



MARCH 1950

FIGURATIVELY SPEAKING

Did you know that there are $7\frac{1}{2}$ miles of electrical cable in the Avro Jetliner and that there are about 17,000 electrical connections - enough to equip a fair sized telephone exchange? There are about 1,200 other parts, switches, relays, light condensers, generators, motors, alternators, transformers and coils. The various generators and batteries supply a current of 187.5 kilowatts - as much as 32 average homes would use. It took more engineering work to design the electrical system for the Avro Jetliner than to design the electrical system for a 20 story building.

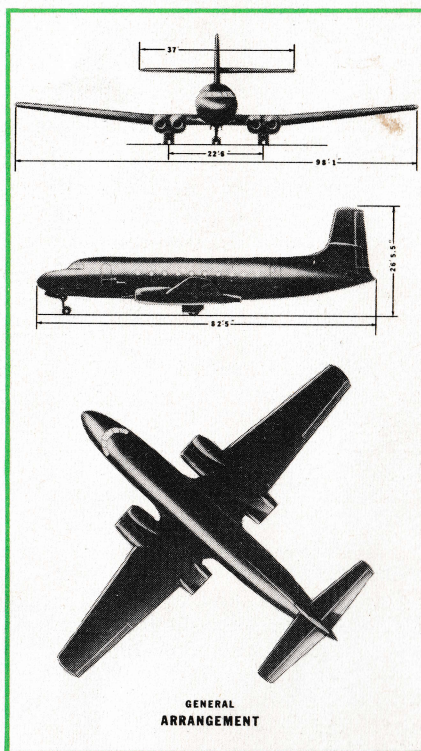
The Avro Jetliner's radio equipment consists of two transmitters capable of transmitting on 40 different fixed frequencies and ten receivers used for various navigation and communication purposes, together with a complete intercommunicating system.

One of the items in the air conditioning system for cooling the air is a small unit weighing only 30 pounds. This unit has a capacity of 200 household refrigerators and despite its small size and weight costs more than all these refrigerators.

From one wingtip to the other is just over 98 feet and it's $26\frac{1}{2}$ feet from the top of the fin to the ground. It's interesting to note that so many rivets are used in making the Jetliner that we have given up trying to count them.

Each one of the plane's four Derwent engines can develop a 3500 pound thrust which means that you would need a propeller-driven engine of about 5,000 horsepower to get the same push at a speed of 450 miles per hour. For these engines a fuel load of about 2,400 gallons can be carried, which according to our uncertain calculations would supply a small English car with enough fuel to make three trips around the earth's equator before running out of gas somewhere in the Indian Ocean.

Our Jetliner can be almost completely controlled by push buttons and switches. Radio navigation aids are connected to the automatic pilot so the aircraft will almost fly and land itself (except for touch-down).



AVRO News

PUBLISHED MONTHLY BY
A. V. ROE CANADA LIMITED
MALTON, ONTARIO

MEMBER
HAWKER SIDDELEY GROUP

ALL MATERIAL IN THIS MAGAZINE MAY BE
REPRODUCED. ACKNOWLEDGMENT OF THE
SOURCE WOULD BE APPRECIATED.

EDITORIAL DIRECTOR - MURRAY WILLER

EDITOR - ROSS WILLMOT

ASSOCIATE EDITORS

KAY LUFF BOYD FERRIS

ART EDITOR - LEN THORNQUIST

COMMENT

We are getting an ever-increasing number of contributions to the magazine and only regret we do not have space to print all of them. This month's prize goes to Al Ponman for his excellent cartoons. We are doing our best to satisfy the Sue Ferguson type of reader while keeping our other readers in mind. Sue sent in a plea from the Turbine Machine Shop for better plant news, more women's material and less technical stuff. We hope she lives up to her promise to help us out in getting contributions.

Lance Connery, of the Canadian Government Travel Bureau, writes that "Avro News is one of the hand-somest publications of its kind I've seen in this office, and we get quite a variety here."

We thank the "Toronto Star's" Over the Teacups editor for her use of a couple more of our news items, this time with a credit to us. Watch for a "Star Weekly" article by Bill Stevenson, partly inspired by our ejector seat piece last month.

In future issues we are planning to tell you about the RCAF's "weekend warriors," aeronautical work at Ottawa's National Research Council, our "subsidiary" at Nobel, Trans Australia Airlines and mercy missions of the RCAF, all of which, believe it or not have a very real connection with Avro Canada.

