

December Meeting

Topic: "Buffalo 115461 – Tragedy to Tribute"

Speaker: Wally Adam, Canadian Warplane Heritage Museum (CWHM), assisted by Bruce Gall (CWHM)

Reporter: Gord McNulty

CAHS Toronto Chapter President George Topple, welcomed members and visitors to our annual Christmas Gift Exchange meeting, and introduced Wallace (Wally) Adam of St. Catharines. Our speaker served for 25 years with the Royal Canadian Air Force and the Canadian Forces as a pilot. He flew both fixed-wing aircraft and helicopters, a total of 10 different aircraft types, and retired as a Major in 1988. Major Adam served primarily in Canada. He also served one year in Tanzania in East Africa, instructing Tanzanian pilots on the deHavilland Canada (DHC) Otter and Caribou aircraft. His high-time aircraft is the DHC-5 Buffalo, on which he flew 2,000 hours --- initially in a tactical transport role and later with 442 Search and Rescue Squadron, which still flies the Buffalo out of Comox, British Columbia.

Major Adam joined the CWHM as a volunteer in 2001 and soon became a tour guide. When the museum acquired a derelict Buffalo aircraft for restoration in 2002, he eagerly joined the project. The Buffalo was restored

and completed as a static display to replicate the Canadian Buffalo 115461 that was shot down in 1974 while on UN duty in the Middle East with the loss of nine Canadian peacekeepers. Thirty-five years later, on 9 August, 2009, the beautifully restored Buffalo --- resplendent in UN colours --- took centre stage as the CWHM held a dedication ceremony and parade.

Wally began his illustrated presentation by saying that it was great to return to what he considered the "sacred ground" of the former DHC buildings at the Canadian Air and Space Museum. He has flown the original line of DHC products, from the Chipmunk to the Buffalo, with the exception of the Beaver. Wally was assisted by Bruce Gall, of Niagara Falls. As a CWHM volunteer, Bruce was involved with the Buffalo project at an earlier stage. Bruce was among CWHM volunteers who went to Greenville, South Carolina, to disassemble the Buffalo that was eventually rebuilt. Bruce, a civil engineer, is webmaster of and historian for the CWHM Buffalo.

Wally noted the Buffalo features impressive STOL (short takeoff and landing) capability. The rugged transport is powered by twin General Electric CT64 turboprops. It offers flexible passenger and cargo configurations, and a high rate of climb. One drawback is that it isn't pressurized, which is difficult given the square fuselage. As a result, crews are limited to an altitude of



Last Photo of DHC-5 Buffalo 461. Photo Credit Jim McFarlane



Speaker Wally Adam

Photo Credit: Neil McGavock

10,000 feet and below. If they want go higher, they must go on oxygen. The Buffalo can carry 41 passengers or 35 paratroopers. The crew normally consists of four: two pilots, a flight engineer and a loadmaster. Maximum payload is 13,500 pounds. The aircraft is fully capable of operating from grass or gravel strips. Offering excellent self-deployment capabilities, it can be flown in and out of primitive areas, and doesn't need special equipment to start. It has an auxiliary power unit (APU) in the port wheel well, started from a battery, to provide the full hydraulic, electric and pneumatic power to start the engines. More than 120 Buffaloes were built by DHC from 1965 to 1986, including 15 early DHC-5A models ordered for the Canadian Forces in 1964. Six of these aircraft are still serving with 442 Sqdn. During their initial service with the Canadian Forces, in 1968, Wally flew Buffaloes with 429 Sqdn. at St. Hubert, Quebec in support of the army, airdropping troops and equipment.

