

Wing Mate

Newsletter 408-437 Wing

Royal Canadian Air Force Association of Canada

Featuring the F-4 F Phantom

April  2023

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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Air Cadets
818 Squadron..... Jackie Johnston
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.

April 2023



John Wreglesworth..... Apr 11

Gwen Smith..... April 15

Happy Birthday!

Wing Events 2023

General Meetings
Sheppard Ave. Legion Building
April 10th

Speaker: Terry Sleightholm

May 8th

Speaker: Carol Culhane

BBQ @ AHOM

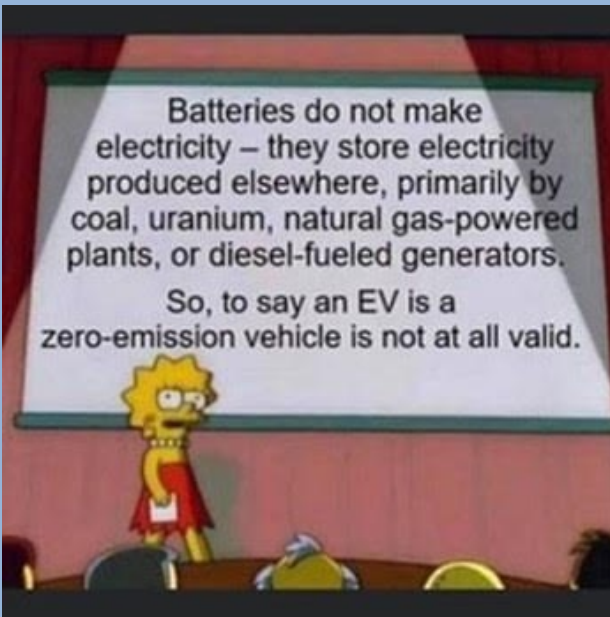
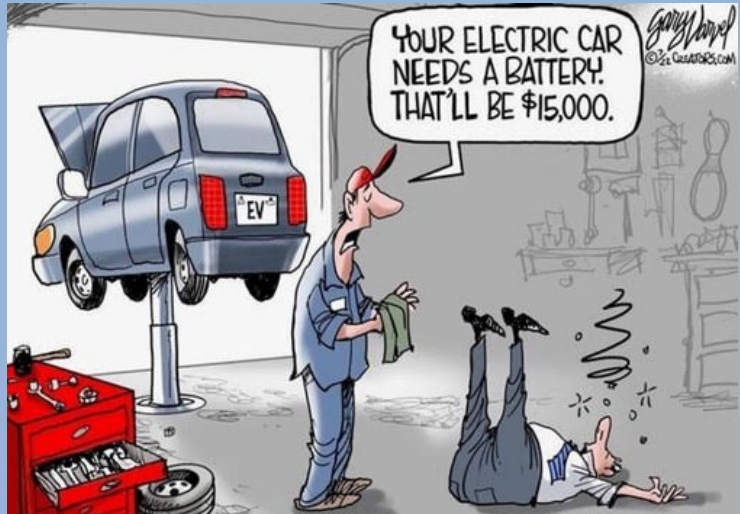
July 9th



408-437 WING
RCAFA



If your electric car runs out of power on the interstate, do you walk to a charging station to get a bucket of electricity...?



President's Report

The Executive has arranged for a speaker for the 08 May General Meeting: Carol T. Culhane PHEc, MBA from International Food Focus Limited. Her area of expertise is food packaging and labelling. What do those numbers really mean? I've heard her speak and found it very interesting. Please, mark it on your calendar and let's have a good turnout.



The age-old question, (if no one is looking), do pigs fly? Okay, the bats are voted back on the island; now, the Raccoon dogs (interesting union) are paddling in the lagoon. The real covid criminal was apparently a Raccoon dog from the Wuhan wet market. Exotic stuff. If in the end it's true, don't mess with Mother Nature, she always gets her pound of flesh before it ends up as a pound of flesh. Regrettably, before the WHO, et al, could properly verify the evidence, the evidence was eaten. Awkward!! How does that well-worn adage go? I was born at night, just not last night. I have it from a reliable source, Bugs Bunny is safe 'for now' but has a go-bag packed just in case.

