Pre-Flight

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THE WAY UP

An account of the 10-year history of A. V. Roe Canada Limited

By SCOTT YOUNG



FOREWORD
By CRAWFORD GORDON, JR.

Since December 1, 1945, A. V. Roe Canada Ltd. has made remarkable progress, both in its own right and in its contributions to the gathering strength of our nation.

On this, our Tenth Anniversary, we thought it worthwhile to pause, at least momentarily, not so much to celebrate our birthday, but to have a look at what has been accomplished.

In Mr. Scott Young's very interesting and informative history of our company in this special issue of Jet Age, there are grounds for pride in everyone who has helped in such a short time to make this a strong and enduring Canadian enterprise.

In the beginning, there were but 300. Today we are 22,000 strong. Our four operating companies, Avro Aircraft Limited, Orenda Engines Limited, Canadian Steel Improvement Limited and Canadian Car and Foundry Co. Limited, operate nine separate plants and engineering establishments. Their products are known and used around the world.

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From the President

At this time, I would like to thank Nick, for his work on the issues of Pre-Flight while he was away. As you can see he had prepared the January/February and March/April issues and had them to the printers on his return.

We will try to issue Pre-Flight on a more regular schedule. If this is possible you should not receive two issues at the same time.

Membership cards will be mailed out for the year 2015 and to those who have renewed for 2016.

Most of you are not aware we are co-operating with the Ontario Science Centre by making the original Avro Arrow model (the one obtained at the Massin Auction) on loan to them for display giving it more recognition as to its history. Frank Harvey

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In many senses we have been pioneers --- and not the least of this pioneering has been in the creation of ever-enlarging opportunities for Canadian skills. This is a direct result of the establishment of A. V. Roe Canada Limited by Sir Roy Dobson and the Hawker Siddeley Group, whose experience in the fields of aircraft and aero-engines provided the base without which we never could have come this far this fast. As for our future, it is bound up inextricably with the future of our country. We are so confident of that future that we have large expansion programs underway to meet the challenge of tomorrow. In that way, I think we illustrate how well all of us know that the first ten years recorded here, with all the pride we do take in them, are still just the beginning.

But yesterday, today and tomorrow, none of it was, is or will be possible without the people who work here . . the men in the shop . . the office staffs.. the test pilots.. supervisor.. engineers.. the hundreds and now thousands of single individuals who are ultimately and inevitably responsible for the success of our Group and the contribution we are making to Canada's security and her peacetime development. To all these, this ten-year story is sincerely dedicated.

The Way Up

One day in 1942 a Royal Canadian Air Force officer had a strange and frustrating duty to perform. The Japanese were poised in the Aleutians for a possible sweep down Canada's west coast. The RCAF was desperately short of Planes to meet any such attack. Canadian squadrons at home and abroad were operating with second or third line planes or fretting on the ground with no planes at all. Yet this officer had to appear before an aircraft allotment conference of non-Canadians to plead for aircraft which had been built in Canada by Canadians --- but, as was usual in Canada, under a licence from the original manufacturer which gave Canada no jurisdiction over the finished product.

He was beaten. The Planes were assigned to Russia: Hurricanes, built at Fort William, Ontario. Australia, he thought, probably would have been second choice. It turned out latter that the Canadian government

was able to keep these planes by simply refusing to let them be shipped out of the country in that dangerous time. But nevertheless the lesson there. The officer said later, "Maybe they did need the planes more than we did. I don't know. But I do know that we needed them very badly. And I realized right then, walking out of that room and feeling every inch a failure, that until we didn't have to tip our hats to anyone to get aircraft when we needed them, we'd never have the air force a first-rate nation really deserves."

A year latter, an Englishman landed in Montreal from a York transport. He was of medium height and medium weight, and he looked tired. He had every right. Days and nights for years he had been pushing and shoving at the development and production of a big bomber called the Lancaster. Now they filled each English dusk with their steady, purposeful roar, and some nights in the south of England they seemed to stretch to every horizon as they headed out in swarms for Europe. Still, the closest thing to a real rest that his associates could persuade him to take was this busman's holiday, a look at the Canadian aircraft industry.

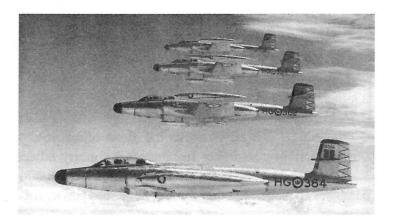
What did he find?

"It opened my eyes, I'll tell you. 'If these so-andsos can do this during a war,' I thought, 'what can't they do after?' I thought some more. 'Why shouldn't this country eventually be as important as the United States?' No reason at all. But one thing it would need was an aircraft industry of its own --- design and development, not just assembling somebody else's stuff. After a while I said to myself, 'Why don't I have a go'?

"If the courses of men and nations were as direct as recognizing a need and then moving in to fill it, the 10-year story of A. V. Roe Canada Limited and the companies now operating under it could be told very simply indeed.

The Englishman with the know-how could get in touch with the frustrated but eager Canadians and say, "Look here, let's get into this thing together." They could go to the government and say, "Look here, sell us an aircraft plant and give us some contracts and we'll hire fifteen thousand people and get a few hundred other Canadian companies building parts for us and get at it."

This all would be done.



