows, and pick them up.

### MOVIES IN DRILL HALL FOR NOVEMBER

- Friday, November 5th—  
"HOUSE OF SEVEN GABLES"—Mystery drama, starring Geo. Sanders, Margaret Lindsay, Nan Gray.
- Saturday, November 7th—  
"VIRGINIA CITY"
- Tuesday, November 10th—  
"PARSON OF PANAMINT"—Western action drama, starring Ellen Drew, Charles Ruggles, Joseph Schildraut, Phillip Terry.
- Wednesday, November 11th—  
STATION VARIETY SHOW
- Friday, November 13th—  
"LEGION OF LOST FLYERS"—Air Action Drama, starring Richard Arlen, Andy Devine, Anna Nagel.
- Saturday, November 14th—  
"BRIDE CAME C.O.D."—Comedy, starring Jimmy Cagney, Bette Davis.
- Tuesday, November 17th—  
"THE LADY HAS PLANS"—Drama, starring Ray Milland, Paulette Goddard, Roland Young.
- Wednesday, November 18th—  
BARN DANCE (Recreation Hall).
- Friday, November 20th—  
"RIDE 'EM COWBOY"—Abbott and Costello, Merry Macs, Dick Foran.
- Saturday, November 21st—  
"HIGH SIERRA"
- Tuesday, November 24th—  
"MAGIC IN MUSIC"—Musical drama, starring Allan Jones, Susanna Foster, Margaret Lindsay, Lynne Overman.
- Friday, November 27th—  
"HELLZAPOPPIN"—Olsen & Johnson, Martha Raye, Hugh Herbert, Mischa Auer.
- Saturday, November 26th—  
"CITY FOR CONQUEST"
- Tuesday, December 1st—  
"SULLIVAN'S TRAVELS"—With Joel McCrea, Veronica Lake, Porter Hall.
- Wednesday, December 2nd—  
NO. 2 LONDON LIFE TROUPE
- Friday, December 4th—
- Saturday, December 5th—  
"THEY DIED WITH THEIR BOOTS ON"—Starring Errol Flynn, Olivia De Havilland.

\* \* \*

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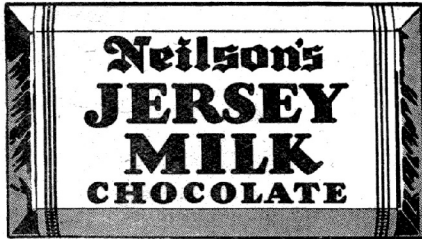
(Continued from Eight)

work day and adds further stimulus to the already keen interest in the men who are working with him. He deplores very much his inability to meet the men singly and separately and expressed a desire that he could speak with more trainees instead of seeing only the odd few that reach his office.

He asked that he might be allowed to say, even though the airmen had most likely realized it many times, that "all should make the most of this wonderful opportunity to learn, in this modern superbly equipped school, and if every opportunity is taken we can turn out the type of men who, with our brothers-in-arms, can win this war in the very near future".



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# TECHNICAL TOPICS

## *Some Considerations Concerning Aerofoil Efficiency*

BY SQN. LDR. A. A. PEBBLES

(Continued)

We may now visualize the type of aerofoil which will give the highest aerodynamic efficiency. Such a wing should be thinnish in cross-section, with a maximum thickness in the neighbourhood of from 7 to 10 per cent of chord length. It should have little or no bottom camber, and the top camber will therefore be small. It should have a high aspect ratio (the higher the better), should be tapered in plan and should have rounded tips. Aerodynamically it would be actually better to carry the taper right out to a pointed tip as in bird wings, but structural considerations do not permit of this.

In view of the above it may well be asked why the main planes of actual aircraft do not conform to the type specified. The answer is that in the design of main planes, as in practically all aeroplane design, a compromise has to be made between aerodynamic efficiency and structural considerations. A thin wing necessitates the use of shallow spars; and such spars, unless made unduly wide and heavy, would not give the necessary strength and stiffness without a great deal of external bracing. Such bracing would so increase the drag of the machine as a whole that the gain in efficiency due to the thin wing would be more than cancelled out. Thin wings can be used in biplanes, where the necessary support is afforded by the inter-plane struts and bracing wires; but experience has shown that the drag due to such components more than offsets the gain obtained by the more efficient thin wings. Hence the modern trend towards monoplanes with internally-braced main planes and without any external bracing to increase parasitic drag. Wings of this type require, in order to keep down the weight to a reasonable figure, deep spars and deep spars necessitate a thick wing to accommodate them. It is true that by the use of stressed skin construction, in which a large part of the tensile and compressive stresses arising from bending are taken up in the skin of the wing itself, the necessary spar depth can be reduced and a thinner wing adopted than would be feasible where all stresses are taken up in the spars; but even so a fairly thick wing is necessary in order to obtain the necessary strength and stiffness without undue weight.