COVER

John Frost, Project Designer on the fighter, checks it over with Ron Porter, just before its official flight at Ottawa, March 11th.

- Photo by Hugh McKecknie



SELLING OURSELVES

It is vitally important that every employee of Avro Canada take an active part in the sales campaign our company has started. Our participation not only assures the success of the company but also our own individual welfare.

The Jetliner leaves us soon to make the first appearance of a jet transport in the envious United States. The records it will set up on this occasion, when it flies the North Atlantic for the SBAC show in England in September and on other appearances throughout the world will be something to talk about. The CF-100 fighter, too, has in a sense started sales demonstrations by its commendable official flight at Ottawa this month. While the part we can play in selling the fighter is small, we can in praising our transport, mention that we also produce the most powerful fighter and turbojet in the world.

Every employee should take it upon themselves to be fully informed, in so far as security goes, about our revolutionary products. Your company magazine has as one of its aims the task of informing you and an ever-increasing number of outside readers about Avro Canada. Much other information is available on request. If you travel by air, you should be able and eager to point out to fellow passengers, the pilot or ticket agent, that your company has an aircraft for sale which travels 150 miles an hour faster than the fastest one they have. In other respects as well the Jetliner is much better.

We at Avro Canada are singularly fortunate. We have exceptionally good management-employee relations and most of us have interesting work with a promising future to it. Let's do all we can to keep things that way, indeed improve our position by selling Avro Canada in every possible way.

PROGRESS AT AVRO CANADA

Sir Roy Dobson

PRESIDENT AVRO CANADA,
MANAGING DIRECTOR AVRO MANCHESTER AND
DIRECTOR OF THE HAWKER SIDDELEY GROUP



We associates of yours in the United Kingdom have been pleasantly surprised at Avro Canada's achievements although Avro Canada was set up primarily for development work as early as 1945. On my recent biannual visit here I inspected the Jetliner, which is now ready to go on record-setting proving runs; the CF-100 fighter, whose first few flights have shown that it is unique in its class; and the Orenda turbojet, now ready for the air tests which we are confident will qualify it as the power unit for our new fighter. For the first time a proper base has been established for the Canadian aviation industry.

As you know, the Jetliner will soon complete its pressurization tests in the air and then go on to obtain its American certificate of airworthiness. After that we will try to sell it throughout the world because there seem to be no technical or aerodynamic snags to upset us. We hope to start by selling the Jetliner right here in Canada and the United States operators have shown a definite interest in it. The Jetliner is being flown to England this

summer with the view of interesting British and European operators. There is considerable interest in this aircraft in Australia and there might also be some in South America. We are hoping that the second Jetliner will soon be ready to help us out in our sales tours and demonstrations.

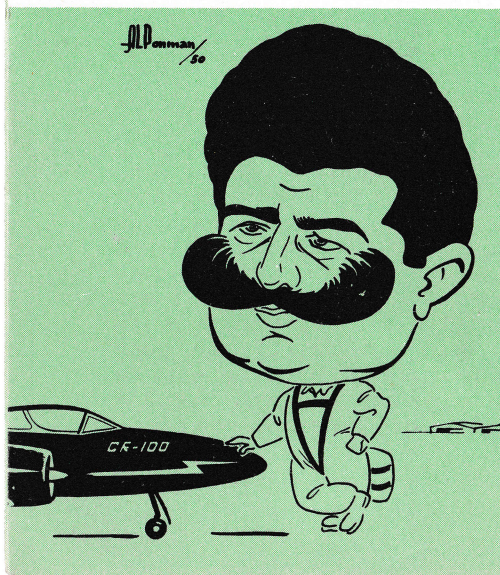
We also have great hopes of selling the Avro CF-100 abroad if we can produce it sufficiently cheaply and quickly. We want to take it to England at the same time to show it to the Royal Air Force and to the foreign military heads.

The Orenda project, I think is, if anything, not only more interesting but more vital to Canada and to Avro Canada than even our two magnificent aircraft. If there did happen to be an international emergency, probably one of the deciding factors would be the production of turbo-jet engines and Avro Canada could undoubtedly render a big contribution at such a time. There is now a world shortage of good turbines and the Orenda has shown that it is at least as good as anything in its class in the world. Therefore I anticipate that we will be

able not only to use the Orenda in Avro Canada aircraft but I hope we can sell it to other aircraft manufacturers in the United States, in Europe and even farther afield.

