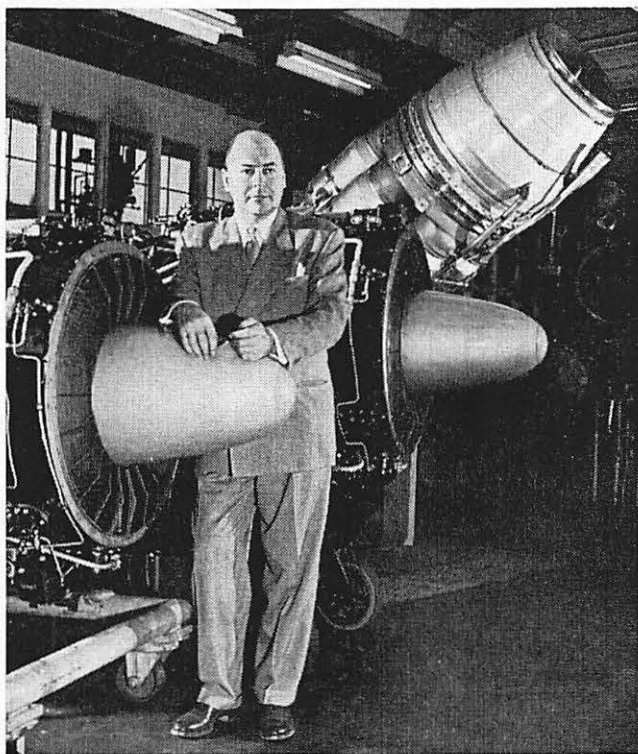


Industrial Interviews:



CRAWFORD GORDON, JR., poses here with the company-designed Orenda jet engine, 1,000 of which have been produced at Malton.

AVRO CANADA PLANS VARIED PROGRAM

An Interview With Crawford Gordon, Jr. President

What does the present work of Avro Canada consist of and what stage of the work is the company now in?

Avro Canada is engaged in the design, development and production of airframes and aero-engines. As such it is one of the few companies in the world successfully producing both aircraft and engines. At the moment, the Aircraft Division is in production on the CF-100 Mk. 4, all-weather long-range interceptor. This is a rocket-firing, radar-equipped twin-jet fighter that is recognized as the most heavily armed longest range fighter in the world today. The Aircraft Division is also tapering off re-conversion of Lancaster bombers originally built at Malton, into Maritime Reconnaissance aircraft for the RCAF. The major re-engineering and redesign involved in this re-conversion was all done by A. V. Roe Canada at Malton.

The Gas Turbine Division is in production on the Orenda turbo-jet. Initial output was 6,500 pounds thrust but about to go into production is an improved model which will deliver 7,500 and further power increases are possible, if required. At present the Orenda is going into the CF-100 and the F-86 Sabre 5 being built by Canadair.

What future work would Avro Canada like to do

- a) in the military field
- b) in the commercial field
- c) in possibly other fields

a) Avro Canada would like to continue to be considered one of the industrial arms of the RCAF. Since it appears that Canada's role in the air is to be confined, at least for the present, to fighter-interceptors and maritime reconnaissance, this is where most of our research, design and development will be concentrated. If, however, the RCAF decides to get into other fields, such as bombers, then that is a natural area for A. V. Roe Canada, having regard for the heavy aircraft experience of its parent company, A. V. Roe Manchester, producer of such fine aircraft as the Lancaster, and now the revolutionary delta wing Vulcan.

b) Having made an important start in commercial aviation with the Jetliner, the first commercial jet transport built in North America, Avro will take advantage of the first opportunity to resume its activity in this field. Since commercial transport is currently the major area in this field, that is where Avro Canada would likely be most interested, although there are other possibilities,

notably helicopters that could conceivably be in our plans for the future.

b) We have no current plans for any activity other than aircraft. However, it should always be remembered that we now own the Gas Turbine plant which we bought from the Federal Government last September. While it was laid out for jet engine manufacture, it can be readily adapted to other products.

What future is being planned for the Jetliner?

None. The advantage we had appears to have been lost, at least with the present configuration and performance.

