

# *The* **CROWNDDEL**

VOL. 2, No. 6  
APRIL 1950



**ROYAL CANADIAN AIR FORCE**



Issued on the authority of  
**THE CHIEF OF THE AIR STAFF**  
 Royal Canadian Air Force

VOL. 2, No. 6

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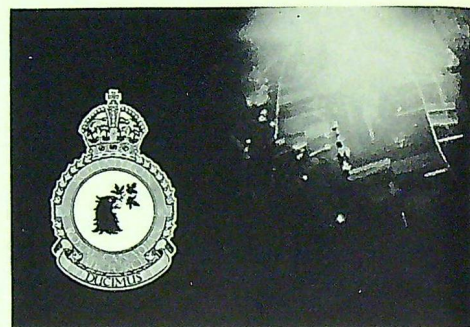
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*This Month's Cover*



The background to No. 405's crest shows a typical target photograph as taken from a Pathfinder aircraft.

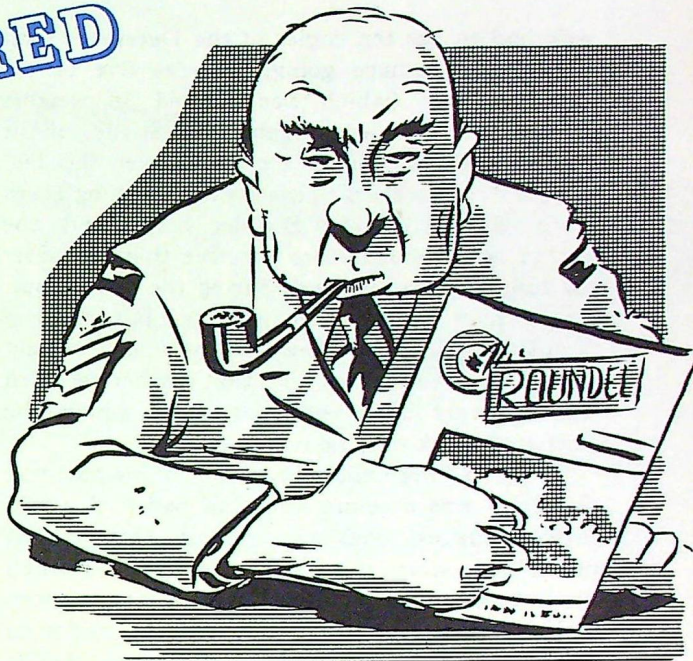
**EDITORIAL OFFICES:**  
 Room 3130, D.N.D. Bldg. "B,"  
 Ottawa, Ont.

# SGT. SHATTERPROOF'S SOUL IS SEARED

Sir:

In twenty-six years of service to His Majesty, my loyalty has never wavered. Even when smarting beneath injury, even when fighting for the boys in the field with my back against the wall, I have remained loyal to the uniform I wear. For it has always been my belief that my superiors, though not infallible, have acted in accordance with the dictates of their conscience. That, Sir, is the spirit of Democracy. That, Sir, has ever been the creed of the Shatterproofs.

But now, for the first time, my belief is shaken. Can it be that the Brass is abandoning the direct attack which we can recognize, respect, and combat? Can it be that it is resorting instead to the insidious weapon of propaganda, against which our clear-eyed young airmen have no defence? Turn to page 38 of the March "Roundel". There you will find an innocent looking article entitled "For the Arctic Gourmet". Though its fell purpose might well escape the average editor or reader, the trained Service mind will recognize it for what it is—an attempt to force the airman's standard of living even lower.



Study the dishes listed. Woolly lousewort, rock tripe, rats, sea-cucumbers, shark . . . True, the article good-humouredly implies that this sort of diet is only recommended for aircrew forced down in the Arctic. But therein lies its subtlety. Once our aircrew is sold on the virtues of such a cuisine, it will be a simple matter to insinuate it into our Messes throughout the country. Despite Sgt. Highball's optimistic view that it might be a pleasant change from what we now get, I would ask you to let the Brass know the stand I have taken. The day on which Shatterproof is required to sit down in his own Mess to a dinner of lemming's liver and beetle's bile will be the day on which he is turned from a loyal servant of the Crown into an N.C.O. at bay. Such things sear the soul.

To turn to more pleasant matters, I noted with interest Mr. Seli's letter regarding the paper on which "The Roundel" is printed. Personally, I agree with him: the coated stock looks better. But can we afford to sacrifice utility to appearance? I have discussed the question with those few of my more thoughtful colleagues who are aware of "The Roundel's" existence. Cpl. Aperture, of the Photographic Section, informs me that his



# The Roundel

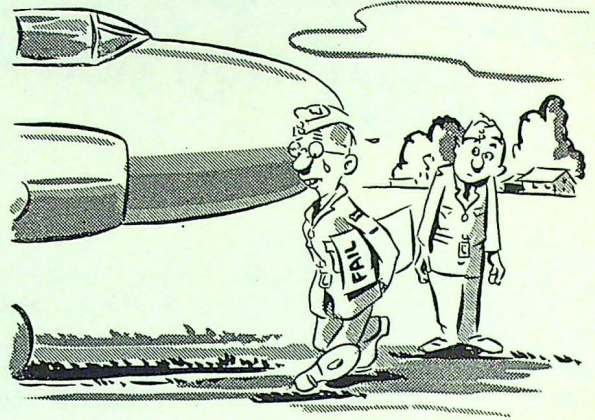
wife had to use ten copies of the December issue to get the furnace going, whereas five of the January issue (which was printed on rougher paper) were sufficient. Again, Cpl. Spyder of the Airmen's Mess is very emphatic over the fact that the coated stock is useless for polishing glass-ware. Similarly, LAC Bladder has found the earlier issues much more effective than the later for touching up his shoes during the lunch-hour. These may seem small matters, but from a circulation point of view we must not neglect them. I am quite sure, too, that further research would reveal many other uses for which the uncoated stock is to be preferred.

To bring Pilot Officer Prune out of his post-war obscurity was a sound stroke of policy. I would further suggest that you publish this gallant officer's life-story, if it has been written\*. Though his immediate influence has waned, his memory may still be green enough to furnish inspiration to some of our own younger personnel. Great emergencies call forth strong men—but even the strongest man cannot serve for ever. I have, as you know, been grooming LAC Bladder to take over on my retirement, but I sometimes fear that the lad's sensitive spirit unfits him for the rôle of leader. After his failure in the last Trade Examinations we had to use force to prevent him from ending it all by putting his head into a jet intake.

In concluding this letter, I would draw your attention to the fact that the last two issues of "The Roundel" have been very late in appearing on the Station. While I do not feel that the

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\*(This can be arranged, Sergeant, if other readers agree with your suggestion.—EDITOR)



R.C.A.F. was thereby temporarily brought to an intellectual standstill, I do feel that it indicates a laxity either in your office or in the office of Flt. Lt. Hornet, our Adjutant.\*\* Punctuality has hitherto been the chief—possibly the only—merit of "The Roundel". Let us not deprive it of even that.

Sincerely yours,

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\*\* (The delays, which occurred here in the Editorial Office, were occasioned by a combination of year-end leaves and a change in editorial policy. The normal date of mailing "The Roundel" from the printers is the 15th of each month.—EDITOR)



## The Trails of '98: Part II



by W. D. MACBRIDE

THE BUILDING of the White Pass Railroad was attended by more than ordinary difficulties. It was a thousand miles from supply bases and there were no telegraph lines connecting this area with the States. In August 1899, 1500 employees threw down their picks and started off pell-mell on a gold stampede to Atlin, B.C., leaving only a few hundred men on the job. Nearly all the work between Skagway and Summit was in the solid rock. Immense quantities of powder were used for blasting. In one case a cliff 120 feet high, 70 feet deep, and 20 feet thick, was blasted away. Frequently the mountain sides were so steep the men had to be suspended by ropes to prevent their falling off while cutting the grade. A short distance from the summit a deep V-shaped canyon is spanned by a steel cantilever bridge 215 feet above the creek bed. Sixteen miles from Skagway occurs the first and only tunnel on the line. This tunnel is two hundred and fifty feet in length, but probably no tunnel in the world was ever built under difficulties any greater than those encountered in boring this comparatively short tunnel. Supplies and machinery had to be packed up the steepest trail imaginable.

M. J. Heney's personality, however, carried the project through. He was the idol of the construction gangs, and was known as the "Irish Prince". His men would steal, beg or fight for him at the drop of a hat, and their welfare was always foremost in his mind. He died in San Francisco in 1910.

From sea level the railroad ascends to a summit of 2885 feet in 21 miles, but its highest elevation (2910 feet) is reached at Log Cabin, a station at Mile-Post 33. The average grade from the wharves to the summit is 2.6%, the steepest grade being about 4%. The cost of the road from Skagway to the summit of the pass was over \$100,000 per mile. From there on to Whitehorse, while the cost per mile was less, it was still extremely high. The railway is 110 miles long—20 miles in Alaska, 32 miles in British Columbia, and 58 miles in Yukon Territory.

The operation of the railroad was on a scale to suit the traffic. We just "ran" a railroad. We waged the same battle against slides, floods, snow, and cold, as had been fought during its construction. Our personnel was, of course, of a more permanent nature. Operating the road was a sort of family affair. Our boys went to work on the road or into the offices with their fathers. Many section men finished out their lives in the service. Even cooks



*Main Street, Skagway. W.P. & Y.R. tracks in centre*

Photo Associated Screen News Ltd.

at the section houses stayed on their jobs for many years.

Contrary to the belief held by many people (and especially by writers who have made a flying trip through the Yukon by plane or highway), in pre-war years a regular winter schedule was always maintained. From the inception of the road until about 1911, as many as two or three trains were operated north and south daily except Sunday, in the winter. Telegraph operators were stationed at approximately 16 stations between Skagway and Whitehorse. For several years after 1911, daily ore

trains were operated in both summer and winter. Since the mines have been inactive, the train service has been scheduled to suit the traffic offering — daily trains in summer, and at least two trains per week each way in the winter. During the tourist season, three trains were operated on arrival and departure days of Canadian Pacific and Canadian National ocean steamers at Skagway.

There were years of heavy traffic and years of depression, dependent on the extent of mining operations and on the number of tourists. In the peak year of 1927 the railroad carried 22,667 passengers. From 1 January to 30 September 1942,

when the U.S. Army took over the operation of the railroad, we moved 70,457 tons of freight.

In March 1901, the White Pass and Yukon Route acquired the river steamers and winter stage line of the Canadian Development Company, and thereafter, in addition to the railway service, engaged in river and lake transportation on the lakes of the Atlin, B.C., and the Carcross, Y.T., areas, and on the Yukon River and its tributaries.

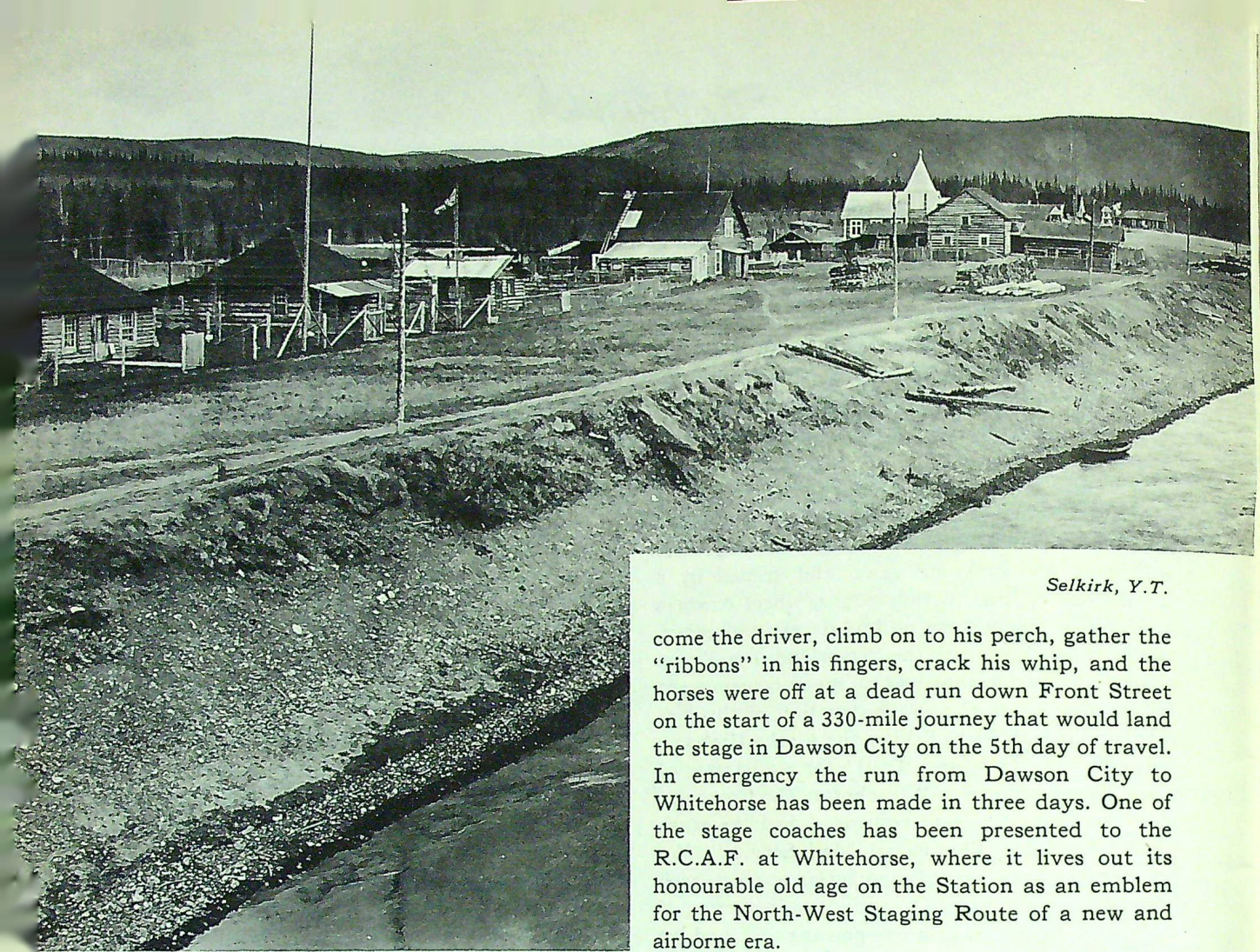
In order to furnish winter transportation between Dawson City and Whitehorse, the "Overland Trail", Yukon's first highway, was built from Whitehorse to Dawson, a distance of 330 miles. This trail was hewn through the wilderness with axes and cross-cut saws, and graded by a small crew of men with ploughs, wheel scrapers and horses. There were no bull-dozers and carry-alls in those days, and the "Overland Trail" was a construction job that was no mean achievement for its day. Prior to the construction of the permanent Takhini River bridge, the Alaska Highway followed the "Overland Trail" for a distance of about 31 miles north of Whitehorse. The Company held the Canadian mail contracts, and the stage line was called "The Royal Mail Service". We operated this winter transportation system with horse-drawn vehicles up to and including spring of 1921, when the area of horse-power ended and we withdrew from the service. A minimum of 200 horses was required to operate the winter mail stages. In peak years this number was greatly increased. Roadhouses and stables were located at 20-mile intervals. On Canada's map of Yukon Territory, the "Overland Trail" is indicated by a red line running from Whitehorse to Dawson. After the inauguration of aeroplane service, a string of emergency landing strips was constructed adjacent to the winter trail.

During the period from the freeze-up of the rivers until there was sufficient snow for sleighs, wheel stages were used. The majority of these stages were built with springs made up of many layers of leather straps instead of metal. They were exceptionally strong and easy-riding, and were called "Thoroughbracers". Wheel stages were also used in the period between the end of sleighing and the start of steamer service on the rivers. The road-

houses maintained at the Posts were log buildings — miniature hotels heated by roaring wood fires, with comfortable beds and good country meals. Moose and caribou steaks were in evidence. Meal rates were \$1.50 each and beds \$1 per night. The passenger fare on wheel stages was \$125 from Whitehorse to Dawson City, not including roadhouse expenses. Hand baggage allowance was 25 lbs. free, excess baggage 30c. per lb. Lower rates were quoted on freight shipments.

When trail conditions permitted the use of passenger sleighs, which carried up to fourteen passengers each, the fares were considerably lower. Wheel stage travel during the break-up in the spring was something to write home about. The wheel stages had to contend with floods, washouts, mud, and land slides.

The White Pass and Yukon Route maintained at Whitehorse a horse hospital with veterinary surgeon in charge, and also operated a complete carriage shop, harness shop, and blacksmith shop. Stages were built in Whitehorse from the ground up, harness was made and repaired. The stage service during the coldest part of the year, approximately 1st December to 15th March, was handled with passenger and freight sleighs, and many a tale could be told of the battles with extreme temperatures. Charcoal foot-warmers and buffalo robes were provided for the comfort of passengers, and practically all travellers wore coon-skin coats, moccasins or felt shoes. Four or six horses were driven, depending on the weight of load and the trail conditions, and these were replaced at each post with fresh stock. Stage drivers, or "skinnners", wore coon-skin coats with a long red sash tied around the waist, and soft buckskin gloves with inner gloves of silk or fine wool. On cold days they would hold the reins in one hand while they pounded the other against their shoulders to keep up the circulation. The seat of honour was on the box with the driver. In the latter days of stage operation, drivers did not leave a Post if the temperature was colder than 40° below zero, but it was often 50° or 60° below before they reached the next Post. If the roadhouse thermometer was out of business, a bottle of "Perry Davis Pain-killer" placed outside a window



*Selkirk, Y.T.*

warned the unwary: when "pain-killer" froze, it was "too damn cold for man or beast". There were some breath-taking grades along mountain sides, and many steep hills on the trail, and wheel stages and sleighs occasionally upset and rolled down the hill-sides; but there were few serious accidents.

The list of passengers who rode with the "Royal Mail" included practically all the famous names of Klondike days, and there were many travellers who would wait in Whitehorse or Dawson for days to ride with a favourite driver. It was an unforgettable sight to see — a coach standing ready in front of the Whitehorse depot, the steam streaming from the nostrils of the prancing steeds, the "boot" (rear compartment) full of baggage, the passengers bundled up to the ears. Out would

come the driver, climb on to his perch, gather the "ribbons" in his fingers, crack his whip, and the horses were off at a dead run down Front Street on the start of a 330-mile journey that would land the stage in Dawson City on the 5th day of travel. In emergency the run from Dawson City to Whitehorse has been made in three days. One of the stage coaches has been presented to the R.C.A.F. at Whitehorse, where it lives out its honourable old age on the Station as an emblem for the North-West Staging Route of a new and airborne era.