Bruce then took the microphone to describe the genesis of the Buffalo, a larger, turbine-powered successor to the DHC-4 Caribou. The Caribou was popular with the U.S. Army, which purchased 159 after trying out five initially, and served with distinction in the Vietnam war. One Caribou, fitted with T-64 turboprops, was flown in 1961. In 1962, the army held a competition

for a STOL turboprop transport that could carry the payload of a Chinook helicopter. The Buffalo won the contract in 1963 over 24 other proposals and on 9 April, 1964, the prototype Buffalo made its first flight. Bruce showed a five-minute corporate video about the Buffalo, produced by DHC and later found by Bombardier, illustrating the spectacular takeoff and landing capabilities of this versatile aircraft --- especially in confined and/or hostile spaces. One demonstration of the Buffalo, showing a high-performance, steep landing and takeoff at East River Park in downtown New York City, was really impressive. Fully reversible propellers enabled pilots to easily back up the aircraft on the ground. The army received the Buffalo, designated CV-7A, in 1965. Four models were delivered and two were assigned for testing in a combat environment. They were put into front-line action, in multiple roles, in the jungle airstrips of Vietnam. On one mission a Buffalo dropped 62 Vietnamese paratroops.

The U.S. Army intended to order more but interservice rivalry saw the U.S. Air Force take over the operation of fixed-wing transports. Unfortunately, no further orders for the Buffalo were placed by the American military. The Buffaloes were re-designated C8As and used for research. The prototype Buffalo was transferred to NASA, refitted with turbofan engines, and used to investigate augmentor wing STOL technology. It was later returned to Canada's National Research Council, used for more testing, and was finally due to be scrapped. As Bruce told the story, the aircraft was being trucked down a highway to Newmarket, where it was to be melted down. When the owner of a scrapyards --- who by coincidence was an aviation enthusiast --- happened to see pieces of an aircraft on a flatbed going by, he hopped in his truck and pulled the truck over. He made a roadside deal and managed to get the nose and the tail. Bruce believes the pieces remain in a Newmarket scrapyards today.

In late 1973, the Yom Kippur War between Israel and its neighbours was ending. As part of Canada's commitment to peacekeeping, two Buffaloes --- No. 452 and No. 461 --- were flown to an air base just outside of Cairo in January, 1974. Assigned to 116 Air Transport Unit (ATU), they were based at a former horse racing track in fairly primitive living conditions. Other aircraft rotated in and out and at one time three Buffaloes were in theatre. In mid-1974, they were transferred to a base further east near Ismailia, Egypt, just off the Red Sea. At the same, United Nations Emergency Force peacekeeping efforts were under way in the Gaza Strip and also in Cyprus. Bruce presented one shot of 461 in traditional white and blue UN colours. It wasn't until 1979 that the peacekeepers pulled out. On a typical flight in theatre, crews would be on a one-week rotation. After a comfortable night's stay at a nice hotel in Beirut, they would fly out in the morning to Ismailia, to pick up passengers and material. They would overfly Beirut, finish up in Damascus, turn around and return to Beirut.

On 9 Aug., 1974, just as Buffalo 115461 was crossing the border into Syria flying to Damascus, three SAM (surface-to-air) missiles were fired at the aircraft. It was hit and crashed near the Syrian village of Ad Dimas. Five crew members and four passengers aboard the aircraft perished. Photos of the wreckage showed the devastating impact of the crash. Bruce showed photos of the nine casualties --- crew: Captain Gary Foster, pilot; Capt. Keith Mirau, co-pilot; Capt. Robert Wicks, navigator; Corporal Bruce Stringer, loadmaster; Master Cpl. Ronald Spencer, flight engineer; and passengers: Master Warrant Officer Cyril Korejwo; Cpl. Michael



Speaker Bruce Gall

Photo Credit: Neil McGavock

Simpson; Cpl. Morris Kennington; and MWO Gaston Landry. They became known as the Buffalo Nine.