These aeronautical achievements at Avro Canada have found profitable employment for Canadian personnel, enhanced the technical status of engineering in Canada; and incidentally provided engineering education for many who would never get it otherwise. As a result, Canada has made definite advancement in the field of basic engineering, and in fact now has something which it never had before, such as Canadian sources of supply for forgings and castings which have also been developed. Although some Canadian firms said they could not make them we helped them and now they

LET'S FACE IT! ANYONE WHO CAN GROW
A MUSTACHE LIKE THE ONE SHOWN
HERE BECOMES VERY
MUCH ATTACHED TO IT - IT GROWS ON YOU



are making them - and doing it very well too even if somewhat costly. About 90 per cent of the Orenda is now being built in Canada and before long it will be a completely Canadian product. In addition, firms outside Canada which make hydraulic components and equipment are being persuaded to make the complete units in Canada. If there is an emergency, therefore, production won't be tied up because a shipment of engines from England was torpedoed. We are in the position now to compete in the world's markets for gas turbines for aircraft. They may also be adapted for various commercial uses which we have not yet had time to consider.

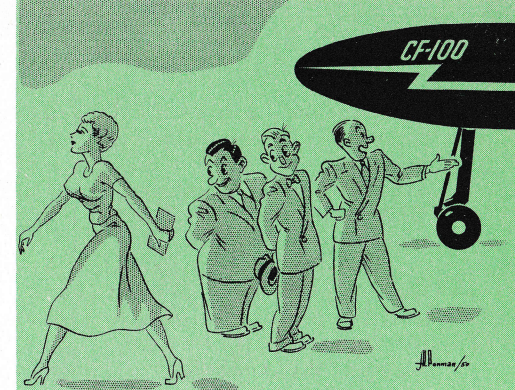
There may be some place for the piston engine in a modern aircraft on the grounds of economy in first cost or extreme range but my belief is that ultimately we shall get the turbines sufficiently economical to displace piston engines entirely.

Admittedly the initial cost of jet aircraft is more than of piston driven aircraft because we have not yet made enough turbines to get the same efficiency of manufacture our piston engine competitors have reached. Operating costs of the two engines are comparable even though the fuel consumption of the jet is higher. Jets have much more power than a piston engine of reasonable size will ever give. From the point of view of the aircraft passenger,

jets have silence and freedom from vibration which the piston engine and propeller could never have. The aircraft structure is not subject to the vibration and fatigue stresses such as are imposed on it by piston engines and propellers. We have found that in certain operations we only needed about half the engine maintenance personnel necessary when we were using piston engined aircraft to do the same job.

But the speed of the jet aircraft is what really counts. Our flight-proven studies show that we can fly more passenger miles in a given time or more ton miles than any piston engined aircraft because of our speed, and particularly do we gain against head winds and on long flights. The Jetliner's time, for instance from Toronto to New York is 59 minutes, about half the time Trans Canada Air Lines now takes with their North Stars. Our average speed on a short hop like that, including take-off, climb to height and coming down to land, would only be about 310 miles an hour. If it was a 1,000 mile run by Jetliner the average speed would be about 385 miles an hour, and if 1,400 miles about 400 miles an hour. The cruising speed at 30,000 feet would be about 465 miles an hour.

Compare a Dakota piston aircraft over the same ranges. At 400 miles, it would cruise at about 160 miles an hour; for 1,000 about 165, giving it all the allowances you could give



"ISN'T SHE A BEAUTY?"

it. The Dakota won't go any faster no matter what its range so there's the difference between 165 to around 400 for the Jetliner. Take the DC6, which is a later type aircraft similar to but larger than the North Star. On a 400 mile hop, average speed would be 235 miles an hour, on 1,000, 255 miles an hour against ours of nearly 400. It will be seen there is a considerable saving in time.

Once airline passengers get a chance to ride in the Jetliner I don't think they will ever want to go back to aircraft powered with piston engines. Public opinion will demand turbines for reasons of speed, silence, absence of vibration and increased safety.

All in all I am very confident in the future for Avro Canada. We in the United Kingdom are looking to your continued progress. I personally enjoyed my recent visit to our Canadian plant and am only sorry I was not able to congratulate more of you personally on your achievements, but I hope to be back before long and spend a little more time with you all.