No story of the Yukon stage line would be complete without a tribute to its motive power, the horses. For twenty years these animals faithfully performed their duty under working-conditions which probably have never been duplicated in America. In the summer they were pastured out to absorb enough vitamins to withstand the next winter. During the summer they were painted periodically on vulnerable portions of their anatomy with a concoction of tar and insect-repelling oils, to protect them from the attacks of "bull-dog" horse-flies, mosquitoes and gnats. Horses that had had their lungs "burned" by labouring in extreme temperatures usually died in the spring or early summer. In cold climates horses grow very long hair as a protection from the cold, and before winter service commenced, the upper portions of their bodies were clipped; otherwise they would "steam" while working hard

in the cold. On arrival at the Posts they were blanketed and placed in warm stables and fed bran mash, oats and timothy hay, imported from the Pacific Coast. Each horse had his record number stamped on a front hoof, and each horse had a name. During the life of the stage line, the list of horses ran into several thousands, with the result that there were very few employees of the W.P. & Y.R. (from the General Manager down) or prominent Yukon citizens who did not have an equine namesake.

\* \* \*

In the fall of 1935, the W.P. & Y.R. entered the air transportation field, continuing in it until December 1941, when the plane organization was sold to the Canadian Pacific Airlines.

At present writing, the River Division of the W.P. & Y.R. known as the British Yukon Navigation Co., operates steamers and barges between Whitehorse, Dawson City and Mayo, in the Yukon, and makes periodical trips to Circle and Ft. Yukon in Alaska. A launch service is maintained between Carcross and Atlin in the summer. In the winter, the Atlin business is handled by Northern Airways of Carcross.

\* \* \*

Our total of accidents in the various branches of the Company's service has been very small. I shall briefly mention the two events that caused the greatest loss of life: an explosion and a murder.

On 25 September 1906, the steamer "Columbian" was en route from Whitehorse to Dawson, carrying a cargo of explosives, when a member of the crew decided to shoot some ducks. Picking up his gun, he stumbled — and shot into the powder. In the resultant explosion and fire, six of the crew lost their lives. Capt. George Raabe then ran the steamer "Dawson" from Whitehorse to the scene of the accident with a doctor and nurses, negotiating the treacherous 30-Mile River, without a stop-bell, in the record time of one hour and forty-five minutes. The above accident was the worst ever to occur on the Yukon River. Since that date, the Company does not permit crew or

passengers to use firearms on board steamers.

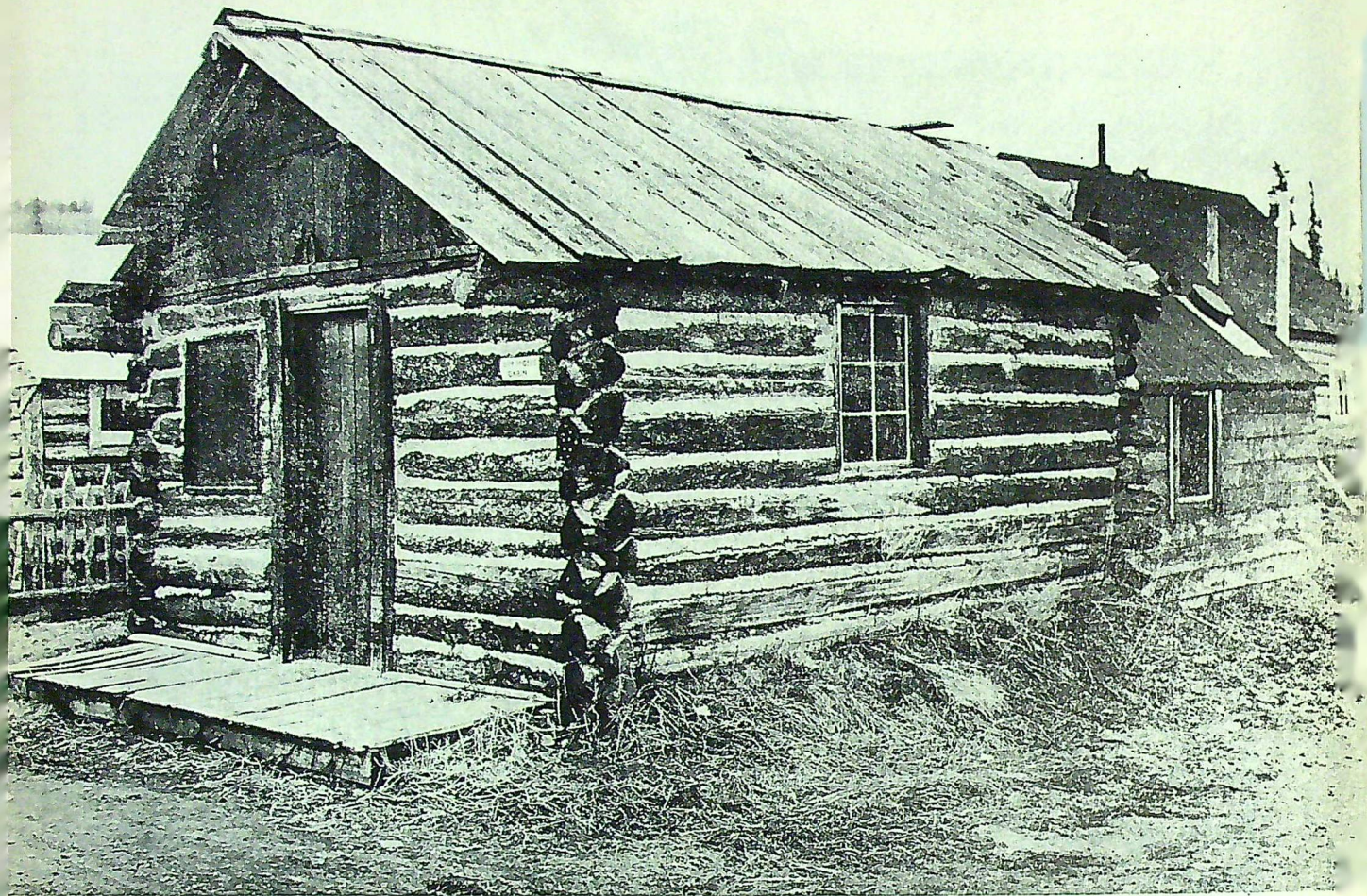
So much for the explosion. Now for the murder.

During the summer of 1915 a Russian Cossack named Alec Gagoff went to work on the Whitehorse section gang. Gagoff spoke a little broken English and understood less. He took lessons in English from a local schoolteacher until one evening when his broad face was discovered peeking through her window, which gave her such a scare that the language lessons were terminated. Gagoff got the not unusual obsession that the other section men were laughing at him and making fun of him because he could not understand their language. He brooded over this, and finally quit his job.

On the afternoon of September 30th, 1915, the section foreman and four of his crew were just finishing lunch on the edge of the high grade north of Ear Lake, three miles from Whitehorse, when they saw a man walking towards them along the grade above the railroad track. He was carrying a rifle in one hand. The section men were reclining on the ground around the fire where they brewed their tea, and as the visitor slid down the grade above them, one man said, "Hello, Alec, come and have some tea."

Without warning, Gagoff raised his 30-30 Winchester to his shoulder and started shooting at the men from close range. One man lay still, but the others jumped down the steep grade towards the river in an effort to escape. Carefully and methodically he picked them off one by one, and continued to shoot at the only man who escaped unscathed. He then reloaded the rifle and proceeded to fill the bodies full of bullets. One man was shot 15 times. Three were dead, but the man by the fire, Henry Cook, having received one fatal wound, was not further molested. Gagoff said to him as he lay there, "I'm sorry to shoot you, Henry. I look for 'Fighting Mike'." Fortunately for Mike, he was not with the gang that day.

Gagoff then lifted the section hand-car on to the track and started for town. He stopped at the roundhouse and said to the foreman, "I just shoot three dogs", and continued on towards the depot. The foreman phoned the depot, reporting what Gagoff said, as he was afraid something was wrong. Gagoff left the hand-car in front of the



*Sam McGee's cabin, Whitehorse*

Photo Associated Screen News Ltd.

depot and walked in, still carrying the 30-30, and with cartridges between his fingers. He said he was looking for "Fighting Mike", and walked across the street to the drug-store, where the druggist, H. G. MacPherson, induced him to hand over the rifle. The clerks in the depot, in the meantime, had notified the Royal Canadian Mounted Police, two of whom walked into the drug-store and arrested Gagoff on suspicion. The section hand, Henry Cook, died within a day, thus bringing the death-toll to four.

The trial was speedily concluded, having waited only for the arrival of Gagoff's cousin from the Coast. When this gentleman stepped off the train, the police removed two loaded revolvers from his person. It was his intention to smuggle a revolver

to Gagoff, so that he could take his own life. To a Cossack, execution by any other means than shooting is a disgrace. The hanging of Alec Gagoff ended the story of the worst mass-murder in the police records of the Yukon Territory.

The headstones of section foreman Pat Kaslow and his crew (George Lane, Henry Cook, and Tom Bokovitch), bearing the date "September 30th, 1915", may be seen in the south-west portion of the Whitehorse Cemetery, where I went to make sure how many men were killed. I well remember, however, the wild look in Gagoff's eyes, and the cartridges held between his fingers, and the feeling of relief that he didn't try to shoot everyone in the depot building too!

The End

# Stalag Luft III: Part 6

by FLT. LT. JOHN E. MAHONEY

## CHAPTER SEVEN

### The Escape, March 1944

UNTIL THE PUBLICATION of eye-witnesses' reports of the horror camps at Belsen and similar places perhaps no event so shocked the Allied world as the mass execution of the fifty air force officers who tried to escape from Stalag Luft III in March 1944.

The cleverly contrived tunnel was a masterpiece of workmanship. The brains behind it were those of officers who had been planning escapes for some two or three years. They organized an escape committee (referred to as "X", for security reasons) under the leadership of a well-known R.A.F. officer who was spoken of only as "Big X".

The project was a complex matter. The organization was split up into various departments — a tailor shop for the manufacture of civilian clothing, a carpenter and metalworker shop for making the tools to be used in the construction of the tunnel, a map-making department, a compass-making department, and a section for forging papers of various kinds. There was also an intelligence and security section. Special prisoners who could speak German were designated as "contact" men, who would waylay the "ferrets" and invite them to their rooms for a cup of coffee to keep them out of the way — and to bribe them, where possible, to bring tools and other helpful accessories into the camp. No less important was the army of guards necessary to warn the various workers if any Germans were approaching. While work on the actual tunnel was in progress, every "ferret" in the camp was shadowed continually from the time he entered till the time he left.

About one-third of the whole of the North Compound had some share in the responsibility, but in spite of the numbers involved, there never was a leak to the Germans.

The tunnel entrance was very ingeniously concealed. It fooled the Germans completely, despite the several searches that were made. It was located in the last place in the world anyone would have expected to find it — beneath a stove. The stove stood on a tiled base which was supported, beneath the floor, by a four-foot-square brick wall built on the ground below the hut. The square of tiles was removed from the floor and fitted into a tray which, when replaced in position, formed an excellent trap door. It was so well done that even the cracks where it fitted into place were invisible.

Beneath the trap door, through the centre of the brick walls, a shaft was sunk straight down to a depth of thirty feet. This shaft, like the whole of the tunnel, was shored with wooden frames made from some fifteen hundred bed boards commandeered from every member of the camp. At the bottom of the shaft a special chamber was built for use of the labourers and as a carpenter shop.

The tunnel itself was over three hundred and fifty feet long and about two feet square. Along the floor were wooden tracks on which a trolley ran, complete with flanged tin-covered wheels, to convey the escapers. The track was built in three sections, so that a person going from one end to the other would have to change twice on the way. The trolleys were rope-operated by remote control. Ventilation was secured by means of a special air pump, designed and installed at the foot of the shaft, with a tin pipe-line extending the length of the tunnel. Electric lighting also

was provided, thanks to some light-fingered kriegie who stole a good length of wiring cable from the Germans.

The diggers had the hardest time of all. As the tell-tale dirt would have given the game away if they had worn clothes, they had to work either naked or in long underwear.

Another important factor in the building of the tunnel was the dispersal of the sand. About fifty prisoners were put on dispersal squads. Each man made two long thin bags out of hand towels. These were tied to a long cord and hung down inside the legs of his trousers, the cord passing round his neck to take the strain. The bottoms of the bags were held together by a piece of string and a pin, which was attached to another piece of string leading to the pockets of the trousers. The bags were filled with sand at the mouth of the tunnel, while our own guards kept watch. The disperser then wandered out to a sandy part of the camp where there was a volleyball or softball game in progress, and, being careful that there were no German guards around, pulled the strings in his pockets. This released the sand, which he shuffled into the soil with his feet.



When the time drew near for the opening of the tunnel, the names of all those who had worked in any way were put into a hat. Out of some five hundred people, two hundred names were drawn. These were the only ones who were to be allowed into the hut at the appointed time.

On the morning of 23 March it was decided to break the tunnel that same night. The chosen two hundred changed places with the regular occupants of the hut. Tense with anxiety, they waited in the rooms till the time came for the opening.

At ten o'clock sharp, two expert tunnellers broke through the last few inches. To their dismay, they found they were a few feet short of the woods in which they had intended to emerge, and were only about seventy-five feet from a nearby Goon box. However, it was too late to change things then.

One volunteer stationed himself near the entrance to the tunnel to keep a look-out for guards and to give the others the "O.K." to come through.

The order was then given to commence operations. Their pockets bulging with rations and escape kits, the prisoners hustled out one by one to make their fateful journey through the tunnel. They formed up in a small group in the woods, to be conducted in a party away from the vicinity of the camp. The groups were formed at about half-hourly intervals, to give their predecessors a fair start in case any group should be caught.

The night could have been better, but had its good points. It was snowing, which meant that tracks would be left, but there was lessened visibility and the tracks stood a chance of being covered. The wind was in a favourable direction, blowing down from the nearby Goon box, thus making noises less likely to be heard by the guard on duty. And there was, of course, no moon.

While the night was still young, two unfortunate mishaps occurred. The first was a raid over Berlin, as a result of which all the lights were turned out, and some time was taken in getting margarine-lamps to serve as substitutes. The second delay occurred when someone became stuck in mid-tunnel and had to be rescued by his friends. These

# The Roundel

incidents considerably hampered the operations, and more time was taken than had been foreseen.

At about five o'clock in the morning, just as dawn was breaking, a shot rang out. The game was up. One of the guards had seen a fugitive in the woods. (Later we discovered that the shot had missed.)

Immediately a hue and cry was raised. The Kommandant and an army of guards entered the camp. When they saw the array of prisoners completely packed and ready to leave, they could only surmise how many were already free. The Kommandant went stark raving mad. He ordered that all the people left in the hut be searched. Brandishing a revolver, he threatened to shoot anyone who did not "jump to it". He had some reason to be worried, as this meant a court martial for him. The members of each hut were then locked in until the Germans had made a photographic check of the entire camp. We learned that seventy-nine officers had escaped — and our prayers went with them.

Four of the boys were caught immediately. They were brought straight back and put in the "cooler". Rumour had it that some fifteen or twenty others

had been rounded up, frost-bitten and completely exhausted.

What had happened to the rest?

We learned on April 6th, when we were assembled in the theatre for an address by the Senior British Officer. He walked on to the stage and addressed us as follows:

"Gentlemen, I have some tragic news to impart to you. The Kommandant has received a statement from the German High Command to the effect that forty-one of the officers who escaped have been killed." He paused, to let the gravity of his words sink into our minds. Then he went on: "They state that these men were shot while attempting to resist arrest or to re-escape after being arrested. Obviously this is the work of the Gestapo. A Luftwaffe officer told me personally that he deeply regretted the affair, and assured me that it had been taken out of their hands. In closing, I ask you not to display a spiteful or vindictive attitude to the Germans. Let us show them we are men of discipline."

A few days later the following notice appeared on our bulletin board:

North Compound,  
Stalag Luft III  
15th April, 1944

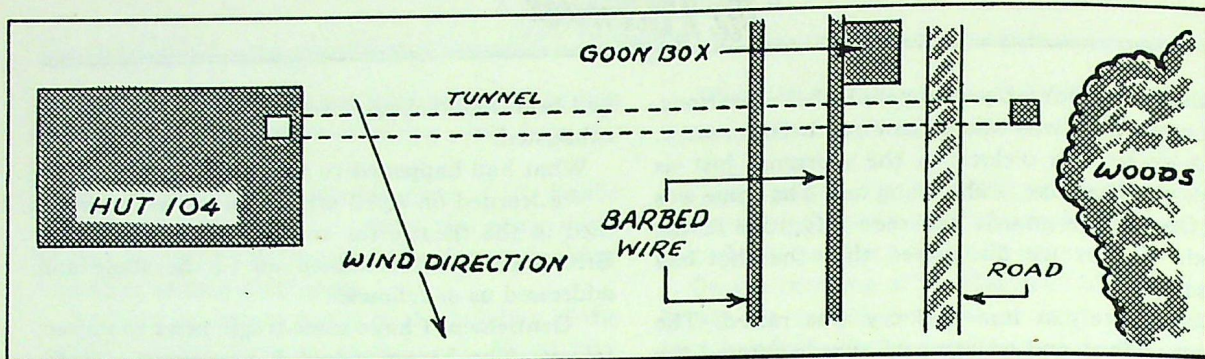
The Senior British Officer regrets to announce the death of the following forty-seven officers who escaped on the 24th of March. The list of names was handed to him by the German authorities this evening.

P/O H. Birkland	P/O C. P. Hall	F/O H. A. Pickard
F/L E. G. Bretell	F/L A. H. Hayter	F/O P. P. Pohe
F/O L. Bull	P/O E. S. Humphreys	P/O B. Scheidhauer
S/L R. J. Bushell	P/O G. A. Kidder	P/O S. Skauziklas
F/L M. J. Casey	F/O R. V. Kierath	Lt. A. J. Stevens
S/L J. Catanach	F/L A. Kiewnarski	P/O R. C. Stewart
P/O A. G. Christensen	S/L T. G. Kirby-Green	F/O J. G. Stower
P/O D. N. Cochran	F/O A. W. Kolanowski	F/O D. O. Street
S/L L. K. P. Cross	F/L P. W. Langford	F/L C. D. Swain
P/O H. Espelid	P/O T. B. Leigh	P/O E. Valenta
P/O B. H. Evans	F/L C. A. N. McGarr	F/O G. W. Walenn
P/O N. Fuglesang	P/O G. E. McGill	F/O J. C. Wernham
Lt. J. S. Gouws	F/O R. Marceskus	F/O G. W. Wiley
P/O W. J. Grisman	P/O H. J. Milford	S/L J. E. A. Williams
P/O A. Gunn	F/O J. T. Mondechien	P/O J. F. Williams
P/O A. H. Hake	F/O K. Pawluk	

And on May 19th, a second notice announced:

The Senior British Officer had notice this morning of the deaths of the following personnel:

F/L J. L. Long	F/O Z. S. Krol	F/O P. Tobolski
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The Tunnel

This brought the total of those killed up to fifty. Near the camp, we built a vault wherein were sealed the cremated remains (which had been sent back to us) of twenty-nine of our dead comrades.

In spite of this German atrocity, the mass escape was not a total failure. Three of the men got back to England and eight of those who were recaptured were sent to concentration camps, whence they later escaped again. The achievement of the former three in outwitting the Germans in the greatest prisoner-hunt of the war should stand forth as a shining example to all the Allied Nations.

I propose to close the brief account of the most tragic episode that occurred at Stalag Luft III by quoting the letter of sympathy we received from the Americans in the adjacent compound.