On the realistic side, during the March Break I overheard my wife who was having a conversation with my six-year-old grandson about school. He loves it, can't get enough. He is looking forward to grade 2. She asked him why and he said, 'When I'm in grade 2 we're doing our First Communion (and added in a serious undertone) I will have to confess my sins.' All I could do was smile.

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It's coming to that time of year again. In May I will be sending out the ballots. AFAC constitution requires that we hold elections every year. So, when you receive it, please send it back. Also enclosed in the care package will be the annual dues request, the amount is \$55. Please return it as soon as you can. This is the amount we are required to send to Ottawa on your behalf. Good news! Ottawa has informed us that as of the 23/24 year if you are turning 90 or are 90 years wise, you are no longer required to remit annual membership dues. In their magnanimity it was reduced from 100 yrs. If this is part of your bucket-list, were willing to wait it out for the free ride, mount up. Everyone will receive a dues request. If you've earned the free ride, just write your year of birth on the form (and name) please and send it back. Cécile Thompson 'Keeper of the Scroll' and 'Diamond' Dave Ouellette our Treasurer will thank you for it. By the way, Cecile is in Japan. Rumour has it that she is taking a Sumo wrestling course and eating lots of sushi . . . known as "bait" in North America.



"The older I get, the more I understand why roosters start their day off by screaming!"

Nick Czernakovich

Looking Back . . . September 2018 Bangers & Mash Evening



818 Toronto Falcon Squadron
Royal Canadian Air Cadets



With Jackie Johnston

It is unbelievable sometimes how quickly a year can speed by. Since the New Year, our cadets have been working extremely hard to improve their drill, dress and deportment in preparation for Annual Ceremonial Review. Recently we started a boot polishing club so the cadets come together and practice the skill and work as a team as they learn. As well our drill team is working diligently on a dynamic display to present at ACR in front of family, guests and friends. Last weekend our Squadron Marksmanship Team competed in the NGTA Zone Competition and earned 3rd place in their first year back at the competition. Additionally one of your junior competitors LAC Diop placed 3rd overall in his first year ever competing.

There are many activities planned for the spring and the staff and cadets are tremendously excited for the snow to clear so we can finally get outside again and do more. As I reflect where we were just a year ago it is a special feeling to see these young people interacting together and creating bonds and friendships as they learn. There truly is nothing better and healthier than positive human interaction.

Daryl Abbott
Captain
CO 818 RCACS



110 Black Hawk Squadron
Royal Canadian Air Cadets



With Cécile Thompson

Cécile is travelling in Japan. Her column will be back in the next issue of Wing Mate.



McDonnell Douglas F-4F Phantom

The McDonnell Douglas F-4 Phantom II is an American tandem two-seat, twin-engine, all-weather, long-range supersonic jet interceptor and fighter-bomber originally developed by McDonnell Aircraft for the United States Navy in 1958.

For aircraft enthusiasts, air force veterans and those who watched the evening news in the 60s and 70s, the Vietnam war will be forever etched in our brains. We all watched the daily progress and horrors of this conflict in the comfort of our homes.



The F-4F Phantom became a familiar sight to many of us as it was one of the most prolific workhorses of that war so far away and yet so close thanks to the daily news media.

I recall reading many years ago about how ungainly the Phantom was in flight and that, in fact, it could not fly without extensive electronics that made it airworthy. That caught my attention as I always thought that

it was such a great-looking jet and was surprised to learn about its flying capabilities and flaws.

Originally designed to be a fleet defence fighter, the F-4 Phantom II soared into the history books as one of the most popular multi-purpose jets in U.S. history. This feared fighter also became one of the best-known icons of the Cold War.

Douglas Aircraft ran internal studies on fighter designs in 1952 and concluded that since there was no new aircraft competition on the horizon, the U.S. Navy had the biggest need for a new and unique type of attack fighter. In 1953 Douglas ran to the drawing board and began redesigning its F3H Demon naval fighter, hoping to improve upon its capabilities and performance. It came up with several variations based on engine design and fittings, making it a truly modular aircraft. The Navy was impressed but not quite sold upon this modular fighter. As Douglas was tweaking their design to seal the deal, the Navy returned with new requirements. Since they already had several types of fighters the Navy felt it needed an all-weather fleet defense interceptor. Being able to carry up to 18,650 pounds of weapons on nine external hard-points made the F-4 a very valuable weapon. Thus the F-4 Phantom II was born. The F-4 first took to the skies on May 27, 1958.