NELSON'S

Canadian

PIGEONS

A SEA FURY LANDS ON THE "MAGNIFICENT"

In rough weather when a pilot comes in to land on an aircraft carrier he is apt to feel much like a person traveling on a moving train who is trying to thread a needle: the lurching of the train at the critical moment might well be compared with the rolling of the carrier's deck as it drops away from under the plane's wheels.

It doesn't help matters that the pilot's view of the carrier is almost completely obscured by his plane's nose. However he has a deck landing officer or batsman to ease his predicament, for landing the plane is really a two-man job which calls for smooth teamwork between the two men. As a plane comes in to land the last few hundred yards of its approach are guided by the batsman whose orders to the pilot are relayed by paddles which he holds in each hand.

Even when the plane has been brought down safely there is still the problem of stopping it before it runs off the far end

of the deck and into the sea. For this purpose a series of arrestor cables are stretched across the deck to catch a large hook which hangs below the tail of the incoming plane. Once the plane has hooked on to one of these cables it is quickly brought to a stop - the whole procedure looking very much like a slingshot working in reverse.

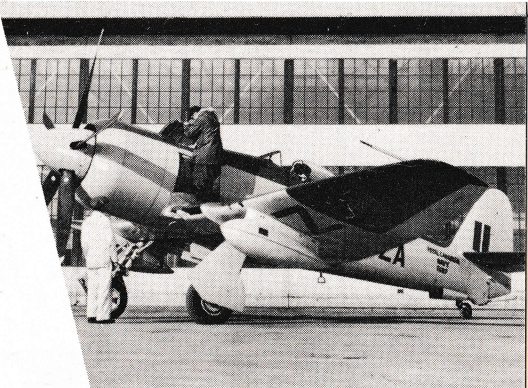
It follows that carrier flying demands special aircraft and Canada's standard operational navy fighter, the Hawker Sea Fury 11, typifies the careful thought which goes into their design. Sturdy construction of its airframe compensates for the unusual landing shocks likely to be encountered by this plane and its wings can be folded to give greater efficiency in hangar storage. Although rocket missiles give it a fire power equivalent to the broadside of a cruiser it has a rate of climb of 5000 feet a minute and top speed of more than 450 miles per hour. It also carries a bomb load as

heavy as bombers did at the beginning of the last war and carries it farther. Sea Furies are being overhauled and repaired for the Royal Canadian Navy here at Avro Canada and watching them being put through their paces over the plant gives a much better picture of their maneuverability than any description could.

The Sea Fury is a versatile craft, capable of air support, as well as combat work. In December, 1949, two Sea Furies of 883 Squadron exceeded the existing record for a non-stop flight between Toronto and Halifax when they flew the 825 air miles from Malton Airport, near Toronto, to the R.C.N. Air Station, Dartmouth, in one hour and 54 minutes - making good an average ground speed of 435.5 miles per hour.

Canada's naval air service is a comparatively recent addition to the country's defence forces. Though many of its personnel served with the British Fleet Air Arm and with the R.C.A.F. during the last war it was not until 1946 that H.M.C.S. Warrior was commissioned as the R.C.N.'s first aircraft carrier. Early in 1948 the Warrior was exchanged for the Magnificent, a carrier of the same class which had just been completed, modernized and equipped for cold weather operations.

Largest unit of Canada's fleet, the Magnificent contains everything needed to supply her planes' and crew's needs for many weeks without touching



AVRO CANADA CHECKS OUT ANOTHER SEA FURY



SEA FURIES IN OUR NAVY REALLY SEE THE WORLD. HERE THEY GO THROUGH THE PANAMA CANAL



H. BRADLEY, OUR REPRESENTATIVE AT H.M.C.S. SHEARWATER AT DARTMOUTH, N. S., J. A. MORLEY AND DON ROGERS LOOK OVER THE SEA FURY

port. With the exception of the island, (the ship's nerve centre, located amidships on the star-board side) her upper deck presents a flat unbroken landing strip 700 feet long and 80 feet wide; two elevators carry the planes from the flight deck down to the hangar deck where more than 30 planes can be stored and serviced. In her six decks she carries ample accommodation and services to keep her crew of over 1000 comfortable under all conditions of climate. Since coming to Canada the Magnificent has

spearheaded cruises south to the Caribbean and as far north as Hudson Bay.

At the present time the air strength of the R.C.N. is divided into two Carrier Air Groups. A series of training cruises is being made to maintain an operational standard with the emphasis being placed on anti-submarine operations and to assist in these exercises British and American submarines are being made available from time to time.

Nelson would scarcely recognize the Navy now.