South Compound,  
Stalag Luft III,  
Sagan, Germany.  
April 7th, 1944.

Group Captain Massey,  
S.B.O., North Compound,  
Stalag Luft III.

Dear Group Captain Massey,

I wish to express on behalf of the officers and men of the South Compound most sincere sympathy to you and members of the Royal Air Forces on the occasion of the recent deaths of forty-one officers of the Royal Air Forces.

Words seem entirely inadequate to express our reaction to this incident. You may be assured, however, that the same feeling that exists among yourselves is prevalent here.

Memorial services are being held in this compound to-day.

C. G. Goodrich, Col.,  
S.A.O., South Compound

## CHAPTER EIGHT

### The Invasion

June 6th, 1944, was one of the most memorable dates in the lives of all prisoners of war, for, with the news of the long-awaited invasion, the idea of freedom became something more than a nostalgic dream.

I was in the theatre queue getting tickets for the forthcoming show, when suddenly people began running madly out of the canteen. We looked on in amazement, thinking that perhaps the place was on fire. Then, just as we remembered that the German radio loud speaker was in there, someone came running up to proclaim the glad tidings.

"Invasion's come!"

The boys' faces lit up as if by magic. A buzz of conversation broke out. The whole atmosphere had suddenly changed.

The first radio announcement was very brief: large forces of British and Americans had landed on the north-western coast of France. Shortly afterwards a communiqué was issued by the German High Command:

"Early this morning the enemy landed parachute and other airborne forces near Trouville, Caen, and along the north-east coast of the Cherbourg Peninsula. This was followed by a large number of ships escorted on both wings by battleships, cruisers and other units, steaming into

the Seine Bay. On approaching the inner estuary, they were attacked by light German naval forces. Some enemy vessels were sunk. The enemy escort bombarded the coast with high explosive and smoke shells without effect. The forces landed in the Caen area are British. American forces were landed near Carentan. Dummy soldiers were dropped by parachute in other places. The object of this was to confuse the Germans."

I arrived back at the hut to find the boys in a state of great excitement. Everyone was talking at once, exuberant, optimistic in their prophesies of an early end to the war.

We knew from the start that the invasion was a success, since the Germans admitted the actual landings and were only able to claim opposition by "light naval forces". The German communiqués were well-known to us for their habit of overstatement of their own (and understatement of our) successes. Nevertheless we eagerly anticipated the British news broadcast. This proved reassuring

in every respect, although, for reasons of security, it did not give many details.

That evening was one of joyful celebration. When the boys felt happy, their immediate reaction was to pay visits to their friends. As the night wore on and enthusiasm grew, sing-songs started up, to ring through the huts until the early hours of the morning.

Material for conversation was provided for many days to come. We heard of innumerable bets won and lost, for the date of the invasion had always been a popular wager. Not all bets were for money. We watched with glee while one unfortunate Polish Officer was led on his hands and knees, with a rope round his neck, from the Polish block to the canteen.

The invasion was in one sense the most important milestone in the lives of prisoners of war. It gave us strength and courage, and enabled us to face the months ahead with renewed hope.

*(To be continued)*

## TRACERS

S. Roberts, of "Stansted", 43 Garth Owen, Newtown, Montgomeryshire, Wales, wishes to get in touch with parents or other relatives of any of the underlisted Canadian officers, all of whom were killed over Arras in June 1944:



Pilot Officer F. A. E. Tandy  
Pilot Officer A. J. Morgan  
Pilot Officer J. K. Swan  
Pilot Officer P. S. Legge  
Flying Officer R. W. Hewitt  
Pilot Officer G. V. Dymond

# Lessons of the Battle of Britain

*(The opinions expressed and the conclusions arrived at by Flt. Lt. Finnie are entirely his own. They do not necessarily represent any body of R.C.A.F. opinion.—EDITOR)*

By FLT. LT. G. K. FINNIE, D.F.C.

## The Invincible Machine

IN THE FALL of 1939 Germany swept through Poland, using a blitzkrieg formula which heralded a new form of air and mobile warfare. Spearheaded by air power, which quickly gained air superiority, the tanks and mechanized vehicles rolled relentlessly through all opposition. In a matter of a few weeks Poland was subdued.

During the next spring, the supposedly powerful French Army was similarly beaten, and Hitler stood victorious at the English Channel. Despite these smashing victories, however, Germany had yet to *prove* to the world (which already considered her a practically perfect military machine) that she understood and could properly apply this new weapon: air power.

After Britain's refusal to negotiate a settlement with Hitler, both Germany and England marshalled forces for the coming struggle for air superiority; and by about July 10, 1940, this war (the Battle of Britain) was under way, with strong German attacks in progress against shipping.

At this time the R.A.F. had an air order of battle of 59 squadrons, in varying degrees of efficiency, and totalling not more than 700 serviceable aircraft. The Luftwaffe had approximately 1015 bombers, 346 dive bombers, 933 fighters, and 375 heavy bombers.

The battle may be roughly divided into four phases, although it is a little difficult to decide exactly when one stage ended and the other began:

Stage 1: July 8 to August 13, 1940. Attacks on shipping

and coastal objectives such as ports, coastal airdromes, radio stations, etc.

Stage 2: August 14 to September 7. Attacks on inland fighter airdromes.

Stage 3: September 8 to September 27. Bomber attacks on London.

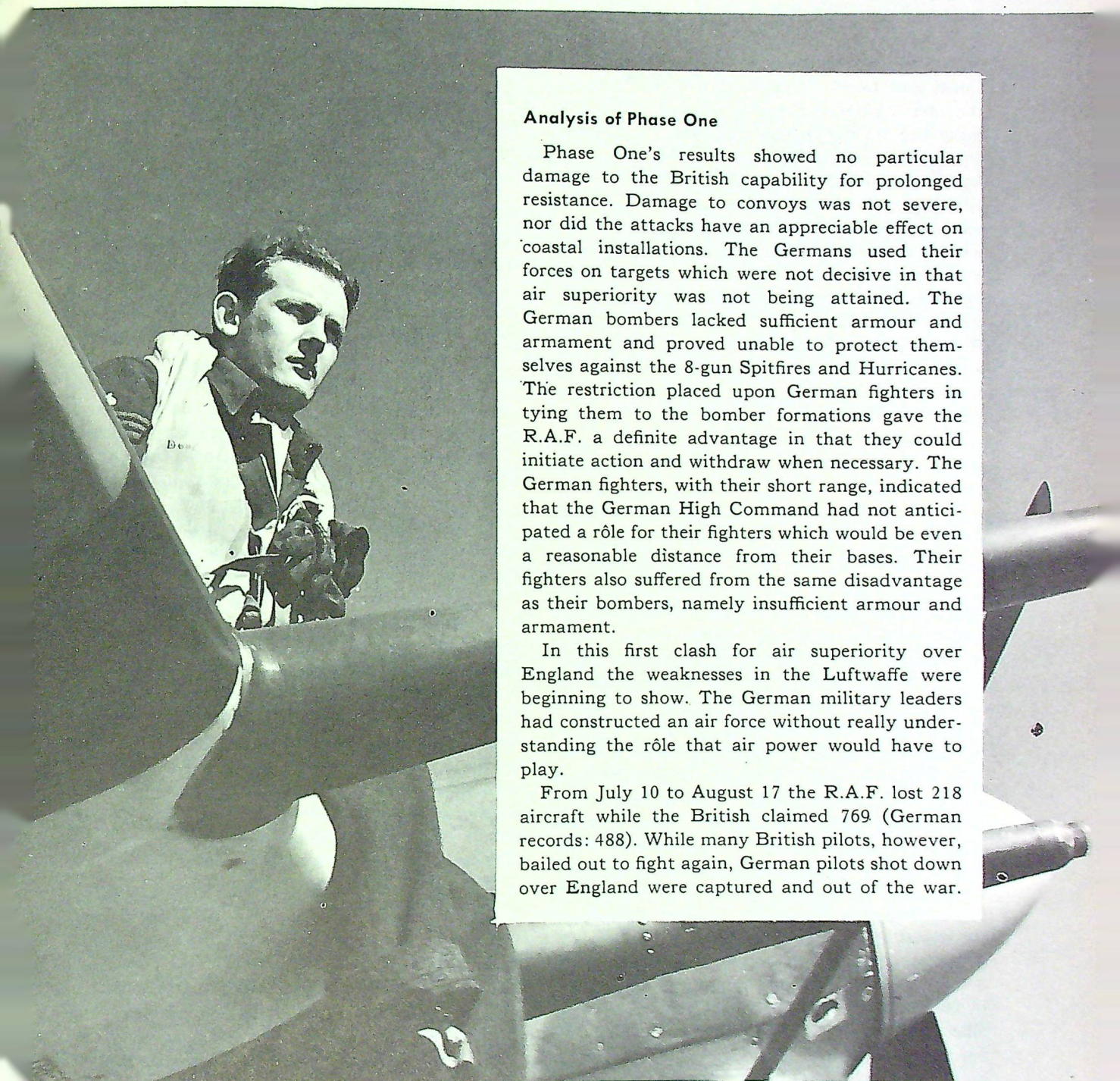
Stage 4: Fighter bomber stage, which lasted to the end of October, 1940.

## Phase One

The main object of this phase was to draw the R.A.F. fighters into battle under adverse conditions, and also to destroy shipping and port installations which would be objectives for the forthcoming land invasion. However, unless bombers accompanied German air formations, the R.A.F. were not adversely baited. Therefore, at the beginning of August the Germans added small bomber forces to their formations. These bombers were used to lure the R.A.F. fighters into battle for the benefit of the large German fighter forces.

The R.A.F. were able to avoid the opposing high-flying escort fighters and inflict heavy losses on the poorly armed and armoured bombers. The Germans then countered by providing close escorts, but in this they erred. German fighters were instructed to stay close to the bombers and could not leave the formation to give combat. Thus the fighters were denied a basic essential: freedom of action and ability to exploit temporary advantages. Further, while the R.A.F. could obtain maximum endurance (because of the radar net-work), the short-ranged German fighters could not escort their bombers throughout the time required for effective bombing runs. Consequently, additional fighters had to be used to meet and escort the returning bombers.

## Analysis of Phase One



Phase One's results showed no particular damage to the British capability for prolonged resistance. Damage to convoys was not severe, nor did the attacks have an appreciable effect on coastal installations. The Germans used their forces on targets which were not decisive in that air superiority was not being attained. The German bombers lacked sufficient armour and armament and proved unable to protect themselves against the 8-gun Spitfires and Hurricanes. The restriction placed upon German fighters in tying them to the bomber formations gave the R.A.F. a definite advantage in that they could initiate action and withdraw when necessary. The German fighters, with their short range, indicated that the German High Command had not anticipated a rôle for their fighters which would be even a reasonable distance from their bases. Their fighters also suffered from the same disadvantage as their bombers, namely insufficient armour and armament.

In this first clash for air superiority over England the weaknesses in the Luftwaffe were beginning to show. The German military leaders had constructed an air force without really understanding the rôle that air power would have to play.

From July 10 to August 17 the R.A.F. lost 218 aircraft while the British claimed 769 (German records: 488). While many British pilots, however, bailed out to fight again, German pilots shot down over England were captured and out of the war.

## Phase Two

About the middle of August the German air formations were gradually switched to another objective—British airdromes between the South Coast and London. The aim was destruction of the installations and the cutting of communications, etc., of the British air bases. The Germans employed about 80 bombers and about 240 fighters. Throughout the battle they had the advantage of the initiative and could employ various tactics, aided by having a wide front from which to deliver their attacks. After having struck a heavy blow and thus forced strong British fighters into battle, another blow would be struck in the same part of the country. Thus the R.A.F. fighters, at the end of their fuel endurance after countering the first blow, could not as effectively deal with the second. The Germans could also build up a heavy force, approach England, and then turn back. When the British fighters sent up to meet them were landing, the Germans would return.

British tactics, however, were anything but ineffectual. Their superior Spitfires were continually employed in drawing off the opposing fighter cover while the Hurricanes played havoc with the almost defenseless German bomber formations.

The gravity of this part of Phase Two is described by Mr. Churchill as follows:

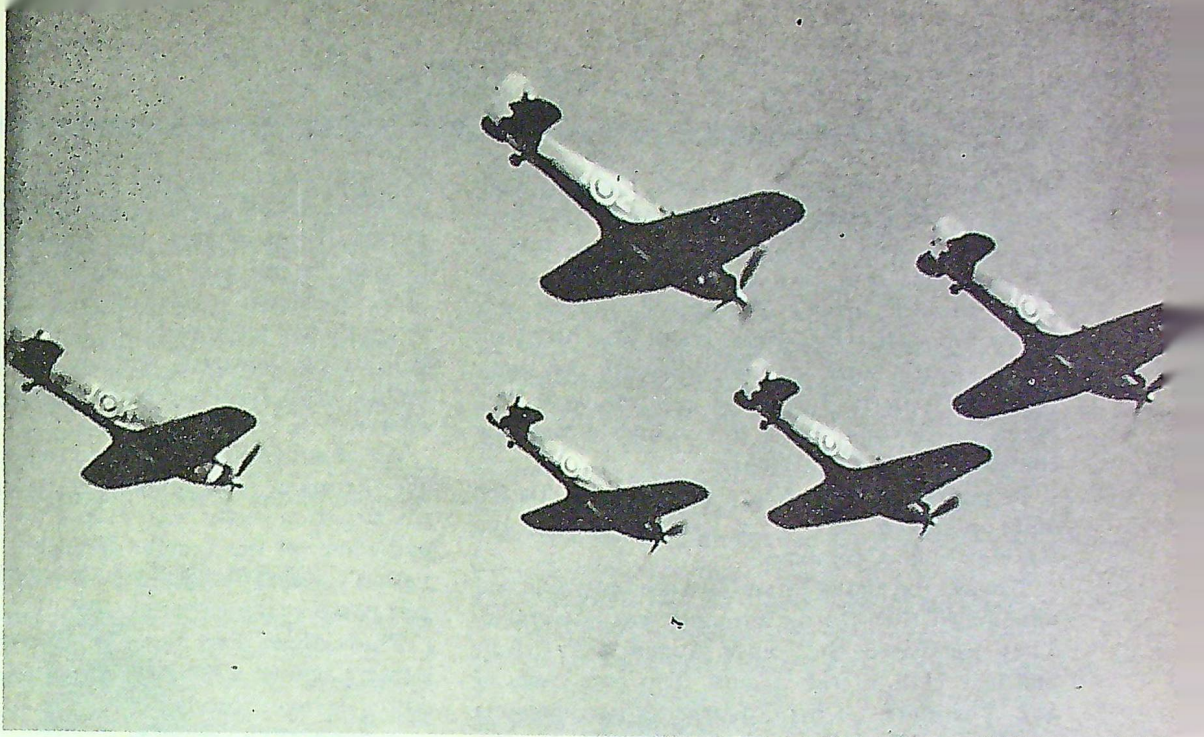
"In the fighting between August 24 and September 6, the scales had tilted against Fighter Command. During these crucial days the Germans had continuously applied powerful forces against the airfields of South and Southeast England. Their object was to break down the day-fighter defence of the capital, which they were impatient to attack. Far more important to us than the protection of London from terror-bombing was the functioning and articulation of these airfields and the squadrons working from them. In the life-and-death struggle of the two air forces, this was a decisive phase. We never thought of the struggle in terms of the defence of London or any other place, but only of who won in the air. There was much anxiety at Fighter Headquarters at Stanmore, and particularly at the headquarters of

Number Eleven Fighter Group at Uxbridge. Extensive damage had been done to five of the Group's forward airfields, and also to the six Sector Stations. Manston and Lympne on the Kentish coast were on several occasions and for days unfit for operating fighter aircraft. Biggin Hill Sector Station, to the south of London, was so severely damaged that for a week only one fighter squadron could operate from it. If the enemy had persisted in heavy attacks against the adjacent sectors and damaged their operations rooms or telephone communications, the whole intricate organization of Fighter Command might have been broken down. This would have meant not merely the maltreatment of London, but the loss to us of the perfected control of our own air in the decisive area. I was led to visit several stations, particularly Manston and Biggin Hill. They were getting terribly knocked about, and their runways were ruined by craters. It was therefore with a sense of relief that Fighter Command felt the German attack turn on to London on Sept. 7, and concluded that the enemy had changed his plan. Goering should certainly have persevered against the airfields, on whose organization and combination the whole fighting power of our air force at this moment depended. By departing from the classical principles of war, as well as from the hitherto accepted dictates of humanity, he made a foolish mistake."

Aircraft production during this phase was only rarely attacked. The Spitfire works at Southampton, and the sheds at Brooklands where Hurricanes were assembled and tested, were exceptions. Some loss in output resulted, but strong anticipatory measures reduced the seriousness of such attacks.

## Analysis of Phase Two

In attacking airdromes the Germans chose decisive targets. The seriousness of these attacks has often been underestimated. Fortunately the Germans did not realize the full success that might have been attained, and shifted their attacks before the cumulative effect of the damage had become too critical. Further, the strength of the R.A.F. was being drained in the defense of these vital targets. It was becoming extremely difficult



to keep units up to strength and to relieve them when exhausted. An effective reserve of trained pilots was still available but they could be made so only by stripping squadrons which were not engaged in the South and Southeast of England. However, morale was still very high and the seriousness of Fighter Command's position was not generally known.

Had these attacks on airfields been continued, along with attacks on the supporting aircraft industry, the outcome might well have resulted in a German victory. This comparatively new and small industry had no cushions to absorb loss. Fortunately, it was hardly attacked.

Although British resistance was continuing fiercely, Goering switched his forces from the vital airfields to the morale target of London. It was probably his failure to carry out a fundamental principle of war, maintenance of the objective, that cost him the Battle of Britain.

During this phase the R.A.F. lost 344 aircraft against 942 claimed German aircraft (German records: 525).

### Phase Three

On Sept. 7 the Germans launched their massed daylight bomber attacks against London with

close escort and high fighter cover. However, they encountered difficulties. Poor ground control made a successful rendezvous over the French coast impossible, thus obviating a well planned co-ordinated attack. The short range of the German fighters (approximately  $1\frac{1}{2}$  hours) dictated that no diversionary approaches to the English coast could be made. This made R.A.F. interception much easier. The German fighters were still required to stay close to their inadequately armed bombers; and above 20,000 feet, at which height the formation flew to avoid flak, the straggling and unwieldy bomber formations were so slow that the fighters could not maintain formation. Thus the long, stretched-out German formations, of which bombers equalled fighters in number, were vulnerable to the Spitfires and Hurricanes, frequently with disastrous results. None the less, by weight of numbers, the Germans did occasionally break through to create a fair amount of damage.

### Analysis of Phase Three

Air Chief Marshal Dowding describes this stage as the most critical of the battle. This may well have been so, for, despite the faulty commitment of the Luftwaffe by Goering (in attacking a target that could not be decisive), the numbers he sent

over England certainly strained Fighter Command to its maximum. This pressure was kept up until 27 Sept. 1940. It then became clear to the Germans that they could no longer sustain their bomber losses. Operational fatigue was heavy amongst the German crews who had been flying steadily and without adequate rest since the latter part of July. The bombers were then taken off daylight raids to continue during the comparative safety of night.