Similar considerations limit excessive aspect ratio. The bigger this ratio for any given wing area the wider will be the span, and the wider the span the further will be the centre of lift from the wing roots. This will increase the bending moment of the aerodynamic forces acting on the wing and this will necessitate, in turn, heavier and stronger spars. Another consideration in this connection is that high aspect ratio reduces manoeuvrability.

Thus the modern monoplane wing without external bracing has to be a compromise between the requirements of aerodynamic efficiency and practical structural necessities.

### **Effects of Surface Smoothness on Aerofoil Efficiency**

The nature of the surface of an aerofoil also has a decided effect upon its efficiency. It is easy to understand that a rough surface will increase drag by increasing skin friction between the aerofoil and the passing air. Hence the smoother the surface the lower will be the drag. A smooth surface will also give a higher lift than a rough one, and will therefore give a decidedly higher efficiency. Any surface projections, such as rivet heads, will materially reduce the efficiency of an aerofoil, particularly at high speeds.

### **Effects of Scale**

One more factor affecting the efficiency of aerofoils remains to be considered. This factor concerns the size of the aerofoil and the airspeed at which it is operating. These combine to determine what is known as the "Scale" of the aerofoil. In the early days of experimental aerodynamics small scale models of aerofoils were tested in small wind tunnels at comparatively low airspeeds. It was soon found that the results obtained in the full-scale wing at much higher airspeeds differed considerably from the results which experiments on the scale model had suggested.

The "Scale" at which an aerofoil is operating is determined by a quantity known as Reynold's number. This number is arrived at by dividing the product of the mean chord length of the aerofoil (ft.), the airspeed (ft. per sec.) and the absolute air density in slugs per cubic foot (.00238 for standard air) by the co-efficient of viscosity of air. Air has a very low viscosity compared with liquids, and the

## THE AIRCRAFTMAN

value of this co-efficient is very small and varies with the temperature. For air at 15° C. its value is .00000374. Hence Reynold's numbers for aerofoils are large. They range from a hundred thousand or so for model aerofoils tested in small wind tunnels to four or five million in the case of light aircraft at speeds of around 100 miles per hour and 20,000,000 or more in the case of the largest modern aircraft at top speeds.

It is clear from the above that for any given air temperature and density the Reynold's number at which an aerofoil is operating varies directly as the product of the chord length and the airspeed. The effects of increasing the Reynold's number on the performance of aerofoils is complex, and cannot be fully discussed in the space available.

Speaking in a general way, however, it may be said that change in Reynold's number has little effect upon the lift co-efficient of an aerofoil until a fairly large angle of attack (around 10 degrees) is reached. At higher angles of attack, however, the effect becomes considerable.

In thin and medium-thickness aerofoils increasing the Reynold's number by increase of wing size, increase of airspeed, or both, will increase the lift co-efficient at the higher angles of attack and will also increase the stalling angle. For example, in the medium-thickness Clark YH aerofoil the maximum lift co-efficient is 1.12 and the stalling angle 15.5 degrees at a Reynold's number of 300,000; at a Reynold's number of around 7,000,000 the maximum lift co-efficient is 1.45 and the stalling angle 18.3 degrees.

As the thickness of the aerofoil increases the effects of increase in Reynold's number on the lift co-efficient and stalling angle becomes less and less marked, and in really thick profiles it becomes quite different. In very thick aerofoils increase in Reynold's number actually causes the maximum lift co-efficient and the stalling angle to decrease until a value in the neighbourhood of 4,000,000 is reached. A further increase in the Reynold's number above this figure, however, tends to cause a slight increase in both lift co-efficient and stalling point. This increase is, however, much smaller than in the case of thin aerofoils.

Increase of Reynold's number tends to decrease the drag co-efficient slightly at all angles of attack until a value of a little over 2,000,000 is reached. At higher values the drag co-efficient has usually a slight inclination to increase, but this increase is almost negligible.

The results of these combined facts upon aerofoil efficiency is that in thin aerofoils there is a very marked increase in efficiency as the Reynold's number is increased. As the thickness increases this increase in efficiency becomes less marked until, in the case of very thick aerofoils, there may be a tendency for the efficiency to actually decrease as the Reynold's number is increased.

