

WARRIOR

Summer 2023



Shearwater: The Birthplace of Maritime Aviation in Canada



Sea King helicopters from 423 Maritime Helicopter Squadron, based at 12 Wing Shearwater, Nova Scotia, fly over Georges Island in Halifax Harbour on January 26, 2018. It was the squadron's final operational flight with Sea Kings; squadron personnel will now turn their full attention to transitioning to the RCAF's new maritime helicopter, the CH-148 Cyclone.

Sea King operations on the east and west coasts will be conducted by 443 Maritime Helicopter Squadron, located in British Columbia, until the Sea King retires at the end of 2018. PHOTO: DND, SW05-2018-0015-001

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**Shearwater Aviation Museum
 Foundation or SAM Foundation 12
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Deadlines for receiving our Winter
 submissions: Oct 15th

Submissions: Text submissions can be
 either paper, email or electronically
 produced in Word.

We will format the text for you. No
 need to centre headings, indent
 paragraphs etc. Graphics are best
 submitted electronically; they should
 be 300 dpi and a .tif file. A jpg file at
 300 dpi is acceptable if no
 compression is used. We will attempt
 to use any pictures, whatever the
 format. NOTE WELL: When sending
 mail of any kind, newsletter articles,
 letters, membership renewals,
 donations etc., Stories should be no
 more than 8 pages please.

COVER PHOTO: Shearwater
 Museum Archives
Back Cover: Members of the
 Helicopter Air Detachment
 aboard HMCS MONTREAL
 conduct helicopter hoist drills with
 a CH-148 Cyclone helicopter, call
 sign Strider, during Operation
 REASSURANCE on February
 13, 2022. Please credit: Corporal
 Braden Trudeau, Canadian
 Armed Forces photo.



In the Delta 2023

BRUSHETT Samuel Augustine	April 2023
Daws-Knowles Stuart John Vere	May 2023
LEWIS Perri Richmond	July 2023
Rodney Albert Lyons	April 2023
STRACHAN Donald Allan	April 2023



Dear Editor of Warrior,

I am not often able to contribute to The Warrior, having come late to the Naval Air world when I married Ted Cruddas in 1980. However, your tribute to Jake Kennedy brought back some memories from my own career. In the early 1970s, as a brand-new Lieutenant (S) (W), I had the privilege of serving as the Staff Officer in the office of the XO of Stadacona. At the time, a series of ship drivers were cycling through the office – including Jake. His legendary reputation preceded him, and he certainly did not disappoint, but what stands out for me, in retrospect, was his passionate Service pride complicated inevitably by his chronic shakiness. Two examples come to mind.

An edict had come down from on high that Naval aircrew who had coerced their tailors to recycle old Navy wings (with real gold thread) onto their new green uniforms were – as of a certain date – to cease and desist and to wear, henceforth, the unified wing. On the fateful date, Jake took the opportunity to stand up on a chair at Happy Hour in the Wardroom and dramatically rip the offending Navy wing from his uniform –exclaiming that he’d rather go without than display the detested CF wing. Unfortunately, in the event, given his exuberance and shakiness, he had

created quite a distinctive jagged hole in the jacket fabric; the only solution to repairing it was – you guessed it – to sew on the dreaded CF wing.

On another occasion, a young sailor had garnered some positive press in the Halifax papers for rescuing a drowning civilian. Jake, intending to nominate the young man for a bravery award, was briefing me on the task at hand while standing behind his desk and wielding a large pair of scissors to cut the relevant article out of the Halifax paper. In so doing, he managed to cut quite a large swath across the front of his summer uniform shirt. Looking down at the ruination he merely shrugged and shoved the offending shirt front (ineffectually) into his waistband and thrust the newspaper clipping at me to get on with the task – as he proceeded to get on with his day.

Deborah Davis



This is a copy of a letter I received from the daughter of one of our SAMF volunteer’s who

passed away last year (Elaine Elliott), she donated all her mom's yarn, a car load and more.

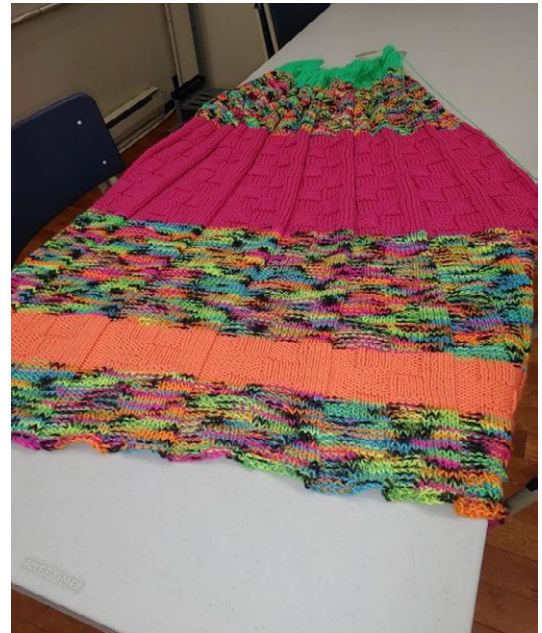
Hi Sandra,

I thought I would give you a little update on the yarn you donated last summer from your mom's stash. With the help of a few volunteers, it was sorted into coordinating lots, each enough to make a blanket. Many blanketeers were absolutely delighted to receive it to make blankets for children in need. One group at the Bridgewater United Church has dedicated many hours to making blankets using your mom's yarn. Besides creating hugs for about 50 children, your gift has given these crafters many hours of fellowship and a sense of purpose.

Thanks again for thinking of us at such a difficult time.

Kind regards,

Rhonda Church
Chapter Coordinator
Project Linus Nova Scotia
<https://projectlinuscanada.org>



A gift of Kindness





DUR

*THE STORY OF A U.S. FIRST WORLD
WAR NAVAL BASE IN NOVA SCOTIA*

“Considerable excitement has been reported to me arising out of the unexpected appearance of the air service machines yesterday. No information has reached us regarding the addition of this service to the garrison. This I would be glad to get as the fortress is equipped with anti-aircraft defences. Enquiries from the civil population make it apparent that some notification is expected by the public.”

The letter of Aug. 25, 1918, from the Halifax Citadel senior military staff officer to naval authorities was clear: unless they got prior notification of an aircraft flying over the city, it could be shot down as a suspected enemy airplane.

