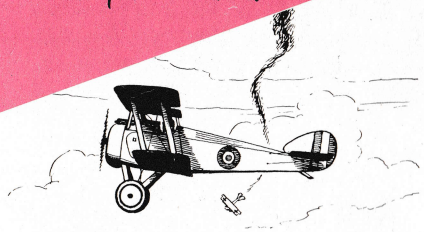
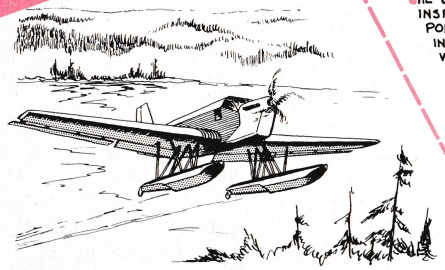
# Tale Spin

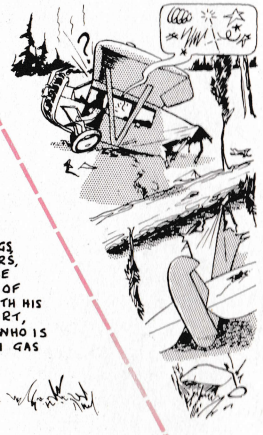
Story by Colin Haines
Illustrated by R.W. Bradford

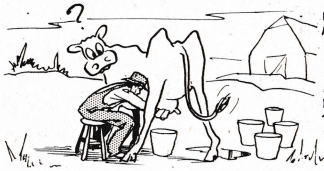
## FRED M STAINES





THE GENIAL GIANT OF AVRO CANADA'S GAS TURBINE INSPECTION, FRED STAINES, BEGAN HIS AVIATION CAREER WHEN PONTIUS WAS A PILOT. FRED JOINED THE ROYAL FLYING CORPS IN 1917 AND DID HIS FIRST DICING IN SOPWITH CAMELS. WHEN WORLD WAR I FOLDED UP (RATHER TO HIS DISAPPOINTMENT, WE COULDN'T HELP FEELING). HE TURNED TO AIRCRAFT PRODUCTION WITH THE INFANT BOEING COMPANY, FIRST AT SEATTLE AND LATER IN VANCOUVER. BY 1929 HE HAD AMASSED AN IMPRESSIVE RECORD OF AIRCRAFT EXPERIENCE - PUNCTUATED AT INTERVALS BY MILD PAST TIMES LIKE BARNSTORMING IN ANCIENT JENNIES — AND BECAME ONE OF THE FIRST CANADIANS TO RECEIVE HIS A, B, C AND D UNLIMITED LICENSES. AT THIS POINT, FRED GREW TIRED OF THE QUIET LIFE, BOUGHT A COUPLE OF JUNKERS F13'S AND HEADED FOR THE FROZEN NORTH. THERE HE MAINTAINED AND FLEW A SUCCESSION OF FOKKERS, FAIRCHILDS, JUNKERS, NORSEMEN, AND THE LIKE, OVER THE LENGTH AND BREADTH OF THE NORTHERN BUSHLANDS. FLYING PROSPECTORS INTO TINY UNMAPPED LAKE IN ALASKA, THE YUKON, AND THE NORTH WEST TERRITORIES, BRINGING OUT SICK TRAPPERS AND PRECIOUS METALS (HE FLEW WITH THE FIRST LOAD OF RADIUM OUT OF BEAR LAKE), HE LIVED FOR TEN YEARS THE THRILL-A-MINUTE LIFE OF THE BUSH PILOT IN THE DAYS WHEN THE TINY FLOAT-PLANES WERE PIONEERING THE WEALTH OF THE CANADIAN NORTH. BEAMING WITH OBVIOUS AMUSEMENT, HE RECALLS THE OCCASION, FOR EXAMPLE, WHEN A GAS LINE RUPTURED ON A VICKERS VIKING AND A STREAM OF FLAME THE DIAMETER OF THE PROPELLOR WAS PUMPED BACK OVER THE TAIL AND BURNT IT OFF. FORTUNATELY HE WAS 500 FEET OVER THE FRAZER RIVER AT THE TIME AND SLIPPED THE AIRCRAFT SMARTLY INTO IT. AND THE TIME WHEN HE CHOPPED OFF A FIR TREE WITH HIS WING ROOT AND THE TRUNK RETALIATED BY CUTTING OFF HIS TAIL AS IT FELL. WHEN THE AIRCRAFT FINALLY CAME TO REST NOT A SOUND WAS HEARD BUT THE LURID CURSING OF A SOURDOUGH PASSENGER IN THE BACK WHO WAS FRANTICALLY TRYING TO FIND THE DOOR, NOT REALIZING THAT THE CABIN WAS SHEARED OFF AS CLEAN AS A WHISTLE TWO FEET BEHIND HIS HEAD. FRED'S COMMENT ON A BUSH PILOT'S LIFE — "IT WAS A LOAD OF FUN". PRESSED FOR VITAL STATISTICS FRED CLAIMED HE WAS TOO BUSY IN THE OLD DAYS THAWING OUT ENGINES AT 60 DEGREES BELOW, TO KEEP LOGS, BUT ALLOWED HE MUST HAVE 5,000 HOURS, ANYWAY, ON MAYBE 15 TYPES. THAT HE STILL FLEW OCCASIONALLY, BUT MOST OF HIS LEISURE TIME WAS OCCUPIED WITH HIS 200 ACRE DAIRY FARM AT AGINCOURT, HELPED BY HIS 21 YEAR OLD SON, WHO IS FOLLOWING HIS FATHER'S TRAIL IN GAS TURBINE INSPECTION.





AVRO CANADA
# News
OCTOBER 1951

## NOBEL: BIRTHPLACE OF JET POWER

OCTOBER 1951 AVRO **News** No. 41

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EDITORIAL DIRECTOR - MURRAY WILLER
EDITOR - ROSS WILLMOT
ART EDITOR - LEN THORNQUIST

## AVRO VIEWS

The New Jersey "Herald-News" reprinted Bill Cameron's article on the weather and sent us a letter saying it had not been the first time they had lifted something from our "very readable little magazine." They add their "congratulations for a really excellent job."

Our prize this month goes to Geoff Stenning.

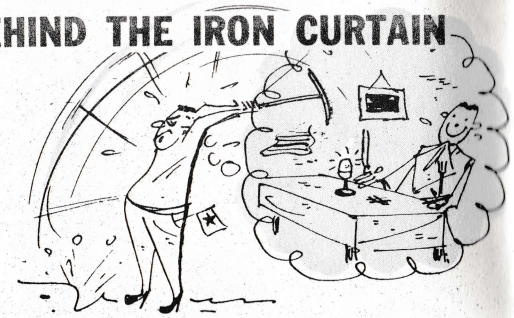
P.S.B. de Gray won our cross-word puzzle contest with Wm. S. Anderson, Donald M. Dingwall, Stuart Eckmier, F.W. Funnell and E. Hazard sharing in the prizes.

## COVER :

PHOTO BY HUGH MCKECHNIE.

Doreen Hancock, the "belle of Nobel," covers her ears when one of the components of the powerful Orenda under test at our test plant there opens up.

# BEHIND THE IRON CURTAIN



A heart-rending letter from a chance "Avro News" reader behind the Iron Curtain has been received. Apparently our magazine aroused considerable interest there particularly because of "the way the contributors write and express their views." In his particular country the reader knows only ten people, relatives included, to whom he can talk freely without fear they may be connected with the secret police.

Our correspondent compares the life in this "enormously happy, great family---Avro Canada" with life in his own country. We obviously have much to be thankful for. For his "boss," the state, he has to work 20 minutes for a single pen-nib, one day for a lead pencil, two days for a pair of cotton socks, 14 days for a cotton shirt, 90 minutes for an egg, 25 hours for a pound of sugar and 16 months for a simple radio set.

He blames it all on the communists, who, he says, are much worse than the Nazis and the Fascists, under whom he also suffered. His country has suffered in almost every European war for the last 14 centuries but nevertheless he "should like to kiss the hands of the mechanics putting guns on Avro Canada's military planes." Force, he thinks, is the only answer to the communist aggression which took over his country.

His parting words should be written in our hearts:

"Every Avro Canada employee performing his paid job also defends his own present and future prosperity. Doing so he is giving hope that the Free World will overcome every obstacle and protect liberty. To a very large number of people overseas that hope is all they have to live for.

"Your successes are ours. Your difficulties hinder us. Safeguard your happiness---your only wealth. Not your wide woods, not roomy fertile plains, not your flourishing industry. The greatest wealth you have is your freedom and democracy. Preserve them for they are ours too. Please watch out for them while they are in danger and help them to come to us again. They are very beloved here."