Does the company plan to keep its present employment figure?

Except for normal readjustments, employment is expected to remain fairly steady at around 14,500 for some time to come.

Does the Hawker Siddely Group plan to carry out any of its activities through Avro Canada?

This all depends upon orders. If the Canadian Government decided they wanted a Hawker Siddely Group product, I am sure the work would be handled through Avro

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has been made in the study of mid-latitude circulations, no comparable advances have been made in the more extensive tropical regions.

To deal with longer and faster flights meteorological communications will have to be accelerated. Although terminal forecasts will have to be made available to more distant stations, they will usually be for a shorter period. Very accurate amended forecasts will have to be issued as the need arises in order to avoid diversion of jet aircraft at low levels.

AVRO INTERVIEW

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Canada providing such an order was of sufficient quantity to make it economic to produce here. It is conceivable that at some time orders from foreign countries might be too much for the Group to handle and Avro Canada might be asked to step in. However, all this is speculation.

What is the future of Avro Canada as a design and development organization?

This, I believe, is the brightest part of Avro Canada's future. Our company was founded on the premise that design and development are essential to a sound aircraft industry. That has been the history of all successful aircraft companies. The record of Avro Canada has been second to none. In nine short years, the company has:

Designed and developed the Jetliner. Designed and developed and finished the initial production contract on the CF-100 Mk. 3.

Designed and developed and put into production the improved CF-100 Mk. 4.

Designed and developed and put into production the Orenda Gas Turbine.

Redesigned and re-engineered the Lancaster bomber into a reconnaissance aircraft.

Without a design and development team such as Avro Canada has, none of this original aeronautical work would have been possible. There would never have been a Jetliner, a CF-100, an Orenda or a Lancaster Marine reconnaissance aircraft.

Few aircraft companies in the world and that includes the oldest, can boast a better record than this.

What are the possibilities of Avro getting orders from NATO?

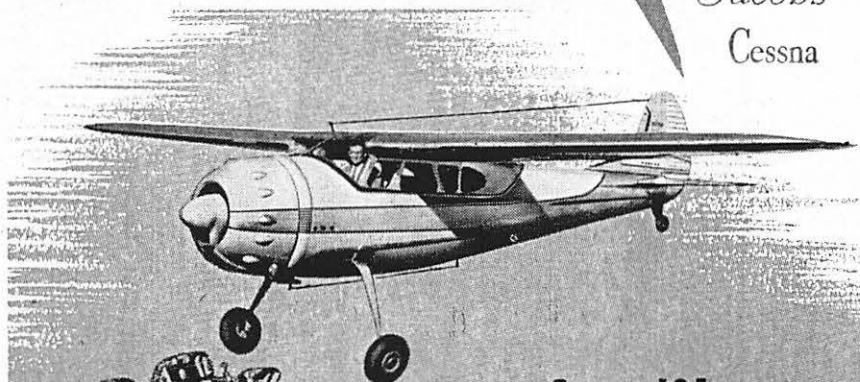
At the recent NATO conference in Paris one fact stood out about air defense: the great need was for an all-weather fighter. At that very moment it is our understanding that a NATO requirement existed for 400 all-weather fighters. There are only two aircraft that fill that requirement in production today—our CF-100 and the Northrop Scorpion. When performance is considered, it would appear that the chances of CF-100's going to NATO are excellent. However, the problem is not so much performance and availability as one of finance. In the last analysis such NATO aid can be provided only by Canada or the United States. NATO countries do not have the dollars to buy military aircraft. What will happen is anybody's guess.

Does the Hawker-Siddeley Group plan to invest more money in Avro Canada?