NORTH



The aircraft that had so startled the civilian and military populace of Halifax were two United States Navy (USN) Curtiss HS-2L flying boats. They were based at Baker's Point in Eastern Passage, across the harbour from Halifax.

But what were they doing there?



The story of how American naval aircraft came to be at Baker's Point has its beginnings in Germany's introduction of an anti-shipping campaign during the First World War. Germany had commenced the first large-scale use of subs, or *unterseebooten*—U-boats to the Allies. Allied shipping losses shot up astronomically.

Germany actually conducted two separate unrestricted anti-shipping campaigns during the war. The first ran from February to September 1915 and met with considerable success, sinking almost a million tons of shipping. It was abandoned only after the outcry in the U.S. over the sinking of the British passenger liner *Lusitania* on May 7, 1915. The 1,200 dead included 128 Americans.

But on Feb. 1, 1917, the German high command instituted another unrestricted U-boat campaign, believing it had enough submarines to force Britain to capitulate. For the campaign to be successful, however, U-boats had to be used ruthlessly; against belligerent and neutral, against warship, merchantman and liner, in British waters or bound for Britain. Although the Germans realized attacking all vessels could bring

“An attack by any one of the new enemy submarines might be expected in Canadian waters any time.”

the U.S. into the war, it was a risk they were prepared to take.

This declaration greatly concerned the Canadian government and, at a meeting on Feb. 10, an interdepartmental committee recommended the formation of a Royal Canadian Navy air arm for east coast defence. Two days later, the committee established a minimum requirement for seaplane stations at Halifax and Sydney, N.S.

Ottawa requested British assistance in fleshing out the proposal, and the Brits sent an experienced naval aviator to study the idea. In the end, his detailed paper recommending a naval air arm of 300 men and 34 seaplanes, stationed at two bases—at a cost of \$1.5 million—was rejected by Canada. It was deemed to cost too much money, men and materiel.

A U.S. navy Curtiss HS-2L flying boat (ABOVE) sits on the launching ramp at the American base on Baker's Point (OPPOSITE) in Eastern Passage, N.S.



The hoisting of the Stars and Stripes signalled the commissioning of Byrd's command as Officer-in-Charge, U.S. Naval Air Force in Canada.

Byrd sits front and centre with his officers at the station in 1918 (ABOVE). The base was overseen by Acting Lieutenant-Commander (N) Richard Byrd, pictured here with its Great Dane mascot (ABOVE RIGHT).

Meanwhile, to counter the U-boat threat, the Royal Navy reintroduced the convoy system and established other anti-submarine defensive measures, such as decoy vessels (ships with concealed weapons known as "Q-ships") and putting deck guns on merchants. Still, shipping losses to U-boats continued to mount.

Then, in January 1918, the Royal Navy told Ottawa that "an attack by any one of the new enemy submarines might be expected in Canadian waters any time after March." A subsequent message on March 11 reiterated the danger and suggested various countermeasures.

These included building seaplanes and the establishment of airbases for coastal patrols. But the Canadian government didn't own any military aircraft nor could the British spare any. Canada's navy had only been founded



in 1910 and its main efforts were directed to ship procurement rather than naval aviation. At the time, Canada had no air force.

A year earlier, after several American ships were sunk in February and March—coupled with the infamous Zimmermann Telegram (that promised Mexico the return of southwestern states lost during the Mexican-American War of 1846-48 if it joined Germany against the U.S.)—the Americans had declared war on Germany on April 6.

With the U.S. now in the conflict, a conference was held in Washington in the spring of 1918 with representatives of the RN, RCN and USN to discuss air patrols over Canadian coastal waters. It resulted in a comprehensive plan to establish air stations in Nova Scotia and Newfoundland.

Halifax and Sydney received top priority—each station would have six seaplanes, three dirigibles and four kite balloons (permanently tethered dirigibles). The specific locations were Baker's Point in Eastern Passage and Kelly Beach in North Sydney. To augment air patrols, the U.S. also provided six submarine chasers, two torpedo boats and a submarine.

The Americans would provide equipment and pilots until Canadians were trained (in the U.S.) and equipped to take over. The creation of the Royal Canadian Naval Air Service, previously rejected by the government, was now approved. Recruiting for the new 500-man service began on Aug. 8.

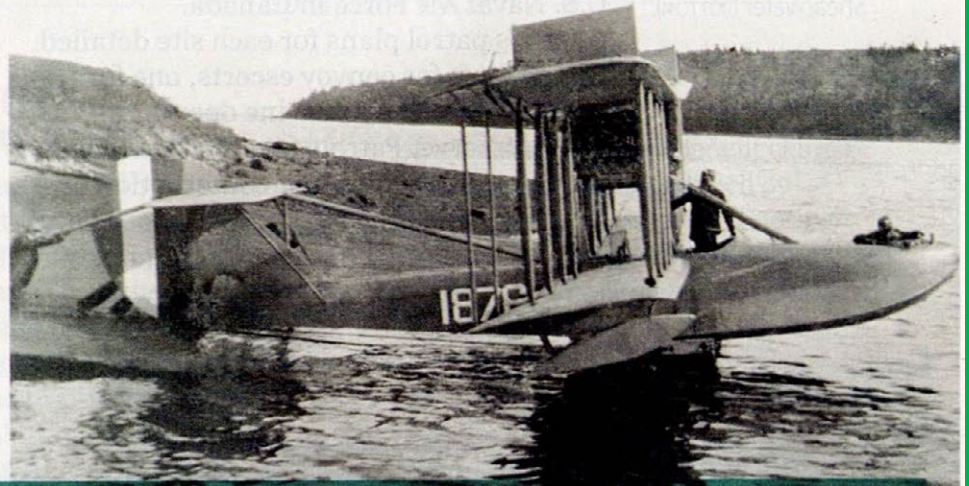
At this time, U.S. Lieutenant (N) Richard "Dickie" Byrd entered the picture. Byrd, a naval aviator, was anxious to get to Europe and into the war. He had thoroughly studied the new field of flying and was an expert.

When Byrd received orders to report to Washington he was overjoyed, confident the navy had approved his proposal to fly a giant new seaplane to Europe. But when he got there, Byrd was told instead to report to Halifax to command a USN Air Station.

