Pre-Flight

01 1 10

A Publication of the Aerospace Heritage Foundation of Canada P.O. Box 246, Etobicoke "D", Etobicoke ON M9A 4X2

Vol. 16, No. 3

May - June 2005



Peter Roland Cope 1920 – 2005

On April 2nd, the last of the test-pilots to fly the famous Avro Arrow interceptor passed away. Peter Roland Cope was born in Croydon England in 1921, which was London's main airport at the time. His imagination was fired by the sights, sounds and probably smells associated with this new mode of transport and Peter resolved as a boy to become an aviator. In 1939 he enlisted in the Royal Air Force, and, after training in Alabama USA (and receiving the coveted gold wings of the USAF), went on to a remarkable wartime career. He served three consecutive tours of duty on the fabled P-51 Mustang in the low-altitude photo-reconnaissance role before being 'caught'. It was due to the RAF losing his personnel records that he did three back-to-back tours, since combat tours were always by safer duties. His subsequent service was in testing advanced British ground-attack fighters, and in training their pilots, both of which he did with distinction.

RL. 903-C

Founded 1989

AHFC

Rerospace Heritage Foundation of Canada



Patron President Secretary Treasurer Membership Director Web Directors William Coyle Frank Harvey Keith McLaren Al Sablatnig Nicholas Doran Michael Brigham Bill Daniels James Harvey John Hughes Tim Patten



Legal Consultant Editorial Consultant Air Force Liaison Jerry Faivish John Thompson Don Pearsons

PRE-FLIGHT

Ted Harasymchuk Nicholas Doran

President's mailing address:

1951 Rathburn Rd., E. Unit 199 Mississauga ON L4W 2N9 905-624-4909

The Aerospace Foundation of Canada (AHFC) is a federally chartered non-for-profit organization. The current emphasis of AHFC is on Avro and Orenda. The Foundation is actively trying to locate former employees of these companies. No part of this newsletter may be reproduced without prior written permission. Opinions espressed in *Pre-Flight* do not necessarily reflect those of AHFC. Cash donations over \$25.00 and "gifts-in-kind" will be acknowledged by a receipt for income tax purposes. For more information on AHFC and how to support its activities, please write to:

Aerospace Heritage Foundation of Canada P.O. Box 246, Etobicoke D Etobicoke ON M9A4X2 (416) 410-3350 www.ahfc.org

From the President

In this issue of *Pre-Flight*, we pay tribute to Peter Cope and Sydney Britton. Peter was the only pilot to fly all of Avro Canada's products, including the Avrocar. Syd was active in the founding of the Aerospace Heritage Foundation of Canada, and served as Treasurer in the initial years. Peter and Syd will be sorely missed.

Please note the information on the last page about the Annual General Meeting on Saturday, June 25, 2005. Then mark this date on your calendar and attend.

Hear about our Foundation's activities for the past year, the reports from the Board of Directors, and about our plans and goals for this fiscal year. We would very much appreciate your input, ideas and suggestions.

Frank

Last Arrow Pilot Leaves Earth

by Randall Whitcomb

After graduating from the legendary Empire Test Pilots School and with the end of the war, Cope became a test pilot with Sir Armstrong Whitworth Aircraft Ltd., which, like Avro Canada, was a member of the Hawker Siddeley Group. On one occasion he did some chauffeur flying for Avro Canada's dynamic young president: Fred T. Smye, during a visit by the latter to Britain. Cope enthused to Smye that he'd be keen to test fly Canada's new fighter, the CF-100, if and when the need for more pilots arose. Once Avro Canada's first experimental test pilot returned to the UK under a cloud of controversy, and his replacement killed himself and his observer in the second prototype CF-100 jet interceptor, Avro's president Fred T. Smye remembered Cope and his enthusiasm. He sent Cope a crisp telegram reading: "Fly over immediately all expenses paid terms discussed on arrival." Cope, despite the circumstances, viewed his entrée into Canadian aviation with glee.

Due to his acknowledged skills an experience in weapons delivery, he became the unofficial armament development test pilot for the CF-100, the only Canadian-designed and built jet fighter to go into production. Armament development, particularly in the early days of the 'jet age', was fraught with hazard. Cope relates having rockets, fired by the CF-100, fly across the aircraft and puncture a wing, and on another occasion one punctured the nose of the aircraft-only a couple of feet from his seat. When testing a particularly potent four cannon installation by firing all guns at maximum rate until the ammunition was exhausted, the gases from the shells built up inside the aircraft and caused a horrific explosion. Peter took it all in stride and always brought his aircraft safely back to base.

