

Wing Mate

Royal Canadian Air Force Association of Canada
Newsletter 408-437 Wing



Avro 698 Vulcan Bomber

April  2025

AIR FORCE ASSOCIATION of CANADA MISSION STATEMENT

The Air Force Association of Canada is a national aerospace and community service organization whose aim is to commemorate the noble achievements of the men and women who have served as members of Canada's Air Force since its inception, advocate for a proficient and well equipped Air Force and, support the Royal Canadian Air Cadets.

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110 Squadron..... Cécile Thompson



Sick and Visiting

Be sure to advise Barbara Newman, Fellowship Chair, if you are aware of a Wing member who is ill or in distressed circumstances.

Barbara can be reached at 416-223-7840.

Happy Birthday!

April

11th John Wreglesworth

15th Gwen Smith



General Meetings

Legion 948 Sheppard Ave.

East of Allan Expressway

Monday, April 14th



Monday, May 5th

Speaker:

Colonel Boychyn, Wounded Warriors, Org.

President's Report



Dear Members,

On 29th March I attended the semi-annual regional meeting at Mount Hope. It was an interesting and informative meeting (and lunch was good and plenty.) As far as where we are as an Association, it is still in the planning and discussion stage, which is a good thing. As I understand it there is a review in process of how we arrived to where we are presently. The plan is to shrink to what this organization's aim and intent was originally.

And of course membership numbers. At the bi-Annual National General Meeting there will be some announcement as to what's what. The Air Force Magazine's last printed issue is the last printed issue. Future issues are electronic copies. Not sure how this will work. If Ottawa has your e-mail and send it to you directly or if will be sent to the Wing for distribution. I don't know how this will work with members who do not have e-mail. We'll see.

There have always been complaints Association-wide that almost no one could get anything published, or just a few, including the Last Post at least. We were never given a satisfactory answer.

At this last Regional meeting it was explained for the first time as far as I'm aware the Air Force magazine is the Air Force's magazine not our Association's magazine. And yet it cost us \$42,000 per year to support it.

Dues-The annual dues request, and the election ballots will be mailed out to you sometime later this month. Please take the time to return it. The dues remain unchanged at \$55 which is at cost; to go to Ottawa plus the Regional Executive donation. As far as I know we're the only Unit to do this; most others are \$75-100. It is important that you continue to support this Wing and by extension the Association because quiet simply if you're asking for just one example the Air Cadet Flying Program depends on us collectively. This program points the way to a career in aviation for many, as an example, my son. I was surprised to discover just how many ex-air cadets are commercial pilots. My son spent almost two years in the arctic flying before he joined Air Canada; the company that hired

him had six pilots on staff four were ex-air cadets. By chance four of them were cadets from the GTA. It is the intension of the new Executive in Ottawa to continue to fully support it.

As far as value for money from this Wing attend any one of our 3 main social functions and you have recouped it. We'd be delighted to see more of you more frequently especially since the weather is cooperating.

The Executive is looking to reintroduce Speakers. In fact, we have one for May. But we need a certain level of commitment if you're able to attend, from you to continue with it. I know this stuff came to a crashing halt with this Covid thing, I'm hoping to return to some normalcy. Next Meeting is **Mon., April 14th.**

Please make the effort to show up at the least for the May 12 General Meeting.

Chag Pesach Sameach!

Happy Easter!

Nick Czernkovich



Mort Lightstone with his daughter Helen. On March 15 at the Canadian Forces (Staff) College, I presented the Coronation certificate to Helen to be in turn presented to her father. She told me that he was very pleased with that. Mort was awarded on November 16, 2024 the King Charles III Coronation medal; now he has the certificate that goes with it! LGen Rohmer pinned the medal on him. [Alis B. Kennedy](#)

Avro 698 Vulcan

The "V bombers" were the Royal Air Force aircraft during the 1950s and 1960s that comprised Britain's strategic nuclear strike force known officially as the V force or Bomber Command Main Force.

The three models of strategic bomber were the Vickers Valiant, which first flew in 1951 and entered service in 1955; the Avro Vulcan, which first flew in 1952 and entered service in 1956; and the Handley Page Victor, which first flew in 1952 and entered service in 1957. The V Bomber force reached its peak in June 1964 with 50 Valiants, 70 Vulcans and 39 Victors in service.

The **Vulcan** first flew on 30th August 1952 at Woodford. The design was considered the most technically advanced of the submissions in response to Air Ministry Specification although it was thought by some as the riskiest option.