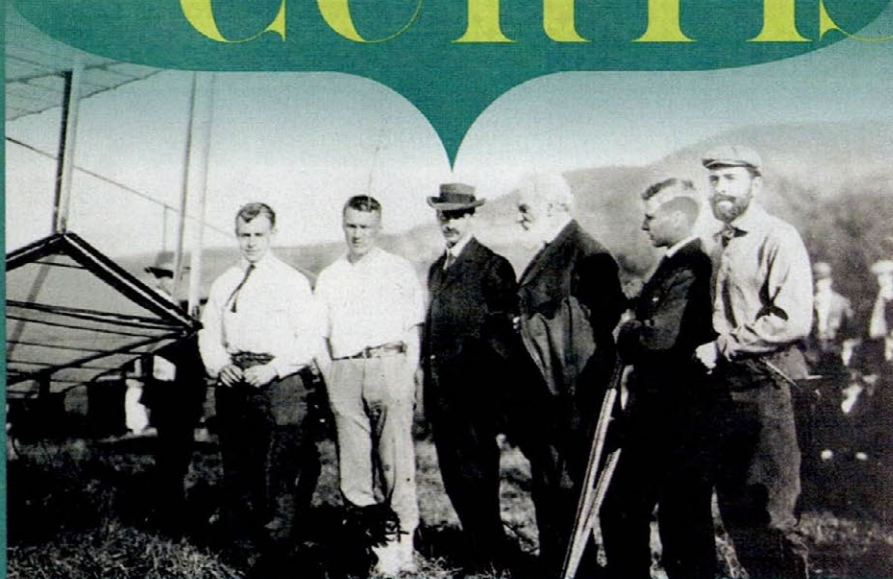
Only the station didn't exist; he would have to build it. Byrd would be responsible for keeping German subs clear of the coast and escorting convoys in and out of Halifax and Sydney.

In early August 1918, now Acting Lieutenant-Commander Byrd arrived in Halifax with several boxcar loads of equipment. He and his men floated the wingless bodies of their Curtiss HS-2L seaplanes

A Curtiss HS-2L flying boat launches at Baker's Point in 1918 (BELOW). Members of the Aerial Experiment Association gather in 1909 (BOTTOM).



The CURTISS connection



Pioneering American aviator Glenn Curtiss joined the newly formed Aerial Experiment Association at Baddeck, N.S., in 1907 at the invitation of Alexander Graham Bell. The next year, flying an association aircraft, he won

the *Scientific American* Aeronautical Trophy for the first flight of at least one kilometre. Curtiss later became the father of naval aviation by developing the world's first flying boat in 1912 and designed several others, including the HS-2L.

It was a general reconnaissance and patrol aircraft designed by Curtiss in 1917 for the U.S. Navy. It was crewed by a pilot and observer and was powered by a 360-horsepower Liberty liquid-cooled V-12 piston engine. The HS-2L had a range of 830 kilometres with a service ceiling of 2,800 metres. Its cruising speed was 105 kilometres per hour, with a maximum speed of 137. After the war, the HS-2L became Canada's first bush aircraft and established the traditions of bush flying in the country.

A temporary steel seaplane shelter, known as "Y" hangar, was one of the first buildings constructed on the Baker's Point site (BELOW). Today, the original base location forms part of 12 Wing Shearwater (BOTTOM).

across the harbour to Baker's Point, where they were reassembled (also see "The Curtiss connection" sidebar on page 57).


A "bare plot of ground" at Baker's Point was quickly transformed into "a bustling camp," including a temporary steel seaplane shelter, known as "Y" hangar. On Aug. 19, the hoisting of the Stars and Stripes signalled the commissioning of Byrd's command as Officer-in-Charge, U.S. Naval Air Force in Canada.

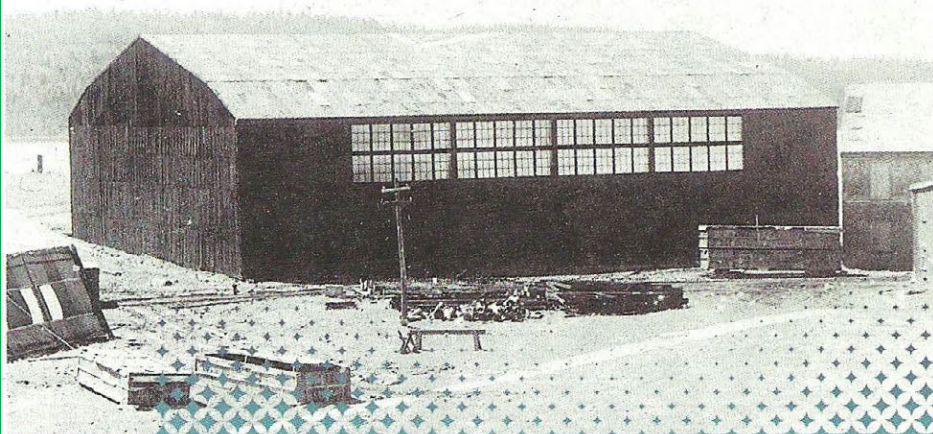
Byrd's patrol plans for each site detailed two aircraft for convoy escorts, one for emergency anti-submarine operations and one in reserve. Patrols from Baker's Point started immediately, but construction delays postponed the North Sydney ones until late September. The two stations quickly

established an impressive log of flying hours in convoy protection, spotting for harbour defence guns and coastal surveillance.

Although Byrd's aircraft did not spot any German U-boats operating in the northwestern Atlantic, the pilots got plenty of practice in marginal flying conditions. According to Byrd, "The highlands and cliffs of Nova Scotia made the air rough and the fog kept it thick. Changes were sudden and violent."

With the armistice on Nov. 11, 1918, Byrd was ordered to return to Washington. He was happy the bloodshed of war was finally over, but bitterly disappointed he had failed to achieve his personal goal of bridging the Atlantic by air.

Despite these frustrations, Byrd enjoyed his relations with Canadians. "Never could any people in the world be more tolerant, helpful, cordial and hospitable than were our Canadian neighbours," he said. "It was there I learned the great truth that knowledge makes for understanding and tolerance." 