# CPA

## THE JET-PROPELLED BUSH LINE

Canadian Pacific Airlines are taking delivery shortly of two de Havilland Comet aircraft for operation on their North Pacific route. Having already established their reputation for the efficient operation of Canada's bush line air routes, they are now setting the pace as the first operator in the Western Hemisphere to take advantage of these radically-new jet transports on their international routes.

The CPA decision to purchase the long-range Comet, which shares with the medium-range Jetliner the distinction of being one of the only two jet transports in the world yet flying, was made after the company had made exhaustive studies of the aircraft on the ground and in flight. Arrangements are being finalized for the purchase by CPA of four more Comets in addition to the two now being delivered. CPA's present piston-engined transports are being sold in the stated belief they are now "archaic".

The Comet will be at first used on the Honolulu - Sydney stage of CPA's service to Australia. This service will be closer time-wise than Montreal - Vancouver on present schedules. They also will eventually fly the CPA Vancouver - Hong Kong service, more than a quarter of the way round the world with three one-hour halts in 20 hours. The distance is 6,800 statue miles and the halts would be at Anchorage in Alaska, Shemya (or Semichi) in the Aleutians and Tokyo.

The Comet made its first flight at Hatfield, England, on July 27, 1949, only a few days before that of the Jetliner, and has since been fully tested, establishing many records. Like the Jetliner it cuts present airline schedules in half. It is fitted with de Havilland Ghost jet engines, but later versions may be fitted with Rolls Royce Avons. The Comet and Jetliner represent one of the greatest advances ever made in the history of air transport. Its operational characteristics are comparable to those of the Jetliner. It has a cruising speed of nearly 500 miles M.P.H. and normally operates at a height of about 40,000 feet or almost eight miles. In this region the atmosphere is clear and stable and passengers may be sure of a comfortable journey high above the weather. An altogether new element in air travel is the absence of vibration due to the use of gas turbine engines. The entire payload accommodation is pressurized and the cabin is heated and humidified to provide a pleasant

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and healthy atmosphere at this great height, with a change of the cabin air every three minutes. An interesting feature is that the pressurizing and heating functions, so vital for high flying, are accomplished with unprecedented simplicity, for the jet engines themselves provide both the pressure and the heat, eliminating the need for complicated compressors and combustion heaters. Refrigeration equipment is included for short-period use when approaching and leaving tropical stations.

The all-round simplicity of the jet air transport is one of its outstanding characteristics; it not only reduces the hazards of flight, but also shortens the turn-round time at halts and brings fresh opportunities of economy in maintenance. This feature, combined with the extremely high performance, permits the aircraft to accomplish a great deal of work in the day and in the year.

It is the high-earning capacity of this new form of aircraft, along with its all-round convenience, which will be so appreciated by operators and passengers alike. The Comet's high speed has not been secured at the sacrifice of slow-flying ability; in point of fact the wing loading is moderate, less than that of some conventional propeller-driven airliners of the present time, and the stalling speed is correspondingly modest so that the aircraft is able to descend through cloud steeply at slow forward speed, and to make its circuit, approach and landing in the ordinary manner. It does not require exceptional runways but is suitable for operation from ordinary main airports along all the trunk routes. It is not revolutionary in handling technique, or even in appearance. As the builders themselves comment, it may be considered as a logical step, rather than a daring stride, in the steady de Havilland policy of securing commercial economy by high performance.

Other orders for the Comet are for the British Government, and for British Overseas Airways Corporation. Various European and South American airlines are reported interested.

The Comet and Jetliner are pilot's airplanes. Capt. C.H. Pentland, CPA's technical operations manager, says the Comet will bring many changes in air transportation and flight operations. He thinks "Comet pilots will look back to the present-day aircraft with four piston engines and find them altogether too complicated".

The Canadian Air Line Pilots Association recently summed up in their official magazine, "The Canadian Air Line Pilot", their opinion of the Comet purchase by CPA in these words:

"Some eighty years ago, a rail line was driven through the western wilds of North America to the shores of the Pacific Ocean and from this bold and foolhardy venture has matured the Dominion of Canada. The boss men of the CPR gambled their money and reputations on the soundness of their project and now, in nearly as bold a move, are gambling again. This hits CALPA members as proof of what private enterprise in a competitive field can achieve. Competing in the Pacific with Pan American, United, Northwest and B.C.P. Airlines, the directors of the CPR have sanctioned a move which, if successful, will result in a Canadian carrier far outstripping American opposition in public service".



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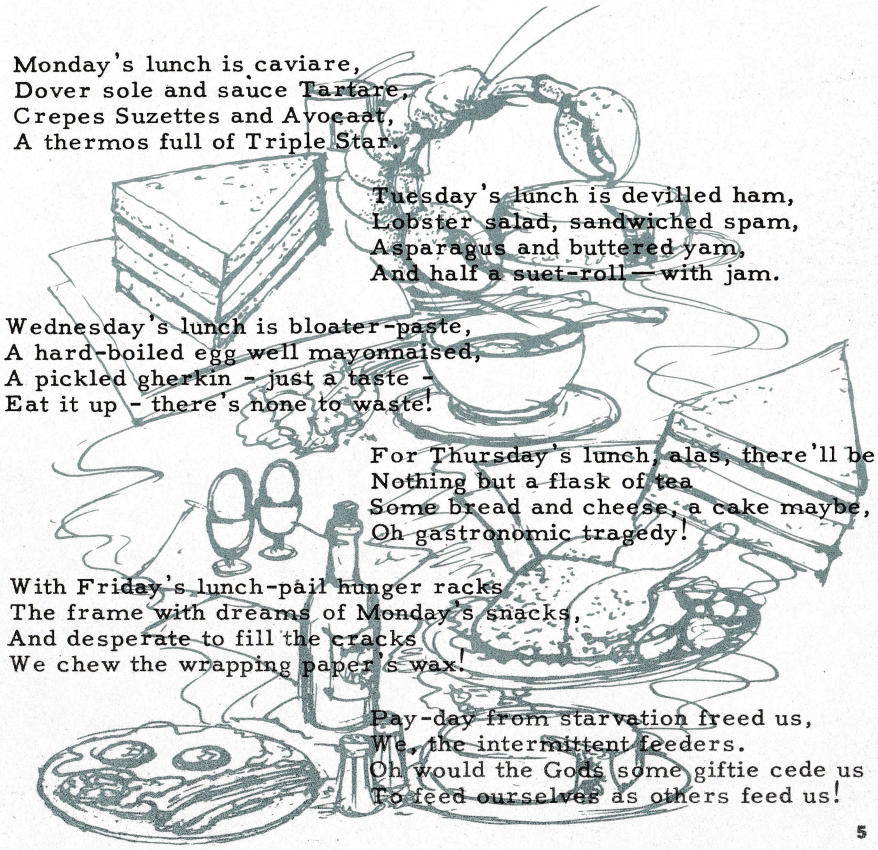
# the way to a man's heart is through his lunch pail

*by C. A. Haines*



Monday's lunch is caviare,
Dover sole and sauce Tartare,
Crepes Suzettes and Avocaat,
A thermos full of Triple Star.

Tuesday's lunch is devilled ham,
Lobster salad, sandwiched spam,
Asparagus and buttered yam,
And half a suet-roll — with jam.

Wednesday's lunch is bloater-paste,
A hard-boiled egg well mayonnaised,
A pickled gherkin - just a taste -
Eat it up - there's none to waste!

For Thursday's lunch, alas, there'll be
Nothing but a flask of tea
Some bread and cheese, a cake maybe,
Oh gastronomic tragedy!

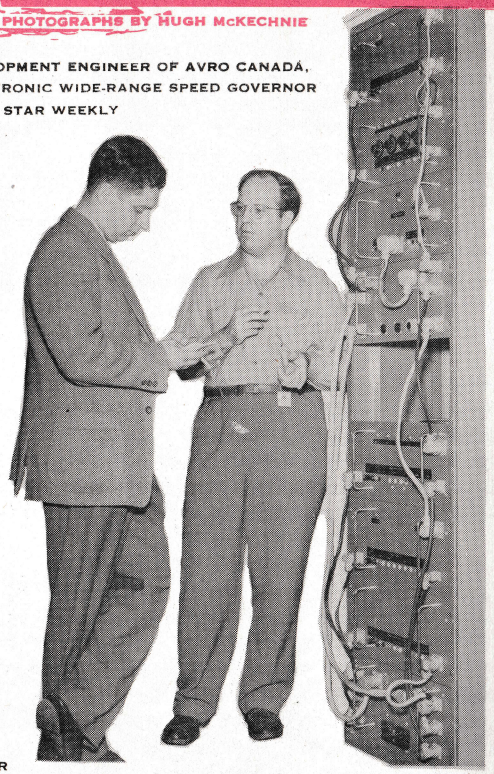
With Friday's lunch-pail hunger racks
The frame with dreams of Monday's snacks,
And desperate to fill the cracks
We chew the wrapping paper's wax!

