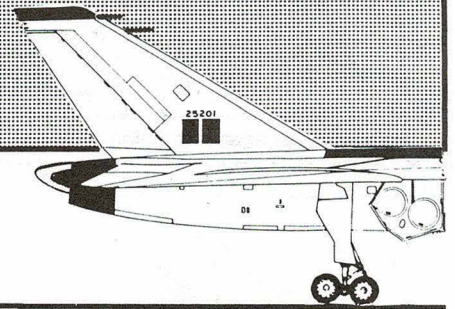


Pre-Flight

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Heritage Man Extraordinaire

by Bill Kanis

When Lieutenant-Colonel Robert Campbell and his brother, Major David Campbell, arrived in Upper Canada in 1828, they probably had no idea what this place would be like 170 years later. As loyal soldiers for His Majesty, King George IV, they received a



land grant and settled along the shore of the Trent River "where there was a ford". Campbell's "ford", together with the bridge and a small parcel of land of Seymour Township, were officially incorporated into the village of Campbellford in 1876.

Today, this pleasant town of 3600 has a hospital, a high school, several churches, "The World's Finest" chocolate factory, and myriad small businesses and services catering to the townspeople and the surrounding farming community. An outstanding attraction is Harold Carlaw's Museum. Drive along Hwy 30 to about 40 km north of Brighton and turn west at Albert Lane in Campbellford. A couple of hundred feet along and, lo and behold, there, before your eyes is a CF 100 "Canuck". I rolled to a stop and parked. The sign on the building to my left read "Memorial Military Museum, Welcome". Before entering, I paused briefly to look at a J57 engine and a "Musketeer" training plane, both on display. Once inside, you read a plaque which states, *"The purpose of this collection is not to glorify war, but to pay homage to those Canadian men and women of the*

Armed Forces who gave their lives so that others can live in peace and freedom."

There I met Harold Carlaw, a very genial guy and Heritage Man Extraordinaire. All around were photos, models of planes, military gear, and literally thousands of souvenirs and artifacts dating all the way back from 1914. I introduced myself and found that Harold was pleased to answer my questions and show me around. Many interesting stories and two hours later, I sat down to jot down some notes.

It all began in the 1930s, when his father and mother bought 3 acres of land with a house and barn. They operated an egg-grading station, and Harold went to school. From an early age, he became intrigued with airplanes and also soldiers, watching them training at the local armory. The Depression years provided little money, and he amused himself cutting soldiers from Kellogg's Corn Flakes boxes and carving airplanes out of wood – and collecting things. When the WW II ended in 1945, so did his schooling. At the ripe old age of 15, he busied himself in the barn, tinkering with old cars and

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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

First of all, on behalf of myself and the members of the Board of Directors of AHFC, I would like to express my thanks to members of our Foundation for their faithful support over the years. Not only have you kept up your annual memberships, but so many of you have made generous donations to help finance AHFC special projects. The Board truly appreciates such gestures of encouragement and will continue to work in the interests and goals of AHFC, all the more so with the knowledge of such membership support.

Some of you have asked about the Toronto Aerospace Museum and our connection with it. To date, AHFC has space allocated for two administrative offices, a display area and additional space for a small theatre. We also have space in the museum library. By the way, the museum is always looking for volunteer assistance in all areas of operations, from pushing the proverbial broom to restoring aircraft.

I would like to apologize to Mrs. Beverley Mackechnie for the incorrect spelling of the family surname.

Nicholas Doran
NICHOLAS DORAN

Heritage Man Extraordinaire, continued:

tractors, and soon found his life's work. His natural ability led him to repair an old 1939 Ford, paint it and drive it around town for the next two or three years. "It ran just fine", he said proudly.

In 1947, he purchased a surplus Cessna "Bobcat" from a dealer in Brighton for a few hundred dollars. Years later, he acquired the CF 100 from the Royal Canadian Legion in Lambeth, near London, since they no longer had space for it. From 1951 to 1953, an old garage he rented was headquarters for a successful business repairing cars. He bought more land adjacent to his parents' property and built his own garage. Harold decided that it was time to marry, and today he and his wife Eileen, four sons and one daughter later, they remain a close family. Two of their sons operate a custom car-building operation, and a paint and refinishing business.

Harold built the actual museum building in 1985, and spends his retirement years happily devoting full-time to his museum.