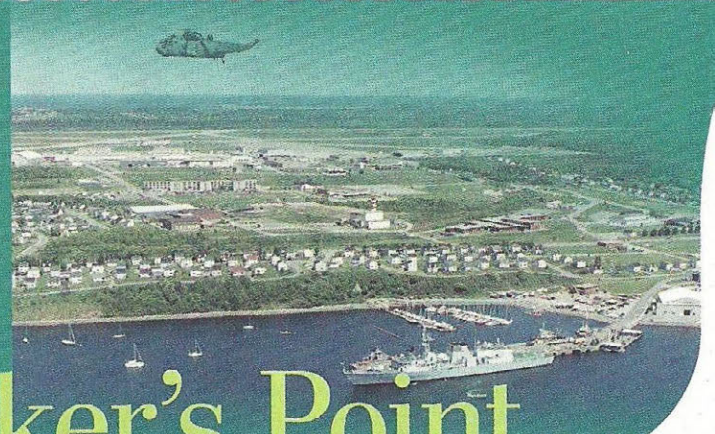
The FATE of Baker's Point

When the Americans departed Nova Scotia, they left aircraft, equipment and the temporary hangar to be taken over by the Royal Canadian Naval Air Service, a force that was disbanded shortly afterward, in

December 1918. The airbase at Baker's Point remained dormant until it became the first east coast station of the new Canadian Air Force in 1920.

Today, Baker's Point forms part of 12 Wing Shearwater, the centre of naval aviation

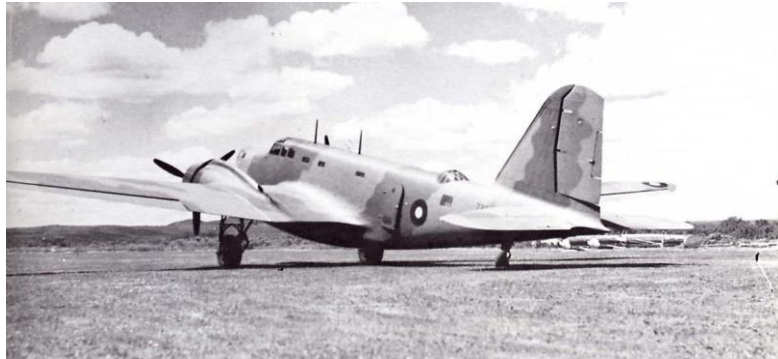
in Canada. Byrd's "temporary" Y hangar is now an historic site and is used by Fleet Diving Unit (Atlantic). In 1995, the Admiral Richard E. Byrd Building was opened by Byrd's daughter as the new base headquarters.



The Douglas Digby
In
10 (BR) North Atlantic Squadron
Ernie Cable SAM Historian

The Douglas B-18

The genesis of the Douglas Digby can be traced to a competition announced in 1934 by United States Army Air Corps (USAAC) for a new bomber capable of carrying a 2,000-pound (900 kg) bombload for 1,020 miles (1,600 km) at 200 mph (320 km/h). The Douglas entry into the competition was the DB-1 and drew on the Douglas engineers experience in the design of the DC-2 transport (the DC-2 was the predecessor to the ubiquitous DC-3 Dakota which had not yet flown). The DB-1 had the same wings as the DC-2 and had a much deeper and wider fuselage thereby requiring larger horizontal and vertical tail surfaces. The bomb bay was in the belly of the fuselage and there were provisions for three 0.303 manually controlled machine guns; one each in the nose and dorsal positions, and the third under the aft fuselage protruding through a ventral hatch. The DB-1 was designed to be operated by a six-man crew.



The Douglas B-18 Digby In USAAC Paint Scheme

The main rival to the DB-1 was the prototype of Boeing's B-17 Flying Fortress. The Boeing aircraft was superior in every regard except one, economy. In the quantities contemplated each of the Douglas aircraft would cost \$58,500, whereas the Boeing price tag was \$99,620. The USAAC agonizingly decided that quantity won over quality and ordered 133 Douglas aircraft and 13 Boeings. The decision was often criticized, but in retrospect was the correct choice. The early B-17 was not a particularly effective aircraft, and the larger number of Douglas aircraft, designated the B-18 "Bolo" by the USAAC, enabled the Air Corps to build a larger cadre of trained bomber air and ground crews that formed the backbone of the US bomber force between 1937 and 1941 before the US entered the Second World War. The continued production of a small number of Boeings enabled the B-17 to be fully developed into a truly formidable bomber.

Between 1937 and 1939 a total of 350 B-18s delivered to the USAAC saw service in North America and overseas. Although many were destroyed in the Japanese attacks on Pearl Harbor and in the Philippines, the B-18s played an important interim role in the American bomber force until the longer-range B-17s and B-24s capable of carrying heavier payloads were

available. In 1942 and 1943 the B-18s were equipped with Air Surface Vessel (ASV) radar and Magnetic Anomaly Detection (MAD) gear and extensively used as anti-submarine aircraft in American and Caribbean coastal areas.

The B-18 was not a particularly inspired design and introduced no innovative techniques in construction; while serving in the USAAC it saw very little direct action against the enemy and therefore became no more than a footnote in American aviation history.

Canadian Purchase

However, in Canadian hands early in the Second World War the B-18 provided robust, reliable, although unspectacular service as the RCAF's first land-based anti-submarine aircraft. The RCAF followed the Royal Air Force (RAF) custom of naming maritime aircraft after coastal communities and named the B-18, "Digby", after the town of Digby, Nova Scotia, an important fishing, and transportation hub on the Bay of Fundy. In 1940, 20 Digbys purchased for the RCAF became the backbone of Eastern Air Command's anti-submarine strength during the first half of the Second World War. The first Digbys were assigned to No. 10 Bomber Reconnaissance Squadron (10 BR) in April 1940 and were stationed at the RCAF's recently completed airfield at Dartmouth, NS. (From August 1918 to November 1939 RCAF Dartmouth was solely a seaplane station.) Early in its primary anti-submarine and convoy escort roles over the North Atlantic, often in abominable weather, the squadron became known as the "North Atlantic Squadron" (a name that was perpetuated in a ribald ditty). The squadron's regular presence in the western Atlantic provided a constant threat to the Kriegsmarine (German navy), with the Digbys conducting 11 attacks on German U-boats one of which resulted in the sinking U-520.

Canada first attempted to purchase the B-18 in September 1938 when Germany was threatening Czechoslovakia and it appeared that Britain and France would go to war. Realizing that its own re-armament plans had made little progress and little help could be expected from Britain, Canada rushed a small team to the US with money obtained through a Governor-General's Warrant as there was no time to call Parliament to increase the defence budget. USAAC officers advised which suitable aircraft were in production. The team worked around the clock and had almost placed contracts for several aircraft types, including one for B-18, the only US bomber in production. However, when British Prime Minister Chamberlain claimed, "Peace in our time", following peace talks in Munich with the German Fuhrer, all contracts were called off.