It should be noted that the above remarks are very generalized, and do not hold in all cases, as the form as well as the maximum thickness of the aerofoil enters into the question.

\* \* \*

### *The Maintenance of Switches*

BY SGT. ADAMS, H. E.

Electric switches are made with several types of contacts. The type of contact is determined by the service for which the switch is intended. The contacts used on a switch for lamps, as an example, would be entirely unsuitable for magneto contact points. In the light switch the contacts "make" and "break" the circuit very infrequently, whereas the magneto contacts must make and break several hundred times a minute.

Ordinarily, switch contacts would be made of copper, because of its good conductance. Copper contacts are soft, however, and would soon wear out under hard use. Where a contact must withstand a heavy pounding, as in a magneto, they are made of a harder metal, such as tungsten.

Switches used in industrial plants are often made with contacts built up of a steel base with the contacting surface coated with silver.

Plain steel contacts would be satisfactory from a purely mechanical point of view, but not from an electrical. When contacts separate while they are carrying a current there is a spark or arc formed by the current trying to continue its flow across the gap between the contacts. This arc burns the metal of the contacts and leaves an oxide deposit. This oxide is usually a very poor conductor, and so resistance is added to the circuit. When the contact surface is made of copper or steel, the oxide must be removed quite frequently. When silver contacts are used the oxide formed is silver oxide which is, unlike other metallic oxides, practically as good as silver in electrical conductance. It is, therefore, unnecessary to remove the oxide, and hence the switch can remain in service for a much longer period without attention. The appearance of the silver oxide is very similar to other oxides in that it

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is very dark in colour and to an uninformed person would look like a "dirty" contact which needed cleaning. Since the oxide is a good conductor and silver a soft metal, this type of contact should never be filed. When cleaning is necessary, a strip of clean paper drawn between the contacts is all that is necessary.

Silver contacts are unsuitable for use where the contact is made and broken frequently because the constant hammering would distort the soft silver and the constant arcing would soon burn it away. For this kind of service a harder metal, such as tungsten, is used. Tungsten contacts are cleaned by burnishing with a steel leaf-like tool called a burnishing tool when they are only dirty; but when burned, tungsten contacts must be either filed or ground flat, and then polished with a dry oil stone. Often two or three different grades of oil stone are used in succession, the last polishing being done with a very fine stone to attain a perfectly smooth surface. A rough contact surface means that only a small portion of the surface is actually making contact, resulting in rapid burning of the contacts.

Where contacts are held together by spring tension, the tension of the springs should not be altered. Increased tension on a contact will wear it out quicker, and decreased tension will result in poorer contact and heating, so that the contact will be burned more.

Oil should never be applied to contacts as it lodges in the pores of the metal and creates an insulating film on the contact surface. A little oil, however, properly applied to the mechanism of some switches is very helpful to proper operation.

Clip-type contacts are often made of phosphor bronze in order to obtain a spring action on the contact. The spring tension should be checked periodically, as a loose contact will cause heating sufficient to anneal the phosphor bronze and destroy its springiness, so that a good contact cannot be obtained. These contacts are often fastened to a base or panel by a screw. This holding screw is sometimes also used as a conductor between the contact and a switch terminal. The screw should be kept tight to prevent the heating and annealing of the spring.

Some switch contacts must be a certain distance apart when the switch is open to assure proper functioning of some device. Whenever such a contact "gap" is to be measured or adjusted it must first be examined to see that the contacts are the correct shape, and that their contact surfaces are not burned or pitted. Flat-surfaced contacts should also be checked to see that their faces are parallel. When the contact material is worn away, exposing the supporting material or core, the contacts must be replaced with new ones.

In multi-polar switches, such as automatic motor starters, etc., one contact may make a poor connection while others are good. This can be checked by operating the switch with a piece of carbon paper and a piece of white paper between the contacts so that pressure of the contacts will mark the white paper with carbon. If all contacts mark the paper alike they are all making good positive contact. A weak spring or an improperly adjusted contact will cause either a very faint mark or none at all on the paper.

Alternating current magnetic switches should be inspected regularly to see that no dirt or foreign matter lodges on the face of the iron core where the armature touches it. Failure to make good magnetic contact between armature and core results in increased reluctance in the magnetic circuit, which reduces the total field strength of the magnet and consequently lowers the impedance of the coil due to less counter e.m.f. Excessive current is thus allowed to flow through the coil and burn it out.

