

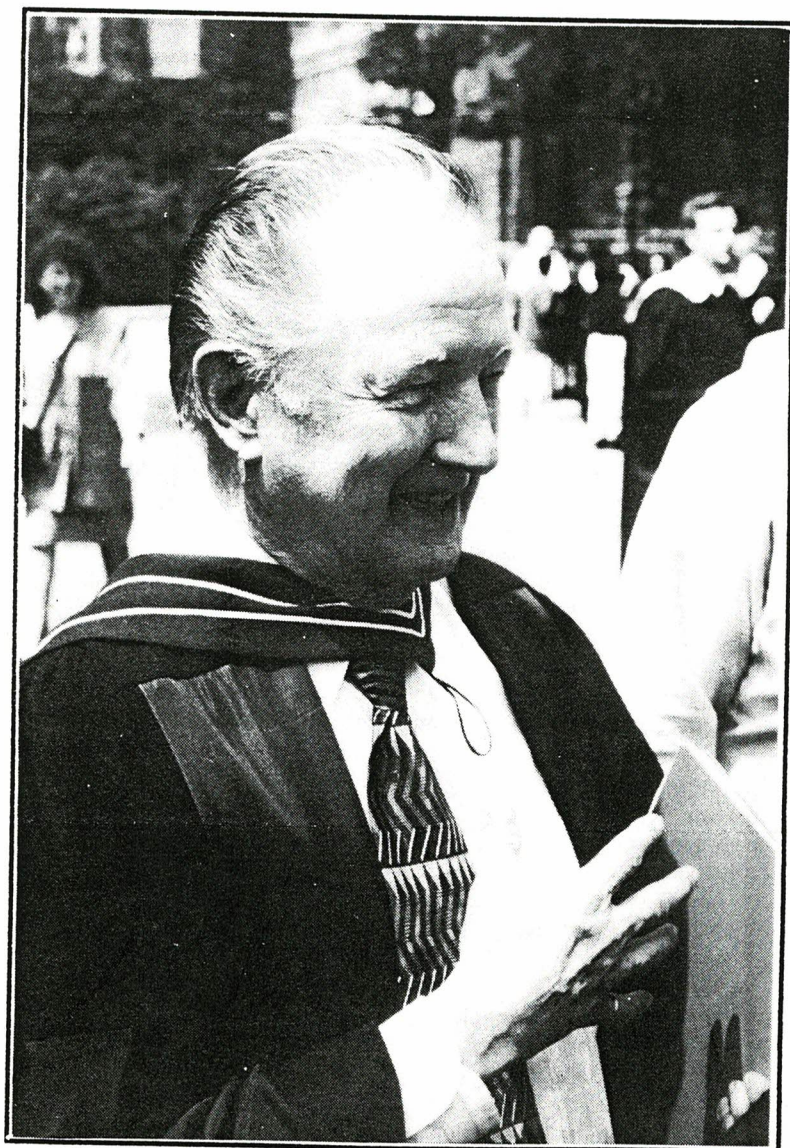
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# Pre-Flight

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Dr. Owen Maynard after his investiture.

Photo: J. Randy Attwood

## Dr. Owen Maynard, Space Pioneer

**O**n June 5th, 1996, Paul Dilworth and I were privileged to be invited to a luncheon hosted by the Dean of the Faculty of Applied Science and Engineering at the University of Toronto. The luncheon was in honour of ex-Avro Canada engineer Owen Maynard, as a prelude to his receipt of a well-deserved honorary Doctorate of Engineering degree at the U. of T. on June 12th.

Owen graduated from the University of Toronto in 1951 and joined Avro in the engineering division. He worked on the C102 Jetliner and the development of the CF 100 fighter and later on the design and development of the Arrow. After the cancellation of the Arrow, he went down to NASA with Jim Chamberlin and his career in that organisation can only be described as 'monumental'. Like most of the ex-Avro engineering group at NASA, he quickly became a team leader, working first on the single-man Mercury project and was later assigned to the

(cont'd on p. 2)

*"If it seems to be impossible, do it anyway, because the nearly impossible task is usually the one most worthwhile."*

- James C. Floyd



# AHFC

**James C. Floyd, Patron**

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The Aerospace Heritage Foundation of Canada (AHFC) is a federally-chartered not-for-profit organization. The current emphasis is on Avro and Orenda and the Foundation is actively trying to locate former employees of these companies.

