

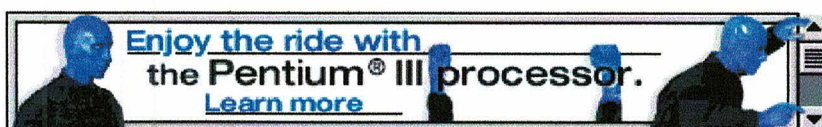
Robert Lindley

(from a telephone conversation between Frank Brame and Tim McShane, July 5, 1999)

Robert "Bob" Lindley was Chief of Engineering on the Arrow project at the time when Mr. Brame had returned from college in England and was with Avro's flight testing department. It was Mr. Lindley who noticed Mr. Brame's abilities and had him transferred from flight test to engineering.

Following the cancellation of the Arrow program, Mr. Lindley joined McDonnell-Douglas, where he was Director of Engineering on the McDonnell-Douglas side of the Gemini space project.

I believe Mr. Brame would like to see Mr. Lindley inducted into the Canadian Aviation Hall of Fame, but has not done much research to track down members of his family. Mr. Brame seems to recall Mr. Lindley purchasing some property in Oregon that he was intending to retire to, but does not know if Mr. Lindley ever did, in fact, move to this property, or if he has family in the area.

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AVRO ARROW

Words

R.N. (Bob) Lindley

June 28, 1999

R.N. (Bob) Lindley

Former Chief Engineer, Avro Arrow Project



Bob Lindley emigrated to Canada after World War II. He had been a colleague of Jim Floyd at the Avro company in Manchester, England, working in the initial project office.

Work followed on the famous Avro Vulcan delta-winged bomber. In Canada, Lindley was initially employed at Canadair in Montreal, where he was considered to have a particular talent for trouble-shooting engineering problems. On joining Avro Canada, he worked with John Frost, the designer of the Avro CF-100. When Jim Floyd became Chief Engineer at Avro, in charge of all engineering staff, Lindley was assigned to develop the CF-100 into an efficient front line fighter. Lindley did an outstanding job on that assignment, and when Floyd went on to become Vice-president and Director of Engineering, Lindley took over as Chief Engineer on the Arrow project. One of his major contributions to the aircraft's design was the concept of its modular weapons pack.

After the cancellation of the Arrow, he went to McDonnell Aircraft in St. Louis and was in charge of their work on the Gemini spacecraft for NASA. He later joined NASA on the Shuttle program, becoming Director of Engineering and Operations for manned space flight. In 1972 he was appointed Director of Project Management at the NASA Goddard Space Flight Centre. Now retired, he lives in Maryland, U.S.A.

Story by:

[National Aviation Museum](#)

These two men have contributed many things to the CF-105 program. It would be unfair to single handedly give them all the credit. A.V.Roe Canada's motto was "The Next Big Step". With those words, the next big step was with the shareholders across Canada to Crawford Gordon and Fred Smye, the Arrow wasn't just a program but a tight knit community that became family. After the Arrow was cancelled, most of the "ex-Avro employees" began to "move" out. They didn't move out to seek better opportunity, they moved out because they were shunned by their country. Many people were dismayed that the Arrow was cancelled and that they were not just going to lose national prestige, but some very close friends.

"I knew four people that worked at the plant in Malton and they were from Saskatoon. Now three of them are working in the States for NASA."

- D. MacPherson

Following termination, Jim Floyd and Janusz Zurakowski, went their separate ways. The following, is of some ex-Avro employees who found work after the Arrow.

Jim Floyd was offered several jobs in the U.S. but chose to work as Chief Engineer in Hawker-Siddeley Aviation in England. He and many "ex-Avro Canada" engineers carried out studies on military and space technology in the areas orbital and horizontal take off vehicles. Jim Floyd became a consultant for the Concorde passenger jet from 1965-1973. He retired in 1980 and moved back to Canada with his family.

Jim Chamberlin was probably the most brilliant man that ever graced the aviation industry. Along with Guest Hake, Bob Lindley and Jim Floyd, Jim Chamberlin rounded out the Arrow Developmental Team. Those who had worked with Jim Chamberlin said he was focused and pursued his job with passion and diligence. His job as Chief Aerodynamicist focused on the integral structure and how well the Arrow would fly at supersonic speeds. He rarely was wrong with respect to what could be expected from the plane he was working on.

After the Arrow, Jim Chamberlin and 25 others went down to NASA to work. He was in charge of engineering on the *Mercury* Project and played a colossal role in the capsule used by John Glenn. Jim also directed the *Gemini* project and was a key player with the *Apollo* missions. Jim Chamberlin died in 1981 at the age of 65. At the time he was working at McDonnell at the Johnson Space Centre in Houston.