RECREATION CLUB

The newly-elected Avro Recreation Club Executive Board held its first meeting on February 21, 1950. The following officers were elected:

President: J. Reilly
Vice-President: T. Hore
Treasurer: W. Gibbs
Recording Secretary: Mrs. E. Swift
Business Secretary: J. Burgess

Below is the complete list of the 1950 executive.

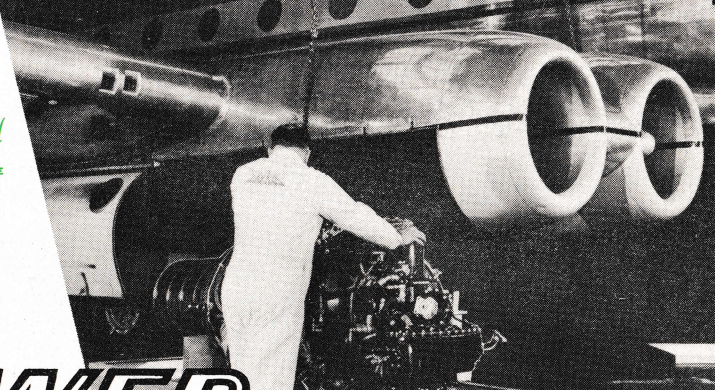
Group	Name	Dept.
1	R. Teeter	1100
2	D. McArthur	1700
3	W. Murphy	3900
4	J. Gane	2200
5	P. Miller	2300
6	S. Hill	2500
7	P. Gorrie	2601
8	E. McNeely	3100
9	J. Reilly	3800
	(Acclamation)	

10	T. Evans	6600
11	T. McConnell	6602
12	D. Munro	4102
13	T. Colville	4102
14	R.W. Glover	6440
15	J. Burgess	6200
16	W. Prendergast	7100
17	D. Burrows	8500
18	W. Gibbs	9600
	(Acclamation)	
19	T. Hore	5410
	(Acclamation)	
20	T. Brassard	5440
21	R. Curtis	6500
	(Nobel)	
22	D. Pon	4303
	(Acclamation)	
23	E. Swift	6601

A number of employees have applied for group membership in the Y.M.C.A. under the sponsorship of the AVRO Recreation Club. Al McNab, Local 83, says that there is still lots of room for additional members in this group.

Harry Halstead

ROLLS ROYCE REPRESENTATIVE
AT AVRO CANADA



POWER FOR THE Jetliner

Rolls Royce have supplied several engines, both piston and turbo-jet, for Avro Canada aircraft - the Merlin for the Lancaster, the Derwent 5 for the Jetliner and the Avon for the CF-100 fighter. Much has been written about the Merlin, a wartime product which gave excellent operational service and which is still being used in the civil transport field. Very little can be said, at present, about the Avon since it is still on the secret list. You might, though, be interested in knowing something about the development and service background behind the Derwent 5.

The Rolls Royce Derwent 5 is a turbo-jet but, structurally, it has very little in common with the Chinook or Orinda engines since the latter derive their thrust or "boost" from an axial compressor, whereas the Derwent has a centrifugal compressor. The power developed by a turbo-jet is always quoted in the form of thrust pounds, and in the case of this engine, the thrust output

at a compressor speed of 14,700 revolutions a minute, is 3,600 pounds. In order to operate the Jetliner at high payload, the Derwents are fitted with special internal fuel manifolds which allow a mixture of water and methanol to be fed into the engine with a consequent increase in power output for take-off. The thrust is increased to 4,000 pounds.

The Derwent 5 is actually a scaled-down version of the Rolls Royce Nene turbo-jet and was designed and developed to power the Gloster Meteor 4 aircraft, thereby providing a natural successor to the Meteor 3/Derwent 1 combination with which the RAF jet squadrons were originally equipped.

Since the first Derwent 5 engine was tested in June, 1945, a total of over 10,000 hours development running has been completed, during the course of which many special test procedures were evolved to overload particular components of the engine. In this way it has been possible to concentrate

development on the improvement of combustion assemblies, rotating guide vanes, turbine discs and blades. By this method, any weakness shown up by service operating experience has been rapidly reproduced and the necessary modification to design cleared on test and incorporated in the engine build.