In 1993, the town of Campbellford awarded Harold a "Certificate of Appreciation" for his outstanding contributions. His fame has continued to spread and many groups from far and wide come with tours to visit his museum. If you want to contact Harold, he can be reached at 1-705-653-4848. The museum is open from 10:00 in the morning until 4:30 in the afternoon, daily. Sunday visits are by prior agreement.

There is no admission fee to view the museum artifacts. Voluntary contributions, which go toward operating and maintenance costs, are gratefully accepted. I asked Harold how he can afford to pay for all this, to keep the museum open. He answered simply, "It's the least I can do to honour those who gave me my freedom."

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About Bill Kanis

Bill has an Avro connection. He was first employed by Avro as a draftsman in February 1950 working for Bill Barlow. In the mid '50s, his interest turned to blade lofting for Roy Thomason as his group leader. Moving into the Orenda plant when it opened, he found himself working in the group formed to design the Iroquois engine with Bert Avery as Chief Engineer.

All Avro workers were laid off on Black Friday, with the exception of a small number which included Bill. This group was the clean-up and transition team.

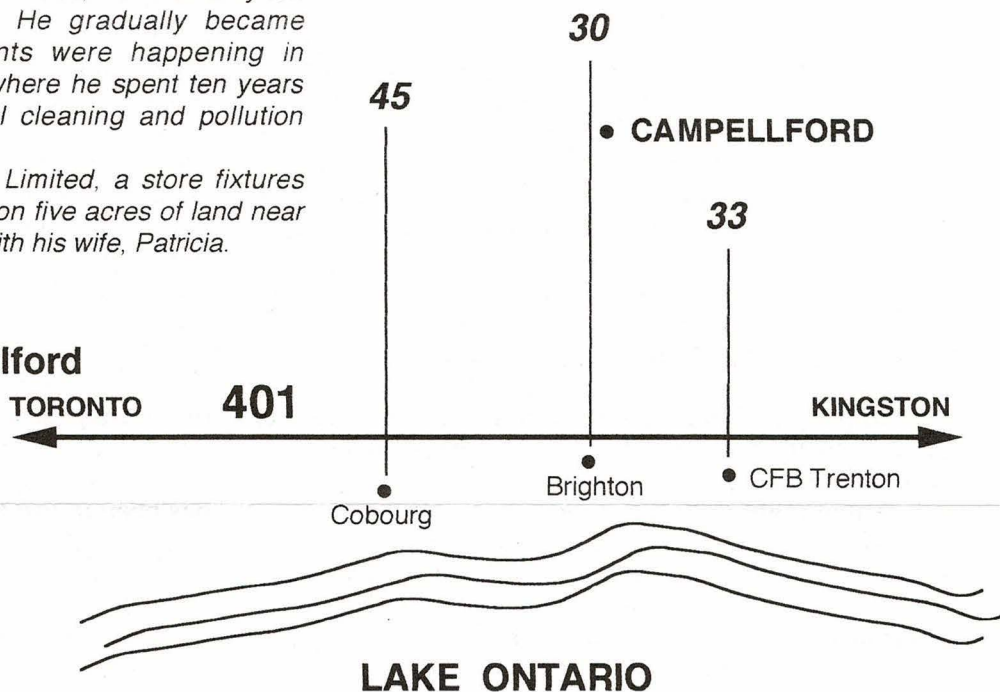
Bill served two years, (1959 and 1960) as President of Technical Associates, Lodge 1922. In 1966, he voluntarily left to work at Bechtel in Montreal. He gradually became disenchanted with the way events were happening in Montreal. He returned to Ontario, where he spent ten years with Wheelabrator, in the material cleaning and pollution control design departments.

Bill retired from Wilson Display Limited, a store fixtures company, in 1990. He built a home on five acres of land near Norwood, where he presently lives with his wife, Patricia.



View of the museum building, with the CF 100 Canuck on outdoor display.

How to get to Campbellford without having to look at a Government of Ontario map!