It might be appropriate at this time to see what planning was being carried out by the German High Command.

Toward the end of Phase Two the Luftwaffe had announced that the air situation was favourable. They estimated that since August the R.A.F. had lost 1115 aircraft against their own losses of 467. Therefore, on Sept. 3, Hitler's headquarters announced that September 21 would be the landing-date.

On Sept. 7 an entry in the German War Diary stated: "The Supreme Command intends to bring about the complete destruction of London's harbours, docks, industries, and supplies by means of continuous air attacks and so hasten the decision."

On Sept. 1 the German Naval Staff reported that no claim could be made to the destruction of the enemy air force but that the Luftwaffe had achieved a perceptible weakening of enemy fighter defence. They also thought it would be better if the Luftwaffe would switch its attacks from London to the invasion area. They did not, however, wish to advise the Fuehrer of this because of his known opinion that these attacks on London might be decisive.

On Sept. 14 at the Fuehrer's Conference, Hitler reiterated the need for continued attacks on London. The invasion date was set forward. Raeder agreed that these attacks should be continued regardless of "Sea Lion" requirements. The German Navy and Army were only too happy to let Goering try to win the war outright. Realizing the tremendous undertaking of this venture and the prerequisite for its success, the Navy had no real liking for the gamble.

Goering was sure that England could be

bombed out of the war and that heavy blows against London would bring this about. He convinced Hitler of this. His impatience to attack London caused him to switch to this target too soon. Optimistic reports of the Luftwaffe's success strengthened his arguments. British resistance was still strong, however, and an analysis of R.A.F. sorties flown at that time shows no let up in their efforts.

As air superiority continued to be unobtainable, the Germans soon found out how unfavourable the situation really was. Hopes were placed more and more on the London offensive, while the invasion possibilities gradually dimmed. "Sea Lion" was postponed indefinitely.

Phase three had taken a toll of 191 R.A.F. fighters against a claimed loss of 680 German aircraft (German records: 340).

## Phase Four

In Phase Four—the fighter bomber stage—the Germans aimed primarily to reduce the fighter strength of the R.A.F.

Some formations of Luftwaffe fighters carried bombs, while all carried extra fuel tanks. Thus it was difficult to know which formations to attack, as the bomb racks and extra fuel tanks were indistinguishable at a distance, and the R.A.F. was forced to send up spotter aircraft which would report their observations by radio-telephone.

The strength of the R.A.F. was still being severely strained during this phase, but by the end of Oct. 1940, the German day attacks were abandoned. Their forces concentrated on the night Battle of London, and the Battle of Britain, as such, was officially brought to a close.

## Analysis of Phase Four

The damage done during this phase, when no bombers were used, was small. However, German tactics made intelligent interception difficult. The R.A.F. was being definitely "bent". Air Chief Marshal Dowding states: "Whatever the study of paper returns may show, the fact is that the situation was critical in the extreme. Pilots had to be withdrawn from Bomber and Coastal Commands and from the Fleet Air Arm and flung into

the battle after hasty preparation. The majority of the squadrons had been reduced to the status of training units, and were fit only for operations against unescorted bombers. The remainder were battling daily against heavy odds."

But the Germans could not sustain their losses, particularly as Hitler had already decided upon the invasion of Russia. England (for the moment) was not to be an invasion target.

This phase cost the R.A.F. 162 aircraft against a claim of 307 German aircraft (German records: 380).

### Evaluation of the Battle of Britain

To understand the reasons for this great British air victory it is necessary to go back to the Spanish Civil War, where German operational experience first was gained and her doctrines evolved. Galland and Moelders were able to improve the Luftwaffe to a great extent by the experience gained in this testing ground. Nevertheless some fatal deductions were made. Successes gained by the He. III and the Do. 17 in bombing operations, outstripping inferior Republican fighters, led the Germans to minimize armour and armament. Nor did the fighting in the Polish and French campaigns (because of weak opposition) lead the Germans to change their views.

This same weakness applied to the Ju. 87 Stuka dive-bomber. This aircraft, completely useless unless command of the air had been obtained, had become a symbol of air power at its height, a weapon which could force a passage through all opposition and enable ground forces to roll through. These bombers were massacred by the British.

Armour and armament were also deficient in the German fighters. Lessons from Spain had soon shown that two 7.9 mm. machine guns were inadequate. These were increased, but apparently only to a degree required against weak opposition. The normal German armament in the Battle of Britain was 4 machine guns, or 2 machine guns and 2 cannons. The British fire-power of 8 guns was therefore decisive.

What lessons can we learn from these German mistakes? Obviously, victory in a battle or a

campaign does not necessarily mean that the methods and weapons employed by the victor are correct or would be successful in the future. Evaluations, based upon results, can therefore be disastrous. Such was the German experience. Only by analysing the cause and effect can correct lessons be learned. The Germans based their lessons upon results and did not correct fundamental faults. They did not analyze their success in terms of weak opposition and look for flaws in their own basic methods. Hence faulty deductions, based upon success, meant that the Luftwaffe was out-gunned, under armoured, and ill prepared to fight a first class air force in a battle for air superiority.

The German generals, steeped in the traditions of land warfare, had found a new weapon to advance their military might. They designed their air force as an arm of the army. It was designed to carry out support work and not to defeat another air force. They thought that numbers, not quality, would be decisive if their air arm was challenged, and that their army would quickly overrun enemy bases. When their army was stopped by the channel and their air force defeated over England, they were in no position to subjugate Britain.

In this prime endeavour to attain air superiority there should have been no variation of effort. The basic principle of war (maintenance of the objective) should have been adhered to. Goering compromised throughout the whole battle. Had the Germans been directed by someone who understood air warfare, the targets would have been the destruction of enemy aircraft in the air and on the ground, airfield facilities, aircraft industries, aero-engine and airframe plants and associated factories. In general, he would have followed the same directive given our allied forces in "Point-blank", when the Western Allies set out to obtain mastery of the air over Germany.

The over-confident Germans tried to accomplish at least three objectives at once:

- To obtain air superiority.
- To destroy shipping and port facilities, so that, in conjunction with the U-boat war, England would be starved out.
- By attacking London and morale, to bomb England out of the war.

These tasks they were not prepared to accomplish. The many fingers and under-currents of the German High Command were at work—Admiral Raeder with his invasion requirements and U-boat war (hence his arguments for attacking harbours, etc.), the requirements for air superiority for invasion, and Goering's desire to win the war outright by bombing London. All these obscured and compromised the prime objective—air superiority.

Air Chief Marshal Dowding had stated that the Air Staff estimate of the number of fighter squadrons necessary for the defense of England was 52. When the Battle of Britain began, 59 squadrons were available, but not all of these were up to scratch. Therefore, there was little leeway between British estimates and availability. The pressure almost cost Britain the war.

Two squadrons had been lost in the sinking of the aircraft carrier "Glorious" while she was returning from Norway. Prior to Hitler's move against the Low Countries, six squadrons were in France. Four more were sent when the fighting began, then the equivalent of two more, then eight half-squadrons (say four). Other squadrons were also engaged in this fighting from their British bases. Between May 8 and 18, 1940, 250 Hurricanes were lost. Dunkirk continued the attrition and left the R.A.F. with only three daylight fighter squadrons which had not seen action and with many others in need of rebuilding. The pressure was terrifically heavy and Britain was on the thin line of her necessary defense requirements. As the fighting in France became hopeless and squadrons were still being sent, Dowding was personally interviewed by the Cabinet and the decision was reached to send no more squadrons from the country. Undoubtedly this was one of the great decisions of the war. However, England had broken up her fighter strength, and in doing so had helped to reduce her margin of victory to the smallest degree.

The morale of the R.A.F. Fighter Command, under indomitable and intelligent leadership, stood up under a test which was severe in the extreme. The crews had the advantage of fighting over their own homeland and of knowing that, if they were able to bail out, safety awaited them.

Of the total number of British pilots shot down in this battle more than one third lived to fight again.

The advantage of quality over quantity was clearly demonstrated. The Germans, who had rushed their aircraft production prior to the war in order to get a numerical advantage, froze their production. Thus the British, who started later in the game and with a clearer understanding of the rôle to be played by their fighters, were able to incorporate superior performance. It is evident that quality in the future will play an even more important rôle. Weapons are becoming more and more complicated and the quality of both the operator and the machine will be decisive.

The need for replacements was amply stressed during this battle. By the end of Phase Two, casualties were so heavy that fighter pilots were not being produced in sufficient numbers to fill the gaps. Flying Training Units and Operational Training Units could not supply the demand. Thus England's survival was being jeopardized by an inadequate pipe-line for fighter pilots.

At the outbreak of war, the R.A.F. Fighter Command had the equivalent of 34 squadrons, but all were not fully trained or equipped. Despite the very real threat of war, which had been apparent for some years prior to 1939, England had neglected her minimum defense requirements. Then came the period of the "phony war", and Britain was given additional time to build up her strength; but even so, when the Battle of Britain started, she was only barely ready for the fight which was thrust upon her. Will we in the future be given such definite warning of aggression?

In this age of technological advances and weapons of mass destruction it is quite possible for any nation to strike another without any warning at all. Science may produce weapons which can make any large-scale preparations for war, such as we knew in the past, unnecessary.

In the Battle of Britain, for the first time in history, two powerful air forces clashed in a fight for air superiority. Had England lost she would have been invaded, but the Germans could not invade with any assurance of success unless they first won the air battle. This lesson (that the air battle must be won before success can be assured)

was strengthened by all subsequent campaigns of the war. Whoever won in the air continued on to win the campaign. Thus military men are now agreed that **air superiority must be the first priority not only of our air units, but of all military and economic forces which are being directed towards final victory.**

We must remember this, however: because a prolonged and major fight for air superiority took place during the last war, it does not necessarily follow that a similar fight will take place in the future. Air superiority may be "inherited". A decisive weapon—if it can penetrate the enemy's defenses and be delivered to the enemy's vital centres in sufficient quantity—can produce chaos. Thus over a period of time, the force making these attacks would inherit air domination without the

preliminary of a major air war . . .

Although there are many lessons to be drawn from the Battle of Britain, they are of little value unless they can be intelligently projected into the future. Many of these lessons point convincingly to one condition—a strong force in being. We may not in the future have any warning of impending disaster and the first blow might be the decisive blow. There can then be only one answer. Our peace-time force must be able to carry the war back to the enemy and strike decisive paralyzing blows. We must be able to smash the very source of his power, his war industry.

Only with such a force can our security requirements be met. It is our only guarantee in war, and is our best guarantee for peace. We cannot afford anything less.



## An Apology

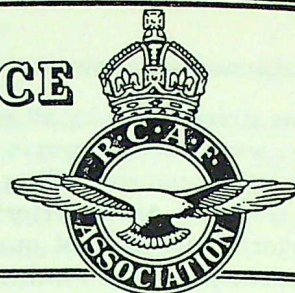
Among the considerable volume of material that was submitted to "The Roundel" for the B.C.A.T.P. issue at the end of 1949, were a few items for the receipt of which no acknowledgement was made. "The Roundel" therefore extends apologies to Sqn. Ldr. W.E. Stillman, Flt. Sgt. Buchanan of No. 2 S.D., Flt. Sgt. D. H. Waitt, Cpl. C.J. Strong, and any other contributors to whom replies may not have been sent.

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# ROYAL CANADIAN AIR FORCE

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## Association



As this material leaves our office on its way to "The Roundel", we are still waiting to hear from Sgt. Shatterproof's old comrade-in-arms, Cpl. Clam, concerning his progress in the formation of the Sockeye Wing. We can only assume that the Nootka Nightingale has not yet got his engine started. With the temperatures they've been having out west, that doesn't surprise us.

Funnily enough, despite our personal loathing of the cold and snow, we wouldn't mind having a bit of this year's freakish West Coast weather here. Ottawa's unnatural warmth this winter is making the Editor of "The Roundel" pretty hard to take. Normally he's fairly quiet in the winter. Being one of the world's most willing (and least scientific) skiers, he's usually crawling around by this time in a state of battered exhaustion. This year, however, since to date (Feb. 25th) he's only had two week-ends on the boards, he's still comparatively intact and goes around thumping his chest, clamouring for more snow, and with nothing to take his mind off the deadlines we are supposed to meet.

Which reminds us that we'd again like to draw all members' attention to the fact that material for "The Roundel" must reach this office not less than seven weeks before the 15th of the month in which it is expected to appear. For example, material for the June issue should be in our hands not later than April 25th.

### Wing News

#### No. 251 (Madawaska) Wing, Edmundston, N.B.

Early in December, the Wing held its Charter Night in the form of a general meeting and social

evening, with the official presentation being made by Air Vice-Marshal A. L. Morfee, C.B., C.B.E., Dominion 2nd Vice-President. In conjunction with the Charter Night, the Wing held a small raffle which realized a net of about \$250. A very creditable showing for a comparatively small community, and indicative of the esteem in which this Wing is held.

#### No. 413 (Air Force City) Wing, Trenton, Ont.

Wednesday, January 11th, marked the official formation of the Air Force City Wing of the R.C.A.F. Association at the Queensway Hotel when Air Vice-Marshal C. R. Slemon, C.B., C.B.E., A.O.C. Training Command, presented the Charter to the President-elect of the Wing, Mr. R. C. Kent.

"To be good citizens is one further aim we should add to the ideals of this Association" said Air Vice-Marshal Slemon before presenting the Charter. "At one time in the R.C.A.F. we felt that we were a race apart, and civilians felt that they were apart from us. What a mistake we made! When war came it was the civilians who saved the day.

"Let's not think of civilians and Service people as two entities and with separate responsibilities. Those not in uniform carry a great load. Those in uniform also carry a great load. If we are strong enough we have a good chance of avoiding war, but citizenship and the sharing of responsibility among all of us is of the greatest importance."

Air Vice-Marshal Slemon then read the aims of the Association and pointed out there are many things the Wing can do. He mentioned assistance to the not yet completed Trenton Memorial



*Left to right: Mr. J. C. West, Air Vice-Marshal Slemon, Mr. R. C. Kent, Senator W. A. Fraser.*

Hospital and promotion of the local Air Cadet squadrons as worthy undertakings. "The R.C.A.F. at Trenton is there for you to call upon for assistance at any time, just as we are going to call upon you," he said.

Mr. Kent introduced Senator Wm. A. Fraser, who had been asked to speak to the new Wing.

Senator Fraser declared that he was wholly in accord with the remarks of Air Vice-Marshal Slemon in urging the Wing to promote the duties of citizenship. "A member of the R.C.A.F. is a member of a welfare state", he said. "The better the government, the better it will treat its civil

servants and members of its defence department and the more secure the country will be. As a member of the House of Commons I saw the growth of the R.C.A.F. Even when the war clouds were gathering, it was a battle in the House to get our defence estimates through. Earlier, in 1926-27, we were endeavouring to lay the basis of defence in the establishment of R.C.A.F. bases across Canada."

Of Trenton and district, he observed that there was no better place in Canada in which to live. He urged the members to practice good citizenship in all their pursuits, individually and collectively.

"The closer we stick to the teachings of Christ—the man or God," he said, "the more we stick to the good things in life for ourselves and for our fellow men."

Later, Hon. Captain the Rev. McConnell said that the Trenton Wing should be one of the strongest of the Association in Canada . . . "You are starting in the right way—in the dignity and prestige and whole atmosphere of the R.C.A.F. in which you served. Since the end of hostilities such associations as this have been needed. Here you can enjoy fellowship and reminiscence, and in good company there are many good things that you can accomplish."

He offered his full support to the Association and told the members that as they grow in numbers and prestige, so they would grow in the respect of the community.

#### **No. 418 (Belleville) Wing**

On the evening of January 13th, in the S.A.C.O. club rooms on Front Street, No. 418 (Belleville) Wing was officially presented with its Charter by Air-Marshall G. E. Brookes, C.B., O.B.E., the Ontario Group Provisional President.

Two excellent films were shown and refreshments were served, followed by a general sing-song with Mr. H. MacDonald at the piano.

#### **No. 500 (City of Winnipeg) Wing**

No. 500 (City of Winnipeg) Wing has been noted for consistently good turn-outs at its meetings. This, in our opinion, is largely due to the manner in which notices of meetings are prepared, and much credit is due to Mr. Jack Thornton. They are done in the form of a well-written bulletin prefaced by a humorous sketch.

We suggest that Wings which are experiencing difficulty in getting members to turn out for meetings, drop Mr. Thornton a line and request that he forward them a sample of a notice of a typical Winnipeg Meeting. His address is: 131 Douglas Park Rd., St. James, Manitoba.

#### **No. 602 (Saskatoon) Wing**

This is the first mention of the activities of No.

602 (Saskatoon) Wing. But still water sometimes runs deep. Our Secretary, Mr. Bob McCartney, in a recent visit to the Prairie Provinces, dropped in on the Saskatoon Wing, and much to our delight found that they were very much alive. It only goes to show that if you don't tell us about your activities, we can't tell others.

The Wing has held dinners and dances, now sponsors the local Air Cadet squadron, and has put on broadcasts from the local radio station.

On February 16th, they had as guest speaker Major-General G. R. Pearkes, V.C., who in the course of his address emphasized the need for concentrating on Air Power as Canada's first line of defence.

#### **No. 600 (Regina) Wing**

A recent report from the Secretary of the Regina Wing states that they put on a stag which was an outstanding success. They experienced a turn-out of 300—a fact which, says the Secretary, was primarily due to good previous publicity as well as to the efforts of an energetic entertainment committee. After paying for food, rental of equipment, and the services of a pianist, the Wing realized a substantial profit.

#### **No. 700 (City of Edmonton) Wing**

The following is an extract from a letter received from Mr. Jim Rowand, Secretary of No. 700 (City of Edmonton) Wing.

"Our first general meeting in the New Year was held on January 9th at the Legion Memorial Hall. The weather was extremely cold but a good representative number of our Wing membership were out to hear Air Vice-Marshall Dunlap's very excellent address on 'Trends of the Royal Canadian Air Force'.

"At this meeting, plans were made for our annual general meeting to be held on February 13th at the Legion Memorial Hall, and a Nominating Committee was elected with Mr. Ronald White as Chairman. President Ferris outlined the procedure for the Group and National Conventions and asked all members to consider any matters that should be brought up at them.



*Left to right: Air Vice-Marshal G. R. Howsam; Mr. E. Borgal, Sec'y; Mr. T. C. Segsworth, President; Mr. F. Sutherland, Vice-President.*

"Our car raffle is in full swing but ticket sales have fallen off due to this very cold weather. However, the draw won't be made until April and we have the car paid for, so we should realize a fair profit on this venture. Our Wing is in a fairly sound financial position. We haven't had to levy Wing dues as yet but the new Executive may feel they are necessary for the coming year."

#### **No. 702 (Lethbridge) Wing**

About a hundred ex-airmen, their wives and friends, braved sub-zero weather on January 19th to attend the Wing Charter night.

The meeting was held in the lounge of the Lethbridge Flying Club, known to many ex-Service men as the officers' mess of No. 8 Bombing and Gunnery School.