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## **FROM THE PRESIDENT**

Recently, members would have received the latest book of lottery tickets in the mail, along with a letter of explanation of the four great prizes.

We are asking each and every member to assist in this fund-raising venture, being overseen by new Board member John Hughes (Q&A-Orenda, retired). If you feel this is a burden in any way, please return the book of tickets to our Post Office Box.

To those who are able to assist, we thank you. If you need more tickets, please drop me a line.

All monies realised will go toward the priority items the Board of Directors have indicated at their planning meeting.

We must preserve A.V.ROE Canada, Limited (Avro and Orenda) history as a tribute to the thousands of men and women who put Canada at the forefront of aviation.

With your help, we will!



Nick Doran, President AHFC

### **Dr. Owen Maynard, continued:**

Apollo moon-landing project. He became chief of the Systems Engineering Division on the Apollo Spacecraft program and was described as the focal point on that prestigious program. Owen was largely responsible for the design of the lunar module Eagle, which placed Armstrong and Aldrin on the moon's surface in July 1969.

My son Paul and I were also privileged to be invited to the U of T Spring Convocation on June 12th, at which Owen received his honorary Doctorate of Engineering degree. In his inspirational address to the graduates who were also receiving their degrees, he mentioned his early days at Avro and how they had influenced his later life. That event, held in Convocation Hall, brought back many memories for me personally, since on March 3rd, 1951, some forty-five years ago, I was invited by my good friend Professor 'Tommy' Loudon, to give a talk on Canada's own unique airplane, the Avro C102 Jetliner, which had first flown on August 10th, 1949 and at that time was the only jet-powered passenger plane flying in North America. The lecture was one of a series of Saturday night special lectures sponsored by the Royal Canadian Institute and held in Convocation Hall.

I don't think that anyone at that event could have guessed that so many years later most of the millions of air passengers would be flying in jet-powered airliners! By the same token, I could not have guessed that forty-five years later, one of my colleagues from Avro, who had worked on the Jetliner, would be receiving such a well-deserved and prestigious honour for a lifetime of achievement in aerospace technology. So the Spring Convocation in Convocation Hall brought back many memories for me personally and was an event that I will remember for a long time.





## THE LEAD SLED . . . THE CLUNK

by Herb Young, Ret.

Forty-three years ago last month, on January 19, 1950, a long, black, sleek missile weighing 16 tons taxied out onto Malton's Runway 23 with Canadian pilot Bill Waterton at the controls and was airborne in only 1500 feet. This was the culmination of less than 5 years (September 1946) of planning, engineering and construction of an aircraft for the renowned Royal Canadian Air Force, which never knew what it was like to have an aircraft of its very own since its inception in 1924. Thus would begin a period of intense flying and development and more flying to make it acceptable for squadron duty and the challenges which lied ahead. This first flight was the CF100 Mark I, serial #18101, powered by two RR AJ65 'Avon' engines. Two Mark I's were built but the second one, #18102, suffered a very bad ending at London, Ontario.

Naturally, several models with variations would be built. Five Mark II's were built, using the first of many models of Orenda engines. The mighty Orendas were flight-tested in a converted Lancaster, #FM209, at the two outboard positions.

After the Mark II's were built, #18104 being 'handed over' to the RCAF on October 17, 1951, four Mark III's emerged, followed by #18112 – the first Mark IV being hand-built. She achieved stardom as the very first all-Canadian straight-wing aircraft to break the sound barrier on December 18, 1952 by that test pilot's test pilot, Jan Zurakowski.

A total of 73 Mark III's were built, to the similar configuration as #18101, except they had gun-packs (8 machine guns of .5 calibre). All were capable of wing-tip tanks or rocket pods. Later, they would be converted to Mark III T or Mark III D (dual control trainers).

Then came 331 of the blunt-nosed Mark IV's with under-wing 'hard points' to which could be added bomb/missile pylons. From #18513 and up were Mark V's for greater ceiling and did not have gun-packs, depending upon missiles and wing-tip rockets. The Belgian Air Force took 53 of these to bring their NATO commitment up-to-date. All Mark III, IV and V saw military service. A grand total of 692 CF100's were built, plus spares and on December 4, 1958, #18792, on the day planned 4 years earlier, rolled out of Bay III to the Production Flight Hangar D2. Manning the brakes was a mechanic who later became supervisor of Q&A over the MD80 wings.