F3H Demon

The reason it was named the F-4 Phantom II comes from the fact that the first "Phantom" was another Douglas jet fighter, the FH-1 Phantom. Other names such as the F4H "Satan" and "Mithras" were proposed, but it was eventually settled upon the F-4 Phantom II.

All three of the military services used the F-4 as their prime air superiority fighter in the Vietnam War. Near the end of the war it also became important in ground attack and reconnaissance. While it was the powerhouse in the sky throughout the 1970's and 1980's, it was slowly replaced by more modern aircraft. Even though the F-4 was replaced by the F-15 Eagle & F-16 Fighting Falcon in the Air Force, as well as the F-14 Tomcat & F-18 Hornet in the Navy and Marines, it remained in service in reconnaissance and "Wild Weasel" roles up until 1996.

Shortly after the F-4 was introduced, it set 15 world records. Among the 15 records the F-4 set an absolute speed record of 1,606.342 mph and an absolute altitude record of 98,557 ft. This was extremely impressive considering that these records were set in 1959-1962. Mach speeds were almost unheard of at the time. Five of the F-4's speed records weren't broken until 1975 when the F-15 Eagle was introduced. The F-4 Phantom II was also the only aircraft to ever be used by both U.S. Flight Demonstration teams. Both the USAF Thunderbirds and the Navy's Blue Angels used the F-4 for several seasons.

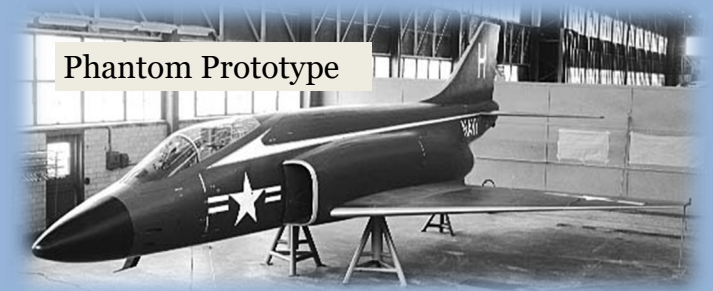


The ability to perform as a Mach 2 class fighter that had a long range as well as a bomber-sized payload made the F-4 one of the most important aircraft in military history. The F-4 Phantom II showed the importance of a multi-purpose fighter in the skies of war.

During the Vietnam War, the F-4 Phantom II would prove to be a better interceptor than the Convair F-106, a better ground-attack plane than the Republic F-105, a superb Wild Weasel defense-suppression aircraft, and a dogfighter able to use its power to defeat

more maneuverable opponents. The Phantom undertook reconnaissance and flew as a Fast FAC; its nighttime sorties in Laos were hair-raising in their danger.

McDonnell having merged in 1967 with Douglas, Phantom became the principal fighter for the United States in Vietnam, serving the Air Force, Marines, and Navy.



Phantom Prototype

The North Vietnamese were equipped with capable MiG-21, MiG-19, and MiG-17 Soviet fighters, all of which proved to be difficult opponents under the rules of engagement of the Vietnamese War. However, the lightweight, maneuverable MiGs could be tamed by F-4s when using energy-maneuverability tactics, in which they traded speed and energy for altitude, enabling them to fight in the vertical plane.

The Phantoms' missiles (Sidewinders and Sparrows) had been designed for anti-bomber operations, and were difficult to use in a swift-turning dogfight. The problem was alleviated with minigun packs attached as pods, and was solved altogether when the F-4E arrived on the scene with an internal gun.

The McDonnell Douglas F-4 Phantom II had its faults, including smoky engines and a hazardous, often fatal, stall-spin characteristic. Maintenance man-hours were high, and cockpit ergonomics were poor. In spite of all this, the F-4 was the best fighter in the West until the arrival of its successor, the McDonnell Douglas (now Boeing) F-15.

The first F-4 was delivered to the U.S. Navy in 1960 and to the Air Force in 1963. By the time it went out of production in 1979, more than 5,000 Phantoms had been built, and it had become one of the most successful fighter aircraft since World War II.

The Phantom's wings folded for carrier stowage in the navy version. Powered by two General Electric turbojets, each generating almost 18,000 pounds of thrust with afterburners lit, the plane could accelerate to more than twice the speed of sound with an operating ceiling was over 50,000 feet.