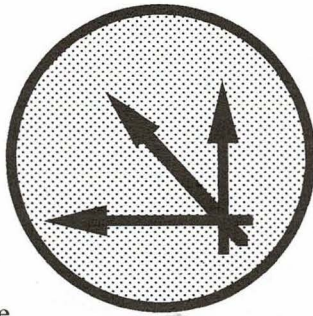


NOTE:

If you have the inclination, biological energy, and enough time, consider driving down the 401 a bit to Trenton. Watch on the lakeside of the 401, as you are nearing the town, for the CF104 mounted in a swoosh attitude, in front of the motel. Looks great. There is a small but excellent aircraft museum on the way to the CFB, with models and artifacts from WW I and II, along with a souvenir corner. And somehow it's all in a modern facility without that jammed in atmosphere. A special bonus is the outdoor static display of aircraft, including a MIG 21. If you have difficulty finding the location, just ask one of the friendly Trentonians. A word of caution: start early and remember to take your sunglasses and Evian.

They didn't have to worry about which way was up ...

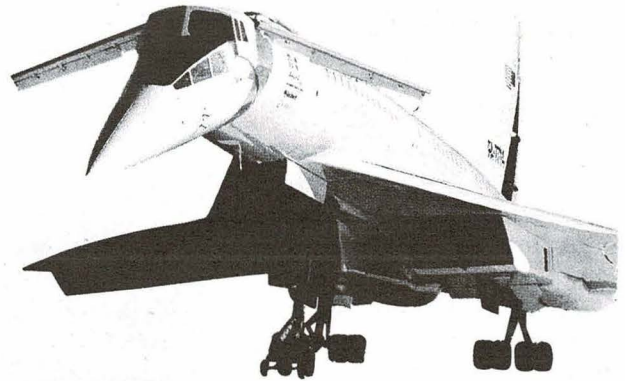
For a very good reason. The Arrow, the world's best interceptor at the time, was killed before they could have experienced it. It's called "the leans".



Zurakowski, Potocki, Cope and Woodman had barely started the testing program and protocols; they just might have encountered it in subsequent flights. "The leans", as it is called by pilots who fly jet aircraft, is a persistent sensation that the aircraft they are flying in is in a steep bank position. The instruments do not show this, and a visual check confirms the numbers, yet the strong sensation is overpowering. Apparently, this is just another form of spatial disorientation, what we would call vertigo. It is bothersome in daytime, but can be dealt with; after all, the eyes are the ultimate control, together with the message of the instruments. However, this is not the case at night or when flying through clouds on instruments. In such conditions, visual control is missing and it is then that the leans can and do kill. Military pilots and planes are lost each year to vertigo.

This bothersome and deadly disorientation can happen when an aircraft's attitude or speed change every so slightly. The motion sensors in the tiny cochlea, located in the head between the ears, are unable to detect the subtle change. Though there is no way to prevent this problem, there is a way to begin to cope with it. If he recognizes the "leans" when it is just beginning, a pilot can have a better chance of survival at night or in the clouds.

As reported in the March issue of the science magazine "Discover", the US Air Force now has a new simulator, an electronic and graphic unit, controlled by a sophisticated computer with an equally sophisticated software program. The unit can reproduce conditions in the state-of-the-art simulator which would be experienced in an actual aircraft. It will give military pilots, especially new ones, a chance to experience this phenomenon, become familiar with the sensations, and initiate basic coping tactics. Primarily, these are to recognize that it is happening, focus on the instruments that are not affected by it, and keep the head very, very still. Now if only something similar could be done for politicians ...



Everyone Wants to Get There Faster: The Latest SST Experiments

When one of the United States prototype SST "Valkyrie" crashed over 20 years ago, there also crashed with it the hope of developing a supersonic transport which might offer better flight characteristics and market potential. Now such a goal seems to be reviving; the United States and Russia have jointly mounted a program to study supersonic flight.

They are using one of the surviving Russian SST transport jets, the Tupolev Tu-144D. There is one catch to this arrangement; the US does not have any access to technical data on the four powerful Tu-144D engines. Aircraft buffs will recall that these NK-321 augmented turbofan engines are the same that are used on the modern Tu-160 "Blackjack" bomber.

The US is not too concerned about this restriction; at least they have a SST aircraft to use. The only other possible alternative "Concorde", developed by England and France has been in use for the last 20 years – but it is out of the question. NASA, the US space agency, needs the Tu-144LL to support data it has compiled for its High-Speed Research Program. The data was developed from results of wind tunnel models testing, various flight tests and computer-generated techniques. NASA began its experiments back in 1990 to develop specific technology for a high-speed supersonic aircraft that would service the needs for public travel in the 3rd Millennium. NASA wants to compare these results with those obtained from a full-scale SST aircraft. The Tupolev should provide data on aerodynamics, structure and operation characteristics. Faster, faster!