And they would wind up ten years later having designed and built and put into full production the first Canadian aero-engine of any type --- and theirs a topranking jet. They would have designed and built and put into full production the first all-Canadian fighter aircraft, a twin-jet recognized as the best in its class in the world. They would have led North America by five years in the race to get a jet transport into the air, missing only by days the honor of being first in the world. By all these achievements, they would have developed engineering and research facilities that never had existed before in Canada. Using these new skills, they would be getting ready for production of another home-grown fighter designed to fly at supersonic speeds and lead the world. They would have running on the test-beds a new jet engine which eventually will power that new fighter, an engine that opens up exciting new vistas of aero power. And they would be working on another aircraft of design so revolutionary that under security regulations nobody is allowed to say anything for sure about it beyond the fact that it exists.

The amazing fact is that all these things have come to pass. The only variation from what is said above is that the job has never been simple. Often funny, sometimes tragic, occasionally with that odd exhilarating wrench of recognized greatness, but never simple. So we'll start again at the beginning.

Certainly one factor in all that happened later was that the air force man wasn't by any means alone in his frustration. By mid-war, the Canadian government had gathered in its vital regions of production and supply young men of very high thrust rating. Aircraft production was one of their chief fields of operation. In dozens of plants, Canada made aircraft designed and developed by the British and Americans. We were

almost completely dependent on these allies for vital parts. It was a manufacturing-assembly operation and was good of its kind. It had to be, to turn out more than 16,000 aircraft during the war. But these men, and others higher in government, didn't like at all the farm-team feeling they got when Canadian aircraft plants faltered or slowed because the flow of engines or armament or gear-boxes from another country faltered or slowed. Not much could be done about it in wartime, except to determine that it must never happen again.

One of these young men --- most of whom worked under Munitions and Supply Minister C. D. Howe --was Fred Smye. In 1943 he was 27, only 10 years out of a Hamilton high school, and director of aircraft production under director-general Ralph Bell. had pounded corridors in Washington and waited in anterooms in London, going through the mill of begging parts for aircraft to be assembled in Canada. With Ralph Bell one November day in 1943 he met Roy (later Sir Roy) Dobson, the man behind the Lancasters, managing director of A. V. Roe Manchester, and a member of the great Hawker Siddeley Group which is to aircraft and engines what General Motors is to automobiles. With Sir Roy was Sir Frank Spriggs, Hawker Siddeley's managing director. A few days later as the tour of Canadian plants progressed, Fred Smye heard the first hint in conversation that Sir Roy thought Canadians should have their own selfsufficient aircraft industry. From that moment on, Fred Smye never let go of the idea that it could be done. And although nobody knew it for sure then, Sir Roy had decided where he hoped it could be done. When he visited the crown-operated Victory Aircraft plant at Malton, a Lancaster was rolling off the line. Perhaps it made him feel at home. "That's it," he said to himself.

Two men he met on that visit were the late J. P. Bickell, one of the most successful of Canadian industrialists, who then was president of Victory Aircraft, and John S. D. Tory, the widely-known lawyer who was one of Victory's directors. Sir Roy told them what he'd been thinking. They were enthusiastic. On many a late evening before the fire in J. P. Bickell's home, the three of them discussed all aspects of what Sir Roy hoped to do. Both these Canadians were to play major parts in setting up A. V. Roe Canada Limited.

The route was complicated. Sir Roy, who had started in 1914 as an apprentice and knew aircraft

from there on up, is by turns quick, salty, forceful and urbane. C. D. Howe, the minister responsible for crown-operated Victory Aircraft, has many of the same characteristics. On their first meeting they dickered in a minor way without coming even near to agreement and, in the manner of hard bargainers, parted as if the whole matter had been dropped.

But it hadn't been dropped. Basically, the government was anxious to get out of the aircraft business as soon as war's end would permit, and Sir Roy was anxious to get that Malton plant. Both kept the matter in mind. In the early summer of 1945, the war in Europe over, Sir Roy came to Canada again. In a series of Ottawa meetings in which J. S. D. Tory handled the legal aspects for Sir Roy, a basis of agreement was reached with C. D. Howe, representing the government. Hawker Siddeley would take over Victory Aircraft on a rental purchase plan. Present contracts for production of Lancasters and Lincolns would be the backbone of the new company at first. Sir Roy took a copy of the agreement to England to present it to the Group for approval.

By this time Fred Smye was in Montreal as assistant general manager of Federal Aircraft, a crown company administering government aircraft production. He resigned to become the first employee of the as yet unnamed company which would be formed when Hawker Siddeley signed the agreement Sir Roy had carried back. On Aug. 1, 1945, through the co-operation of W. V. Scully, who had succeeded Mr. Bickell as Victory's president and who now is a vice-president of Steel Company of Canada, Mr. Smye moved into an office at Malton, his secretary then as now Mrs. Betty Moore. Sir Roy couldn't get the money out of England to pay his salary, but Mr. Scully agreed to do that through Victory Aircraft on a personal loan basis. And then, before Hawker Siddeley could sign the agreement which would have set up the new company in business, the Japanese war ended and the government cancelled all the contracts for Lancasters and Lincolns.

This ends the first part of "The Way Up" of JET AGE by Scott Young

In part two, we will see what happens now that the Japanese War has ended and the time is slowly slipping by. Fred Smye finally goes to Ottawa to try and find out what was going on. Read on in the July/August issue of Pre-Flight.