An almost identical scenario arose nearly a year later. In late August 1939, just before Canada declared war on 10 September; a Canadian team was rushed to the US to negotiate a contract for 20 Douglas B-18s. There were no flight trials and there is no evidence that the Canadians even saw a B-18. The B-18 selection was made solely on the recommendation of senior USAAC officers and a survey of production status. The Canadians felt confident with the recommendation since the B-18 was in production and in service as the standard US heavy bomber, and it was more attractive than bombers under development with unspecified delivery

dates. The Lockheed Hudson also looked attractive for the RCAF, but Lockheed could not promise delivery before December at the earliest as it was committed to orders for the RAF. However, the Canadian team did manage to arrange delivery of 28 Hudsons for the RCAF from the RAF production line starting in September 1939.

The Defence Purchasing Board placed an order with Douglas for 20 B-18s on 31 August 1939; each B-18 cost \$117,330, for a total value of \$2,346,600. Since the RCAF intended to use the B-18 in the maritime reconnaissance role additional features were added to the standard USAAC aircraft. Two auxiliary fuel tanks were integrated into the bomb-bay, and an auxiliary oil tank, wing floatation compartments, and de-icing equipment for the wings and propellers were also added. American pattern wireless radios, Browning 0.303-caliber machine guns, and 600-pound (275 kg) and 1,100-pound (500 kg) bombs were ordered through the manufacturer.

The twenty new Digbys were assigned RCAF serial numbers 738 to 757, with the first five delivered to the RCAF in December 1939, followed by ten in March 1940, and the remaining five in May 1940. The Digbys were delivered to 10 (BR) Squadron that had been created from the disbanded No. 3 (Bomber) Squadron whose personnel were divided in two to form the nuclei for 10 (BR) and 11 (BR) Squadrons. No 3 Squadron had been flying obsolete Wapiti biplanes (Airforce Magazine Vol 44 No1) and 11 (BR) became the first RCAF Lockheed Hudson squadron in October 1939.

In November 1939, 10 (BR) dispatched a party of four pilots and three crewmen to Winnipeg to prepare for the delivery of the new Digbys. Later, in December 1939, seven RCAF personnel spent a week at the Douglas factory in Santa Monica, CA to become familiar with the technical details of new aircraft. At that time the US had not yet entered the Second World War and American neutrality laws prohibited aircraft being *flown* to belligerent countries. To circumvent the law American pilots flew the first two Digbys to Sweet Grass, Montana and landed in a field near the US-Canada border where Canadians were waiting. The aircraft taxied up to a barbed wire fence separating the Canadian field at Coutts, AB from the adjacent American field. The Americans got out and shook hands with Squadron Leader (S/L) Gordon; everyone was in civilian clothes. The wire fence was cut, a rope was thrown across the border and tied to the aircraft, and a team of horses then *pulled* the aircraft over the border. Crews from 10 (BR) flew the Digbys to Winnipeg. The 18 other Digbys were similarly *towed* across the border by teams of horses or tractors at Emerson, MB and flown to Winnipeg. Canadian farmers likely received a good stipend for every aircraft pulled into Canada.

Introduction to RCAF

The 10 (BR) detachment remained in Winnipeg until January 1940 to instruct squadron pilots and crewmen on the new aircraft. The large twin-engine Digby with its retractable undercarriage, flaps, brakes, variable pitch propellers and other modern features, such as the MN26A radio compass, were an enormous advance over the Wapiti and required a major adjustment to flying skills. Fortunately, flying characteristics were good, controls were light and

smooth, although there was only a slight tendency for aerodynamic swing, crosswind take-offs could be a challenge.

In December 1939, the 10 (BR) Winnipeg detachment moved to St. Hubert, QC, where greater hangar accommodation was available to begin conversion training as more aircraft started to arrive from the United States. As training proceeded in April and May, it became evident that the initial crew the RCAF envisioned for the Digby, consisting of the first pilot (aircraft captain), a second pilot/navigator, a wireless operator, and an air gunner, was woefully inadequate. During an attack the air gunner had to act as bomb aimer as well as man all the guns. This reflected the mindset from the former Wapiti era when RCAF aircrew were jacks of all trades requiring air gunners to also act as navigator, bomb aimer, and radio operator. This was manifestly impossible in the Digby resulting in two more air gunners being added to the crew.

After completing conversion training crews and aircraft moved to 10 (BR)'s interim base at Halifax municipal airport, however, the heavier aircraft caused the runways to break up resulting in damage to the aircraft. In April 1940, the squadron began its move to RCAF Station Dartmouth with the first five Digbys and by 15 June the entire squadron was in situ. Also on 15 June 1940, just as 10 (BR) completed its move to Dartmouth, the squadron received orders to immediately ferry five Digbys and their crews to Gander, Newfoundland to be closer to the convoy routes in the western Atlantic. The following morning the five crews, led by S/L Carscallen, departed Dartmouth but were forced back by bad weather, however the transfer was successfully completed the next day. The five Digbys (Nos. 744, 749, 752, 753, and 754), designated "A" Flight within 10 (BR), were the first military aircraft to operate from Newfoundland with S/L Carscallen flying Digby 744 on the first anti-submarine patrol from Gander 17 June 1940. The Digbys could patrol to ranges of over 350 miles (560 km) and remain airborne for 12 hours.



Douglas Digby And Lockheed Hudsons On Dartmouth Flight Line

The transfer left the remainder of 10 (BR) in Dartmouth with almost no aircraft as most of the Digbys were still in storage in Trenton and Malton (Toronto) until 10 (BR) was ready to receive them. The five aircraft in Trenton were ferried immediately to Dartmouth where the squadron found, much to its chagrin, they had been stored outdoors with little care and were in

poor condition. The aircraft in Malton had been flown to Ottawa in July as Malton required the hangars for other purposes. Although the Ottawa aircraft were in better condition the 10 (BR) Officer Commanding, Wing Commander (W/C) Gordon, urged all Digbys be moved to Dartmouth where they could be looked after by experienced personnel and issued to 10 (BR) as required to sustain the squadron's normal establishment of 15 Digbys. The first 10 (BR) operation from Dartmouth was a Halifax harbour entrance patrol flown by F/O A. Laut in Digby 757 on 3 July 1940. By late September, all RCAF Digbys had been delivered to Eastern Air Command (EAC) in Halifax except for No. 751 which was issued to 12 (Communications) Squadron at Rockcliffe.