Handling problems as the aircraft approached the speed of sound at high altitude, resulted in a tendency to enter an uncontrollable dive, which of course proved unacceptable. The solution included the "Phase 2 wing" featuring a kinked and drooped

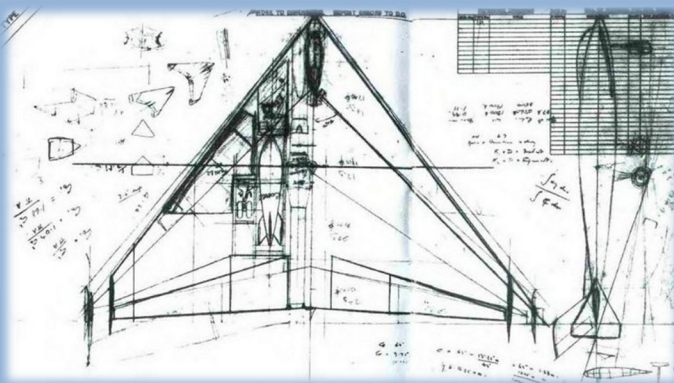
leading edge and vortex generators on the upper surface, all of which had been first previously.

As a part of the RAF's V-Force, the aircraft was the key part of the UK's airborne nuclear deterrent during much of the Cold War. Although typically armed with nuclear weapons, the Vulcan's ability to also carry conventional weapons was used to full effect on during the Falklands War. This was to be the only mission flown in anger by an Avro 698 Vulcan.

Carrying no defensive weaponry, the Vulcan relied upon its high-speed and high-altitude flight to evade interception. Although electronic countermeasures were also employed from circa 1960, the Vulcan was always vulnerable to air attack.

The Avro Vulcan Bomber, the most famous of the British V bombers, is known for its distinctive howl and delta wing. Initially one of the delivery agents of Britain's independent nuclear deterrent during the Cold War, the Vulcan later fulfilled another role, undertaking the longest bombing raid in history for Operation Black Buck in the Falklands Campaign of 1982. (It is hard to believe that the war was in 1982!.) Following the Falklands War, the Vulcan was retired from service with one kept on for public demonstrations. One of the first operational RAF aircraft with a delta wing, this Cold War jet has never lost its appeal.



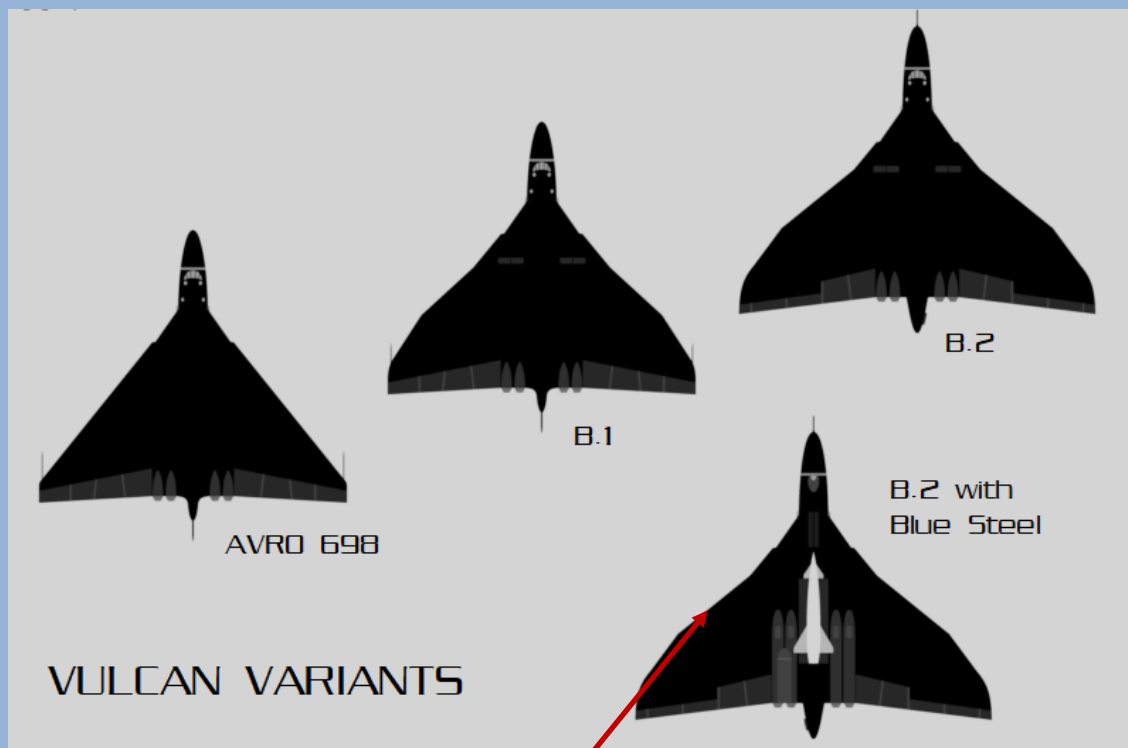


Roy Chadwick's original "Delta Sketch"



A Vulcan 698 Bomber and the much smaller 707 trainer which never went into production, having been deemed unnecessary for Vulcan pilots in training.





