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City seeks review of **OMB's** decision to green-light highrise tower in downtown

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The saga of the 26-storey, mixed-use Nautique condo in downtown Burlington is not yet over, as the city has asked the Ontario Municipal Board to review its recent decision to green-light the highrise tower.

In a media release issued March 12 and almost a month after the OMB published its decision, the City of Burlington stated it has filed a Section 43 review request to the board's executive chair.

"Under Section 43 of the Onta-

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Avro Arrow sheet metal worker was there the day the project died in 1959

Michael Colangelo, 90, worked on famous fighter jet and the 'flying saucer' PAGE 40



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Burlington senior worked on experimental delta-winged interceptor jet

TIM WHITNELL twhitnell@burlingtonpost.com

Michael Colangelo is likely among a small group of people who can boast they once worked on the legendary Avro Arrow fighter jet and a "flying saucer" and also received a photo and thank-you letter from the prime minister, the man who cost him his high-paying job.

The just-turned-90-yearold, spry and chipper, talked to the Post recently in his lakeshore condo unit about his years working at A.V. Roe (Avro Canada) in Malton, just north of where Pearson airport is today, as a sheet metal mechanic.

A bit of Canadian history is required in order to understand the heady, highstakes, high-tech environment Colangelo worked in for about 10 years starting in 1949.

In the early 1950s, Roe was the

"He came on the

plant) loudspeaker

(Avro's Malton

and told all the

workers, 'That

&\$@#* prick in

Ottawa

maker of interan ceptor/ fighter jet, the CF-100 Canuck, as well as the Avro C102 Jetliner, the second commercial jet airliner in the world. Later

the came Avrocar. the "flying saucer, and, most famously, the CF-105, better known as the Avro Arrow.

The Arrow was an experimental delta-winged interceptor jet that was Canadian made and more advanced than any aircraft in the world, including what the Americans and Russians flew during the early years of the Cold War.

The Arrow reached Mach 1.98 (2,400 kilometres per hour), almost twice the speed of sound - and was touted as being able to easily exceed that. Six working prototypes were built.

The Arrow was being developed in earnest in 1957 and '58 as a response to the possible threat of the Soviet Union attacking North America over the Canadian Arctic. The Arrow was unveiled on Oct. 4, 1957 — the same day the Russians launched the Sputnik satellite into space. The first flight was on March 25, 1958.

The Arrow program was infamously cancelled abruptly on Feb. 20, 1959, known as Black Friday, by Canadian Prime Minister John Diefenbaker; millions of dollars had been spent on the project.

All vestiges of the planes and their plans were ordered destroyed. The completed planes and those partially assembled were cut up to be sold as scrap metal.

The project's cancellation put of tens thousands of people out of work across Canada. U.S. the and Europe. Many (Diefenbaker).'" of the brightest

as

- Michael Colangelo, aircraft enformer Avro Canada gineering worker, recalling the and design infamous announcement minds, as made by Crawford well skilled la-Gordon Jr., the president bourers, of A.V. Roe Canada,

were about the cancellation of scooped up the Arrow project by American aero-

nautical companies, including NASA, in a massive Canadian brain drain.

Colangelo says he'll never forget that cold day in February 1959 when Crawford Gordon Jr., the president of A.V. Roe Canada, tore into Diefenbaker and his Conservative government for cancelling the Arrow project.

"He came on the (Avro's Malton plant) loudspeaker and told all the workers, 'That &\$@#* prick in Ottawa (Diefenbaker).'

Years later, in 1973, Colangelo said he was on a flight from Vancouver to Toronto and was introduced to the woman sitting beside him — Olive Diefenbaker, wife of the former PM.

He said they exchanged small talk at first. Then he felt compelled to tell her that he was still very upset, all those years later, with her husband for cancelling the Arrow project.

Several weeks later he received a letter from the House of Commons, on then MP John Diefenbaker's letterhead, thanking him for his talk with his wife. A photo of the Diefenbakers with their pet dog was included. He still has it.

Colangelo said unemployment after the Arrow was, thankfully for him, short-lived. Two days after being laid off he got a call from Avro's personnel manager, Jack Nesbitt, who told him, 'Mike, you're working on the flying saucer, so you can come back to work."