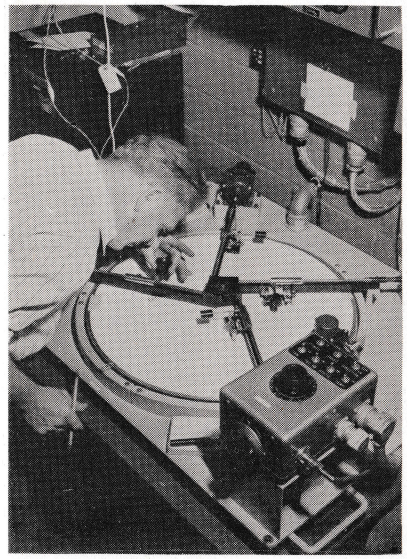
Pay-day from starvation freed us,
We, the intermittent feeders.
Oh would the Gods some giftie cede us
To feed ourselves as others feed us!

# NOBEL birthplace of jet power ...

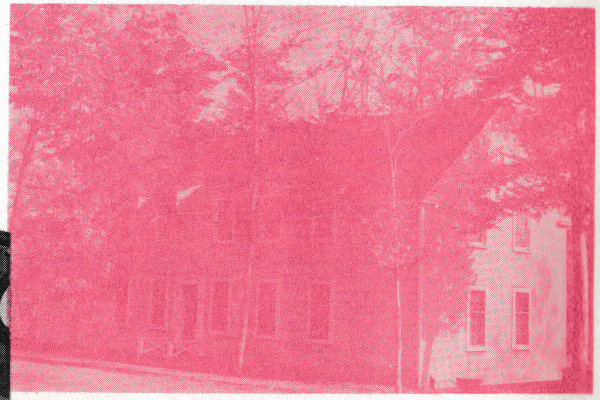
PHOTOGRAPHS BY HUGH McKECHNIE

DOUGLAS KNOWLES, CHIEF GAS TURBINE DEVELOPMENT ENGINEER OF AVRO CANADA, EXPLAINS THE COMPANY'S OWN-DESIGNED ELECTRONIC WIDE-RANGE SPEED GOVERNOR AT NOBEL TO WM. STEVENSON OF THE TORONTO STAR WEEKLY

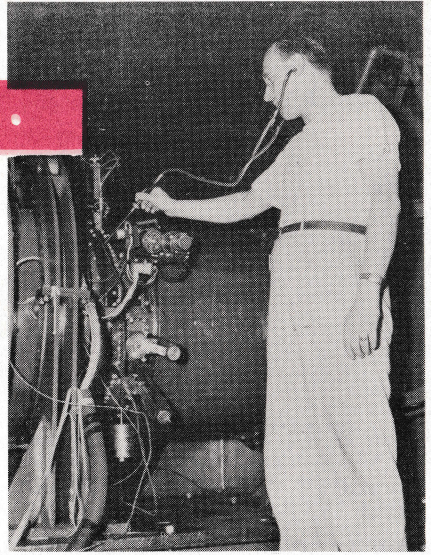




NOBEL'S R. RUCHAN PLOTS DATA FROM THE COMPANY'S OWN-DESIGNED RECORDING TRAVERSER WHICH WITH ELECTRONIC COMPUTERS ENABLES THE COMPANY TO DO AN ENORMOUS AMOUNT OF BASIC RESEARCH ON ITS JET ENGINES

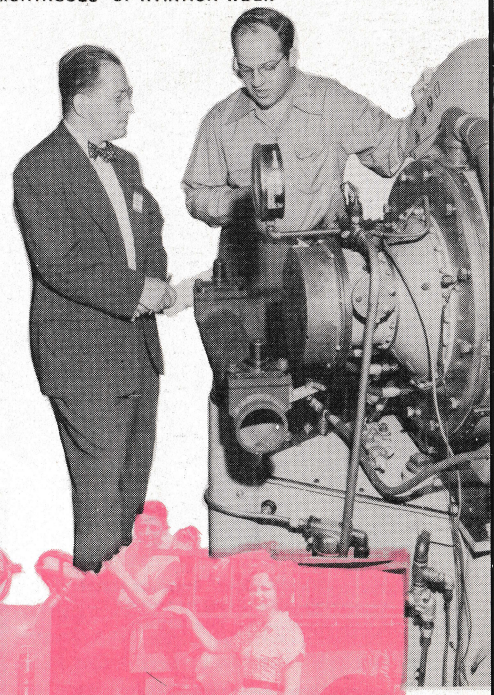


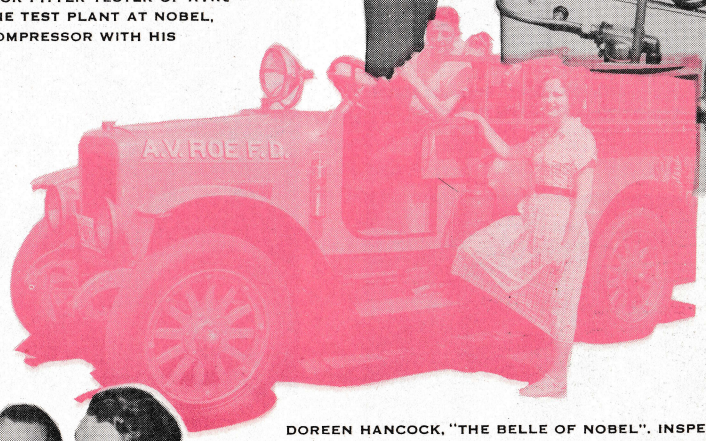
THE STAFF HOUSE AT NOBEL



LESLIE FIELDING, SENIOR FITTER TESTER OF AVRO CANADA'S GAS TURBINE TEST PLANT AT NOBEL, TESTS THE ORENDA COMPRESSOR WITH HIS STETHOSCOPE

DOUGLAS KNOWLES GIVES AN EXPLANATION TO JIM MONTAGUES OF AVIATION WEEK



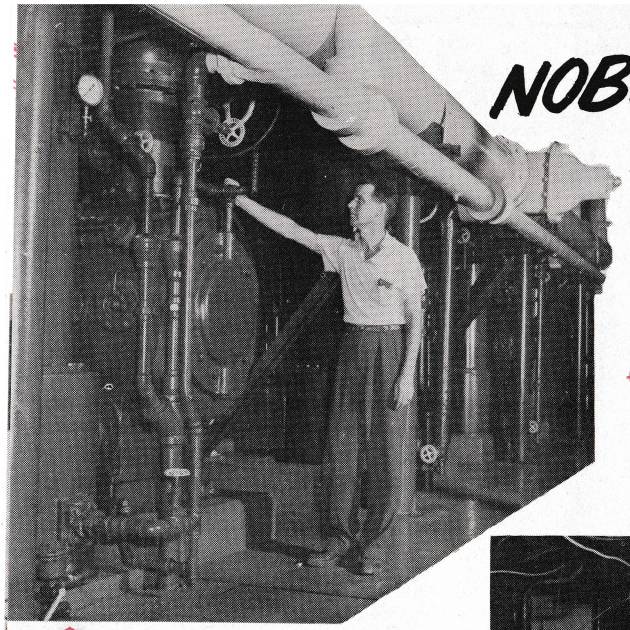



DOREEN HANCOCK, "THE BELLE OF NOBEL", INSPECTS THE UNIT'S ANTIQUATED BUT EXTREMELY EFFICIENT FIRE ENGINE.

REGINALD COOPER, AVRO CANADA SERVICE ENGINEER, LEARNS ABOUT THE VARIABLE INCIDENCE CASCADE FROM HARRY GIBSON, ENGINEER IN CHARGE OF THE COMPANY'S GAS TURBINE TEST PLANT AT NOBEL

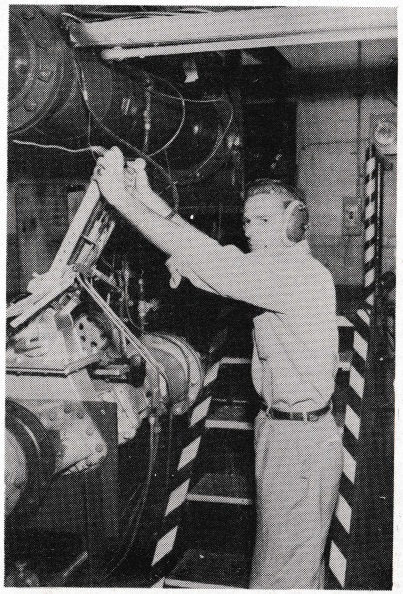
THERE ARE MORE OF THE ORIGINAL DEVELOPMENT ENGINEERS ON THE WHITTLE JET ENGINE WORKING AT AVRO CANADA AND PARTICULARILY AT THE COMPANY'S FULL-SCALE TEST ESTABLISHMENT AT NOBEL THAN ANYWHERE ELSE IN THE WORLD. THIS IS THE REASON FOR AVRO CANADA'S LEADERSHIP IN THIS FIELD. RECENTLY THE MAGAZINE PRESS TOURED NOBEL FOR THE FIRST TIME