To further this scheme and reproduce rapidly the weaknesses likely to arise from operation at extended running hours, an engine selected at random was removed from a service aircraft and brought back to the test beds. Here the first of two tests, consisting of a 500-hour duration run to a schedule which reproduced the conditions obtained under normal service operation, was completed. The engine was strip-examined, the bulk of the components found to be suitable for further running and the engine rebuilt. The second test consisted of 100 hours running at the maximum permissible take-off rating. This was completed satisfactorily.

In September, 1946, the world's air speed record was attained in the U.K. by Group/Capt. E.M. Donaldson in a standard Gloster Meteor 4 aircraft which maintained an average speed of 616 m.p.h. Squadron Leader W.A. Waterton, who, as you are all aware, is flight testing the CF-100, also took part in the record attempt and turned in a speed of 614 m.p.h. On this occasion, specially rated Derwents were

installed which developed 4,200 pounds thrust at 15,200 r.p.m.

The Derwents, which are powering the Jetliner, conform essentially to the production Meteor version but have been adapted to suit this special installation and are the first civil type. They are mounted in pairs in two nacelles in a similar manner to that adopted for the Nene in the Avro Manchester Tudor 8. Each engine has a self-contained oil system and is fitted with its own fire extinguishing rings with a fire-proof bulkhead between the sections carrying the fuel system and the "hot end" area. Consequently, in the unlikely event of a fire occurring, these provisions adequately prevent any serious damage and contribute in a high degree to the safety factor of a turbo-jet powered aircraft.

Generally speaking, the larger the aircraft, the greater number and size of accessories which have to be carried. The accessories are the units which are essential to the operation of the aircraft and supply, among other things, the hydraulic pressure to operate the undercarriage and flaps, air pressure to pressurize the cabin and current to operate the electrical services. The power to operate these units is taken from the engines - the energy requirement from each engine being in the region of 120 horse power or, in other words, sufficient power to drive a medium size car at over 100 m.p.h.

In order that the aircraft may be operated and maintained on the most economical basis, an intensive program to extend the life of the civil Derwent engine from its existing 500 hours between overhaul to 1000 hours between overhaul, is being conducted.

The Derwent 5 has also been chosen to power other aircraft, among which are the Avro Manchester 707, the Fokker jet trainer and the Pulque - the latter being designed and built in the Argentine. Rolls Royce turbine engines probably

power more prototype jet aircraft than any other in the world. The company's experience in producing aero engines goes back to the first world war.

Naturally, Rolls Royce are justly proud that their Derwent 5 engine has been chosen to power the Jetliner and can foresee that its contribution to the jet transport field will provide a further milestone in the engine's history. At the same time, we can be sure that it will help to create new aviation records for Avro Canada's Jetliner.



DEPARTMENTAL NEWS

REPORTERS

JOE BEST	SECURITY	DAISY PON	RECREATION CLUB
ELEANOR DAVIE	ACCOUNTING	PAUL NIELSON	NOBEL
KAY LUFF	SALES & SERVICE	ARNOLD RICHARDS	GAS TURBINE PRODUCTION
HARRY MACDOUGALL	AIRCRAFT DESIGN	GEORGE TIMPSON	CONVERSION & OVERHAUL
ISABELLE MCGARVEY	PURCHASING	GEORGE VALE	GAS TURBINE DESIGN
MURIEL CANNELL	GAS TURBINE EXPERIMENTAL SHOP	NORM WOOTTON	AIRFRAME MANUFACTURING
	OLIVE WURM		MATERIAL CONTROL, SHIPPING AND RECEIVING

INTRODUCING DON LINGWOOD



Don has come to Avro as our Director of Recreation and to relieve all those good-hearted volunteers of the worrisome details regarding the organization of our various sports and recreation activities. Don has interesting plans tucked away for future reference, and we know will prove a big help. Happy to have you with us Don.

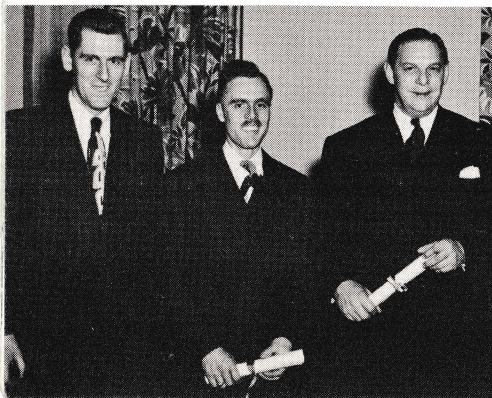
MAIL ORDER HOUSE

Bob Evans, of Department 2200, has a remedy for the housing problem. Bob bought a lot in Brampton last April and by July of the same year was living in his own four-roomed house. Here's how it was done. After putting in his full size cellar, Bob erected his house prefab style, having previously ordered the necessary sections. He tells us that not only did this plan prove a time-saver, but also an economical advantage.