Some switches which may be entirely satisfactory on alternating current circuits will be of no use on direct current circuits. D.C. switches which must interrupt fairly large currents at normal voltages have to be equipped with some form of arc "blow-out" to prevent excessive burning of contacts when the current flow is interrupted. For this reason a switch that was made for A.C. circuits cannot be used in a D.C. circuit.

A golden rule to remember whenever working on electrical apparatus is that every circuit is "alive" until you make sure that it is "dead".

\* \* \*

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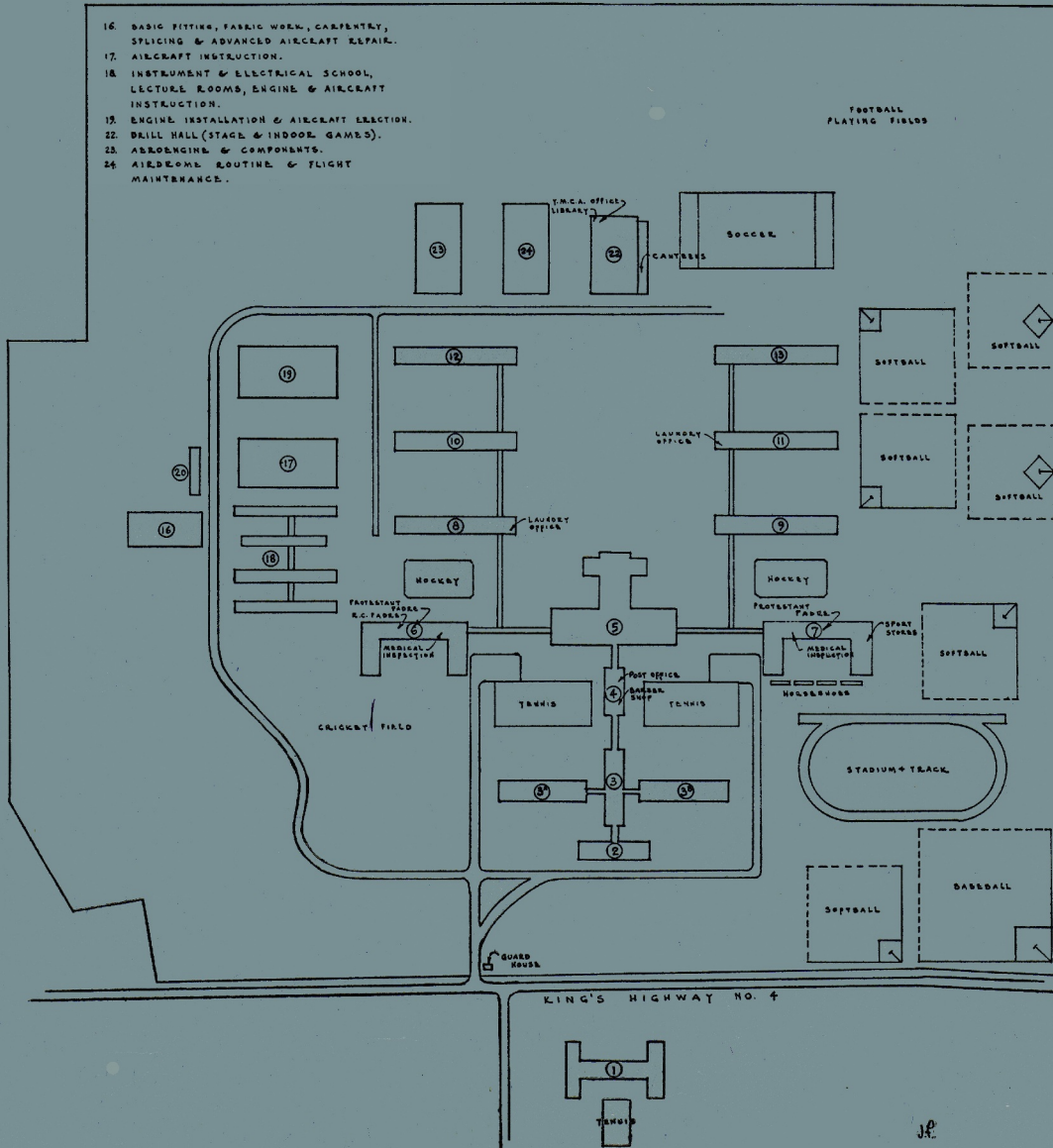
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