# NOBEL (CONTINUED)

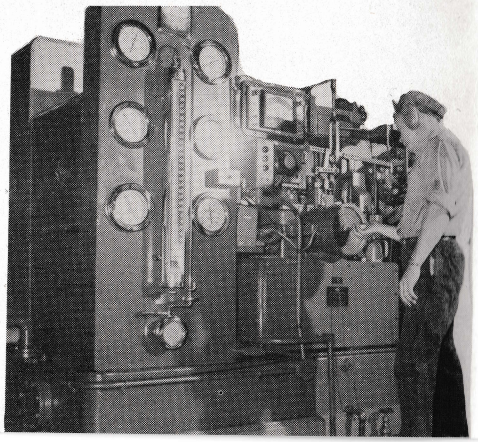


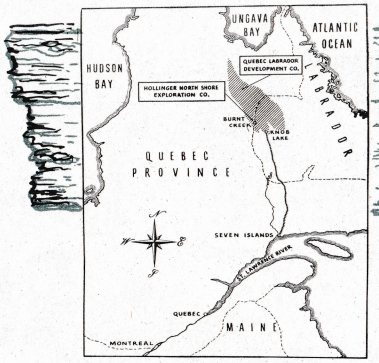
W. S. JONES, CHECKS SOME OF NOBEL'S MANY AIR COMPRESSORS WHICH ARE REQUIRED TO TEST ONE COMPRESSOR OF THE ORENDA

WM. STEVENSON, OF THE STAR WEEKLY; BOB HALFORD OF AIRCRAFT; AND KEN WHITE OF THE FINANCIAL POST, GET THE LOW-DOWN ON THE ATMOSPHERE AND COMBUSTION TEST RIG AT NOBEL



EARLE THOMAS, WITH THE ATMOSPHERE AND ALTITUDE COMBUSTION TEST RIG FOR THE MAIN COMPONENTS OF THE ORENDA AT NOBEL






# Wilderness Airlift

For more than a month last summer, in the bleak but mineral-rich territory of northern Quebec and Labrador, a Fairchild C-119 Flying Boxcar exercised special hauling abilities on heavy mining and road-building equipment needed to expedite an iron ore development project of top importance to the United States and Canada.

Rich iron ore deposits, in a preliminary state of development today, are located at Knob Lake, Quebec. A region of sand and rock covered with growths of Canadian Spruce and moss and laced with 3,500 foot mountain ridges, the area is inaccessible at present except by air. In order to get the rich ore deposits down to the St. Lawrence port of Seven Islands, Quebec, for transhipment by boat and rail to steel mills, a railroad is being built across 356 miles of wasteland.

A civilian transport company, has been hauling dismantled heavy equipment such as tractors and shovels in to the Knob Lake area. However, their fleet of commercial transports and a flying boat are unable to haul such bulky items in one piece as can be accommodated in the rugged and spacious C-119 Flying Boxcar.

The Iron Ore Company of Canada expects to make the first shipments of ore out of the region in 1954. To speed building of the railroad and opening of the mines as well as building dams, highways and camp sites, machinery is needed and in a hurry.

The C-119 operated out of the Seven Islands airstrip, making trips to Knob Lake, a distance of 320 airline miles, and Wacouna, 90 miles. Typical equipment hauled to these mining and railroad bases consisted of tractors, shovels, scrapers and truckers weighing up to ten tons.

Other loads included 25 foot lengths of culvert pipe (800' X 4'), insulation material, 25 foot bridge timbers, 5,000 pounds of plywood, and tons of groceries.

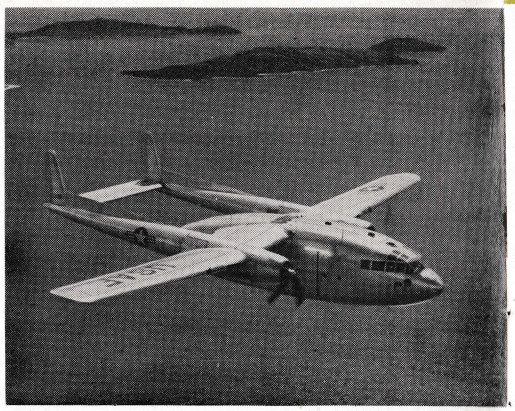
In 49 flying days, the C-119's work added up to 1,452,120 pounds carried while travelling 39,920 miles. As many as five round trips were made daily with weights of nine tons or more.

The airstrips flown into at Knob Lake and Wacouna are quite different from the normal idea of a proper landing field, being sand and gravel-surfaced. They are located in tight valleys between mountains which rise up to 4,000 feet. Weather con-

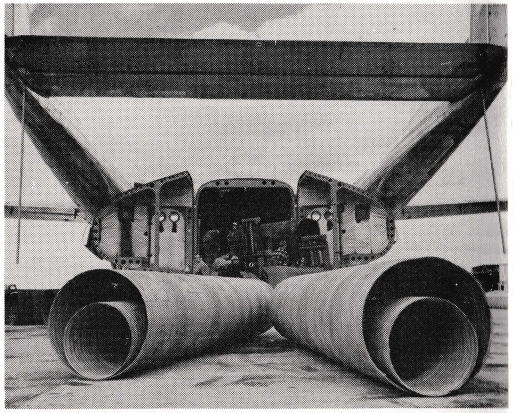
ditions are variable. Even in June, one of the best months of the year for flying, snow squalls were not an uncommon occurrence. Fog and low clouds became routine problems.

During the period of sustained operations the rugged C-119 required very little maintenance, most of which consisted of inspections.

Native French Canadians, to whom the sight of airplanes in this "bush" country is no novelty, nevertheless were thrilled by the size of the gleaming aluminum ship - and the prodigious loads it could speed over mountain and water. Looking over its 109 foot wingspan, its tail booms towering twenty-six feet into the air, they dubbed it, with Gallic directness, "Le Gros Oiseau" (The Big Bird). An official of a steel company, on a fishing trip to Labrador, observed operations and commented: "I'm glad to see this Air Force plane up here, crewed by civilians - it's a good example of all-round cooperation between commercial and military organizations, between Canada and the U.S., in a vital defense project."



A FAIRCHILD C-119 MILITARY TRANSPORT WINGS OVER THE ST. LAWRENCE RIVER ON LOAN FROM THE U.S. AIR FORCE TO A CIVILIAN MINING COMPANY, IN THE INTEREST OF NATIONAL DEFENCE. THE "FLYING BOXCAR" HAS CARRIED OUT A WILDERNESS AIRLIFT.



TWENTY-FIVE FOOT LENGTHS OF CULVERT PIPE FIT EASILY INTO THE CARGO COMPARTMENT OF A FAIRCHILD "FLYING BOXCAR"

GRADING OF ROADBED PROCEEDS AT KNOB LAKE, LABRADOR, PROPOSED RAILROAD TERMINUS LINKING RICH ORE FIELDS TO A PORT AT SEVEN ISLANDS, QUEBEC. TWO AND HALF TON TRUCKS AND POWER SHOVEL IN FOREGROUND WERE FLOWN INTO THE AREA

# getting away from it all

*by Shirley Munshaw*

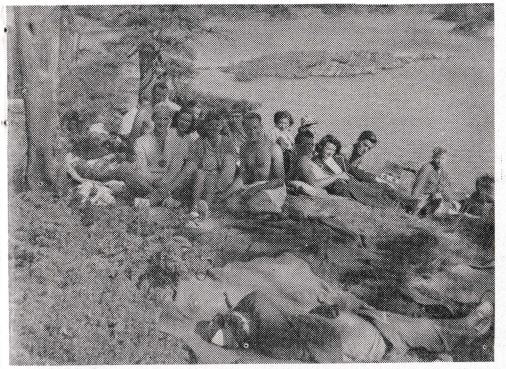
After spending a weekend on an island in Georgian Bay, completely away from civilization, Jean Sutcliffe and I decided it would be an ideal place to stay on our holidays. Rocky Islands and forests, swimming almost everywhere, studying the stars at night atop high rocky hills — these made this strictly informal island a place to forget that we had to work for a living. Marg Thompson and Doris Bird thought it sounded great and decided to join us. Mike Muir and Tom Rubery had been vacationing there for a number of years and still full of enthusiasm about the wonders it held were going back for another two weeks of rugged living.