THE FEMININE TOUCH

Look to your laurels, fellas. We refer to the way several feminine noses are being poked into your business. Let us explain - Airframe Engineering, formerly considered a male realm, has been invaded by draftswomen Kay Harvey, Eleanor Wylie, and newcomers Joyce Rigby and Wilma Bomhower. Kay Harvey, in addition to raising a family of four boys, gained her initial experience in airframe design at Noorduyn, Montreal, on Harvard aircraft. Kay tells us that when she first started work at Malton in 1942, the design office consisted of approximately twelve boards, in an office which now employs some 300-odd draftsmen and engineers. Eleanor Wylie first started drafting in architecture, but after working for Northrop in California, she was convinced that aircraft was a more exciting field, and finds her work on aircraft electrics fascinating. Daisy Pon made her debut as an aeronautical engineer by being the first and only girl to graduate in this

FROM L. TO R. — DON SMITH AND HAROLD COOK OF AVRO, WITH P. KLOPSTOCK JR. OF PAULITE PRODUCTS



class of engineering in Canada. June Ward is another girl with an unusual occupation - that of chemist analyst in the Metallurgical Chemistry Lab. June conducts chemical analyses on aircraft materials ensuring they are up to standard specification. Jean Terrio keeps things under control in Rivet Stores. As a storekeeper, Jean has full responsibility of ordering and keeping records. Reliable sources tell us Jean has a photographic memory regarding such records, and is an old hand at the business, first starting here in National Steel Car days. All the girls are extremely happy with their chosen field of work, and contrary to rumour, tell us that they find male co-workers very helpful, co-operative, and easy to get along with. So polish your prestige fellas, but tread softly. This could be the thin edge of the wedge you know.

COMMENDATION

In a contest sponsored by Canadian Plastics Magazine, Avro Canada in conjunction with Paulite Products, won a prize for the development of a new technique of producing precision die cast blades with plastic patterns. A Certificate of Merit was presented to Harold Cook and Don Smith, who represented Avro Canada at the Annual Conference of the Society of Plastic Industry, which was held at the Royal York Roof Gardens.

GONE WITH THE WIND

A raging windstorm during the past month played havoc at Barker Airport and completely destroyed Tiger Moth CF-CJZ, owned jointly by brothers Roy and Les Hems, of Material Control. As this happened once before, Roy and Les are beginning to wonder if there are such things as "aerogremlins".

HOMESICK?

Latest info from England on Eveline Doiron (now Mrs. Elwood Small), formerly secretary to C.N. Lucas, has her cheering loudly for hubby who plays on England's Streatham hockey team. We quote Ev. that touring the sights of London is alright for a holiday, but that sailing date home of May 14 cannot come too soon.

MALTON LANCASTERS

During the late war F/Lt. Roland Butler, A.F.C., (now Roly Butler of Conversion and Overhaul) was one of the few R.A.F. test pilots who carried an official permit empowering him "to fly and authorize his own flights on all types of aircraft." Roly had more than his share of excitement, safely surviving six crash landings. An interesting note in his hectic career is the fact that he was awarded the Air Force Cross after landing a Lanc. under decidedly adverse conditions, saving both the lives of the crew and a valuable air-

craft. This Lanc. was FM.105 built at Malton. Roly was one of three pilots who tested and issued to the Canadian squadrons in Six Group, all the Malton Lancasters after their arrival and modification in England.

HERB CULLAM

Recent reports have Herb Cullam (General Stores) convalescing rapidly and favorably after his unfortunate accident during the Xmas season. We all accept this as wonderful news. Word has it that Herb appreciates seeing his AVRO pals, so why not drop in to Room 7, Ward D, at the Western Hospital and surprise him.

WOT, NO CANASTA?

Lunch time in the Cost Accounting Department is a scene of violence and sharp utterances, due to the eight quiet card games that take place every day. With three bridge and five euchre, the noise is terrific at times. Ab. Doak and Norma Musgrove lead the bridge champs, but the euchre enthusiasts state "no comment".

WELL KEED

You'd think that tapping a typewriter all day would provide enough five-finger exercises for Betty Moore (who works for F.T. Smye), but apparently it isn't so. Betty has recently acquired a piano, and she spends every spare moment she has practicing.