A Department of Flight Safety board of inquiry report, which was classified as secret until 2002, summarized the fate of Buffalo 461. It was flying at about 11,000 feet above sea level when the attack occurred. An eyewitness reported that the first missile was either a glancing blow or a near miss in the tail area. The Buffalo remained under control but as it neared the ground a second missile hit the port wing, putting the aircraft out of control and setting it on fire. Just before it hit the ground, a third missile exploded in the nose area, ripping the aircraft apart. Pieces of the aircraft were strewn

across a wide area. A propeller blade was recovered from the crash site and was placed in a chapel at Ismailia during 116 ATU's stay there. It now has a permanent home in the National Air Force Museum of Canada at Trenton.

Wally returned to the microphone with more observations about questions that have always been raised about the crash. He noted the Buffalo had been cleared by air traffic control for descent into Damascus when it was brought down. As to why a friendly UN aircraft would be shot down by forces of the very country that it was supposed to land in, the board deliberated at great length and never came to a firm decision. However, the board cited two possibilities: 1. The SAM missile crew could have been inexperienced and may have mistaken the Buffalo for an Israeli Phantom jet that had been hazing the countryside earlier that day. It seems so hard to believe a Buffalo could be confused with a Phantom, but the SAM missile site provided only a radar image and the crew may never have seen the Buffalo itself. 2. It was a deliberate shutdown. Syria had just suffered an embarrassing defeat by the Israelis, after attempting to retake the Golan Heights from Israel. The Syrians were angry at both Israel, which continued reconnaissance flights over Syrian territory, and the UN, which couldn't stop the Israeli flights. So it's possible that the Syrian leadership might have wanted to teach the UN a lesson, so to speak, by shooting down a UN aircraft --- which just happened to be Canadian. No one is really sure what happened to this day. Syria, in fact, has never admitted liability for the incident at all.

Wally noted that other pieces of the wreckage are now at the Canadian War Museum in Ottawa. The CWHM has attempted to get an original piece of 461 from any source, but has been unsuccessful. The idea of a restoring a Buffalo originated in 2002, when CWHM volunteer Doug Nagy, a friend of Bruce's, made connections with a company called DAC Aviation International in Montreal. DAC Aviation, through its subsidiary CMC Aviation in Kenya, is the largest civilian operator of Buffaloes and flies humanitarian relief charters in Africa. Doug convinced DAC to purchase a derelict Buffalo in South Carolina and donate it to the CWHM.

The CWHM's Buffalo, a later DHC-5D model, was built in 1978 and was one of four purchased new by the Sudan Air Force. No. 85 on the production line, it was badly damaged in November 1984 in a combat landing on a short unprepared strip during the Second Sudanese Civil War in southern Sudan. It was repaired with some help from DHC and eventually, after sitting in Sudan until 1987, a deal was struck to repair it as part of a C-130 Hercules contract. In November 1987, the Buffalo was flown from Khartoum, the Sudanese capital, to Alexandria, Egypt. It then made an epic 12-day flight, including stops in Krakow, Poland; Frankfurt, Germany; Prestwick, Scotland; Reykjavik, Iceland; Sondre Stromfjord, Greenland; Frobisher Bay; Goose Bay; Syracuse, NY; and finally, Greenville, SC. The flight was

made with the nose gear, and possibly all of the landing gear, down because it was damaged in the 1984 landing incident. Wally presented photos of Buffalo CN 85 in transit at Frankfurt and sitting in far from ideal condition at Greenville. Political problems ended the repair contract, as the U.S. seized Sudanese assets for human rights violations. The State Department eventually impounded the Buffalo and it sat on its belly at Greenville for some 10 years.