Early in the war there were no RCAF personnel experienced in maritime operations to mentor aircrew joining newly formed bomber reconnaissance squadrons. Consequently, the new squadrons had to teach themselves the skills of maritime operations through trial and error. To complicate matters, the British Commonwealth Air Training Plan (BCATP) had yet to be fully established and there were no bombing and gunnery schools to train the air gunners for the augmented Digby crews. Therefore, 10 (BR) personnel at Dartmouth had to prepare and conduct air gunner courses in addition to flying calibration flights for local ground-based radars and radio direction-finding stations. Despite these ancillary duties the number of 10 (BR) open ocean patrols from Dartmouth gradually increased as the summer of 1940 progressed.



10 (BR) Squadron Digbys At Dartmouth

Gander Operations

The airmen at Gander struggled with inadequate facilities and gained relief from the inhospitable weather only when Gander's Digbys were ferried to Dartmouth for their 180-hour overhaul and exchanged for another aircraft. Similar flights were made between the two bases for spare parts, transporting personnel on leave or requiring medical treatment. As the Canadian presence in Newfoundland increased the Digbys were often pressed into service to ferry senior military personnel and civilian VIPs between the two bases.

Despite the diversions "A" flight in Gander was the real centre of operations where crews conducted two or three long range patrols each day and were typically airborne for more than 12 hours. As the RCAF's longest range aircraft with a respectable endurance, the Digby was put to the test in the spring and summer of 1940 when German surface raiders broke into the North Atlantic in search of merchant convoys. On 5 November, convoy HX 84, 600 miles (960 km) east of Newfoundland reported that it was being attacked by the pocket battleship, *Admiral*

Scheer. Three Digbys took off from Gander at 0730 in light rain to search for the German predator. However, by the time the aircraft arrived *Admiral Scheer* had retired to some 800 miles (1,300 km) off the coast well beyond the range of the Digbys; and leaving in its wake five sunk merchant ships from the 37-ship convoy plus the sinking of the convoy's sole escort the armed merchant cruiser *HMS Jervis Bay* in its heroic defence of HX 84.

November was a tragic month for the squadron. On 16 November 1940, the crew of Digby 749 took off from Gander for a patrol but was shortly recalled when abominably bad weather was forecast to close the airfield. The same atrocious weather system had enveloped the entire east coast and after several aborted attempts to land, the crew elected to divert to Montreal the nearest suitable alternate airfield 1,000 miles (1,600 km) to the west. The eight hours of fuel remaining was sufficient to reach Montreal safely. However, when the aircraft failed to reach Montreal, a search was immediately started in the area of the last radio contact near the Maine-Quebec border not far from Riviere de Loup.

The Board of Inquiry later learned that after the fuel tanks ran dry the crew elected to bail out. Incredibly, the crew discovered that there were only five parachutes for the six crewmembers. The two lightest crewmembers volunteered to jump using one parachute, the other four crewmembers bailed out using their own parachutes. Three of the crew landed safely and after an extensive search the other three crewmembers were declared missing. The body of one crewmember was found later apparently seriously injured on landing but died shortly thereafter. The bodies of the two who had jumped in a single parachute were never found; it was believed they landed on a lake but broke through the ice and drowned. The Board acknowledged that since the US was not yet at war the crew had to respect American neutrality by flying almost due west from Gander to skirt the most northern tip of Maine before turning southwest to Montreal. The Inquiry found that after being airborne for 12 hours the aircraft ran out of fuel due to improper adjustment of the engine controls. The Board recommended that more experienced pilots should be posted to the squadron.

Flying during the winter of 1941 at both Gander and Dartmouth was severely curtailed by very high winds, sleet, and wet snow; in January alone flying was scrubbed for a total of 22 days. As a cold weather experiment, Digby 753 was kept outside overnight at Gander, the high winds and wet snow penetrated every orifice of the aircraft before freezing, defeating all but the most secure covers. The experiment confirmed that hangar accommodation in Newfoundland was a necessity. However, the single hangar at Gander was often occupied by RAF Hudsons being ferried to Britain, therefore the Digbys had to be maintained in the open and were frequently difficult to start.



10 (BR) Digby Over Newfoundland

On 22 February 1941, “A” Flight was involved the search for a crashed Hudson in which Sir Fredrick Banting, the Canadian co-discoverer of insulin lost his life. Tragically, three other crew members were killed with only the pilot surviving. While airborne the Digbys received word that the German battlecruisers *Scharnhorst* and *Gneisenau* had sunk five ships in a westbound convoy 500 miles (800 km) east of Newfoundland. The Digbys had to refuel in Gander, but night fell before they could take off. The next day the raiders had steamed out of range. On 15-16 March, the battlecruisers returned to a position about 350 miles (560 km) southeast of St. John’s, sinking or capturing some 16 vessels from two convoys. Two Digbys, enroute to join the outer convoy learned from an armed merchant cruiser that an attack was in progress. In spite of this warning, both aircraft flew on without heading to the position at which the shelling was taking place. To make matters worse, the Digbys proceeded to escort the wrong convoy (already escorted by a capital ship) with the result that several ships in the unescorted, outer, convoy were sunk and the Digbys failed to locate the two battlecruisers a few miles away. *Scharnhorst* and *Gneisenau* withdrew unscathed and made for Brest, France. The failure to engage the enemy and report the position of enemy warships was a grievous error that raised questions about the training of the aircrew and diligence of the briefing officers. Commanders at all levels, including the station commander, his briefing officers and the Digby pilots were censured for not exercising proper leadership and supervision.

April 1941 was eventful for 10 (BR), W/C H.M. Carscallen took over as CO of 10 (BR) from W/C Gordon and air and ground crews from Dartmouth were finally reunited with their squadron mates in Gander, which was organized as a regular RCAF station, but known as “Newfoundland Airport Station” because Newfoundland was a British colony and not yet part of Canada (Newfoundland joined Canada on 31 March 1949). As the 10 (BR) crews from Dartmouth gained experience with the Newfoundland operating conditions, 10 (BR) could launch a half-dozen 8 to 12-hour patrols daily. With proper care the Digby was proving to be a respectably reliable aircraft.

In May 1941, the increased effectiveness of British sea and air escorts over the western approaches to the UK drove German submarines to shift their convoy attacks to the western Atlantic. Convoy HX 126 was heavily attacked 680 miles (1,100 km) east of Newfoundland.