Peter was also very proud of having test flown the Avro Canada C-102 Jetliner, the first jet passenger plane in the Western Hemisphere by many years. It has recently emerged that the USAF, Howard Hughes's Trans World Airlines, and National Airlines all tried to purchase this plane, but that shady bi-lateral politics killed these deals, much to the detriment of the Canadian aviation industry and national economy. Like every pilot who flew the Jetliner, he felt it was a phenomenal aircraft destined for stellar sales figures-given a fair shot.



Cope, cont'd

Once the CF-100 was turned into a safe, reliable and potent war machine, Avro Canada set their sights astronomically higher in terms of performance and began the design and development of the vaunted Avro CF-105 Arrow. Peter was involved in testing missiles, from the CF-100, which were under consideration for the supersonic Arrow. In fact, Cope is probably the single most accomplished pilot in Canadian history in terms of missile development experience, at a time when Canada took a back seat to no nation in weapons development.

Peter Cope was also the man who recommended that Avro Canada hire, from Glosters in the UK, Janusz "Zura" Zurakowski - a name now synonymous with the Avro Arrow. Peter has described his first flight in the Avro Arrow as the most exciting flight of his flying career. Considering some of the hair-raising and life-threatening missions he'd flown in wartime and as a test pilot, that is saying a great deal- especially since his excitement was not generated by fear but by awe at the performance of the Arrow and enthusiasm for the awesome potential of this aircraft design. Peter insists, contrary to the assertions of some Canadian 'historians', that the Arrow was very easy to fly, and had an unbelievable performance. In fact, Cope has said the Arrow "was a phenomenal performing aircraft. our performance boys thought we might get Mach 1.6 out of it yet we flew it to nearly Mach 2. With the Iroquois engine we were talking about a 2.3 [or] 2.4 Mach number potential. There wasn't a single plane flying at the time that could come anywhere near to touching that aeroplane."

He has always remained a stalwart supporter of the Avro Arrow and the Avro Jetliner, and professed puzzlement at the negativity towards these aircraft and the company which built them, among members of the Canadian establishment-certain 'historians' particularly. Once the Arrow programme (and indeed Avro Aircraft Canada Ltd.) were killed due to bi-lateral politics gone awry, Peter took a job with Boeing aircraft in Seattle Washington. Here he was a manager associated with the introduction of the 727, 737, 747, and 767 to service in various airlines. He retired in 1986 after a simply phenomenal career in aviation spanning nearly 60 years. He passed away on Saturday April 2, in Belleville Washington where he and his wife Anabel had lived happily for many years. He will be missed.

Sydney L. Britton 1921 – 2004

Sydney L. (Syd) Britton, P.Eng., C.Eng. was a veteran of WWII Royal Canadian Navy and British Fleet Air Arm, died peacefully at home on Wednesday, November 17, 2004. He leaves his wife Christa, and son Robert, daughter Pamela Hopkins and her husband Jim, Andrea, and Christopher Britton of Australia, and his grandson, Carlo DiBello. Syd is survived by his mother-in-law Dora De Clercq.

The funeral service was held on Monday, November 22, 2004 at St. Philip's Anglican Church, Toronto, with interment at St. Philip's Cemetery.

Syd Britton was a true Canadian, born in Hamilton, attending primary and secondary school, completing his Senior Matriculation at the Hamilton Technical Institute in 1939. He then went to the U.S.A., enrolling at the Tri-State College of Engineering in Angola, Indiana, graduating in 1942 with a bachelor degree in aeronautics. Syd understood the importance of education and began his ongoing graduate studies. A year later, he acquired a certificate in advanced aerodynamics, aircraft weight control and structures. Subsequently he enrolled at the University of Toronto in 1961, taking industrial economics. Two years later, he was taking a course he felt was essential in his field, operations research. Then at Queen's University he completed the course in operations research.

Syd also understood the importance of passing on pertinent information to professional learners. He enrolled in two IBM Executive EDP courses, Professional Development for Teachers (1966) and Instructional Techniques (1970), and at Humber College in Toronto (1971) for Fortran IV for professional engineers.