When CWHM volunteers inspected the aircraft in Greenville, they found all kinds of rodents, snakes and whatever living inside. All of that activity had an effect on the electrical wiring and other systems, so the CWHM never considered restoring the aircraft to flying condition. In fact, restoration would have cost more money than buying an airworthy Buffalo. After the Buffalo was deconstructed and made ready for transport to the CWHM, three or four flatbed trailers were used for the trip in January 2003. The restoration itself proved to be an onerous 6½-year project. Refurbishing began in a shell outside the main CWHM hangar. There wasn't any heat or electricity. The CWHM took some liberties with the restoration, since it was for static display only. Any rivets that were used probably came from Canadian Tire, for example. The CWHM received a lot of help. The wing centre section and tail were lowered into place with a crane, and Aurora Crane, of Newmarket, generously provided lifts without any charge whenever hoists were needed. It was a major accomplishment to put the aircraft back on its undercarriage after a decade or so of sitting on its belly. The crane was again needed to connect the tail cone to the fuselage. During the winter, the museum allowed the Buffalo crew to do refurbishing and painting inside the warmth of the hangar.

Many challenges arose. The restoration had to be an outdoor project. With a tailplane of 28 feet, 8 inches, the aircraft was too tall for the hangar doors of the museum, which are 24 feet in height. So there is no question of the aircraft ever going inside. Without any power from the barn, the crew had to run long extension cords to the aircraft. It was difficult to run more than one power tool at a time with the voltage available. The restoration wasn't an official CWHM project, so the museum sort of tolerated the project. The Buffalo crew were basically paying for the work out of their own pockets. Many parts were missing, with DAC having removed some parts after they bought the aircraft. However, DAC was kind enough to ship parts from Africa as they became available and the crew was able to finish the aircraft. There are parts from about eight individual Buffaloes in the CWHM aircraft.

In September, 2008, members of two of the Buffalo Nine families came to visit the museum. They painted the final numbers on the nose of the aircraft. It was an inspiring project in every way --- "a labour of love," as Wally described it, by dedicated volunteers and contributors too numerous to mention. On 9 August, 2009, the hard work culminated in the official dedication

of the CWHM Buffalo. The impressive ceremonies, held on the 35th anniversary of the shooting down of Buffalo 461, coincided with National Peacekeepers Day in Canada as enacted by Parliament in 2008. Hundreds of people, including relatives of every one of the Buffalo Nine, gathered at the museum on a day when the humidex hit 43. The tribute included speeches, a parade organized by the Canadian Association of Veterans in UN Peacekeeping (CAVUNP), three marching bands, and a colour party. Ontario Lieutenant Governor David Onley was among numerous dignitaries who attended. The wreath laying ceremony included --- among others --- Silver Cross Mother, Mrs. Loyola Helen Park, mother of Cpl. Simpson who was a passenger aboard the ill-fated 115461. The CWHM DC-3 did a flypast, and 424 Sqdn. sent a Hercules from Trenton. It was a truly memorable occasion. On the evening of Aug. 8, a reunion of 116 ATU was held at the CWHM hangar, and a good time was enjoyed by all. For complete coverage and photos, check out the website . and also Google "Buffalo Nine - Vintage Wings of Canada."

Recognition of Buffalo 461's history is all the more important given that the tragedy did not receive the coverage that it deserved at the time. The incident was overshadowed by the resignation of President Richard Nixon, which dominated the news. Today, however, the Buffalo proudly stands as a tribute in honour not only of the Buffalo Nine, but all of Canada's peacekeepers. It's a popular attraction for visitors. Wally noted there is a possibility it will receive a more prominent place, perhaps in a peace garden between two buildings, if the museum's long-range expansion plans materialize. Visitors to the CWHM are welcome to see the Buffalo at any time and need only to ask a tour guide to take them to the aircraft. Answering questions, Wally noted that a next-generation Buffalo has been suggested by Viking Aircraft as a possible made-in-Canada answer to the Canadian Forces requirement for a new search and rescue aircraft. Italy's Alenia C-27J Spartan is believed to be the front-runner but the Viking proposal underlines how competitive the Buffalo remains even today.

George Topple expressed his thanks to Wally and Bruce for a very moving and fascinating presentation. Bob Winson presented a gift and a donation to the CWHM in appreciation of a remarkable effort by the Buffalo volunteers. Congratulations and best wishes are in order!