The featured speaker of the evening was Lieut. G. B. Shockley, U.S.A.A.F. Base, Great Falls, Montana, who described his duties as a Berlin Air-Lifter. Air Vice-Marshal G. R. Howsam, C.B., M.C., President of the Alberta Group, presented

the Charter to President T. C. Segsworth. Short addresses were given by Wing Cdr. Coleman of N.W.A.C., Mr. Bob McCartney, Dominion Secretary, and by Capt. J. Slatterlee of the U.S.A.A.F.

During the course of the evening, honorary membership pins were given to Messrs. Fred King, P.O. Enerson, and A. E. Neils, in appreciation of their work on behalf of the Association. Mr. E. R. McFarland, President of the Flying Club, was in Ottawa on R.C.F.C.A. business at the time and expressed regrets at being unable to be there for the presentation.

The Wing meets monthly at the Flying Club lounge by courtesy of Mr. McFarland and the Club's Directors.

#### **New Wings**

##### **No. 102 (Colchester) Wing, Truro, N.S.**

We owe this Wing an apology. We find, on checking back, that by some oversight we have never announced the formation of the Colchester Wing in Truro. Its Executive is as follows:

President:	F. W. Young
1st Vice-President:	J. E. Comeau
2nd Vice-President:	J. Kendrick
Secretary:	G. M. Gillespie

Treasurer: D. T. O'Brien  
 Additional Members: E. L. Wilson  
 R. E. Chisholm  
 N. P. Roode

## No. 103 (Cabot) Wing, Sidney, N.S.

As a result of good organization work on the part of Group Captain S. B. Rhude, M.B.E., a wing of the Association was formed in Sidney on January 30th. The Executive elected at this meeting consists of:

President: C. R. MacDonald  
 1st Vice-President: S. B. Rhude  
 Sec'y Treasurer: Bruce MacMillan

## No. 104 (Liverpool) Wing, Liverpool, N.S.

Due to the initiative and hard work of Mr. A. F. Wigglesworth, No. 104 (Liverpool) Wing has been formed. On 4th February they held their organization meeting and the following Executive was elected:

President: Armand F. Wigglesworth  
 Vice-President: Ross F. Gardner  
 Sec'y Treasurer: Harold Smith  
 Additional Members: Wilbur McCoombs  
 Marguerite Hartlen  
 Edward Ross DeMolitor

## No. 105 (Cumberland) Wing, Amherst, N.S.

The Amherst Wing owes its formation, we understand, chiefly to the efforts of Mr. Augustus J. Burton. The organizational meeting was held on February 9th, where the following Executive was elected:

President: James R. Crisp  
 1st Vice-President: Gordon Baty  
 2nd Vice-President: Agustine Van Snick  
 Secretary: Augustus J. Burton  
 Treasurer: John E. Morrell  
 Additional Members: Gordon A. Hart  
 Thomas N. Brown  
 Kenneth L. Thompson

## In Montreal—

As a result of a general meeting held under the Chairmanship of Group Captain Hartland Molson

on February 8th, three new Wings have been formed. Through the courtesy of the R.C.A.F., the urban quarters of No. 401 Squadron have been made available to Wings of the Association on Wednesday night of each week. The new Wings, with their executives, are:

## No. 304 (Beaver) Wing

President: P. C. Darrell  
 1st Vice-President: C. R. Wolfe  
 2nd Vice-President: W. R. Ellison  
 Secretary: Miss Mary T. Jamieson  
 Treasurer: R. Payette  
 Additional Members: Harry T. Hesselton  
 Robert C. Gillespie  
 Miss B. Roy

## No. 305 (City of Montreal) Wing

President: Danny Fortune  
 1st Vice-President: Bernard A. Gillies  
 2nd Vice-President: G. L. Brady  
 Secretary: R. P. Manitt  
 Treasurer: W. K. Chester  
 Additional Members: J. H. Griffith  
 G. H. Thomassin  
 A. S. Hunter

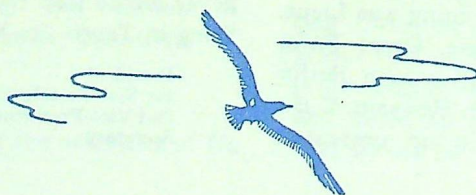
## No. 306 (Maple Leaf) Wing

President: Andrew G. McNiece  
 1st Vice-President: C. Greig Harrison  
 2nd Vice-President: Marjory Irene Dutton  
 Secretary: Gerald Copeman  
 Treasurer: George R. Ellis  
 Additional Members: Homer Girard  
 Wm. D. Harrison  
 George Smith

## No. 422 (Leamington) Wing, Leamington, Ont.

Our thanks are extended to Mr. Morgan Brown of Leamington, who carried the load in getting this Wing organized. The organization meeting was held on January 5th. The Executive elected was:

President: Frank G. Martin  
 1st Vice-President: David E. Law  
 2nd Vice-President: Earl J. Cooper  
 Secretary: George S. Dobbins  
 Treasurer: Robert W. Ross  
 Additional Members: Tom Cooke  
 George Brett  
 Gerald Wigle  
 Peter Boxer



# No. 405 Squadron

(Prepared by FLT. LT. T. A. PIDDINGTON,  
R.C.A.F. Reserve)

NO. 405, THE FIRST BOMBER SQUADRON of the R.C.A.F. overseas, was formed at Driffield, Yorkshire, on 2 April 1941, and equipped with Wellington II aircraft. The unit carried out its first operation (an attack on the marshalling yards at Schwerte) on the night of 12 June 1941 and from then to the end of the war in Europe it was actively employed on offensive operations over land and sea, participating in most of Bomber Command's heaviest and most telling assaults on targets in Germany, the occupied countries, and northern Italy.

The success of No. 405, like that of any other unit, was due in no small measure to the personality and efficiency of its commanding officers. Its first C.O., Wing Cdr. Gilchrist, D.F.C., led the squadron through its formative stage and its first six weeks of operations, until he went missing. He was succeeded, after a short period during which Sqn. Ldr. R. C. Bisset, D.F.C., held temporary command, by another R.A.F. Canadian, Wing Cdr. R. M. Fenwick-Wilson, A.F.C., who led the squadron until February 1942, when he handed over command to one of his flight commanders, Sqn. Ldr. J. E. Fauquier, of Ottawa, the first member of the R.C.A.F. to command a bomber squadron on active operations. Wing Cdr. Fauquier, after a notable tour that won him

the D.F.C., was replaced in August 1942 by another flight commander of No. 405, Sqn. Ldr. L. G. D. Fraser, who, in turn, left in November 1942. Wing Cdr. Fraser was awarded the D.F.C. after completing 22 operational sorties in which he displayed remarkable fortitude, daring and tenacity. The next C.O. was Wing Cdr. A. C. P. Clayton, D.F.C. and Bar (R.A.F.), who was welcomed as a capable successor with a wealth of experience in bombing operations and who led the squadron with distinction for five months.

In June 1941 No. 405 joined in the series of heavy raids which Bomber Command had just started on the Ruhr, the Rhineland, and the ports of Northwest Germany. The same month brought a move from Driffield to Pocklington, which was to be the squadron's home for more than a year.

Two operations of special kind in July are worthy of mention. These were attacks on the German battleships which lay in Brest harbour.



Wing Cdr. J. Fauquier. (All ranks mentioned are those held at time photographs were taken.)



*Wing Cdr. L. G. Fraser.*

On the night of the 4th/5th, which marked the first raid of this sort undertaken by the R.C.A.F., No. 405's aircraft did so excellent a job that the A.O.C. No. 4 Group told them theirs "was easily the best group show last night." A similar raid, carried out in daylight on the 24th, proved both spectacular and disastrous for No. 405. Its nine Wellingtons were among the last bombers to reach the Gneisenau, which was their particular objective, and five of them were engaged by enemy fighters which shot down two over the target. One of these was piloted by the C.O., Wing Cdr. Gilchrist, who was taken prisoner and later escaped to Switzerland. Sgt. Craig's gunners shot down two Me's, but his aircraft was so badly damaged that he was forced down in the sea near the English shore, where the crew scrambled into their dinghy and were picked up by a motor boat. Aircraft "Q" was attacked by a Me. 109 which the rear gunner, Flt. Sgt. R. E. Parsons (R.A.F.) shot down as it broke away. "L" for "London", after making what appeared to be a direct hit on the Gneisenau, was fired on by a He. 113 and a Me. 109. The rear gunner was mortally wounded and the whole aircraft so shot up by cannon and machine gun fire that it made a crash landing at Plymouth. In all, No. 405 lost four aircraft and

two crews, and claimed three enemy aircraft shot down. Sqn. Ldr. W. B. Keddy received the D.F.C. and Flt. Sgt. Parsons the D.F.M. for their services in this raid.

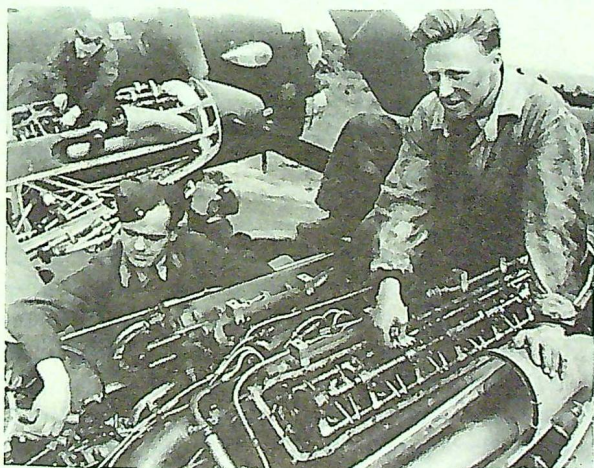
However, the first member of the unit to distinguish himself especially, though the war was over before his achievements became known, was Sgt. V. R. J. Slaughter, R.A.F.V.R., crew member of an aircraft shot down over Holland on the night of July 14th/15th during a bombing mission to Hanover. Sgt. Slaughter was able to bale out, and from the first day (when he was seen by a German sentry whom he shot and threw into a canal) right on through nearly four years of war his experiences, if recounted in detail, would fill a book. He jumped from moving trains, hid with Dutch farmers, concealed himself in the wash-room of German officers' quarters, obtained civilian clothes, warrants and money, helped dig tunnels out of prison camps, and broke away from a marching column. With each recapture serving only to spur him on to further attempts, he continued these exploits right up to 26 April 1945, when he got away from a stationary railway truck and four days later, aided by a Dutch family, made contact with the 6th Airborne division. In December 1946 he was awarded the M.B.E.



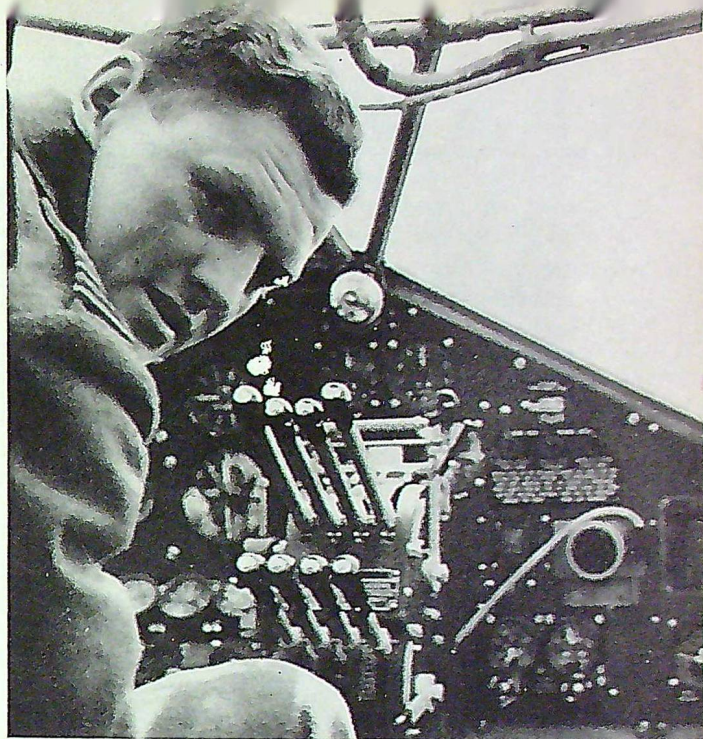
*A party in the spring of 1944*

Meanwhile operations had continued for the crews of No. 405. On the last night of November 1941 they took part in a major raid on Hamburg. Sqn. Ldr. Bisset reported after an hour's flight that he was abandoning the operation, presumably because of mechanical difficulties. For another hour further signals were received from his aircraft, and then silence. An intensive sea-search discovered no trace of his crew. Later the award of a Bar to his D.F.C. was published, in recognition of his gallantry, devotion to duty, and outstanding qualities of leadership.

Early in 1941 the R.A.F. had brought into use a 4,000 lb. bomb. No. 405 first made use of this terribly destructive missile in an attack on Bremen on 17 January 1942. Sqn. Ldr. Fauquier, whose "J" for "Johnny" was carrying one of the new bombs, released it by hand, the mechanical release having failed, and saw it burst with an enormous flash in the centre of the town north of the docks. An hour after take-off on this same raid a message was received that Sqn. Ldr. Keddy was returning because of engine trouble. Then the Observer Corps reported that a Wellington was down in the sea, south of Flamborough Head. Searches by aircraft and Air Sea Rescue boats found nothing. Next morning, however, word came that a destroyer had picked up two of the



*Left to right: LAC G. M. Reid, AC1 A. A. McMurachy*



*Flt. Lt. W. H. Swetman at the controls of a Halifax.*

crew, Flt. Lt. D. R. S. Scrivens (R.A.F.) and Sgt. R. L. Turnbull, suffering from exposure and frostbite after fourteen hours adrift in their dinghy.

No. 405 took part in the unsuccessful attempt to intercept the German battleships in their flight up the Channel on 12 February 1942, and March found its crews involved in some of the early night attacks on industrial targets in occupied France. In April the squadron was withdrawn from operations for five weeks to re-equip with Halifax II aircraft. But the new "Hallies" and their crews were ready to join in the first three of the famous 1,000-bomber raids on May 30th and June 1st and 25th, when the principal targets were Cologne, Essen and Bremen respectively. After bombing Bremen from 12,500 feet, Wing Cdr. Fauquier dived to 100 feet over the city and attacked two pairs of searchlights and light flak guns which had engaged him, silencing one gun and extinguishing one light. There followed several more smaller scale attacks on Bremen. That of July 2nd called for a maximum effort from the four R.C.A.F. bomber squadrons then operating. No. 405 had no losses, but a Halifax with Sqn. Ldr. L. G. D. Fraser at the controls encountered heavy flak while crossing the Dutch

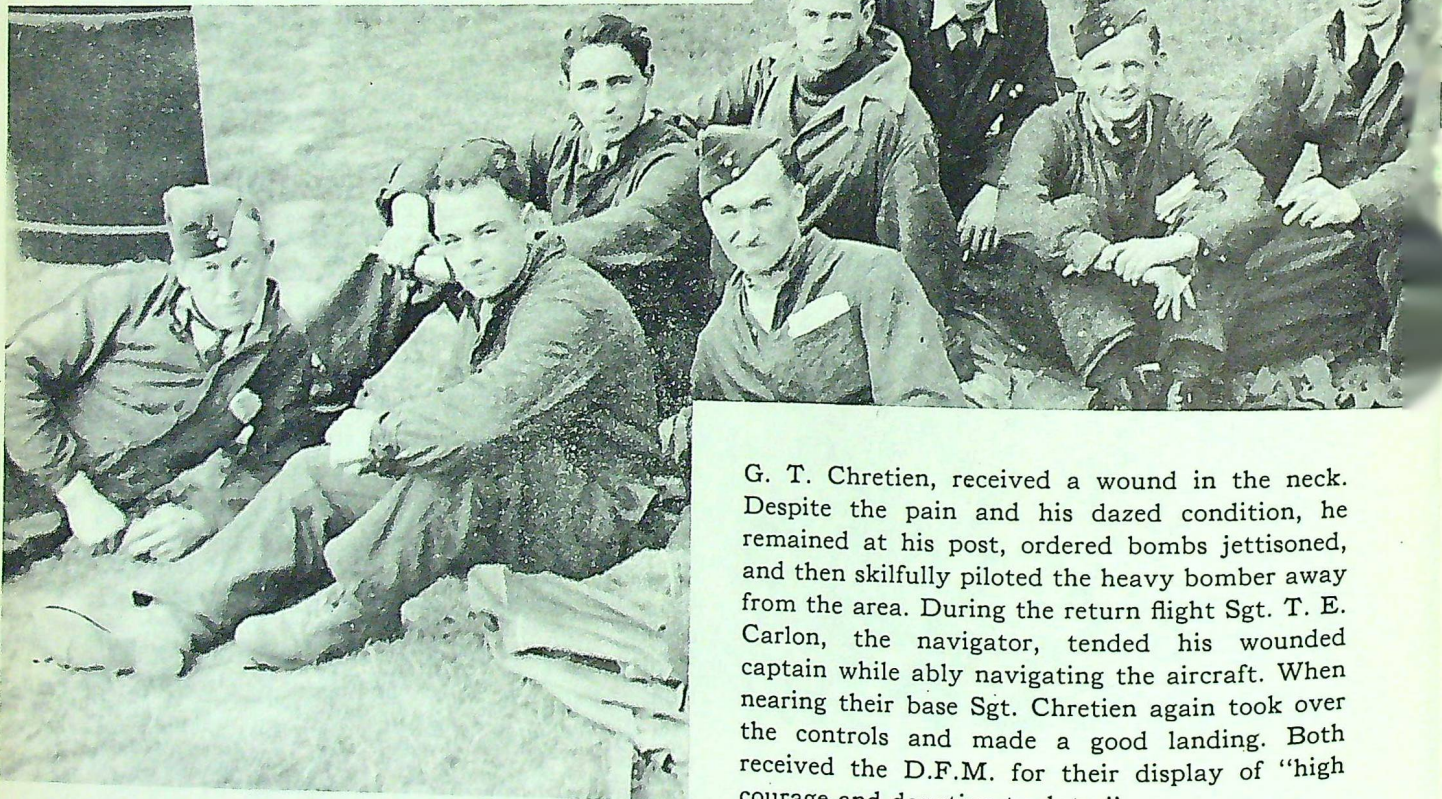
## The Roundel

coast and was thrown on its back by one shell which burst close under the right wing. Out of control, the heavy bomber spun for 3,000 feet before the pilot could right it again. A month later when Sqn. Ldr. Fraser took over from Wing Cdr. Fauquier, his place as "A" Flight Commander was taken by another rising young bomber pilot, Flt. Lt. W. H. Swetman, a native of Montreal, who soon after received a D.F.C. for his bold and resolute leadership in numerous raids against German targets. At the same time the squadron moved from Pocklington to Topcliffe.

October opened with a very costly raid on Flensburg. Three of the eight aircraft despatched by No. 405 failed to return from this low level attack, in which intense light flak and dazzling

searchlights proved serious obstacles. Pilot Officer C. W. Palmer's outstanding effort on this operation won him a D.F.C.; and his flight engineer, Sgt. H. J. Anderson, who carried on with his duties in spite of wounds received over the target, was awarded the D.F.M. Attacking Krefeld under poor conditions on the following night, one of our aircraft received a flak burst under the port wing just as one of the starboard motors failed. The aircraft became uncontrollable and lost height from 11,000 feet to 1,000 feet before Pilot Officer J. H. M. MacIntosh regained control. He pulled out at about 100 feet and flew back to base at 500 feet. On the night of October 13th, Halifax "U" for "Uncle" was hit by heavy flak when approaching the target at Kiel, and the pilot, Sgt.