“Drooped & Kinked” Wing

707 Trainer Project

The Avro Type 707C was originally proposed as a lead-in trainer for the full-scale Type 698, Vulcan. The bomber's size and complexity suggested that pilots would be unable to successfully convert to the Vulcan directly from the Vampire advanced trainer. Thus the 707 would provide the RAF with a simple and undemanding aircraft in which pilots could learn how to fly an aircraft with handling qualities that were similar to the 698.

Experience with the 698 prototypes soon demonstrated that an “intermediate” trainer was unnecessary and the proposal was dropped. Just two Avro 707 C aircraft were ordered but the first aircraft was abandoned. Only one was built and this aircraft made its first flight from RAF in July 1953.

Apparently the 707 thrilled all of the pilots who were lucky enough to fly this nimble jet.



Curt Abels

Kurt was born in Germany and emigrated to Canada in the 1950s, passed away peacefully, at Providence Health Center on March 7, 2025, just after his 93rd birthday. He is lovingly remembered by his wife, Ursel; his first wife, Renate; children, Barbara (Alex), Robert (Linda), and Stephen; grandchildren, Vanessa (Brett), Matthew (Alana), and Ryan (Maya); great-granddaughter, Sophie; stepdaughters, Bettina (Michael) and Claudia (granddaughter, Philippa); nephew, Juergen; and Richard, Marbelis and Clarice.

Kurt cherished many summers with his family at their cottage in Honey Harbour on Georgian Bay, and later boating around Lake Simcoe. In his forties, Kurt earned his private pilot's licence, allowing him to take many family trips around Ontario and

the US. He shared his love of the outdoors with his children and grandchildren, teaching them how to ski — both on snow and water — and ice skate.

For many years, he found great fulfillment working for Peter Munk, and later in mentoring young adults through the Cadet system and with the Air Force Association. Kurt's love of life and his warmth and friendliness will never be forgotten by his family and friends.

He will always remain in our hearts.



We will remember him.

Curt Abels
1932-2025

Curt served our Wing as Membership Chair, Treasurer and President, holding the chair from 2001 until 2011.

We thank him for his faithful service.

Please visit the Pine Hills Cemetery website at:
mountpleasantgroup.permavita.com/site/



Air Canada Signs for Purchase of Electric Aircraft

Heart Aerospace has replaced the 19-seat design of its previous ES-19 aircraft with the 30-seater battery-powered ES-30. The Swedish startup has also confirmed Air Canada as a new minority shareholder with a \$5 million investment and a purchase order for 30 ES-30 aircraft.

Saab, the Swedish aerospace and defense manufacturer, joins Air Canada as the newest minority shareholder in Heart Aerospace with its own separate \$5 million investment in the company. According to details about the ES-30 released by Heart Aerospace last week, the ES-30 is powered by four electric motors using lithium-ion batteries as a primary source of power and two sustainable aviation fuel-powered turbo generators as reserves.

Heart Aerospace describes this as a “reserve-hybrid configuration” where the pair of turbo generators “can also be used during cruise on longer flights to complement the electrical power provided by the batteries.” On battery charge alone, the ES-30 is being developed to fly a range of 200 kilometers (124 miles) with an altitude ceiling of 20,000 feet.

The company also specifies an extended range of 400 kilometers with 30 passengers and the ability to fly up to 800 kilometers with 25 passengers. Heart’s targeted range for the ES-30 is similar to the ES-19 that was also being developed to fly up to 400 kilometers.

Air Canada expects the ES-30’s battery system to have a charging time of “30-to-50 minutes.”

“The introduction into our fleet of the ES-30 electric regional aircraft from Heart Aerospace will be a step forward to our goal of net zero emissions by 2050,” Michael Rousseau, President and Chief Executive Officer of Air Canada, said in the press release. “Already, Air Canada is supporting the development of new technologies, such as sustainable aviation fuels and carbon capture, to address climate change. We are now reinforcing our commitment by investing in revolutionary electric aircraft technology, both as a customer for the ES-30 and as an equity partner in Heart Aerospace.”