Bob Lindley, the chief engineer at Avro, went to work at McDonnell Aircraft in St. Louis. He too worked on the *Gemini* project through McDonnell. Lindley joined NASA and became director of engineering and operations of space flight and went to the European Space Agency as a consultant for "Spacelab".

Mario Pesando, the chief of project research, moved to Massachusetts and worked on the *Saturn V* project for NASA. John Hodges, Fred Matthews, Chris Kraft and Tex Roberts also made their mark at NASA. There are many more Avro engineers that went onto a successful career not necessarily in space programs but in other aeronautical industries. They were hired at Boeing, McDonnell Douglas, Hawker-Siddeley, Fokker Aviation and the list goes on. In an essence, these people became our ambassadors for greater things to come. Ironically, most of the engineers at Avro went down to NASA to fulfill Kennedy's dream to put a man on the moon.

Date: Fri, 10 Sep 1999 02:11:48 -0400
From: A. Lindley <allindley@erols.com>
To: Timothy J. McShane <tmcshane@calcna.ab.ca>
Subject: Robert Lindley

[The following text is in the "ISO-8859-1" character set.]
[Your display is set for the "US-ASCII" character set.]
[Some characters may be displayed incorrectly.]

Dear Mr. McShane,

This note is in regard to your letter dated August 4 to Robert N. Lindley who worked at A.V. Roe. He died in May of this year.

I have no idea what the A.V. Roe Canada Heritage Museum is but I think my father would of enjoyed your letter.

Sincerely Yours
Alison Lindley

Date: Mon, 27 Sep 1999 23:32:15 -0400
From: A. Lindley <allindley@erols.com>
To: Tim J. Mcshane <tmcshane@calcna.ab.ca>
Subject: Re: Robert Lindley

[The following text is in the "ISO-8859-1" character set.]
[Your display is set for the "US-ASCII" character set.]
[Some characters may be displayed incorrectly.]

I'm sorry to take so long in writing. We have been getting over the hurricane that came through. We are also in the process of moving into a new house. One of these events is bad enough but combined it is an experience I would not wish on anyone.

Please give Mr. Brame my e-mail address. I have included our new address and phone number.

allindley@erols.com
1113 Jade Drive
Bel Air MD 21014
Telephone Number (410) 420-2091

I would be happy to assist him. I agree my father's contributions have been overlooked.

We have things he collected over the years, the photos, the documents, and different airplane and rocket models. I am sure we can offer enough information to make it possible.

I wished you had the opportunity to have met him. I consider myself very fortunate to have known him. He in my opinion was not only a remarkable individual but also a great and unique person.

Alison Lindley

A.V. Roe Canada Heritage Museum

6802 Ogden Road SE, Calgary, AB T2C 1B4

Telephone/Fax: (403) 236-5098

August 4, 1999

Robert N. Lindley
579 Coover Road
Annapolis, MD 21401
U. S. A.

Dear Mr. Lindley:

Please forgive the directness of this question, but are you by any chance the same Robert N. Lindley who worked at A. V. Roe Canada Limited of Malton, Ontario and played a major role in the development of the CF-100 and CF-105 interceptor aircraft?

A current World Wide Web exhibit (a joint effort of the Discovery Channel and the National Aviation Museum, located at <http://exn.ca/FlightDeck/Arrow/>) on the Avro Arrow states that the Robert Lindley I am looking for currently lives in Maryland, U. S. A. A search on a World Wide Web people-finder turned up your address.

Through my research with the A. V. Roe Canada Heritage Museum, I have been in communication with Mr. Frank Brame, who worked as Chief of Systems under you on the CF-105 project. He expressed to me his wish to see you inducted into the Canadian Aviation Hall of Fame, a goal we at the A. V. Roe Canada Heritage Museum support. To complete his nomination, he requires additional information from you. Would you be willing to assist him, and us, with this nomination?

If you are not the Robert Lindley that I am looking for, or if you wish to maintain your privacy, please forgive my intrusion and disregard this letter. However, should you wish to contact me, you can e-mail me at tmcshane@calcna.ab.ca, call me collect at (403) 230-8316, or write to me at;

Tim McShane
#8 – 2120 Centre Street NE
Calgary, AB T2E 2T3
Canada

Thank you.

Sincerely,

Timothy J. McShane, Director
A. V. Roe Canada Heritage Museum

A Division of the