He was a Professional Engineer (P.Eng.) a Chartered Engineer, U.K. (C.Eng.), a Fellow of the Canadian Aeronautical and Space Institute (C.A.S.I.) and the Royal Aeronautical Society (F.RAeS.). He occupied key positions and capacities in various organizations, educational and social institutions. Syd was an actively involved member of society.

During WWII, he worked at Fleet Aircraft as an engineer. Syd then was employed by Avro in the gas turbine Division as an engineer. Next, he was closely involved with Orenda and the Iroquois, becoming Chief Engineer and Vice-President (Engineering) at Avro Canada, Toronto Division. After a stint of three years (1967 - 1970) as Assistant to the President, Orenda Ltd., he was a consultant to Williams Research Ltd., in Wall Lake, Michigan and later Science Master (1970 - 1971) at Humber College. With all this experience and current expertise, Syd was ready to move into another areas of endeavour: management and marketing.

He joined the Industrial Development Sector of the Ontario Ministry of Industry and Tourism since June 1, 1971. He was assigned to the newly-formed Engineering Services Section, and was responsible for liaison with the professional side of the private sector in areas such as seminars, export development and marketing. He functioned as project manager for a new Ontario Government Trade Centre and was responsible for the budget, setting and maintaining the construction schedule and liasison with Engineering, Interior Design and Building Management. Two years later, he was seconded to the International Marketing Division, Latin American Branch, and participated in several Ministerial level marketing missions to Central and South America.

In 1974, Syd was appointed West Coast Manager for the Ontario Government in Los Angeles. Over the next four years, he was responsible for industrial development, with a specific



Britton, cont'd

mandate in the areas of Higher Technology and Aerospace. The development of Ontario suppliers to these industries and participation in the federal "offset' program were important actions. After completing his Foreign Service term, he was responsible for another new Ontario government initiative, the Program for the Export of Administrative and Technical Expertise (PEATE). This program was successful and has been included in an overall Capital Projects activity in which the government acts as a catalyst in bringing together professions and manufacturers to participate and bid on turnkey projects abroad. As coordinator, Syd was responsible with his group for the identification of consortia, providing international market information, arranging finance contacts and developing contact abroad.

To summarize, in 1970 Syd had entered private management and engineering consulting practice, working closely with the Federal Department of Industry, Trade and Commerce of Canada in assisting a major American company that hoped to establish a new segment of the automotive, aircraft and industrial gas fields. He was employed in various capacities by Hawker-Siddeley and Orenda for 23 years. At Hawker-Syddeley (Toronto) and at Orenda, Syd held senior management positions, reporting directly to the President since 1962. As Vice-President, Engineering and Chief Engineer, he was responsible for product design and development during the period following the cancellation of the Arrow/Iroquois Program. The result of this catastrophic action was a range of industrial heavy duty gas turbine engines, which accounted for 40% of Orenda's business at the time.

Mention should be made that a number of other products in the diesel engine, nuclear field and vending machine areas which he originated during this period were highly successful, and all sold to other companies. During 1962-67, Orenda had profitable years. The plant changed its makeup and introduced numerical control equipment and the installation of EDP units which were used for payroll and inventory control. As Operations Manager, he was involved in negotiations with successful staff and shop union agreements.

Syd Britton: a rich, fulfilling life well spent.

The

16th

ANNUAL GENERAL MEETING
of the
Aerospace Heritage Foundation
of Canada

will take place

on

SATURDAY, JUNE 25, 2005 at 11:00 am

at the Toronto Aerospace Museum 65 Carl Hall road Downsview, Ontario.

Following the meeting,
Claude Sherwood, President of TAM
will update our membership
on the progress of the Museum
and the replica of the Avro Arrow.

All members are cordially invited to attend!

Refreshments to follow.

Members Watter

I am pleased to inform you that the gifts to donors are all on their way to our generous recipients. but there is still a small backlog for the VHS titles. This situation will be quickly corrected. I thank those who called for their understanding that this was something beyond our control.

I too appreciate all those who sent in their renewals so quickly. This made the work of sending out new membership cards so much easier. (I can do more and quickly if they come in a batch.) Thank you!

Saturday, June 25th is a special day: AGM Day! I

hope to see and chat with you.