The Group is so enthusiastic about the potential of Canada and Avro Canada in particular that it will take advantage of the first opportunity to increase its holdings here. Already, High Duty Alloys, the foremost light alloy forging and processing com-

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Jacobs
Cessna

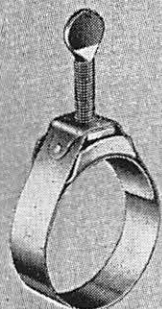
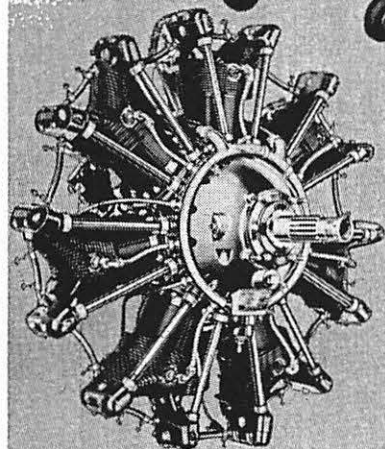


Cessna 195

Jacobs Engine Model R-755 A

both equipped with

WITTEK
Aviation
HOSE CLAMPS



AN737-RM
TYPE FBSS
(Radial—with
floating bridge)



AN737-TW
TYPE WWD
(Tangential—
with one-piece
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pany in the U. K. has set up a sales office here and will likely establish manufacturing facilities in the near future. The Group is constantly on the lookout for other opportunities in Canada.

Is there any thought of making Avro Canada a public stock company?

Not at the present time.

Is the company working at full capacity?

What is full capacity? If any emergency occurred, we would have to double and perhaps triple output. It could be done. For the present, we have a schedule which calls for full capacity as we are presently tooled up, although as efficiency increases, output goes up, as in any mass-production operation.

Has the company made any study of the comparative costs of designing a Canadian aircraft and producing it and building it under license?

No detailed studies have been made but from our knowledge of the industry, we are convinced that it is just as cheap, perhaps cheaper in actual dollars and cents to design and build an aircraft ourselves than to pay a license fee to build some-

one else's and then pay so much royalty per aircraft. But what is more, aside from the dollars and cents consideration, by doing our own designing and developing, we build up in Canada an invaluable national asset—an engineering and research establishment that can hold its own with anything anywhere.

Such a policy results in engineering establishments that provide opportunities for young Canadian engineering graduates. The flow to the greener fields in the United States has been halted. In fact, in some cases it has been reversed. Many of our young engineers are coming to us from United States Colleges.

This technical skill, and experience is the heart and soul of Canada's industrial development which is the envy of the world. Engineers in the final analysis, make it all possible. Even if it costs more to do our own design and development, which isn't the case, it would be worth the added expense, in my opinion, considering the high return in opportunity for young Canadians and the solid foundation on which we have been able to build our fast-growing economy.

NOTMAN INTERVIEW

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Canadair is naturally interested in continuing work on guided missiles because sooner or later they will replace piloted aircraft in military use. If the Government wishes, we also would like to do development work in this field. Our associated companies in the United States can be of considerable help to us in this.

Is there any possibility of Canadair getting into the transport field?

We feel that sooner or later TCA and the RCAF will be seeking a successor to the North Star. The proposed Canadair version of the Britannia maritime reconnaissance aircraft, if it is proceeded with, will put us back in the four-engined field, and it is possible that we might also build a transport version which in various configurations would meet the demands of both TCA and the RCAF.

Would the transport version of the Canadair Britannia have the same engines as the maritime reconnaissance version?

No. The transport version would probably be powered with Bristol Proteus III's. There would be no problem in substituting the engines.

Will Canadair maintain its present working force of 10,000?

As experience is gained in the production of a particular airplane efficiency increases and this is what is taking place on our F86 and T33 lines today and some consolidation of the labor force is to be expected. The extent of the reduction in staff will be governed by the number and size of new orders placed with us. We are naturally interested in maintaining an efficient operation in the interests of producing as great a saving as possible for the taxpayer.

What do you think of the possibilities of the new AITA manufacturing committee?

Because of the growth and ever-increasing complexity of the industry, this committee should fill a real need on common problems. By its means the various companies will be able to present a common front for the good of the industry and the country. At the same time we feel that there should be a bit of desirable competition between companies.

Will Canadair's network of subcontractors be decreased as the company's work program progresses?

It is certainly not Canadair's intention to withdraw subcontracting work from any plant which wants to do such work and which is doing a

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