## *The Lost Poet*

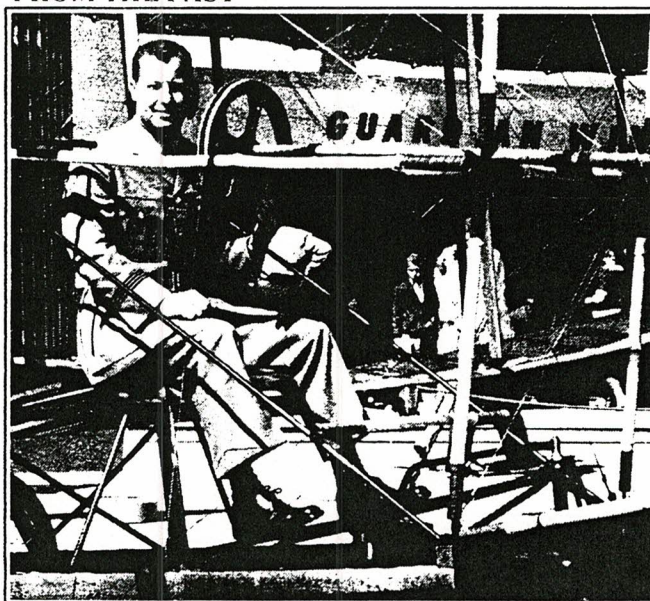
Most people have by P.O. John Gillespie Magee, Jr., No. 412 Squadron 412, RCAF, titled 'High Flight'. He wrote it shortly before his death in a tragic training accident in England on December 11, 1941. Winning a top scholarship to Yale, he cut short a promising academic career by enlisting in the RCAF. He enjoyed flying, especially Spits, to the dismay of his parents. An excellent pilot, he revelled in throwing his aircraft around in the sky. Magee was stationed at Digby in Lincolnshire, with 412, a Spitfire Squadron, when he died. Among the few personal possession in his locker was an unfinished poem. Apparently he was sufficiently encouraged with it, because he sent a rough, first draft to his parents. It was titled 'Per Ardua' and offered a tantalizing promise of what might have been.

*They that have climbed the white mists  
of the morning,*

*They that have soared, before the world's awake,  
To herald up their foemen to them, scorning  
The thin dawn's rest their weary folk might take.*

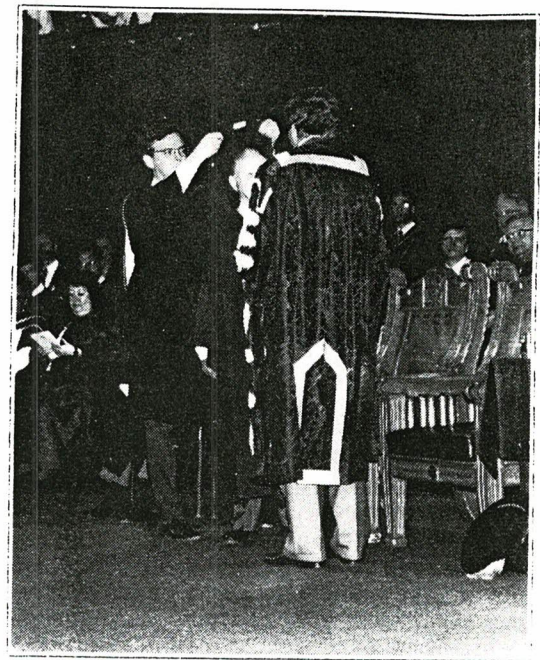
*Some that have left other mouths to tell the story  
Of high blue battle – quite young limbs that bled,  
How they had thundered up the clouds to glory  
Or fallen to an English field, stained red.*

### FROM THE PAST



Flight Lieutenant Jack Woodman, as seen at the 50th Anniversary of "Powered Flight in Canada" display, at the Canadian National Exhibition in 1958.





PHOTOS  
of the  
Reception and  
Investiture  
of  
Dr. OWEN  
MAYNARD

by  
J. Randy Attwood