The next day bearings on a German radio transmission placed a U-boat at 55° north, 50° west, just barely within reach of the Digbys at Gander. The crews from 10 (BR) pushed their Digbys to extreme range, just over 500 miles (800 km), but at that distance from base were able to patrol only briefly over the search area. These events broke the bureaucratic logjam in the RCAF's bid to acquire longer range Catalina flying boats destined for the RAF, which had a range of over 600 miles (960 km). The requirement for a longer-range aircraft was underscored when the German battleship *Bismarck* and heavy cruiser *Prinz Eugen* broke contact with shadowing Royal Navy cruisers south of Greenland and were presumed headed for the convoy routes. On 26 and 27 May the Digbys patrolled at extreme range, however *Bismarck* had headed for France but was located by a RAF Catalina and sunk by the Royal Navy southeast of Ireland. *Prinz Eugen* continued to cruise the western Atlantic, but well beyond the range of available land-based aircraft.



10 (BR) Crews In Front of Squadron Digby At Gander

U-boats In Western Atlantic

The most significant addition to the Digby was the British Mark II Air to Surface Vessel (ASV) radar with a 1.5-meter wavelength, however, due to limited availability the radar was not installed on all Digbys. The ASV was a sideways-looking radar with a range of up to 40 miles (64 km) against moderate sized ships and surfaced submarines at 10 to 15 miles (16-24 km). The transmitter was an array of eight dipoles 18 feet (6 meters) long installed in four pairs on top of the fuselage. The receiving antennas were Sterba arrays 12 feet (4-meters) long stretched along both sides of the rear fuselage. The broadside array allowed the aircraft to search wide areas of the ocean on both sides of the aircraft at the same time. Aircraft could scan the approaches to a convoy by flying 10 miles (16 km) to one side of it, sweeping a 20-mile (32 km) wide path. Submarines were not fast enough to cross that distance before the aircraft returned for another sweep. Although the ASV could regularly locate surface vessels, the number of initial submarine contacts made by the ASV was disappointing. Most troublesome, the ASV had a high false contact rate registering floating debris, whales, and icebergs as possible targets, resulting in the human eye continuing to be EAC's principal search tactic. At night, it was difficult to home on a radar contact less than a kilometer away because radar returns from the sea masked the target, preventing a seamless transition from radar to a visual contact.



ASV II Radar Transmit Antennae On Top of Fuselage
Dipole Receive Antennae Along Upper Side of Fuselage

First contact with the enemy by 10 (BR) aircraft occurred on 25 October 1941 when intelligence from the British Admiralty reported the western movement of several U-boats with four being confirmed just to east of the Strait of Belle Isle. Seven 10 (BR) Digbys took off at dawn the next day, two provided escort for the west bound convoy, ON 26, steaming into the danger area, and the remainder were on search patrols that resulted in the first sighting and attack by an EAC aircraft. Digby 740 was captained by S/L C.L. Annis, the armament officer from EAC Headquarters in Halifax and was visiting Gander for a Court of Inquiry. Annis was a former squadron pilot with about 300 hours experience flying over the ocean; since 10 (BR) had more serviceable aircraft than qualified pilots, Annis volunteered to fly the additional Digby, but he had only very short notice to establish rapport with the crew. (Annis later became an Air Marshal and Vice Chief of Air Staff.) The patrol ordered Annis to conduct a parallel track search in an area northeast of Newfoundland. The wind at the 900-1,000 feet (300-350 meters) patrol height was approximately 45 knots and the sea below was ferociously churned up. At midday, east of the Strait Belle Isle, Annis sighted a U-boat through the salt spray on the wind screen with its conning tower and upper hull fully exposed. The U-boat dived, the swirl and trail of bubbles indicated the direction the U-boat was moving allowing Annis to setup a quartering stern attack, dropping two 600-pound (270 kg) bombs from 300 feet (100 meters), one just short of the swirl and the second about 75 feet (25 meters) ahead of the swirl. Despite strong headwinds the bombs straddled the U-boat perfectly, but there were no explosions!

The attack failed because the bomb aimer/nose gunner had switched the bomb-arming release switch back to the safe position at some point during the out-bound flight. It was the type of mistake that crew training at the operational training units (OTU) were designed to avert, but EAC had no experienced aircrew or aircraft for OTU's. The BCATP quotas for overseas squadrons left the Home War Establishment squadrons desperately short of aircrew.



Bomb Aimer And Nose Gunner Positions

In late 1941, the number of U-boats operating off Newfoundland continued to increase. Attempts by 10 (BR) to locate and attack the U-boats, numbering 18 at one point, were sharply curtailed by continuously bad weather. After 7 December 1941 when the Americans officially entered the war, U-boat captains were given permission to attack convoys south of the Grand Banks, an area previously forbidden to them because of its proximity to U.S. territorial waters. In the late fall Canadian and American forces in Newfoundland clarified their areas of responsibility in the Northwest Atlantic to make the most efficient use of their air resources. In effect EAC aircraft escorted convoys to the Western Ocean Meeting Point or WOMP (The point where RCN surface escorts turned escort duties over to the Royal Navy), about 49° West longitude, while Hudsons and Digbys from Gander and Torbay (St. John's) accompanied them for 200 and 400 miles (320 and 640 km) miles respectively in the area north of 48° North latitude. For anti-submarine sweeps and general reconnaissance patrols in the sector north of 48° North the ranges were extended to 300 miles (480 km) for the Hudsons and up to 600 miles (960 km) for the Digbys. The latter stretched the Digbys to the limit and did not produce satisfactory results.

While EAC strove to match the effective ranges of air cover in the eastern Atlantic attained by the RAF's Coastal Command, the RCAF followed developments in British aircraft armament. The Digbys initially used American 600-pound (270 kg) and 1,100-pound (500 kg) bombs to attack submarines, but these proved to be unsuccessful, and EAC struggled to find an effective ASW weapon. The bombs were hydrostatically fused to detonate between 100 and 150 feet (35 and 50 meters), but this was too deep for aircraft delivered bombs. RAF experience demonstrated that aircraft could only effectively attack a surfaced submarine or attack no later than 15-20 seconds after diving. Therefore, the ideal detonation depth was 24 feet (8 meters). In mid 1941, the RCAF arranged for production of the new Mark VIII 250-pound (115 kg) Amatol filled (TNT mixed with ammonia nitrate) aerial depth charges and ordered fittings from the UK to convert naval 450-pound Mark VII depth charges for use by aircraft. But these still had a detonation depth of only 34 feet (11 meters). By the end of 1941, the Mark VII depth charges

had replaced the ineffective anti-submarine bombs in most squadrons. Since the Amatol filled depth charge lacked killing power the RCAF ordered the more powerful Torpex filled (consisting of TNT, RDX and powdered aluminum) depth charges from the UK, in May 1942, along with a supply of Mark VIII Star pistols that provided the essential shallow detonation setting.