Over the last year, Heart Aerospace has continued to make progress on what has now become the ES-30 aircraft development program. Key achievements include confirming Garmin International to supply its G3000 integrated flight deck for the ES-30 cockpit. Garmin explained in an interview with *Avionics International* last year how their work with Heart will focus on interfacing the aircraft’s battery management system, motor control units, and other electric drive train components to the G3000 computers.

In January, Heart completed a test flight with a 1:5 scaled model of the ES-19 that was powered by commercial off the shelf electric motors. The startup also noted at the time that its electric drivetrain had been in ground testing for more than a year. No other details about a timeline for the first flight or ground test of a full-scale ES-30 aircraft have been released.



On the same day as the Air Canada and Saab shareholder investment announcements came the addition of a new industry advisory board and plans released for the development of an electric aircraft development campus. Heart is building new offices and production and flight test families for the new campus, "Northern Runway," to be located in Gothenburg.

Their new ES-30 industry advisory board includes

Their new ES-30 industry advisory board includes representatives from 21 airlines, including Air Canada, Air New Zealand, Cebu Pacific, Icelandair, and United Airlines among others. United Airlines also committed to a future purchase agreement for up to 100 electric aircraft from Heart Aerospace. The startup has also received letters of intent from SAS, Wideroe, Air Greenland, and Finnair, among others.



Brazilian Air Force in WW II?

Brazil is perhaps the largest yet mostly forgotten Ally in World War II. Brazil declared war on Germany in August 1942 after German submarines sank several of its merchant ships (and other political machinations). Brazil mostly fought in the Mediterranean Theater, where its Brazilian Expeditionary Force, which numbered around 25,900, included a fighter squadron equipped with US aircraft.

From the fall of 1944 to the end of the war, an all-volunteer group of 48 Brazilian fighter pilots flew as a squadron attached to the U.S. Army Air Forces' 350th Fighter Group, 12th Air Force, in Italy. Designated the 1º Grupo de Aviação de Caça (1º GAC), these P-47 Thunderbolt pilots amassed an impressive combat record that included the destruction of over 1,300 motor vehicles, 250 railway cars, and 25 bridges.

The Brazilian Expeditionary Forces, known as "the Smoking Snakes", was a military division of the Brazilian Army and Air Force that fought with Allied forces in World War II against Nazi Germany and Fascist Italy. It numbered 25,900 men and was very successful in the battlefield.





George Frederick Beurling

DSO, DFC, DFM & Bar

1921 – 1948

George "Buzz" Beurling was the most successful Canadian fighter pilot and ace of WW II.

Known as "The Falcon of Malta" and the "Knight of Malta", he was credited with shooting down 27 Axis aircraft in just 14 days over the besieged Mediterranean island. Before the war ended his official total climbed to 31. Beurling's wartime service was terminated prior to war's end, for repeated stunting and his lack of teamwork. Having found a way to potentially continue combat flying in the postwar era, Beurling was killed in a crash while attempting to deliver an aircraft to Israel.

George Frederick 'Buzz' Beurling was born on December 6, 1921, in Verdun, Quebec, where he was educated. As a youngster he built and sold model aircraft to earn money for flying lessons, and hunted game birds to improve his shooting skills. By 1939 he was a licensed private pilot and had won an aerobatics contest in Edmonton against civilian and military pilots.

Beurling was refused enlistment in the RCAF at the start of the war. Why? For lack of a school-leaving certificate. He tried and was refused enlistment in the Chinese Air Force and the Air Force of Finland. Beurling again attempted to join the RCAF as a pilot and again was rejected. This refusal caused him to join the crew of a merchant ship and cross the submarine-infested Atlantic in order to enlist in the RAF in England. Again he was refused, this time for lack of proper documents. He promptly returned to Canada, secured the required papers, and within a week sailed back to England, where he was finally accepted for pilot training by the RAF. Good for England!

After completing advanced training and graduating with his wings as a Sergeant Pilot in September 1941, Beurling was assigned to No. 403 RCAF Squadron flying a Hurricane fighter. Within weeks he was trans-

ferred to the all-Canadian, RAF Spitfire Squadron 242, where he shot down one enemy aircraft. In June 1942, he was posted to No. 249 Squadron on the Island of Malta and by mid-July had destroyed eight enemy aircraft and won the Distinguished Flying Medal. In September 1942, his score rose by 17 enemy aircraft destroyed and he was given a Bar to the D.F.M. Beurling was then commissioned as a Pilot Officer and awarded the Distinguished Flying Cross for downing more hostile aircraft. On October 13 and 14, 1942, he fought his last battles from Malta and was awarded the Distinguished Service Order.