The first F-4s were armed only with air-to-air missiles, but, after suffering serious losses to Soviet-built MiG fighters over North Vietnam, they were fitted with 20-millimetre cannon for more effective close-range dogfighting. They also carried bombs and missiles under the wings for attacking surface targets—as they did in the Vietnam War and also in the Arab-Israeli War of 1973 when they spearheaded Israeli assaults on Egyptian and Syrian airfields and missile batteries.

In the early 1970s the F-4 was retired as a frontline fighter from the U.S. Navy and Air Force, but it continued to serve as a trainer, in radar-equipped reconnaissance versions, and as “Wild Weasel” aircraft equipped to detect and destroy radar installations and missile batteries.

"Speed is life" was F-4 pilots' slogan, as the Phantom's greatest advantage in air combat was acceleration and thrust, which permitted a skilled pilot to engage and disengage from the fight at will. MiGs usually could

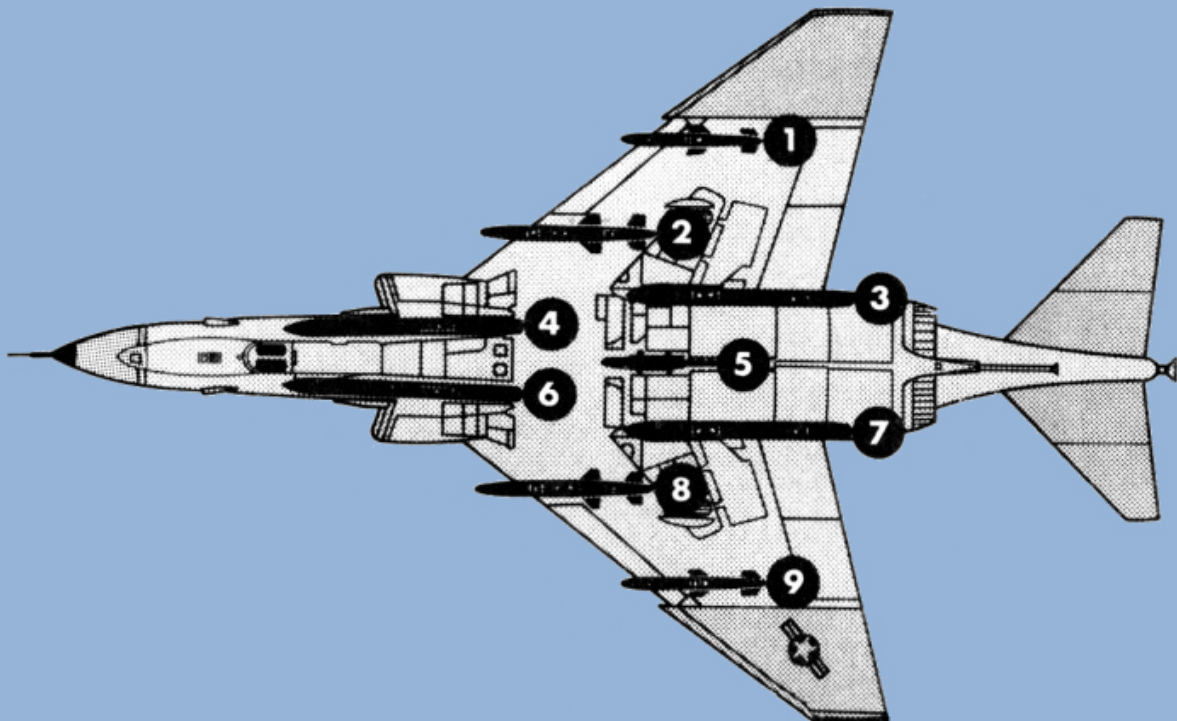
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outturn the F-4 because of the high drag on the Phantom's airframe, as a massive fighter aircraft designed to fire radar-guided missiles from beyond visual range, the F-4 lacked the agility of its Soviet opponents and was subject to adverse yaw during hard maneuvering. Although the F-4 was subject to irrecoverable spins during aileron rolls, pilots reported the aircraft to be very responsive and easy to fly on the edge of its performance envelope. In 1972, the F-4E model was upgraded with leading edge slats on the wing, greatly improving high angle of attack maneuverability at the expense of top speed.