SPORT

Ted Colville

The Avro basketball team in the Mount Dennis Industrial League has completed an unbeaten season. This League is composed of six teams - Avro, Kodak, Gair, R.C.A.F., Square "D", and Moores, and games are played each Tuesday night at the Kodak gym. If they keep up their present pace, our Avro team should win handily in the play-offs. The three top scorers are Avro men: Bruce York, first, closely followed by playing coach, Harold Cochrane, and Jack Frise. Norm Lucas and Johnny Brookes are also well up in the first ten scorers. The remainder of the team are Alec Harbow, Len Smith, Gus Kurus, Joe Pompierre, Ed. Findley, Art Shires, Ross Brownridge (one of the most valuable players on the team), and Blake Etough.

Harold Cochrane's basketball record is an impressive one. Harold first started as a bantam with Simpson Avenue Church, in Toronto, working up to junior with Simpson's Grads

who were Dominion Champions as juveniles in 1934-5 and Eastern Canada finalists as juniors a year later. For several years Harold was on the West End "Y" seniors. At present as well as being Avro's playing coach he is President of the Toronto Men's Church League, Treasurer of the Ontario Church League, Vice-President of the Toronto and District League, and also one of Toronto's better basketball referees.

Several of our lunch-hour dart experts are interested in forming a dart club which would feature team games under a set-up similar to bowling, which is a pay-as-you-play game.

For further information phone Clem Ely, Local 84; Chris Hunter, Local 238; Bill Willis, Local 180; or Art Pondling, Local 159.

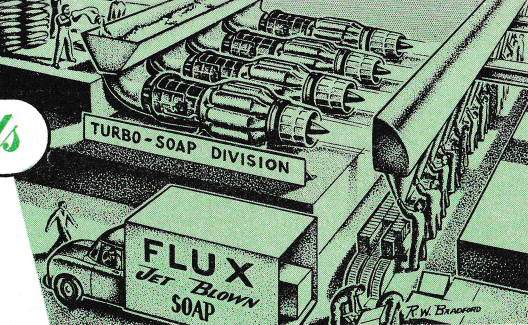
On February 7, West Toronto Tire in the Weston Commercial Bowling League rolled an impressive 4294 triple with single games of 1362, 1584 (a near Canadian record) and 1348. Congratulations to three Avro bowlers - Stan Aikin, Bud Hildebrand and Gord Lenahan who are members of this team.

As Others See Us

One of the best ways we have found to spread the good news about Avro Canada is through North American correspondents of foreign publications. Ed Bauman, who represents the Norwegian magazine, "Flying," in sending us an article about us in the February issue, writes: "I haven't the slightest idea of what it says about you but I'm sure it's something nice. Y'see they do the translating over there. All I can do is hope the editors paid attention during their English periods in dear old Oslo High."

An advance visit to New York indicates that the appearance of the Jetliner there in mid-April should generate considerable publicity, which we are not going to discourage. For further details see your newspaper, magazine, newsreel, television set or listen to your radio about that date. We received a very good press, incidentally, as a result of the official flight of the CF-100 at Ottawa this month. Many of you were no doubt startled at the "Toronto Star's" report we had sold \$800,000,000 worth of Jetliners and there were 1000 jobs open here as a result. Like the premature reports of Mark Twain's death, these reports were "slightly exaggerated."

We have a selection of large



photographs of our aircraft and aero engines for display purposes if any of your community organizations are interested. Last month these photographs appeared to accompany a lecture in Convocation Hall.

We have done very well recently on magazine covers. The last two issues of "Canadian Aviation" and "Aircraft and Airport" featured Avro Canada products.

Sir Roy Dobson's visit also created much favorable publicity. The daily press and such magazines as the "Financial Post," featured material from his news conference. Sir Roy's remarks were carried back to "blighty" by courtesy of CBC News Round Up.

Don Rogers, Michael Cooper-Slipper, Bill Waterton and Doug Knowles went on the chicken à la king circuit last month to speak to various organizations in Montreal, Brampton, Hamilton and the University of Toronto. John Fisher, of the CBC, is helping us out by mentioning us in his many speeches across the continent and we are going to see him at the plant soon to brief him with material for a broadcast on Avro Canada.

A TENSE MOMENT



GIRLS ON ICE



WHO WOULDN'T GRIN! WE'RE WINNING