While making preparations, and phoning for reservations and transportation, we discovered to our amazement there were three more Avroites going

ARRIVAL AT CAMP FRANKLIN
(OR WAS IT CAMP AVRO CANADA)

SOME OF THE AVRO CANADIANS PRESENT

AN IDEA OF THE BEAUTIFUL NATURAL SURROUNDINGS MAY BE OBTAINED FROM THIS PHOTO. THE AVRO-ITES IN IT, OF COURSE, HELP



THE CLOSEST THING WE HAVE TO A BATHING BEAUTY SHOT

to Franklin Island - Jim Cuthbert, Bill Wilson and John Taylor. Avro Canada being the huge place it is, we had never met before, but that was soon remedied. Anyway, it was nice to know that we wouldn't be completely among strangers the day we finally arrived at our destination, since there were now nine of us from A. V. Roe heading the same way.

The day finally came when we arrived at Franklin and after we were settled we met two of our lodge mates - Joyce Rigby and Sandra Dawe. The usual conversation ensued and we learned that they too were from A. V. Roe and that their girl freind, Mary McLean, was arriving next weekend. It was almost time for lunch so we hiked it back to the main lodge and were met at the door with: "I'd like you to meet Don Buckley and his wife, Irma. Don's from A. V. Roe! Oh yes, and this is Mervin Rotz also from Malton. Did you know that John Steck is coming up in a few days?" Well, by this time my head was swimming, for it seemed that most of the camp was from Avro. As it turned out there were 18 of us when Kay and Ray Rumble joined us later in the week.

The staff consented to pull tables together and permit us to eat in a group. From then on we were a challenge to the rest of the camp.

The Recreational Director would ask groups to challenge us to games, Tennis matches or whatever he could organize. By the end of the week we had gained a reputation that we were a very difficult crowd to beat and the challenges became barely audible. On skit night, every table was responsible for a poster and thanks to engineer Don Buckley and artists, Sandra Dawe, Joyce Rigby, Mike Muir and Doris Bird, A. V. Roe took second prize with a drawing entitled "The Avro Parashots" showing the Avro Jetliner dropping us on Franklin Island in various comic poses. We also wrote a song entitled "The Rivet Guns Go Dring a Dring Dring" to the tune of "The Bells of Hell Go Ting a ling ling", which showed remarkable talent, (I hope there aren't any non-Avro campers reading this). Anyway, there are about 100 more people who will remember the name A. V. Roe when they hear it again. (Honestly, we didn't divulge any secrets!)

In spite of a few disadvantages (various modern conveniences), we all agreed it was a wonderful vacation. I, for one could not have asked for a more congenial group with whom to spend a holiday.

RON ADEY'S COMPANY GOLFING ASSOCIATES PAID TRIBUTE TO HIM THE OTHER DAY ON HIS ACHIEVEMENT OF A "HOLE IN ONE". IN THE PRESENTATION BY HENRY GARSIDE OF THE TROPHY PICTURED ALONGSIDE, IT WILL BE NOTED THAT ALL ASPECTS OF THE GAME ARE CATERED FOR.

# Sales and Service Dance

MALLONEY'S ART GALLERIES

THE STAG LINE—A STUDY IN EXPRESSION. PRACTICALLY EVERYTHING FROM EAGER ANTICIPATION TO AMUSED BOREDOM

THE FLOOR SHOW. THE PAINTINGS ON THE WALLS WERE VERY INTERESTING ALSO

CHEESECAKES MALE AND FEMALE. SOME OF OUR FIELD SERVICE ENGINEERS AND THEIR WIVES

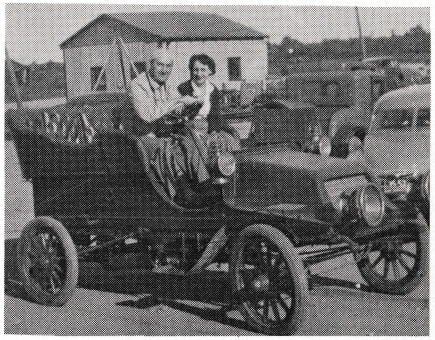
CELEBRITIES' TABLE. DAVE MELDRUM WOULD LIKE TO MAKE IT KNOWN THAT IT WAS THE PHOTOGRAPHER, NOT WHAT HE HAS IN HIS GLASS, THAT MAKES HIM LOOK THAT WAY

# Prize-Winning Vacation Photographs

NORM WOOTON WON OUR FIRST PRIZE FOR HIS SET OF PHOTOGRAPHS TAKEN DOWN IN THE MARITIMES AND FJOLA DAVIDSON GETS A SPECIAL AWARD FOR HER BATHING BEAUTY SHOT.
EVERBODY WHO ENTERED GOT PHOTOGRAPHS OF OUR AIRCRAFT

NORM WOOTON AND FRIEND

THE NORTH POLE NEAR LAKE PLACID AS PHOTOGRAPHED BY NORM WOOTON



MONCTON CAR OF 1904 IS PUT THROUGH ITS PACES BY THE WOOTON HOLIDAYERS

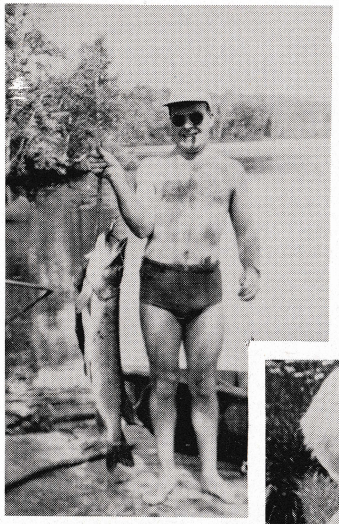
NORM WOOTON SHOT THIS BEAR WITH HIS CAMERA SHORTLY AFTER A DIFFERENT KIND OF SHOOTING

THE WOOTONS INSPECT SANTA'S REINDEER

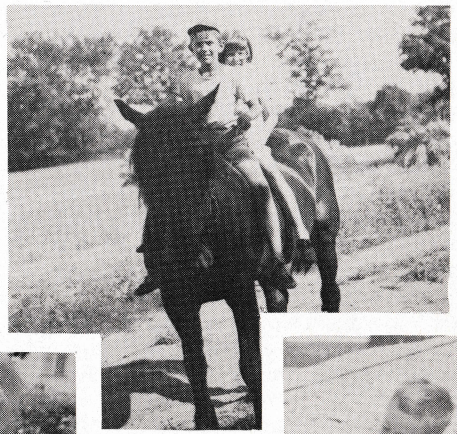
THE WOOTONS MAKE THEIR XMAS WISHES FROM SANTA

PATSY, DAUGHTER OF ED. TREASURE, AND NIECE OF FJOLA DAVIDSON, ILLUSTRATES ONE WAY OF BEATING THE SUMMER HEAT

PETER JAMIESON SNAPPED THIS SHOT OF CLEVELAND'S TIMES SQUARE FROM HIS HOTEL WINDOW



WM. J. LUCIANI TOOK THIS PHOTO OF STEWART PHILLIPS WITH A 14 LB. PIKE HE CAUGHT NEAR PARRY SOUND



N. CHRISTENSON'S YOUNGSTERS "DOWN ON THE FARM"

M. SMITH'S TWO-YEAR-OLD BOBBY TRIES THE DAISY-PULLING TRICK

BILL MITCHELL'S NEPHEW GETS A STONE IN HIS SHOE (NO WONDER) AT LIONS HEAD

# as others see us

There was only one plant reader who sent us in comments on how to improve the magazine. H.H. "Buck" Barnhart's criticism wins for him several large photographs of our aircraft, and deservedly so. He had several good suggestions to make.

Although we might take this lack of response as unfavorable criticism in itself, we are inclined to think it indicates general approval of the magazine. We say this because we recently have received literally hundreds of very flattering tributes from readers outside the plant whom we asked if they wished to continue receiving the magazine. We believe the tastes of these outside and inside readers are to a great extent the same. This does not mean that we're self-satisfied - far from it. While we think the magazine compares very favorably with any other of its type, we still think it can be made much better.

Undoubtedly there are certain features about the magazine which annoy the individual reader. "Buck" Barnhart names certain articles which he says do not find general favor in the shop and others, particularly such humorous ones as those by Jack Woolacutt and Colin Haines which would. While we would like to have every article please every reader, we know this is impossible. Rather than have our readers indifferent to our material we would have them partly hostile to it, so long as they eventually would find something which pleases them.

"Buck" thinks we set our sights too high but we are sure he would be one of the first to criticize us, being interested in writing himself, if we lowered our standards. He suggests a roving reporter to get information from the shop and we hope perhaps he will take on this job. Here we would like to make a bit of a confession. For months we have been pleading for contributions as a matter of policy. Actually as anyone can see, we have a good number of contributors, some of them conscripted admittedly, but contributors none the less. Perhaps we should be satisfied but we still think there are a few contributors such as "Buck" himself who should be made to realize that the pages of the magazine are open to them. We do not want to risk the accusation that the magazine is written by a clique.

Innumerable surveys including the one "Avro News" conducted several years ago, indicate that what readers of such a magazine overwhelmingly want is information about the company which might have some bearing upon their future in it. What they overwhelmingly don't want are personal items about babies and brides unless these items are significant or interesting in themselves. This, of course, does not mean we should ignore personal items, but rather that we should pick and choose among them. That's exactly what we have been doing.