Left to right: (front row) LAC G. A. Greves, LAC F. Kelso, LAC V. Holmquist, (back row) Cpl. A. G. Turcott, LAC F. H. Stevens, LAC J. B. Agnew, LAC K. J. Murray, LAC G. F. Hastridge



G. T. Chretien, received a wound in the neck. Despite the pain and his dazed condition, he remained at his post, ordered bombs jettisoned, and then skilfully piloted the heavy bomber away from the area. During the return flight Sgt. T. E. Carlon, the navigator, tended his wounded captain while ably navigating the aircraft. When nearing their base Sgt. Chretien again took over the controls and made a good landing. Both received the D.F.M. for their display of "high courage and devotion to duty."



*Radar Section, Sept. '44*

On the 23rd No. 405 sent ten Halifaxes to attack Genoa in conjunction with the Eighth Army's operations in North Africa. Two days later No. 405 sent a detachment of fifteen aircraft with crews and ground staff to Beaulieu, in Hampshire. In its new location the squadron operated for over three months as a unit of Coastal Command. On the 29th, what was probably the unit's worst single disaster occurred when a Halifax which had been detailed to fly fifteen personnel to their new base, crashed and burned five minutes after take-off from Topcliffe, killing all its occupants instantly.

During this period with Coastal Command, No. 405 sent out Halifaxes in threes or fours nearly every day on patrols over the Bay of Biscay. Most of them were uneventful, but incidents enlivened what were otherwise, especially for bomber crews, very monotonous flights. During November there were five sightings of enemy submarines, two of which were attacked, and several strikes at enemy shipping, including one in daylight against a submarine and four ships at the mouth of the Gironde. Several times there were encounters with FW. 190's, Ju. 88's and Arados which the Germans sent out to intercept our patrols. After the Gironde attack Wing Cdr.

Fraser dived to sea level and, with only three engines running, outdistanced three Arados attempting to pursue him. On the 26th a Halifax, returning from a patrol with only two serviceable engines, made a forced landing at St. Eval but bounced off the runway and caught fire. All except the mid-upper gunner got free; and the captain, Sgt. R. A. Symes, and flight engineer, Sgt. A. J. Nichols, with great courage returned and after an effort extricated the trapped man just before the gas tanks blew up. For this gallant action both sergeants were awarded the B.E.M.

December and January were fairly quiet months, in which the weather and a grounding for a technical check-up cut down the number of patrols. On December 9th a Halifax engaged in shadowing an enemy convoy was attacked by two Ju. 88's, both of which were destroyed by the bomber's gunners. February 1943 was a more active month, with 98 sorties, the outstanding incident of which was Flying Officer W. W. Colledge's bout with four Ju. 88's, which attacked his aircraft together, two on either side. By means of a skillful corkscrew dive and excellent work on the part of his gunners, who fought off numerous individual attacks, Flying Officer Colledge finally was able to gain cloud cover and returned to

base "after a brilliant duel with superior numbers." He was awarded the D.F.C., and Sgt. E. A. Taylor, his mid-upper gunner, the D.F.M., for their coolness and skill in this thirty-six minute running fight which resulted in the destruction of one enemy aircraft and damage to two more. On its departure from Coastal Command at the beginning of March, No. 405 received a highly congratulatory message from the Admiralty. It was at this time that the squadron was formally adopted by the City of Vancouver.

From Beaulieu No. 405 moved back to Yorkshire—first to Topcliffe and then Leeming—where for six weeks it joined the recently formed No. 6 (R.C.A.F.) Bomber Group. Its activities were bombing raids against important German targets and a few mine-laying sorties. Two crews distinguished themselves during March. Sgt. (shortly after Pilot Officer) Symes, B.E.M., and crew survived a thirty-minute combat on a Stuttgart trip and came back safely from Duisburg in spite of severe flak damage. Pilot Officer N. D. Daggett's American rear gunner, Flt. Sgt. L. I. Thomas, destroyed an Me. 109 en route to Stuttgart, winning for himself a D.F.M.; and the very next night the same crew came back from Essen with 200 flak holes in their bomber. Stuttgart was the squadron's first operation since returning to Bomber Command, and it had the misfortune to lose four crews, including that of Sqn. Ldr. L. E. Logan, "A" Flight commander. On the night of April 8th Pilot Officer C. C. Stovel and his crew had a really "shaky do". In taking violent evasive action from a box of heavy flak over Duisburg, all the motors cut and the aircraft went into a prolonged spin. Four members of the crew, misunderstanding their instructions, baled out; then at 1,000 feet three engines started up again and the pilot regained control, but before reaching base he had to bring the aircraft out of another bad spin. Pilot Officer Stovel was given a D.F.C. for this fine performance.

In April the Vancouver Squadron was honoured by being selected to join the élite of Bomber Command, the Pathfinders of No. 8 Group, and on the 19th the unit moved to Grandsen Lodge, Bedfordshire, just in time to celebrate its second

anniversary. At the same time Wing Cdr. Clayton went to a senior operational post at R.C.A.F. Base, Topcliffe, and Wing Cdr. J. E. Fauquier once again took command of No. 405 (P.F.F.) Squadron, as it now was. A month later he was privileged to take a party of twenty-five air- and groundcrew personnel to Group H.Q. at Wyton to meet their Majesties the King and Queen.

From this time forward to the end of the war the Vancouver Squadron continued to add to its laurels by its record of steadily increasing efficiency, borne out by a high level of bombing leadership combined with remarkably low losses in view of the results achieved. The Battle of the Ruhr raged on with concentrated attacks throughout April, May, June, and into July, when it was superseded by the Battle of Hamburg. Sgt. J. A. Phillips won an immediate D.F.M. for bringing his Halifax back after it was most critically damaged by a fighter en route to Cologne on the night of July 3rd. A month later he and his crew were interned in Sweden where they were forced to land after an attack on Hamburg. On the night of July 15th Flying Officer M. Sattler's mid-upper gunner, Flying Officer W. R. W. Anderson, though wounded four times in the arm, staved off seven fighter attacks and finally shot down a Dornier 217. He was awarded a D.F.C. In the first of four annihilating attacks on Hamburg, on July 24th, the Pathfinders began using new special equipment enabling them to identify the target even when it was obscured by cloud. On this same raid Pilot Officer H. Gowan won a D.F.C. when he brought back an aircraft badly battered by flak and with one gunner mortally wounded. In August Wing Cdr. Fauquier received a D.S.O. for his sterling leadership in raids against Peenemunde and Berlin. His navigator, Sqn. Ldr. P. G. Powell, D.F.C., also received a D.S.O. for his unerring skill on the same two raids and his yeoman service as squadron navigation leader.

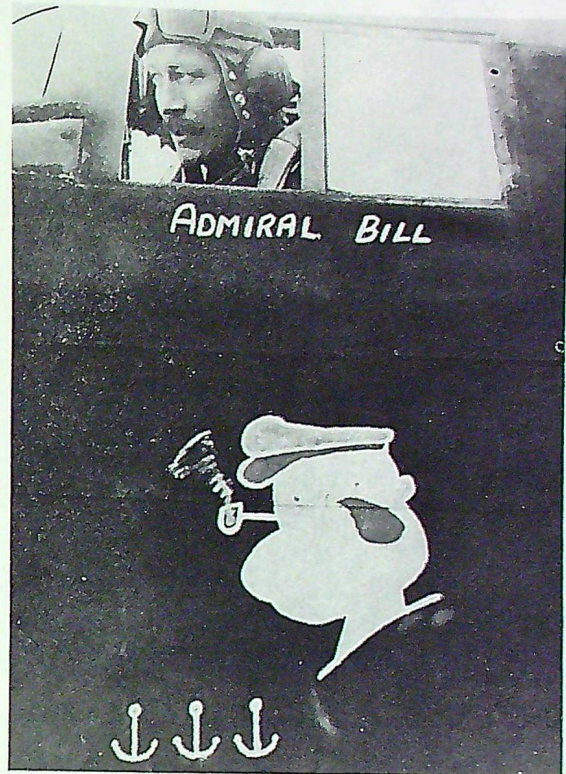
The foregoing examples of individual effort and heroism are merely typical of the achievements of a first class bomber squadron. Other cases, equally courageous, could be recounted almost to the point of monotony; but in a short account it is impossible to give them all. For instance, in

September the squadron received five more D.F.C.'s and five D.F.M.'s. On the night of the 27th, Sqn. Ldr. L. E. Logan, D.F.C., who had "walked back" from Stuttgart, took off to bomb Brunswick and went missing for the second time. In this same month the growing importance of the squadron was recognized when the C.O., Wing Cdr. Fauquier, D.S.O., was made a group captain. From this time on it became the practice for No. 405 to have relatively higher ranks amongst its senior aircrew officers than were found in most bomber squadrons. For example, in October, we find on one day three pilots appointed acting squadron leaders: Sqn. Ldrs. H. Gowan, D.F.C., M. Sattler, D.F.C. and W. Weiser, D.F.C. All three had over thirty "ops" to their credit, and in May 1944 all three received Bars to their D.F.C.'s. On the very next day Sqn. Ldr. R. J. Lane, D.S.O., D.F.C., arrived and took over "A" Flight with the rank of wing commander.

During August the squadron had been receiving Lancaster III aircraft, and early in September its crews became operational on them, though they continued to use Halifaxes as well during that month. Then in October they took to "Lancs" alone and flew them for the duration of the war.

In November, No. 405 took part in an attack on Modane to block the French end of the Mont Cenis tunnel, "anti-recovery" raids on Mannheim-Ludwigshafen and other targets, and in all four of the month's major operations of the Battle of Berlin, which opened in earnest on the 18th. In the fourth of these trips to Berlin the "Ruhr Express", first Canadian-built Lancaster, which had been assigned to No. 405, made its first successful operational sortie, with Pilot Officer H. A. Floren at the controls.

Along with major raids on various other German cities, further blows in the Battle of Berlin proper continued into March 1944. On the night of December 16th, bad visibility and fuel shortage caused three of the squadron's aircraft to crash on their return from Berlin, resulting in the death of sixteen members of their crews. Warrant Officer S. H. Nutting, D.F.M., a rear gunner on his 45th sortie, was the only survivor from one of the crews.



*Flt. Sgt. R. W. Barton.*

In January the squadron had to bid Group Capt. Fauquier farewell for the second time when, having completed two tours, he was transferred to a higher post; and Wing Cdr. Lane took command of the squadron for the next eight months. It was a period of tremendous activity. Most of the key German cities had already been wholly or largely devastated, but from time to time anti-recovery raids were considered necessary; and at this stage of the development of bombing methods, very often a certain specific area or even an individual building would be marked for destruction. Then, too, as D-Day approached, there were numerous tactical raids on pre-invasion targets in France. In all of this No. 405 played an important and impressive part, adding constantly to its laurels.

August 1944 was the peak month of the war for most bomber squadrons, yet No. 405, while it flew its highest number of operational hours (962:52 in



*Left to right: Sgt. J. Karleff, Pilot Officer W. W. Colledge, Sgt. E. A. Taylor, Flt. Sgt. J. Steward, Sgt. J. Yates, Sgt. Arthur Simms (R.A.F.), Sgt. A. J. Ennals (R.A.F.).*

that month), actually reached its high figures for sorties (224) and tons of bombs dropped (943.9) in July. Nevertheless, August was a notable month for the unit. Four senior officers received immediate awards of the D.S.O.: two pilots, Sqn. Ldr. J. R. McDonald, D.F.C., and Sqn. Ldr. L. L. MacKinnon, D.F.C.; a navigator, Sqn. Ldr. G. B. Ellwood, D.F.C.; and an air bomber, Sqn. Ldr. G. A. Sweany, D.F.C. On the 23rd, Group Capt. Lane was transferred to a post at No. 6 Group, and handed over command of the squadron to Wing Cdr. C. W. Palmer, D.F.C.

On September 8th, Wing Cdr. H. A. Morrison, D.F.C., of Winnipeg, was master bomber in a daylight raid on Le Havre. Over the target heavy and accurate fire seriously damaged his aircraft, rendering it almost uncontrollable, and a rapidly spreading fire soon filled the fuselage. As the aircraft could not be saved, Wing Cdr. Morrison ordered his crew to leave by parachute and coolly waited until he was satisfied that all his

comrades were clear before jumping himself at a very low altitude. They landed near the Allied lines and were soon back in Britain, where Wing Cdr. Morrison was awarded an immediate D.S.O. At the end of the month he replaced Wing Cdr. Palmer as C.O. when the latter failed to return from his 38th operation, an attack on Cap Gris Nez in which he was a "visual backer-up". Only a month later the command changed hands again when Wing Cdr. Morrison was posted and his place was taken by Group Capt. W. F. M. Newson, D.F.C. and Bar, who was destined to be the last in a list of outstanding C.O.'s.

The high standard of efficiency which No. 405's crew had set themselves was maintained in major raids, mopping-up operations and attacks on special targets such as marshalling yards, oil refineries, and key airfields. Towards the end the scope for bombing became very limited and the targets more and more specialized. One of their last two offensive operations, however, on 25 April 1945, must have given the crews considerable pleasure. This was a daylight bombing attack on Berchtesgaden, Hitler's mountain retreat. Five

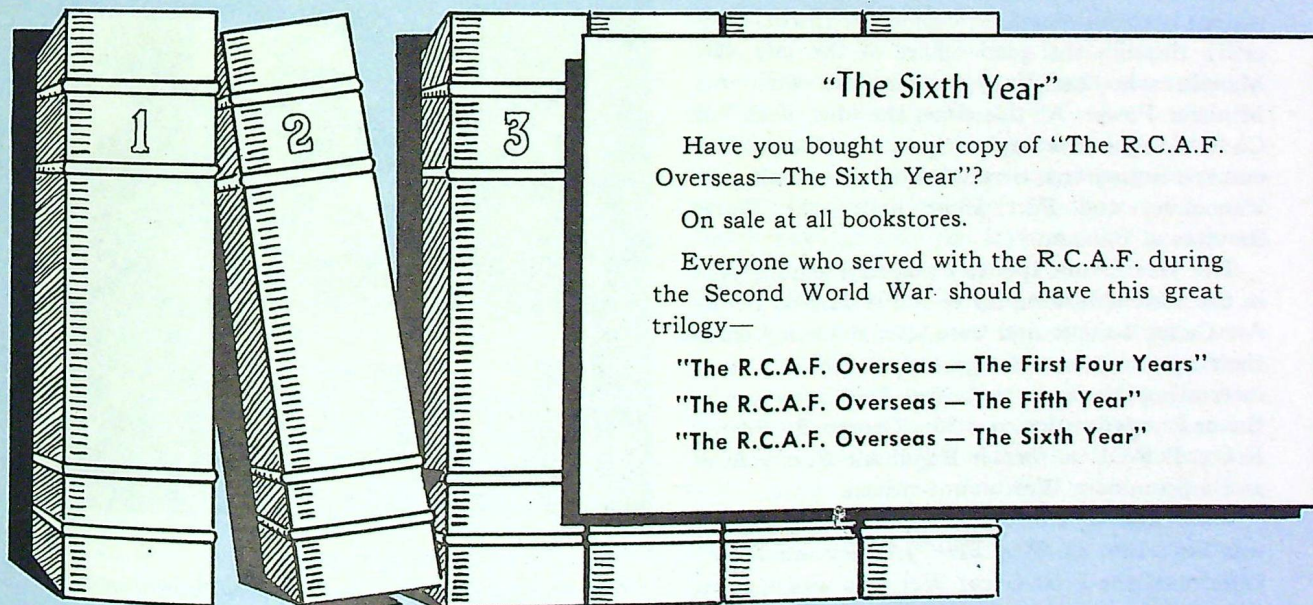
days later began a week of marking points for dropping supplies to the famished people of Holland. Then with V.E.-Day came a week of flying liberated Allied prisoners from Brussels, Lübeck and Juvincourt to Britain; and on May 15th the squadron's war operations came to an end.

During May, No. 405's Mark III Lancasters were replaced by Mark X's, and at the end of the month the squadron was transferred to Linton-on-Ouse in Yorkshire. The main party departed by rail—as the unit diary put it—"amid cheers and tears of R.A.F. personnel of Gransden Lodge and the local village of Great Gransden". Among those at the station to bid them farewell was Air Vice-Marshal Bennett, C.B., C.B.E., D.S.O., A.O.C. Pathfinder Force—a gesture which was much appreciated. Training continued until June 16th, when twenty crews took off from Linton on the first leg of their flight to Canada. This took them in stages to St. Mawgan in Cornwall, the Azores, Gander in Newfoundland, and finally to Scoudouc, N.B. The remaining personnel returned by boat to Canada, where a more elaborate programme of training had been projected. However, the capitulation of Japan in August put an end to all

thoughts of going on to the Orient, and the squadron was formally disbanded in September 1945.

Somewhat belatedly, after No. 405 had disbanded, it received a unit badge. Both the design and the motto were particularly appropriate. The design is an eagle's head, holding in the beak a sprig of maple. The eagle's head is derived from the Pathfinder badge and by its position ("facing to the sinister", in heraldic terms) suggests leadership, the rôle of the P.F.F. units. This is further borne out by the motto "Ducimus" (We Lead) which recalls not only that No. 405 was a Pathfinder squadron and the only R.C.A.F. unit in that famed group, but also that it was the first Canadian bomber squadron overseas.

At the time of writing it is planned to re-form No. 405 Squadron at Greenwood, N.S., in March of this year. The squadron will be equipped with Lancaster X aircraft which have been modified to make them suitable for Maritime Reconnaissance duties. Wing Cdr. D. T. French, D.F.C., will be appointed as the Officer Commanding No. 405 Squadron and Sqn. Ldrs. R. J. Gordon and A. G. Dagg will be the Flight Commanders.



## "The Sixth Year"

Have you bought your copy of "The R.C.A.F. Overseas—The Sixth Year"?

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"The R.C.A.F. Overseas — The Sixth Year"

# The ROYAL CANADIAN AIR CADETS



## The Story of No. 1 Squadron

One of the most heartening developments of recent Air Cadet League history is the manner in which a pioneer unit—No. 1 (West Montreal) Squadron—has regained a large measure of its early prominence. Following a period of inactivity this historic squadron was completely reorganized in 1948. Under new sponsorship, with new officers and a whole new generation of cadets, No. 1 Squadron again ranks among Canada's finest.

The history of No. 1 Squadron dates from the earliest days of the Second World War. Its formation was sponsored by a prominent group of Westmount citizens led by Major Hugh M. Scott, M.C., and including Mr. Walter A. Merrill, K.C., Major B. L. Hall, D.S.O., M.C., and Sqn. Ldr. H. P. Illsley. These men, who were anxious to be of service to a fighting R.C.A.F., made representations to the National Defence Department, especially through the good offices of the late Mr. Merrill, who had many interviews with Air Minister Power. At this time, the idea of an Air Cadet League was beginning to take shape, and embryo squadrons were already functioning at Vancouver and Port Hope under the Cadet Services of Canada.