After recuperating in England from a bail-out, Beurling returned to Canada to assist in selling war bonds as Canada's leading ace of World War II. His exceptional ability as an airborne marksman was then directed to the training of new fighter pilots in Britain but he wanted to be back in the air. He was then transferred to the RCAF in September of 1943. That same month, serving with No. 403 Squadron, he destroyed another enemy fighter. He was transferred to No. 412 Squadron and promoted to Flight Lieutenant. In December of 1943 he destroyed two more enemy aircraft. He found service discipline difficult, and was released from service in October 1944 and returned to Canada, after 31 affirmed aerial victories.

Until 1948 he barnstormed across Canada and accepted occasional bush flying assignments. But, lost in a world without air combat - "it's the only thing I can do well; it's the only thing I ever did I really liked" - he was accepted by the Israeli Air Force as a fighter pilot in the war between the Jews and Arabs in Palestine. He was killed at Rome Airport on May 20, 1948, when the aircraft he was ferrying to Palestine crashed. He is buried in Israel.

RCAF Squadrons

406 Night Fighter Squadron

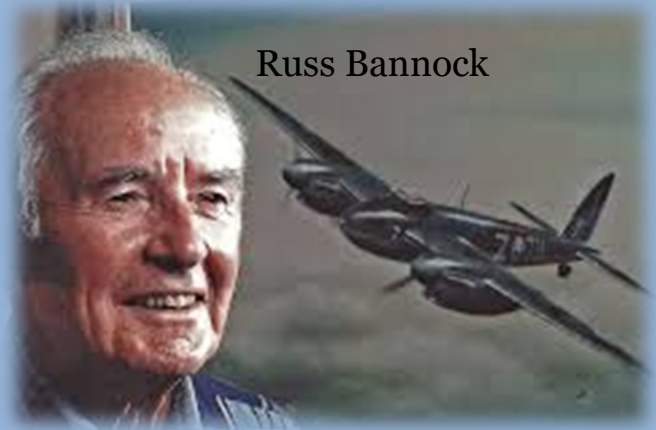
No. 406 Squadron RCAF was formed at Acklington, Northumberland, England in May 1941 as the RCAF's fifth (and first Night Fighter) squadron formed overseas. As part of No. 12 Group, Fighter Command, the squadron was equipped with Bristol Blenheim Mk. IF heavy fighters, re-equipping with the improved Bristol Beaufighter Mk. IIF the following month. In February 1942 the Squadron moved to Ayr, with a detachment at Scorton. In June the whole Squadron moved to Scorton and converted to the Bristol Beaufighter VI, then moved on to Predannack in Cornwall in September and then on to Middle Wallop in December. In March 1943 went to Valley on Isle of Anglesey in the far north-west of Wales. The Squadron returned to the south-west at Exeter in November. A further move to Winkleigh in April 1944 and reequipping with deHavilland Mosquito XII's, saw the unit defending the invasion ports and achieving some success.

In July Mosquito Mk XXX's replaced the Mark XII's and in September they moved to Colerne to undertake training for intruder operations. Moving to Manston in late November, the intruder raids commenced in December allowing 23 air and 10 ground victories to be claimed during the last four months of the war, raising the unit's total victories in the air to 53 1/2. The Squadron used the code HU during this period.

The unit also flew Mosquito aircraft in the night air defence of Britain. On 27 Nov 1944 No. 406 Squadron was re-designated No. 406 (Intruder) Squadron and converted to offensive operations over Europe. Listed as the top-scoring RAF/RCAF Intruder unit at the war's end, the squadron was disbanded at The Squadron was disbanded in England on 1 September 1945.

Commanders included W/C D.G. Norris (RAF), DFC 28 May 41 – 6 Aug 42. W/C R.A. Wills (RAF) 7 Aug 42 – 31 Jan 43. W/C I.R. Stephenson (RAF) 1 Feb 43 – 24 Aug 43. W/C R.C. Fumerton, DFC and Bar 25 Aug 43 – 26 Jul 44. W/C D.J. Williams, DSO, DFC 27 Jul

4.4 – 3 Nov 44. **W/C R. Bannock, DFC and Bar**
23 Nov 44 – 14 May 45. W/C R.G. Gray, DFC 15
 May 45 – 1 Sep 45.



Russ Bannock



Meeting March 10