There is no doubt our magazine could do much more in interpreting and explaining company policies. If we want this material we have to work for it and we just have not found time to get as much as we would like to see included. There is much about the company which remains untold and we hope to get the co-operation of our fellow employees in digging out these stories. We believe in Avro Canada as a fine place to work for both management and workers chiefly because they get along so well together. We hope to promote this relationship by furthering better understanding among all classes of employees.

Just to make us all feel good, here are a few typical comments on the magazine we received from outside readers. These readers incidentally are mostly press people whose professional opinion is to be valued.

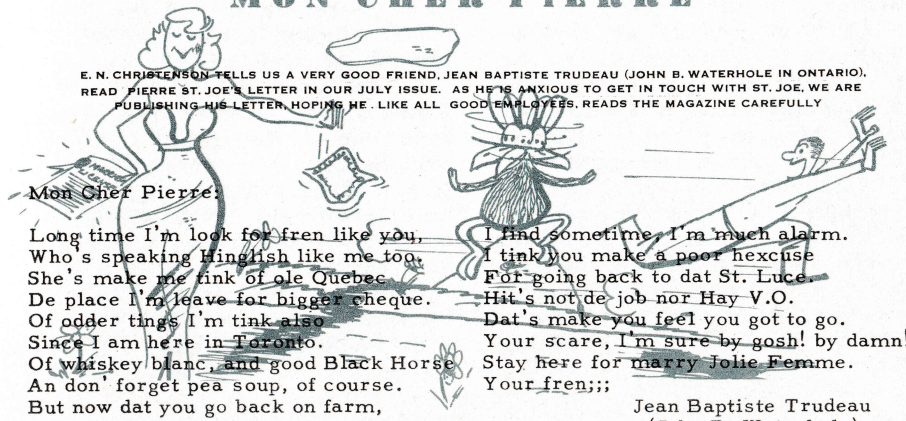
"I must say Avro News is one of the brightest and best designed house organs I've ever seen."

"I like the way it is made up and the general tone of it and would like to take this opportunity of congratulating you on turning out such an interesting magazine."

"Much of the information you supply in the News is of interest to a person like me - one not willing to read aviation journals and requiring information in small readable packages."

"I lecture on Canada in this country, U.K. and occasionally U.S.A. and your interesting little Avro News helps me keep up-to-date."

## MON CHER PIERRE




Mon Cher Pierre:

Long time I'm look for fren like you,
Who's speaking Hinglish like me too.
She's make me tink of ole Quebec
De place I'm leave for bigger cheque.
Of odder tings I'm tink also
Since I am here in Toronto.
Of whiskey blanc, and good Black Horse
An don' forget pea soup, of course.
But now dat you go back on farm,
I find sometime, I'm much alarm.
I tink you make a poor hexcuse
For going back to dat St. Luce.
Hit's not de job nor Hay V.O.
Dat's make you feel you got to go.
Your scare, I'm sure by gosh! by damn!
Stay here for marry Jolie Femme.
Your fren;;;

Jean Baptiste Trudeau
(John B. Waterhole)

# Personality Parade

## Bert McCaffrey

by Hugh Gilmour

In a rather obscure but none the less important and busy corner of our spacious plant; to be exact, in our embodiment loan stores Building "W", works a man of some 56 years, whose hair is greying but the bright twinkle in his eyes and ready smile belie his years. This man was born a few miles north of Malton at Caledon East in 1895 and christened John Albert McCaffrey, better known as Bert.

Bert's name is known and revered throughout the length and breadth of the land in hockey circles. He first played intermediate hockey for Bolton, Ontario, thence to Chesley Seniors in the N.O.H.A. In 1920 Bert joined the famous Toronto Granites where he played for four years alongside such outstanding players as Dunc Munroe, Hooley Smith, Beattie Ramsay, and Sig Slater. The Granites won the Allen Cup, symbolic of Canadian Senior Hockey supremacy, for four years in a row and culminated their great career by representing Canada in the Olympic games of 1924 at Chamanic, France, where they won the World's Amateur Hockey Championship for Canada with ridiculous ease. The Toronto Granites were, and rightfully so, recognized as the greatest amateur hockey team in Canadian history.

Following his four year stint with the Granites, Bert turned pro with the then Toronto St. Pats of the National Hockey League and in 1927-28 played with the Toronto Maple Leafs, one year with the Pittsburgh Hornets, then of the National Hockey League, along with Lionel "Big Train" Conacher, Roy Worters, Hile Milks and others. In the season of 1929 Bert was traded to Montreal Canadiens where he played for three years with the immortal Howie Morenz, Aurel Joliet, Johnny "Black Cat" Gagnon, Pete Lepine, Silvio Mantha, Marty Burke and other "Greats". The Canadiens won the Stanley Cup three years in a row while Bert played with them.

At the end of the 1931-32 season Bert hung up his hockey tack as an active player and took up refereeing in the National Hockey League for a period of five or six years.

Bert has worked for A.V. Roe Canada Limited since its inception on December 1, 1945, and before that with Victory Aircraft Ltd., Malton. He lives quietly with his wife and family at 13 Inglewood Drive, Toronto, and can usually be found on Saturday nights, during the winter months - you guess where? - that's right! at Maple Leaf Gardens.

# Avro Service Engineers have seen the World

by Geoff. Stenning

Take almost any type of aircraft operated by the Western powers during the past decade, fly into any airfield or flying-boat base between here and China, and you will have a talking point with any one of Avro Canada's service engineers.

Reminiscences of the good old days, of disaster averted by split-second improvization, of catastrophe avoided by superhuman ingenuity; in private the line-shoot would be hair-raising, but in public - it isn't done. Yet Avro Canada is fielding a team of engineers to represent the company with the RCAF of which any engine and aircraft manufacturer might well be proud. Undoubtedly something should be said about these service engineers. Their stories take you from Winnipeg to the Phillipine Islands and from London to Shanghai, and even when passed for publication make good reading.

These men are an integral part of Avro Canada's Service Department. At its head is Fred C. Plumb, who has had 27 years in the industry, covering most phases of its activities. So perhaps he knows a few things about these gravity-defying devices.

The Service Department has the responsibility of advising the RCAF on the maintenance of the CF-100 fighter and Orenda engine in the field. The training of RCAF engineering personnel on this aircraft and engine is another duty of the department, which calls on its service engineers and technical authors (each of the latter a specialist in his sphere) to supply the lecturers required for the courses. Manuals and handbooks on the aircraft and engine type are written by the authors and illustrated by another section of the department composed of artists who are (with few exceptions) quite tame. The Greenwich Village element, the authors and artists, are no part of this article. These dim mortals are mentioned chiefly because several of our service engineers have themselves, as part of their training on the Orenda and the CF-100, taken part in writing these manuals, on which their activities in the field will be based. Founded on the work of its technical authors, the department looks to its service representatives to ensure that standards are observed while keeping the aircraft flying.

The activities of the airframe service section in the field are captained by Clem Ely, engineer and ex-RAF pilot. After his six-year apprenticeship to David Brown & Sons (Huddersfield) Ltd. of England, he engaged for several years in the prototype building of light aircraft, and later in the experimental fitting and testing of Fairey "Battles" and "Fulmars" at the company's Middlesex plant. As a flight-test observer, he put in upwards of 40 hours flying on these and other aircraft. Subsequent to 1937 he held such positions as chief draftsman and assistant chief designer, at Fairey's, Cunliffe Owen, Dowty, and Folland Aircraft. In the course of his experience at the latter firm he worked on the design of the flying control surfaces for the great Brabazon I. Completing two European operational tours as pilot and navigator bomb-aimer on Lancasters with the RAF, he came to Canada in 1947 with Avro Canada and since October of 1950 has been a service engineer.

That old man of the sea, Forrester Mordeau Smith, better known as Dick, came to the job via De Havilland and the Royal Naval Engineering College. In 1942 he was appointed to HMAC "Hunter" as Air Engineer Officer, his ship forming part of the escort for one of the first Mediterranean convoys with troops for the North African campaign. The story of the prolonged bombardment suffered by their convoy has gone down in history. Dick himself has gone down but that was in the sea, when he was torpedoed off Tripoli in the "Avenger". Some still find him salty.

Service as Lieutenant Commander on a station in India followed and in 1946 we see him as Commander of the Royal Naval Air Repair Yard, Fleetlands. Posted subsequently as Air Engineer Officer to the School of Naval Warfare in Padstow, Cornwall (England), he met there many Canadian naval men. In 1949 Dick retired from the navy and came to Canada. As technical representative for Avro Canada he accompanied the CF-100 on its evaluation trials at Wright Patterson Field.