So Colangelo continued to work his sheet metal magic for Avro Canada. It was done at the Orenda Engine's test site that was just a short walk from the Avro plant.

Just as he did with the Arrow, Colangelo worked on producing engine blades for the Avrocar, also known as the "flying saucer."

He said he saw both aircraft rolled out of hangars in Malton and taken for test flights at various times.

He remembers seeing Arrow chief test pilot Jan Zurakowski, the first to fly it, saving the Arrow from severe damage on one test flight by landing it safely when its wheels wouldn't deploy.

In the case of the flying saucer, a U.S. army secret project, it was a lot less impressive than the majestic Arrow.

The Avrocar was a large silver disc — nearly 27 feet

off the ground and wobbled in diameter and 5.5 feet tall - with U.S. military marknoticeably. ings; it looked like the ste-The American military

Michael Colangelo, 90, was a sheet metal worker who worked on the famous

Avro Arrow Canadian interceptor jet in the late 1950s and the Avrocar, a

protype flying saucer being developed for the U.S. military.

reotypical flying saucer of

science fiction pulp books

and B movies. It was essen-

tially a hovercraft designed

to take off and land vertical-

blades. I was present for the

tests on the tarmac. It was

tied to guide wires and then

the pilot performed various

Unfortunately, the sau-

cer did little flying as it

could barely get one metre

recalled

manoeuvres,"

Colangelo.

"I did work on the saucer

ly.

spent more than \$7 million on the project and then cancelled it in September 1959. Colangelo was out of work, again, after a seven-month reprieve.

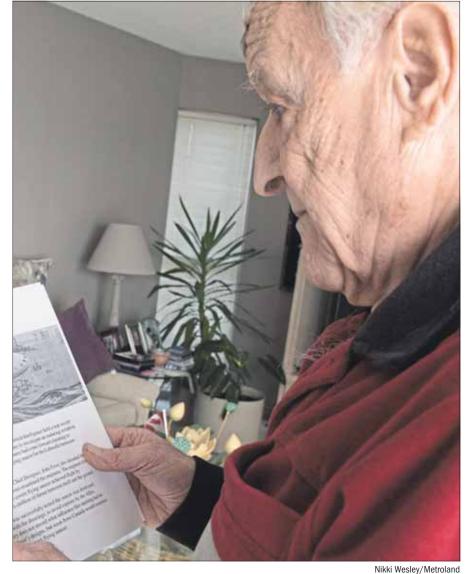
When he started at Avro he made 90 cents an hour; by the end he was making more than \$7 an hour, a very good wage in the late 1950s.

From there Colangelo was wooed by aircraft engine maker Pratt and Witney. He almost moved to its Florida plant to work but he and wife Alice decided to stay in Canada.

Colangelo sold real estate for a while, and even delivered pizzas. One day he ran into a former A.V. Roe colleague who got him an interview with Found Brothers Aviation, builder of bush planes. He worked there for a time.

His next big break was finding work with American-based Power line Fasteners, a company that made nail guns. He moved up quickly from sales rep to

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Museum in Calgary home to most extensive collections of documents, drawings

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regional sales manager to Canadian sales manager to company vice-president and Canadian general manager.

When Power line moved operations he left it to join Globe Spring and Cushion in North York. By then he and Alice had bought a condo in Burlington, the same one he has lived in for 30 years. He retired at age 70.

Michael Colangelo's parents came to Canada from the old country, both from Naples, Italy. Michael was born in Toronto and grew up in the area of Dufferin Street and St. Clair Avenue West in a family of seven boys and two girls. Only he and brother Johnny, 88, are still alive.

Colangelo has two daughters, Rachelle and Joy, three grandchildren and one great-grandchild. His wife Alice died seven years ago. He looked after his long-ailing spouse in their apartment, with a view of the lake, for four years.

Colangelo says he lost interest in studies early in life and left St. Clair Catholic School after Grade 8 to do part-time jobs.

In 1944, at age 16, already with his driver's licence, he was making 75 cents an hour learning the home oil heating trade.

At 18 he was introduced to Jack Swanson, the foreman of the machine shop at A.V. Roe, a man who would teach him how to read and use precision instruments.