The Westmount sponsors played a leading part in discussions leading up to the formation of the Air Cadet League and were later rewarded when their squadron was designated as No. 1. It is interesting to note that the first president of the new organization was Mr. George B. Foster, K.C., D.F.C., a former Royal Air Force officer and a prominent Westmount citizen.

Commanding Officer of the original squadron was Sqn. Ldr. H. P. ("Pete") Illsley, an R.F.C. veteran of the First Great War who was eager to

serve his country again. His continuing interest in Air Cadet affairs is evidenced by the fact that he has since served as Provincial Chairman in Quebec and is currently a member of the League's Dominion board of directors. This energetic C.O. gathered around him a group of efficient officers, many of them ex-R.A.F., including R. B. Hall, W. E. A. Coulter, A. E. Ross, A. Ross Grafton, L. McCaig, L. C. Peterson, L. B. Laurin, A. N. Francis and H. Noble. L. McCaig and A. N.



*Flt. Lt. Greene gives instruction on the Browning .303.*



*Seated (left to right): Flt. Lt. H. S. Greene, Sqn. Ldr. H. P. Illsley, Mr. A. Ross Grafton, Wing Cdr. Link, Flt. Lt. L. E. Weaver. Standing (left to right): Flying Officer J. H. Barnes, L. Hyman, G. Wolfe, R. Drouin, I. R. Leger, Flt. Lt. Guess.*

Francis later joined the R.C.A.F. and proceeded overseas. McCaig became a squadron leader, earned the D.F.C., and lost his life after serving gallantly. Other officers joined up later, among whom were G. P. Smith, J. Patrick and W. Soper. Mr. Patrick later went overseas and Mr. Soper had already served with the Royal Canadian Navy.

The unit, then called No. 1 (Westmount) Squadron, proceeded to operate through the support of the citizens of Westmount and public-spirited organizations. In company with similar sponsoring bodies which were springing up across Canada, the civilian group raised funds for uniforms and equipment. Due largely to the efforts of Sqn. Ldr. Illsley, the squadron flourished and grew to a strength of almost 400 cadets.

A record number of Westmount graduates served in Canada's armed forces, in which many of them later gave their lives for their country. Meanwhile, others returned from active duty and are now serving as officers of the revitalized squadron. The reorganized squadron is known as No. 1 (West Montreal) Squadron and is sponsored by the Air Force Veterans Association, Quebec Branch 84 of the Canadian Legion. With a strength of over 100 cadets, a fine trumpet band, and a group of experienced officers and instructors, the

new unit already shows signs of matching the achievements of its predecessor. Commanding Officer is Flt. Lt. Hugh S. Greene, who was an Air Cadet with the original squadron. Other officers are Flying Officer L. E. Weaver, adjutant; Flying Officer T. Williams, supply officer; Flying Officer J. Barnes, wireless; Flying Officer A. Pitcairn, meteorology; Flt. Lt. G. Guess, navigation; Mr. R. Drouin, band; I. R. Leger, drill; G. Wolfe, aero-engines; L. Hyman, airmanship; B. Baker, public relations.

The civilian committee is headed by Mr. A. Ross Grafton, who this year was elected chairman of the Quebec Provincial Committee. H. P. Illsley has retained his interest and serves as honorary secretary.

No. 1 Squadron's achievements last year were impressive. The squadron won the athletic proficiency shield at summer camp; its rifle team placed second in district championship for the Venis trophy; and the squadron band was awarded third place in competition for the Illsley trophy. Five cadets received R.C.A.F. flying training scholarships, while another cadet—Sgt. F. Lindsay—was chosen for an exchange visit to the United Kingdom.



# The Strategy of the Arctic

By GROUP CAPTAIN V. H. PATRIARCHE, O.B.E., A.F.C.

*(The following article was first published in the October 1949 issue of "International Affairs", the journal of the Royal Institute of International Affairs, England. It is reprinted here, in considerably shortened form, by the Institute's permission. Group Captain Patriarche, who assumed his present duties as Director of Service Requirements in 1949, has had a varied career. Originally trained in the R.C.A.F., he spent the years between 1929 and 1939 with the Northern Aerial Minerals Exploration Co. and other commercial aviation organizations. In 1934 he became a member of the Auxiliary R.C.A.F., and the outbreak of war found him functioning as General Traffic Manager of Canadian Airways Ltd. Back in the Regular R.C.A.F., he was engaged in flying training for nearly four years before being posted to the North-West Staging Route as Commanding Officer and later as Chief Staff Officer when the Command was formed. Prior to appointment to his present position, he was serving as Chief Staff Officer to S.C.A.F.L.O., London, England.—EDITOR).*

WARS BEGIN long before the shooting starts.

In fact, as we have seen in very recent years, it is quite possible to achieve the aim of war without firing a shot. The transition from competition to open hostilities is gradual, and we must, therefore, consider strategy in all spheres, economic, political, and military. Modern war is very largely a problem of transportation; without it military operations degenerate into guerrilla conflict between people within walking distance of one another—a desirable but no longer attainable characteristic. The strategy of any region is thus largely determined by the problems of transportation to and in that area. Strategy must be determined by man-power limitations and measured by costing as much as by opinion on what is the "best thing to do." In consequence, any geographical area must be considered in relation to the whole.

With these points in mind, it will be appreciated why consideration of the strategy of the Arctic must deal with political and economic problems as well as purely military ones; and why, too, the North can only be considered in relation to the much larger field of world affairs.

\* \* \*

The term Arctic is generally considered to refer to that portion of the globe lying north of the

Arctic Circle. Technically we must draw a line somewhere, and the Circle itself, although purely imaginary, forms a very convenient boundary. In fact, however, the Arctic is better defined by its climatic conditions, its vegetation and natural resources, and by its geographical accessibility. The region of Hudson Bay, for example, most of which lies well south of the Circle, actually takes its character from the Arctic in its climate, its vegetation, its animal life, and its problems of transportation. The British Isles, on the other hand, although they extend north of the lower limits of the Bay, could hardly be classed as Arctic territory.

Political, economic, and military problems are far more affected by matters of climate, population, and physical development, than by latitude; and when we use the term Arctic in discussing these matters, it is advisable to free ourselves from the rigid conception of its boundaries and to consider the more elastic definition which I have given.

The Arctic of the story books is generally regarded as a barren waste of snow and ice inhabited by polar bears, explorers, and eskimos. Actually, much of the land as far north as the tip of Greenland clears during the summer; vegetation and animal life thrive, and considerable open water is found. Owing to the continuous sunlight

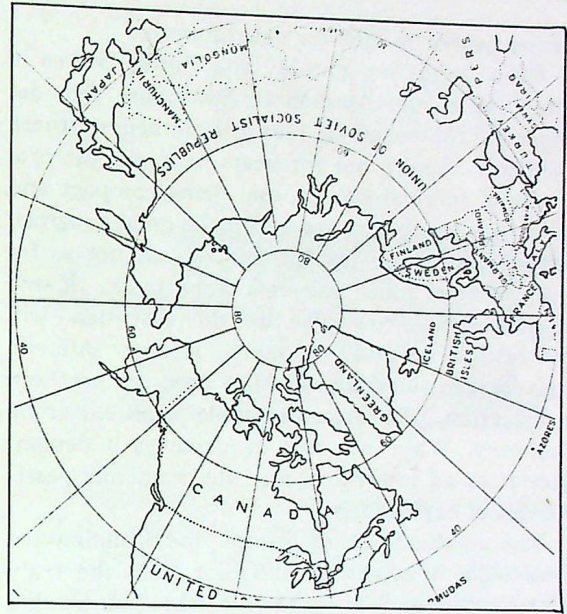
of the summer months, the spring thaw is very rapid and the summer much longer and warmer than is generally believed. Plant growth takes place more quickly than further south, and life for both men and animals presents no great problem other than that of the ever-present mosquito.

In the winter, the extremes of temperature and snowfall are no more severe than are found inland on the continental masses. Deep snow, thick ice, and extreme low temperatures of the order of 80° F. below zero are encountered both in Asia and North America below the Arctic Circle. While meteorological records are not extensive in the polar regions, those that do exist over a wide variety of places, and extending over many years, suggest that temperatures there will seldom go below minus 50°. Taking it all in all there are probably no greater difficulties inherent in living, working, or fighting in the Arctic than have already been overcome elsewhere on the globe.

In the north to a much greater degree than elsewhere, the whole course of events is conditioned by the economics of transport. The aim to be attained must justify the cost of moving the cargo. If the war can be won in the temperate zone at less cost, it should not be fought in the Arctic. The aeroplane has already brought many hitherto inaccessible areas into the orbit of trade, and as time goes on and other resources dwindle, we may well look to both polar regions for much that we now find nearer at hand. For some time to come, however, the north will not be a major factor in world economic affairs. It will be, rather, an area in which claims are being staked for the future—a political rather than military and economic matter.

\* \* \*

The Polar Basin is bounded on one side by northern Canada, and on the other by the U.S.S.R., with smaller territories such as Alaska, the Scandinavian peninsula, and the islands such as Greenland and Iceland, also in the region. On the Canadian side, there are the islands of the Canadian Archipelago, extending to within less than ten degrees of the Pole. The Arctic Basin north of Eurasia is, on the other hand, mostly



water, with a few large islands spread along the southern fringe.

Canada originally claimed the islands between her mainland and the Pole under the sector theory of sovereignty. This principle is not universally accepted but has not been actively challenged. Her influence has been strengthened by the establishment of police posts, medical facilities, weather stations, and transportation services. By developing trade and good administration in this area her action has resulted in no counter-claim being filed, and there are in fact no grounds that would sustain such a claim. In short, Canada is covered both ways, and now, I would say, sets more store by claims based on discovery, development and administration, than on the basis of the sector theory.

On the other side of the world, the Soviet Union has energetically developed its own territories, with great emphasis on the northern sea route which, by linking the great arctic rivers, provides a channel of commerce for the northern part of the mainland. Both countries are exploring the possibilities of their arctic regions, but for the next few years it may safely be said that each has so much to do that there is little likelihood of

either having to look for new interests.

Other countries, notably the United States in the case of the Alaskan territory, are also developing the economic features of their northern property. Alaska has for years been a great producer of mineral wealth, and being compact and readily accessible by sea, has made great progress. Greenland, under Danish control, has not so far become of so much economic importance, though it is reasonable to expect that this vast island will in future become of much greater interest. Spitzbergen, long known as a base for northern exploration, presents an example of an old arctic economy. While not rich in resources it demonstrates in an interesting way the economic possibilities of exploration.

The northern arm of Europe, the Scandinavian peninsula, is somewhat different from the truly arctic regions. While much of the country lies well north of the Circle, it is readily accessible by sea and is properly associated with the temperate zone. The position economically is not that of a truly arctic area, and can hardly be considered on the same footing as those previously mentioned. The hardy, small nation of Iceland is a part of both worlds, the old and the new; but although it lies on the fringe of the Circle it is rather in the same position as northern Scandinavia — in the north but not of it. Politically alone, therefore, its place is with the temperate zone, whatever its military significance may come to be.

Thus, politically, the claims are well established, and it seems unlikely that great changes in the spheres of influence will occur, though new channels of trade will undoubtedly develop as time goes on.

\* \* \*

The Arctic, in the military sense, can be considered in two aspects: first, as a theatre of operations; and second, as a route of attack. The successful prosecution of a war demands that force be brought to bear at some point where it will decisively affect the enemy. The long-drawn-out process of attrition, the gradual whittling away of defences and territory which have characterized most military operations of the past were means to an end. The end itself came only when one

Power was able to grasp the reins of government and exert sovereign authority over another. When we consider the methods of doing this by use of the armed forces we are immediately faced with the problem of choosing our ultimate objectives; and these lie where they have always done, at the seat of authority and production in each nation. Thus, while there are always intermediate objectives, or obstacles to surmount along the way, they are incidental to the ultimate aim. This factor is the determining one in assessing the importance of any region as a possible theatre of war, and the Arctic contains none of these ultimate objectives.

A theatre of war implies the possibility of fighting in it. There is, of course, no reason why we cannot fight in the Arctic. But both naval and military operations are seriously limited by considerations of climate and terrain. Movement by sea within arctic waters is severely restricted and over most of the Polar Basin is prevented by ice. As we move away from the Pole it becomes possible to move seasonally, but not continuously.

Troop movement on snow and ice is practical, but here we come up against the problem of transport. To use sea-borne, or land-borne, transport is to depend on a supply system capable of being completely severed by the vagaries of climate. Not only is surface movement slow in these conditions but, in terms of effort per active soldier, it becomes enormously expensive. No large force can wisely be committed to an operation involving uncertainty of supply not merely for days but weeks. Nor can it wisely undertake operations where the striking force in comparison to the supporting services is unduly small.

There remains air supply. While this, too, is expensive, the north is an area in which the overall cost of surface transport has risen to meet the higher cost of air. It must, however, be emphasized that the air cost has not been reduced. It has merely been equalled by rising figures for the other means. The ability of the transport aeroplane to move with little regard to climate or terrain is its great virtue as an arctic vehicle. It is this feature which will determine, more than any other, the characteristics of military operations in the north,

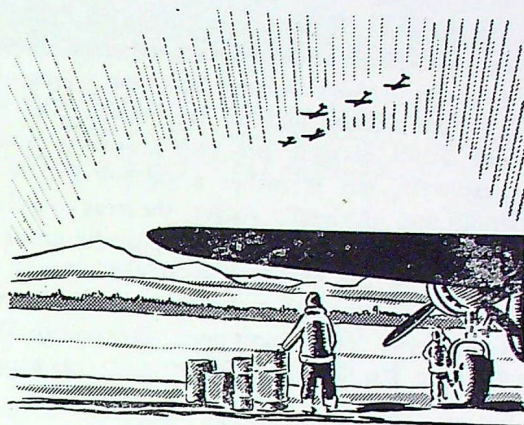
and it follows that such operations would become, due to the absence of primary objectives and the cost of air lift, highly mobile, very fluid and, in point of numbers engaged, relatively small.

The air striking force is also capable of operating in the Arctic quite effectively. Here again, however, the question of objective arises. Points of attack, such as principal cities and industrial areas, lie far to the south, and the north is a route to these objectives rather than a main theatre of battle. Should other forces become engaged in the theatre, the air arm, in its supporting as well as its independent rôle, would of course be implicated. However, the governing factor is the lack of decisive targets, and operation of any kind in the north, even if it were conclusive in itself, would not offer the prospect of reaching a final decision.

In this respect the Arctic is like the great ocean areas. The possession of freedom of movement, and the ability to deny that freedom to an enemy, can be of major importance to the ultimate assault. As a theatre of battle, on the other hand, it is a means to an end rather than an end in itself. Victory in the north would not attain the aim of war. This principle inevitably conditions the strategical importance of the region.

\* \* \*

Let us now consider the relation between the polar and other theatres of operation. As mentioned earlier, wars are only concluded when overwhelming pressure leads to the surrender of the enemy. This pressure must be ultimately applied to industrial areas, to the masses of the people, and to their government. It finds its geographical objectives, therefore, in the most heavily settled areas of any country, and its effectiveness is almost directly proportional to density of population. It is, in the final analysis, men, not machines or territory, who give life and initiative to a nation, and it is men who become either the victors or the vanquished. If we examine the globe, we find that within the entire arctic region there are no great or vital centres of population. As we go further south these become more numerous, and lie generally in the temperate zone. It is, consequently, in this part of the world that wars must be decided; and the theatres of operation are



those regions normally separating the vital areas of two potentially hostile states.

In considering major strategy the advent of long-distance transportation has introduced the term "global war". With the careless use of the term has come the tendency to assume capabilities which transport does not yet possess. The last war, although it covered much of the world, was decided in relatively small areas of battle and each moved towards the vital zones of the states engaged. The supply routes were truly global, and without their control the battles could not have been fought. The battle areas, on the other hand, determined the routes of supply, and were themselves determined by those focal points against which the decisive thrusts had to be made.

In the case of air operations such as those of strategic bombing, the question of distance is an important one. The load which an aeroplane can carry is determined by the distance it has to fly. At maximum range the entire capacity of the aircraft may be taken up by fuel, and its striking power is at a minimum. As range is decreased, so the bomb load increases, and it follows that the shorter the range the more effective is the air force. Another factor enters this picture in the question of weight of attack. Over very long journeys the vehicle may be able to make only one trip per day. If the journey is halved, the number of possible trips to the target is roughly doubled. Thus, however we may increase the range of our aeroplanes and other vehicles, dis-

tance lends no enchantment to the strategist. A given man-power will always produce a greater impact over a short distance than over a long one.

For this reason, and for the reason that the world is not divided into two mutually hostile hemispheres, but is rather a jig-saw puzzle of friendly and unfriendly stages, theatres of actual war are much smaller than the gigantic areas so attractive to the armchair strategist. It will be seen from the map that these potentially hostile regions do not, for the most part, "face one another across the North Pole." They, and the supply

routes joining them, tend to lie in the temperate zone, and it is in these areas that major strategy must be worked out.

We may take it, then, that the Arctic, unless it becomes the only or the shortest route between the vital areas of two contending Powers, is not likely to become the major theatre of military operations for some time to come. It fills, rather, a subsidiary rôle, although, depending on the circumstances of war, it could become a decidedly active area.

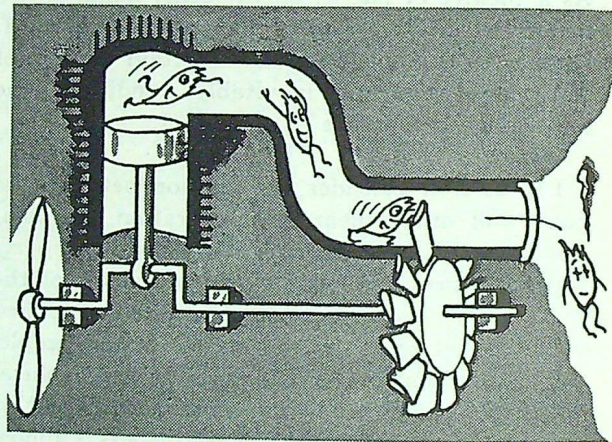
## Compound Engines

(Reprinted by courtesy of "SAE Journal")

COMPOUND ENGINES were defined and prominently discussed as part of the Summer Meeting technical fare which emphasized more efficient powerplants in every category as a dominant theme.

The schematic drawing above illustrates what most speakers and discussers meant when they used the term "compound engine"—a powerplant combining reciprocating engine and gas turbine. Purpose of the turbine is to extend the expansion ratio—a job which some discussers explained could be accomplished in a secondary, low-pressure cylinder instead of the turbine but only with addition of much weight and complication.

The sketch shows gases exhausted from the cylinder of the reciprocating engine progressing to the turbine, which converts some of their energy to useful power. In this case, the turbine contributes power to the reciprocating engine's crankshaft, which powers a propeller. In other cases, the turbine may power a supercharger only—or, at the other extreme, it may furnish all the useful power, with the reciprocating engine merely supplying high-temperature, high-pressure gases for the turbine.