Phantom II production ended in the U.S. in 1979 after 5,195 had been built (5,057 by McDonnell Douglas and 138 in Japan by Mitsubishi). Of these, 2,874 went to the USAF, 1,264 to the Navy and Marine Corps, and the rest to foreign customers. The last U.S.-built F-4 went to South Korea, while the last F-4 built was an F-4EJ built by Mitsubishi Heavy Industries in Japan and delivered on 20 May 1981. As of 2008, 631 Phantoms were in service worldwide, while the Phantoms were in use as a target drone (specifically QF-4Cs) operated by the U.S. military until 21 December 2016, when the Air Force officially ended use of the type.

The Phantom, aka “Snoopy” and “The Iron Sled”, was called the "World's Leading Distributor of MiG Parts". As a reflection of excellent performance in spite of its bulk, the F-4 was dubbed "the triumph of thrust over aerodynamics “.







Today's RCAF

Aircraft (CMMA) for the RCAF

As part of its defence policy *Strong, Secure, Engaged*, the Government of Canada is seeking to replace the CP-140 Aurora fleet with a Canadian Multi-Mission Aircraft (CMMA) for the Royal Canadian Air



CP-140 Aurora

Force. The Lockheed CP-140 Aurora fleet was originally procured in 1980, and the aircraft is currently scheduled to retire from service in 2030. Procuring a new fleet is required to ensure Canada's military has the equipment it needs to continue protecting Canadian sovereignty along its coastline. Ensuring that the RCAF are well-equipped and supported, maintaining operational continuity, and seeking best value for Canadians, including through economic benefits for industry and communities from coast to coast to coast, is at the core of Canada's defence procurement strategy.

A Request for Information (RFI) was released in February 2022 to obtain information from industry. Following engagements with industry and Canada's closest allies, the government has determined that the P-8A Poseidon is the only currently available aircraft that meets all of the CMMA operational requirements, namely anti-submarine warfare and C4ISR. This platform is a proven capability that is operated by several of Canada's defence partners including all of its Five

Eyes allies—the United States, United Kingdom, Australia, New Zealand—as well as Norway, and South Korea. Germany has also recently purchased this platform.

With a view to exploring this option in more detail, Canada has recently submitted a Letter of Request (LOR) through the United States government's *Foreign Military Sales* (FMS) program outlining Canada's requirements and requesting an offer. These requirements include up to 16 P-8A Poseidon aircraft and associated equipment and initial servicing, as well as access to intellectual property and technical data.

The issuance of a LOR does not commit Canada to purchasing the P-8A Poseidon and the project remains in Options Analysis. The final decision will be based on the capability offered, availability, pricing and benefits to Canadian industry.

Public Services & Procurement Canada, March 27 2023



Boeing P-8A Poseidon



P-8A Poseidon

Canadian Aces



Mackenzie "Mac" Reeves

This week marks the anniversary of one of Madoc's wartime heroes' passing. Mackenzie Reeves served with 403 Squadron RCAF and was killed on March 28th, 1945.

Mac and five other airmen departed for a patrol over Haltern Germany. Mac saw an enemy transport column. He and his wingman went in for a closer look and engaged the transport. Suddenly enemy flak opened up and the planes got split up. Mac's wingman looked behind him and noticed Mac's plane was going into a dive. Mac's plane was hit. As a result he was not able to get out according to radio transmissions, resulting in the plane crashing into nearby woods, and Mac not making it out of his aircraft.

"You may be interested to know that Mac Reeves sent a radio transmission to his fellow pilots moments after he had been attacked by enemy airplanes. He told them that his arm had been completely shot off and that he had no choice but to ride the airplane in. (he could not get out and he could not fly it). He wished them well and he said it was a privilege flying with them."

Mac was credited with 4 confirmed air kills and a 1/2 during his time with 403 Squadron. Mac was considered a hero before going overseas, during his time at Uplands flying Harvards. He brought back 5 or more aircraft to Uplands when the planes were lost in a blizzard over the Ottawa skies. Mac who was familiar with the area, as he camped their many times before the war, recognized the terrain. The flying instructor credited Mac for his heroics before receiving his pilot wings in 1943.

Before the war, Mac ran a service garage in Madoc and Marmora in partnership with his mother Florence Reeves. Mac served with in the Hastings and

Prince Edward Regiment Militia during the 1930s, and later joined the 127 Wing Squadron RCAF.