After joining Roe, later on he worked with Jack Mashinter who ran the fiveman experimental department in Malton. Initially a gofer, Colangelo eventually came under the tutelage of Englishman George Bell who "took so much time to teach me about engines and the wings."

A six-year apprenticeship culminated in Colangelo becoming a sheet metal mechanic. From 1955 on he worked simultaneously on



JoAnne Van Slingerland photo

The famed Avro Arrow taking off at the Malton. Ont. airport in the late 1950s.

the Arrow and the flying saucer.

History says that the work being done at A.V. Roe, particularly on the Arrow, was top secret at the time but Colangelo says it didn't seem that way, at least not for him.

"I could talk about it at any time with anybody. I had (security) clearance from the RCMP and the FBI. You had to have special clearance for the engine (testing) area."

The treasurer of the Avro Museum, housed at the Springbank Airport in Calgary, said security might have appeared to be light for some workers at the Malton assembly plant but that it was noticeable in many respects.

"Security at Avro Canada would be considered high by any measure," Mike Ward said in an email to the Post.

"The top secret information related to many of the manufacturing processes, aircraft design as well as the 'fly-by-wire' (computerized flight regulation) technology," Ward noted.

"This was way ahead of any other technology being used anywhere else in the world. Access to this material was restricted to senior engineering and manufacturing staff. Some of these staff had high enough clearance to be allowed to take material (drawings, etc.) out of the factory to work on it at home, which is why, when the hammer fell, some of these drawings and materials were not captured by the destruction orders that came later.

"The destruction order was put in place and executed to ensure that no one else could get their hands on the advanced technology that Avro Arrow aircraft design encompassed. The destruction included all the finished aircraft, about 30 partially finished aircraft on the production line as well as all the manufacturing equipment that, in most cases, had been designed and built specifically for the Avro Arrow and some of the (at the time) exotic materials, like titanium, that were used in the factories."

Ward said not all documentation was destroyed and that the Avro Museum has one of the most extensive collections of Avro Canada documents with more than 15,000 pages and various drawings, which they are in the process of organizing so it can be uploaded to its website for access by the public.

Colangelo said he avoided serious injury working around all that heavy machinery at Avro and Orenda, but he recalled the day that he was standing not far from a worker who was waiting for metal sheets to come through the cutter but instead a hand showed up, the worker on the other end getting it stuck in the machinery and severed. Avoiding severe workplace mishaps enabled Colangelo to be active his entire life. He says he still goes to the Burlington YMCA every day cycling on stationary bikes and using a treadmill.

"I used to do 14 miles a day on a bike, now it's eight miles."

He has been a member of one YMCA location or another for about 70 years.

Colangelo played competitive handball for decades and won 43 trophies, including provincial and national singles and doubles titles, through YMCA tournaments.

Colangelo's eldest daughter, Joy, said she's always marvelled at her father's stories and his legendary exercise regimen.

". He was always able to learn and pick things up so quickly. I think it's incredibly impressive that he taught himself the math required to be a skilled sheet metal worker.

"He never put limits on himself and was able to transition and adapt to whatever was required to perform well in all of the various jobs he held throughout the years.

".. I can't get over the fact that at 90 he still works out every day including Sundays. If the 'Y' is closed for a Statutory holiday, he goes down to the exercise room in his condo and does his workout. He's unbelievable!"



Tim Whitnell/Metroland



Tim Whitnell/Metroland

insidehalton.com

Clockwise from above left, the famed Avro Arrow takes off at the Malton, Ont. airport in the late 1950s. Former Canadian Prime Minister John Diefenbaker and his wife Olive sent Burlington's Michael Colangelo this photo in May 1973. Attached to the photo was a letter from the office of the former Canadian Prime Minister and then Conservative MP. Colangelo had met Mrs. Diefenbaker on a plane ride from Vancouver to Toronto earlier in 1973. They had engaged in small talk at which time Colangelo let the wife of the ex-PM know that he was not happy when her husband announced in February 1959, when he was PM, the abrupt end to the production and testing of the Avro Arrow Canadian military jet. Colangelo worked for A.V. Roe in Toronto at the time of the plant's closure.