Also reported at the meeting were paths being taken to get more out of fuels and oils, and to raise performance and life of vehicles and their components, including engines, bodies automatic transmissions and instruments. Round table sessions sparked frank discussion and broadened group participation in both special and general areas.

# Personnel, Dead, Disposal of

*(Flt. Lt. H. G. Williamson, of the R.C.A.F. Provost and Security Branch, feels that it is still not too late to promulgate this order in A.F.R.O.'s. Personally, we seem to remember its unofficial promulgation as far back as 1941. We wonder how many of our readers recall it . . . ?*

—EDITOR)

1. It has been brought to our attention that Air Force personnel are dying and refusing to fall over after they are dead. **THIS MUST STOP!**

2. On and after the 1st of April 1949, any Officer or Airman found sitting up after he is dead will be discharged immediately (i.e. within ninety days). Where it can be proved that the Officer or Airman is being supported by a broom or other piece of property marked "Air Force Property", an additional ninety days will be granted. The following procedure is to be strictly adhered to:—

- (a) If, after several days, it is noticed that the Officer or Airman has not moved or changed his position, the Officer or N.C.O. in charge will investigate. Because of the highly sensitive nature of R.C.A.F. personnel, and the close resemblance between death and their working attitude, the investigation is to be made quietly so as not to disturb the individual if he is only sleeping. If some doubt exists as to the true condition of the individual, the extension of a Government cheque is to be the final test. If the Officer or Airman does not reach for it immediately, it may be reasonably assumed that he is dead. In some extreme cases the instinct is so



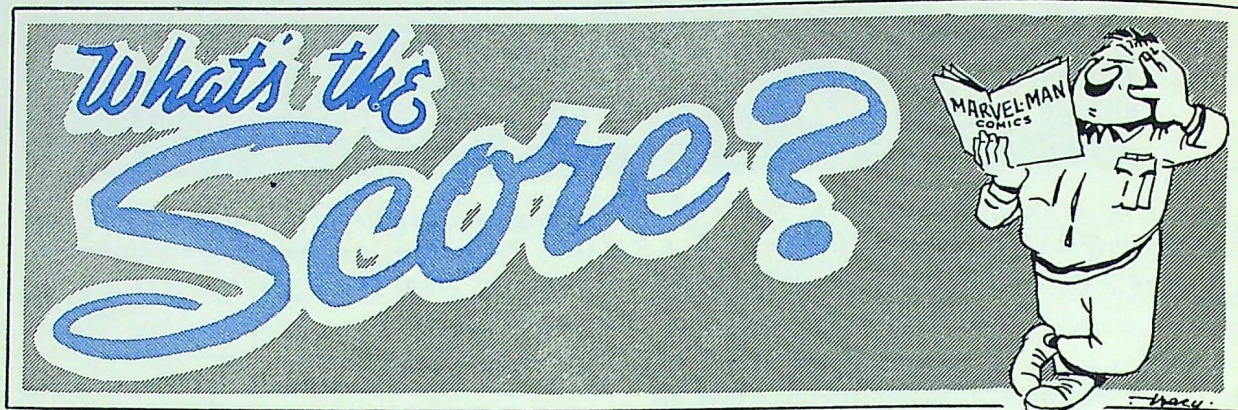
strongly developed that a spasmodic clutch or reflex may be encountered. Do not let this fool you.

- (b) In all cases a sworn statement must be filled out by the deceased (Form F2 X Rev.). Fifteen copies are to be made—three copies are to be given to the deceased and the rest destroyed.
- (c) Form Y22 Rev. (application for indefinite leave of absence WITH pay) must be filled out immediately by the Officer or Airman. Be sure to include the correct information, especially the forwarding address. If he cannot write, his signature must be witnessed by two other members of the R.C.A.F.—preferably alive.
3. In conclusion, push the body aside, thus making room for the next incumbent.

## Military Tactics

Military Tactics are like unto water; for water in its natural course runs away from high places and hastens downwards. So in war, the way is to avoid what is strong and to strike at what is weak. Water shapes its course according to the nature of the ground over which it flows; the soldier works out his victory in relation to the foe whom he is facing. He who can modify his tactics in relation to his opponent and thereby succeed in winning, may be called a heaven-born captain.—Sun Tzu, 500 B.C.

(*"Canadian Army Journal"*)



A lot of things happened in the world during the first six weeks of 1950. If you know the answers to twelve of the following twenty questions, your reading-coverage of current affairs and your memory are both about average. Correct answers are shown on page 48.

1. The "Flying Arrow", which was featured prominently in the press, is:
  - (a) The name of a wrestler who defeated "Gorgeous George"
  - (b) A merchant ship that was shelled by the Chinese Nationalists
  - (c) The latest addition to the New York Central Railroad's diesel equipment
  - (d) The model with which Kaiser hopes to capture the low-priced car market
2. The Minister appointed to Canada's new Department of Resources and Development was:
  - (a) The Hon. H. R. Falls
  - (b) The Hon. R. H. Springs
  - (c) The Hon. H. R. Summers
  - (d) The Hon. R. H. Winters
3. A formal protest was made to Britain about an English newspaper article on the love of a king for a civil servant's daughter named:
  - (a) Narriman Sadek
  - (b) Lorna Doone
  - (c) Ninon de L'Enclos
  - (d) Magda Lupescu
4. Dr. Carl Binger is:
  - (a) The chief ecclesiastical opponent of H-bomb manufacture
  - (b) The newly-appointed head of the Anti-Lord's Day Alliance League
  - (c) A psychiatrist who was cross-examined during the trial of Hiss
  - (d) The discoverer of the wonder-drug "cascara".
5. Reported as a possible preventive of heart-attacks was a Swiss-developed drug called:
  - (a) Sanatogen
  - (b) Tromexan
  - (c) Calomel
  - (d) Xanthite
6. It was made public that Henry Wallace had, in 1944, reported to President Roosevelt that Chiang Kai-shek was:
  - (a) "The only hope for Democracy in the East"
  - (b) "At best, a short-term investment"
  - (c) "At heart, still a war-lord"
  - (d) "The sanest social philosopher since Confucius"
7. The heaviest known element, created at the University of California, was tentatively christened:
  - (a) Californium
  - (b) Cylonium
  - (c) Trumanium
  - (d) Berkelium



# The Roundel

8. A world-famous air force commander who died was:
- General Arnold
  - Sir William Chisholm
  - General Niles
  - Col. Babcock
9. Very unfavourably criticized for his stand on the Hiss case was:
- Whittaker Chambers
  - Rev. Harold Velde
  - Secretary of State Dean Acheson
  - Senator Karl Mundt
10. Nickname of the U.S. battleship that ran aground in Chesapeake Bay is:
- "Old Glory"
  - "Big Mo"
  - "Thunderboy"
  - "Big Palooka"
11. The British boxer who lost the world's light-heavyweight championship to American Joey Maxim is:
- Benny Leonard
  - Tommy Farr
  - Bombardier Wells
  - Freddie Mills
12. Accused by the Russians of responsibility for germ-warfare crimes in World War II was:
- Emperor Hirohito
  - Dr. Alexis Carrel
  - Dr. Vannevar Bush
  - President Truman
13. War was declared on the Federal Council of Churches of Christ, B'nai B'rith, and the National Association for the Advancement of Coloured People, by:
- The Ku-Klux Klan
  - The Sons of Freedom
  - The Junior G-men
  - The Committee for the Investigation of Un-American Activities
14. Self-confessed as having been instrumental in handing over secrets of A-bomb manufacture to Russia was:
- Hiss
  - Fuchs
  - Boyer
  - None of the above
15. Britain's Minister of Food stated that, in England, incomes of more than £5,000 per year are enjoyed by only:
- 250 persons
  - 1,250 persons
  - 2,250 persons
  - 3,250 persons



16. U.S. churches, censorship boards, and the Texas legislature demanded the banning of the film:
- Samson and Delilah
  - Paisan
  - Stromboli
  - The Last Days of Pompeii
17. Married to a cousin of King George VI was an American lady named:
- Mrs. Sampson
  - Mrs. Simpkins
  - Mrs. Simpson
  - Mrs. Semple
18. A thirty-year defense treaty was signed between:
- Indo-China and the Netherlands
  - Korea and Formosa
  - The U. S. and Britain
  - Russia and Communist China
19. The author of the famous novel "Scaramouche", who died on Feb. 13th, was:
- Rafael Sabatini
  - Jonathan Swift
  - H. G. Wells
  - Gabriele d'Annunzio
20. "The Wooden Horse", one of the more successful books to appear in January, deals with:
- The Trojan War
  - The memories of a circus-rider
  - Modern sculpture
  - The escape of P.O.W.'s from a prison-camp

# Preparing

for

# Promotion

*(We are reprinting here a letter that was published last summer in "Air Clues". It was written by an R.A.F. Officer—Flt. Lt. J. A. Wilson, M.A. In the earlier article of Air Commodore Pankhurst, to which Flt. Lt. Wilson refers, it was also stated that "on the whole, promotion examinations, whilst not ideal, are the only effective means of ensuring minimum qualification." It is hoped that this letter will arouse some controversial thinking on a much-debated subject in our own Service. Comments are invited.—EDITOR)*

IT WOULD SEEM that the reintroduction of promotion examinations has two aims: to test an officer's knowledge and to encourage him in the habit of reading and study. Promotion examination "B" is particularly concerned with the first, but examination "C" quite clearly demands wide reading and study. I would say, therefore, that the wrong way for preparing for these examinations is that used by Flight Lieutenant Rogers and described by him in the May *Air Clues*. It is wrong because it is spoonfeeding and tends to give the average officer the idea that it is someone's duty to get him through the promotion examinations. Air Commodore Pankhurst in the February, 1949, *Air Clues* makes the point quite clearly when he says, "It is part of the duty of each officer to ensure that he acquires the knowledge which will enable him to clear the obstacle", and again, "The onus, however, rests on the junior officer himself".

Furthermore, why should officers be allowed time off to study for promotion examinations? It is, no doubt, for the benefit of the Service that they should qualify for a higher rank, but primarily it is for their own good. Surely the examinations are held to find out whether an officer knows his job. It should not be necessary for the Service to induce him to learn it by providing facilities during the working day.

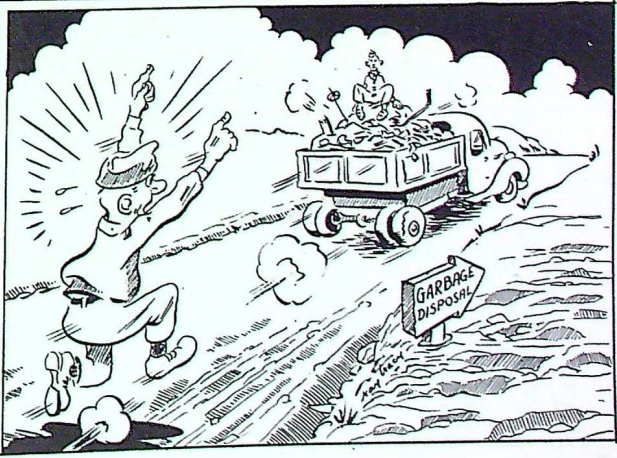
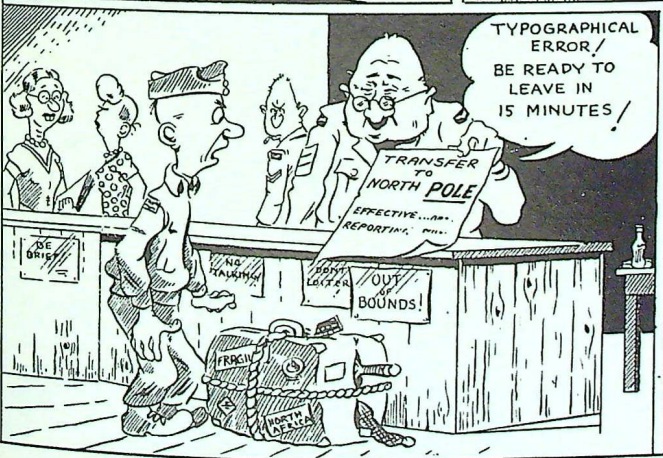
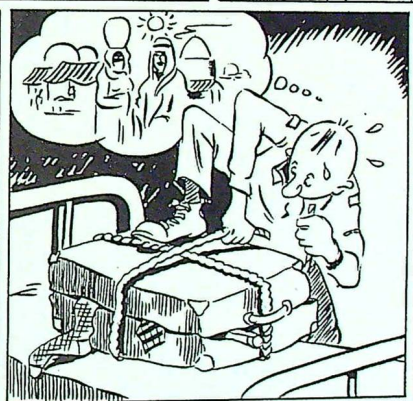
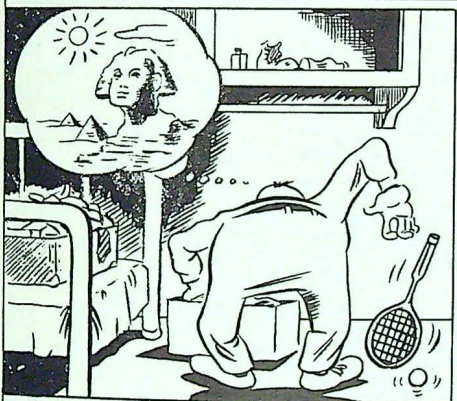
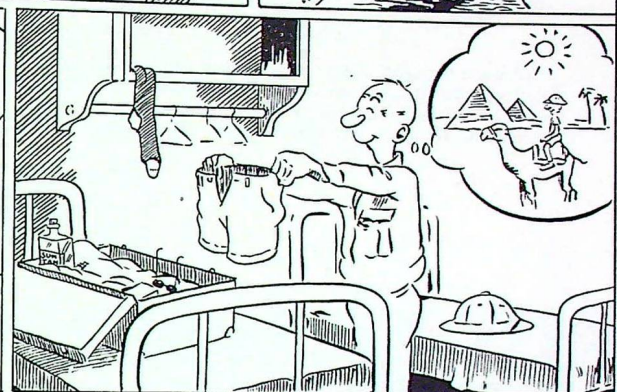
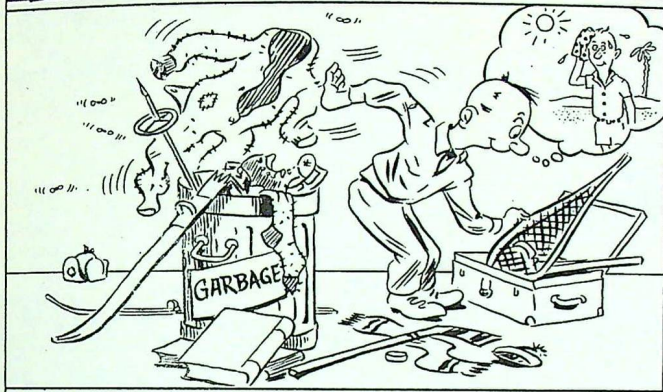
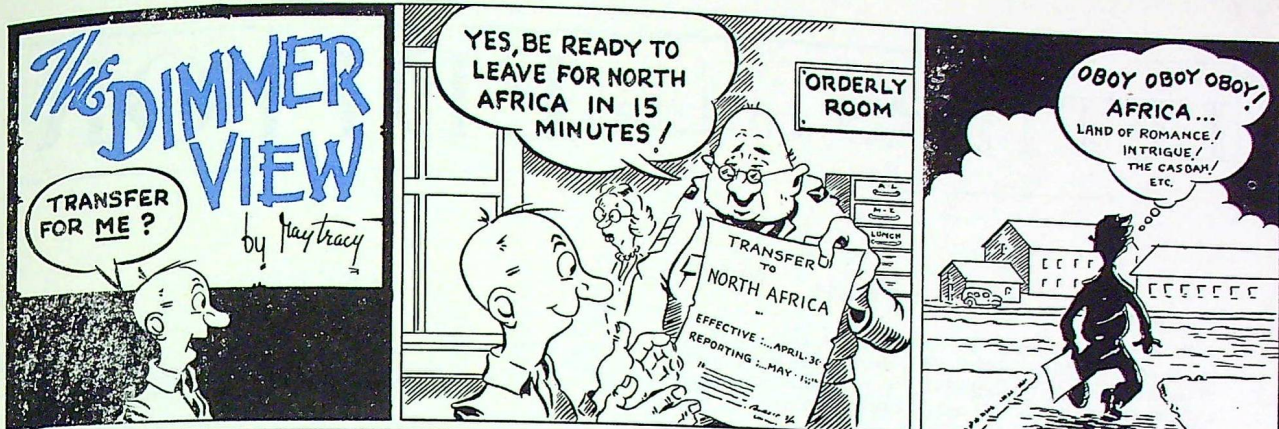
All this does not mean that the officer should be left to wrestle unaided with the promotion examinations. Many officers do not know *how* to study and they should be given some help. It is suggested that the best arrangement is a programme of lectures, each with time for discussion,

covering the main divisions of the syllabus. The lecturer's aim should not be to pass on all the information he has acquired, but to outline the main topics for study and to indicate the sources of information. These lectures should be given weekly, outside working hours, by specialist officers on the station, with such assistance as can be obtained from outside. Each lecturer should be asked to suggest one or two examination questions, and a test paper made up from these should be set periodically.

Candidates for examinations "B" and "C" can often take lectures together, these being arranged to cover both syllabi—as, for example, in Organization and Administration. But, where possible, a series of lecture tutorials should be given to examination "C" candidates in Imperial Geography and Current Affairs, and, perhaps, in Air Strategy.

Finally, officers should be encouraged to form small syndicates for the pooling of study material and publications, for discussion and for combined study. The best way to learn anything is to teach it and while officers are wary of lecturing, they are usually quite willing to explain a subject to one or two others.

The whole idea behind this scheme is the "guidance" of candidates for the promotion examinations. They are shown how to study, and the aim is to produce not the examinee who can pour out only what he has been taught, but an officer who knows how to help himself to acquire any sort of knowledge as well as how to pass examinations.



# LETTERS to the EDITOR

## FOR "H.Q. TYPES"

Dear Sir:

What about letting us have a short article in one of your issues on the subject of No. 6 (Bomber) Group Headquarters at Alliston Park, Yorkshire? I am sure there are quite a number of H.Q. types who would enjoy re-living some of the old days.

Y. Hamilton Grant

(A good thought. We would welcome any reminiscences and photographs that our readers may care to send us. With their help, our friend the Air Historian can certainly produce something along the lines Mr. Grant has in mind.—EDITOR)

## 6-GROUP PINS

Sir:

Several of my old Air Force friends have pins inscribed "No. 6 Canadian Bomber Group". Can you or any of your readers tell me where these are now obtainable?

David Buchanan,  
7 Burrell Street  
Belleville, Ontario

(Perhaps someone with the required information can drop Mr. Buchanan a line direct.—EDITOR)



## Replies to Letters

Lest we sometimes be thought lax in the matter of replying promptly to letters, we would like to assure "Roundel" readers that a delayed reply means, in nine cases out of ten, that we are printing the letter in a forthcoming issue.

—Editor



## Answers to "What's the Score?"

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

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