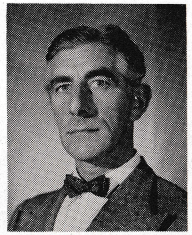
John Mertz is a Canadian who gained his wings in the RCAF Reserve and then transferred himself and his wings to more exciting places. At the invitation of the Government forces in Spain he took part in the civil war there and was shot down. This baptism of fire apparently drew his attention to quieter ways of earning a living, and after a year on engine overhaul and testing with BOAC he settled down in Kisumu, Kenya Colony, servicing flying-boats as a ground engineer on engine maintenance and overhaul. He worked on those grand old aircraft, the Short 'C' Class flying-boats, for two years. It will be remembered that by their operation on the famous "Horse-Shoe Route" throughout the greater part of the war the Empire air-lines of communication were kept open.

Rejoining the RCAF in 1941, Mertz served with a Coastal Command squadron based in Ceylon and completed a tour of 1,000 hours on Catalinas. One experience he recalls during this period is of rescuing 13 men who had been adrift in an open boat for 52 days. The highlands of Scotland were his next call, and after several months there with the RAF as a crash inspector, Johnny returned to his native shores in the service of Avro Canada. He joined as an engine-fitter in Gas Turbine Experimental and ten months later was promoted to service representative, specializing in Orenda maintenance.

And now for a brace of Halton apprentices; two of Avro Canada's Service representatives, George Ellis and Reginald Cooper, who made their way through this famous training-ground of RAF apprentices. George Ellis left Canada in 1935 for this course and later was stationed at Northolt. Posted to Odiham Army Co-operation Squadron, his was one of the first units to land in France. He saw duty as an air gunner and later as a flight-engineer. At Dunkirk his chief claim to fame, he says, was in his withdrawal from the scene much more rapidly than the others, since his was the only aircraft in the flight to get airborne. The remaining planes had to be destroyed on the ground.

As a flight-sergeant, Ellis subsequently served in Africa and in Sicily and in 1945 was promoted to Warrant Officer, charge of engineering in a communications flight in Malta. Transferring to the RCAF, he became an examiner on a Trade Test Board. After demobilization he joined BOAC, returning to Canada as an Inspector at Dorval airport. Again he went back to England but in 1949 George found himself acting as acceptance inspector for BOAC on the Boeing Stratocruiser at Seattle. Another period in the U.K. followed before he decided to settle in Canada. Having crossed the Atlantic 11 times, he is hopeful.

The other Halton ex-apprentice, Reg Cooper, is that rare bird, an Englishman who



AVRO CANADA'S SERVICE ENGINEERS WITH FRED PLUMB, THEIR CHIEF, HOLDING THE CF-100 MODEL. LEFT TO RIGHT - REG. COOPER, LES ABBISS, CLEM ELY JOHNNY MERTZ, MAURICE COUPLAND AND GEORGE ELLIS. DICK "SALTY" SMITH IS IN THE INSET.

enjoys extremes of temperature. His best work has been done in Cairo (110° in the shade) and in Winnipeg (40° below zero). To widen his experience of weather conditions as well as aircraft engineering he has, in his own words, "worked on many different types of aircraft and aero engines during service in England, France, Egypt, Italy, Austria and Canada". Wherever he went he found trouble. To such typical complaints as "Sergeant, my engine's making funny noises and smoking," Cooper would bring his wide knowledge of the intimate functions of engines and effect a cure. But even Reginald's appetite for trouble was assuaged when he was put in charge of a post at Naples, where as many as 30 different types of aircraft were serviced each day.

Leaving the RAF with the highest trade group rating of Sergeant-Fitter I, he came to Canada in 1948 to carry out work on prototype aircraft winterization trials and overhaul of RCAF Mustang aircraft. That was in Winnipeg, "where it was nice and cold", and whilst out West there came, characteristically, the call of the East. He joined Avro Canada as a technical author and then, in the East, his desire for the West grew. So he became a service representative, "where the chances appear quite good for servicing an Orenda engine at forty below, some winter's night on the Prairie".

Now Les Abbiss is, like Dick (I mean Richard Mordeau) Smith, a De Havilland man. After completing his apprenticeship he joined their Service Department as an inspector and in 1947 came to Canada with their company in Toronto. Here again, came the call of the East - but his was the East of old Cathay, with its mystic ceremonies and beautiful temples. De Havilland aircraft in Shanghai were actually his distined study, but it sounds better that way. Recalled to Toronto in 1949 he soon arranged a passage back to China. As he picked up his bags to leave Toronto for Shanghai the radio announced that the Reds had crossed the Yangtse and were teeming down the valley towards Shanghai. "I had paid for my ticket anyway," he said, "so I went. Our PAA flight was the last one into the city. The Reds had already arrived on the outskirts of Shanghai."

He had been offered a contract by the Chiang Kai-Chek air force but found them already departed for Formosa. The RAF, however, landed on the Wang-Poo River in Sunderland flying-boats and took off the British for Hong Kong. After recovering at the Peninsula hotel he went to Bangkok to recover from the Peninsula.

CONTINUED ON PAGE 19

THE R.C.A.F. "PROVISIONING TEAM" FOR THE CF-100 IS PICTURED IN FRONT OF THE AIRCRAFT, IN CO-OPERATION WITH AVRO CANADA. THE TEAM, UNDER THE LEADERSHIP OF S/L G.T. DOUCET (CENTRE) ARE ESTABLISHING THE SPARE PARTS REQUIRED FOR MAINTENANCE OF THE

# Britain's Air University

A little known airfield in Hampshire beat London Airport last year for the title of Britain's busiest air station.

The airfield, owned by Air Service Training, popularly known as Britain's Air University, handled an average of 205 aircraft movements a day - most of them piloted by students learning how to fly.

Run independently as part of the Hawker Siddeley Group, the world's largest aircraft production organization, the University has played a unique role in the British Commonwealth's air training schemes, besides training hundreds of embryo aviators from a score of countries outside the Empire.

Opened 20 years ago by the Duke of Gloucester, who, incidentally, was the first to give Air Service Training the title of Britain's Air University, it has turned out by far the largest percentage of successful civil and military pilots and aircrew of any independent establishment in the world.

The aim at A.S.T. is to teach a man to fly, to handle and maintain a plane, to know how it works, the aids to navigation and the secrets of radio and radar. No attempt is made to tackle the more advanced task of teaching pilots to fly jets, but the University's standards for basic training are high, and since its first days it has enjoyed the blessing, support and encouragement of the Air Ministry and most other Governments in both the civil and military aviation fields.

Throughout the war the University turned all its efforts to training aircrews for the R.A.F. and by the end of hostilities had contributed over 40,000 trained aircrew personnel to the Service.

It was not until 1947 that A.S.T. was able to return to its original role. Since then it has fully regained its international character.

A visit to the University graphically illustrates the cameraderie of the air which exists there within its white-painted gates. Men from the West Indies, Africa, Malaya, India and Pakistan rub shoulders in complete harmony with Spaniards, Finns, Egyptians and Icelanders to name but a few of the 39 countries who send their students to A.S.T. They share their comfortable quarters and mess together, much to the concern of the Station chefs who are hard put to it to cater for all the national dishes involved.

They work together in one or other of the four main schools. Commercial pilots start out training on elderly

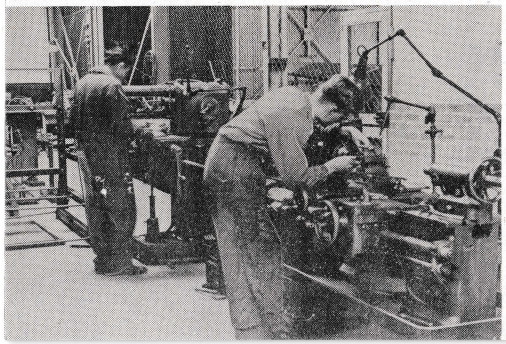
biplanes and end up flying twin-engined Avro Ansons. They obtain their instrument rating endorsements and pass on to the Navigation School, seat of learning for all who wish to fly for a living. Here they work to achieve the high standards demanded by the International Civil Air Organization and the British Ministry of Civil Aviation exams for commercial licences, accepted as paramount practically the whole world over. They learn about a wide field of subjects including D.R., navigation, astral navigation, flight planning, air legislation and meteorology, taught by hand-picked instructors from the Empire Air Navigation School.

Technicians enter the engineering school and work for the licences granted by the Air Registration Board for all ground maintenance engineers, on a course that lasts a total of two years. Their instructors take them stage by stage through all the problems that govern the maintenance of light and heavy piston engines, airframes, propellers and compasses. They are taken on visits to the different production companies of the Hawker Siddeley Group. Then those who wish to learn the secrets of the gas turbine are able to go on to Armstrong Siddeley Motors' new jet engine school at Ansty near Coventry.

The 'Sparks' pass through the School of Radio and Radar, generally rated the best in Britain. Here they learn to become airline operators or radio maintenance mechanics, working alongside other budding 'Sparks' who prefer getting their feet wet in a life at sea to the job up top. Taught by expert instructors, all of them former air or marine radio officers, these students face a shorter course lasting only a year, by the end of which they are ready to pass for the British Postmaster General's 1st class licence. Although this licence only has official availability for British and Dominion subjects, it is recognized as being of the highest standard the world over.

Dominion and overseas air force personnel join with the civil pilots and air crew on many of the courses, while many wealthy families send their sons thousands of miles to A.S.T., just to learn how to fly for pleasure. In addition to all this A.S.T. also runs a Reserve Flying School for the R.A.F.'s national servicemen who pass through the Navigation School. In the engineering field they train Dominion and Overseas Air Force officers on a two year course at the same level as the R.A.F.

Man behind all these activities is Group Captain R.J.F. Barton, O.B.E., one of Britain's first pilots, who learned to fly in a Vickers' bi-plane in 1913 and is a survivor of the first night bombing flight ever made. An international rifle shot and a keen yachtsman, he has been Commandant of the University since it first opened its doors.



A CORNER OF THE A.S.T. ENGINEERING SCHOOL

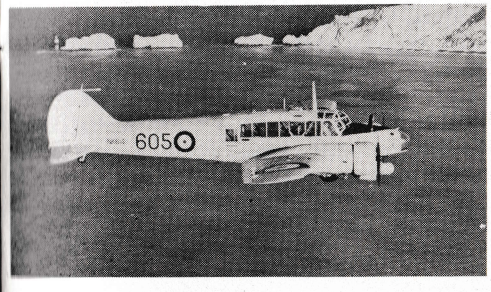
Among many achievements, Group Captain Barton was the officer instructor who first spotted the inventor of jets, Air Commodore Sir Frank Whittle, then an apprentice at the R.A.F. College, Cranwell, and got him his commission.

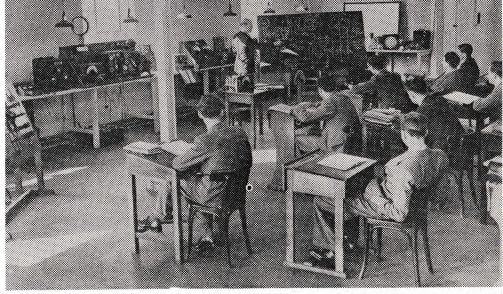
Under "Groupie's" guidance, A.S.T. has steadily expanded to its present unrivalled position in world aviation, and has pioneered such outstanding developments as the technique of blind-flying in civil aviation.

To-day the activities of A.S.T. extend far beyond the white-painted gates and red brick colleges of A.S.T. They stretch out to Ansty, near Coventry, Warks, where some students undergo flying training and maintenance, in addition to those attending the new Gas Turbine School; to Bangalore, where A.S.T. have set up, staffed and actually run the Indian Air Force's technical college for the Indian Government; to Pakistan, where they run two more schools of flying and engineering for the Pakistan Government.

The contribution that they and A.S.T. make to aviation is a vital one, for no military air force or civil airline, no country, in fact, can hope to develop in the new fields of jet aviation which unfold themselves before us to-day without the surety of a constant reservoir of trained men to fly their planes.

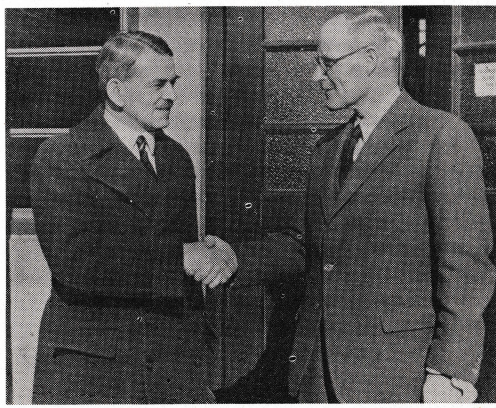
AN AVRO ANSON FLYING CLASSROOM BASED AT AND OPERATED BY A.S.T.



A.S.T. STUDENTS ATTENDING A LECTURE IN THE RADIO AND RADAR SCHOOL

G/C R. J. F. BARTON, HEAD OF A.S.T., GREETS A VISITOR, AIR COMMODORE SIR FRANK WHITTLE, INVENTOR OF THE FIRST JET ENGINE



# "THE BEST FIGHTING AIRCRAFT IN THE WORLD"

The first details of a new, secret superjet, the Hawker P 1067, together with the news that this fighter will go into immediate quantity production for the RAF not only means that Britain's aviation industry has passed a post-war jet-age mile stone, but also answers the often asked question, "When do we start mass production on these new superjets of ours?"

Neville Spriggs, O.B.E., 51-year-old general manager of Hawkers Aircraft, Kingston, states "We believe that the P 1067 will outfight any other known type of fighter interceptor flying today.

"The fact that the RAF ordered this new aircraft off the drawing board is the best testimony to its qualities. So far as we know, it is one of the very few that have ever been so chosen by the RAF. This means, in effect, that we have been able to plan mass production even before the prototype left the workshops for its first flight.

"The P 1067 brings airframe construction right into line with the tremendous advances in jet engines which have given Britain the aviation lead over the rest of the world."

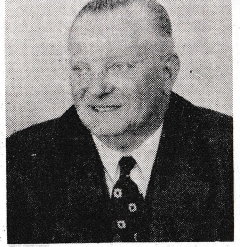
Mr. Spriggs should know what he is talking about. He was only 15 years old when he got his first glimpse of the inside of an aircraft factory. That was when he joined the old Sopwith company in 1915. Since then he has done practically every job from fitter upwards, to foreman, chief process engineer and finally to the position he holds today. In 1942 Mr. Spriggs, who joined Hawkers 30 years ago, was made works manager in charge of the company's war output of fighters. It was he who stepped this up to its peak production of 240 Hurricanes a month, an achievement for which he received the O.B.E.

Now Neville Spriggs faces a similar task in the current jet re-armament program. Recently Hawkers announced that the Board of Trade had allocated to them the giant wartime shadow factory at Squires Gate, near Blackpool, and, at the same time, announced Mr. Sprigg's appointment to be general manager, just as they were running into the largest production expansion program in their history.

Backing up his production effort, Neville Spriggs has an unrivalled design team led by Sidney Camm, famous for designing fighters with an ultra-fast climbing speed and extra high fire power, and who has given Britain such outstanding piston-engined fighters as the Hawker Hart, Hurricane, Typhoon, Tempest and lastly, the Sea Fury, currently the all-purpose, carrier-borne, fighting plane of the Royal Navy, which has put up such a fine show in Korea.

Since the war, this unique team have been concentrating on a new line of jet fighter interceptors, and have given us such aircraft as the new P 1040, better known as the Sea Hawk, which is now in production for the Royal Navy; the P 1052 and the P 1081 experimental fighters.

The P 1067 is the logical development of this new line of jets, and, flown by Squadron Leader Neville Duke, D.S.O., D.F.C., A.F.C., Hawker's chief test pilot, it has already shown that Britain has once again snatched the thunder in the skies from the grasp of any potential enemy.



NEVILLE SPRIGGS, O. B. E. S. HAWKERS GENERAL MANAGER

S/L NEVILLE DUKE, D.S.O., D.F.C., A.F.C., HAWKER CHIEF TEST PILOT



## Service Engineers

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Finally he accepted the post of line maintenance engineer with Air Burmah in Rangoon. He transferred later to Union of Burmah Airways as Engineer-in-charge of Workshops, spending 18 months in Rangoon and returning to England last Christmas. Within six weeks he was back in Canada.

Rounding off this unholy septet we have Maurice Coupland. Canada, the USA, the UK, Europe, Hawaii, Fiji Islands, New Zealand, Australia, New Guinea, Borneo and China figure in his career. Born in the Middle West, he crossed to the UK in 1937 to join the RAF, and after gaining his wings was posted to Upwood as G.D. Officer. In 1940 he was attached to the RCAF as a flying and ground instructor and a year later was transferred to the RAF Transport Command at Dorval. A flight-engineer's course on Hudsons, Vega Venturas and Lancasters followed.

In 1942 Coupland returned to the UK for a Senior Officer's course and was posted to Iceland for a tour as flight commander. After several postings with this position he was sent to Dorval to act as Squadron Leader leading a flight of 22 aircraft which was being ferried to Sydney, Australia. He formed the 243 Squadron there, which was to support the British Fleet in the South West Pacific. He also set up field maintenance bases through the islands to service their aircraft. In July of 1947 he relinquished his commission on completing his contract service.

These brief surveys feature only the highlights of Avro Canada service representatives' careers, but perhaps enough has been said to give the RCAF the confidence that Avro's field engineers are of the right calibre. For the more intriguing details refer to the privately issued line-shoot.