1942 was the most hectic year for 10 (BR). With the entry of the United States into the war, the Kriegsmarine established Operation *Paukenschlag*, the movement of U-boats into North American waters to take advantage of the target rich environment along the American seaboard. The move would expose the qualitative and quantitative weaknesses of EAC as the U-boats off the Canadian and American mainland reported, “Enemy patrols heavy, but not dangerous because of inexperience”.

On 19 January 1942, a 10 (BR) Digby on patrol from Gander spotted the conning tower and upper deck of a fully surfaced submarine through the snow lying in a trough between the waves. It was U-86 fresh from damaging a ship from convoy ON 52 and sinking a straggler from convoy SC 63. F/L J.M. Young quickly descended to attack height on an approach course at right angles to that of the target, released three 250-pound (115 kg) Amatol depth charges from the right bank of the bomb bay set to detonate at 50 feet (17 meters), wheeled around, and dropped the left bank stick set to 100 feet (33 meters) at 45 degrees to the submerging U-boat’s presumed course. It was a good attack with disappointing results, splitting welded seams but not sinking the U-boat.

Three days later while returning from a patrol in support of convoy SC 65 another 10 (BR) Digby encountered U-84 moving fast on the surface three miles ahead on the port bow. F/L E.M. Williams descended from 1,100 feet (365 meters) for his attack run with depth charges set to detonate at a depth of 50 feet (17 meters). However, only one of three depth charges released due to the over keenness of the front gunner/bomb aimer, who in the excitement of the moment, forgot that all the depth charges had to be manually released singly because a 12-volt distributor that would have released all three depth charges in-train had not been available back at Gander. F/L Williams made two more attacks, dropping the remaining five depth charges that were out of lethal range. German records confirmed a “near miss”.

With the lack of a Maritime Operational Training Unit, inexperience and insufficient training played a large part in the failure of EAC aircraft to give U-boats the *coup de grace*. To update aircrews’ knowledge of aircraft armament and raise the probability of successful attacks the RCAF introduced the armament syllabus, used at training units, to the operational squadrons for “on job” training. Each squadron assigned a flight commander, who had completed the eight-week armament course for pilots, the responsibility for delivering the syllabus. In at least four of seven attacks on the enemy in early 1942, inadequate weapons rather than faulty technique probably accounted for failed attacks. Good marksmanship on the attack on 19 January was ineffective because the depth charges were set too deep at 50 feet (17 meters). Still,

the organization and performance of EAC's anti-submarine squadrons still left much room for improvement.

On sighting a submarine, the ability of the aircraft to attack as swiftly as possible with its depth charges often depended on the aircraft achieving surprise. High flying aircraft were more likely to achieve surprise because U-boat lookouts could comfortably scan just above the horizon but had to strain their necks to sweep the higher altitudes, also submarines could be sighted at longer ranges from higher altitudes and catch the U-boats unaware. British trials also demonstrated that U-boat lookouts were unlikely to spot a white-painted aircraft until they were 20 percent closer than those with a darker paint scheme. To capitalize on the more effective camouflage the Digbys' mottled green-brown upper surfaces and black undersurfaces were gradually painted white, as were all EAC antisubmarine aircraft.

New Offensive Tactics

In February 1942, Air Vice-Marshal (AVM) Cuffe replaced AVM Anderson as the Air Officer Commanding EAC and invited British advisory teams touring American and Canadian anti-submarine commands to review EAC's operations. RAF officers with extensive Coastal Command experience made two observations; first, EAC's organization was too complex due to the added responsibility for the total air defence of Eastern Canada; and second, although liaison with the navy was good, the lack of a combined headquarters was a severe limitation. The Coastal Command officers recommended that EAC streamline its organization and operational control by establishing an anti-submarine command and a combined naval-air force operations room similar to Coastal Command. Commander Martineau, a Royal Navy officer from Coastal Command HQ recommended that EAC adopt Coastal Command's "Offensive Tactics", noting that the RAF had long abandoned EAC's doctrine of escorting every convoy whether it was threatened or not. Operational research analysts from Coastal Command reported that most of EAC's flying was within 200 miles (320 km) of base, thereby failing to strike the U-boats before they reached the convoy focal areas and coastal routes, where they could do the most damage. By November 1942, Air Force Headquarters (AFHQ) was not yet attuned to mathematical analysis, so EAC organized its own operational research section.

The RCN's Operational Intelligence Centre (OIC) in Ottawa had been largely dependent on High Frequency Direction Finding HF/DF and became one of two U-boat plotting centres for the western Atlantic in April 1942. (The other was the US Navy centre in Washington, DC.) However, the HF/DF information transmitted by signals tended to arrive in Halifax too late to be of operational value, so Cuffe and Martineau agreed to set up a system of passing immediate HF/DF information from the OIC in Ottawa to the EAC operations room by commercial telephone using a plain simple language, "Vitamin Code". In July 1942, when the RCN began to provide timely U-boat intelligence EAC started to concentrate its operations on probable U-boat locations. With the concurrence of the RCN, EAC applied its new offensive tactics off the Newfoundland coast for the first time in October. Coverage of areas where intelligence reported U-boats had high priority. At the same time the RAF provided powerful new radio transmitters at St. John's and Halifax that permitted EAC to contact aircraft at great distances with the latest

HF/DF bearings and intelligence from the U-boat plotting centre. Convoy protection took the form of sweeps along parallel tracks either side of the main line of advance, 50-miles (80 km) to the rear and 100 miles (160 km) ahead, preferably in the last hours of daylight or immediately after sunrise when U-boats were maneuvering for attack or shadowing positions.

First Successes

Although EAC and the RCN haltingly adopted the British models for command and control, the new anti-submarine tactics quickly proved themselves in the northwest Atlantic. In late October 1942, EAC aircraft based in Newfoundland participated in the defence of two east bound convoys, SC 104, and SC 107, which were intercepted by U-boat wolf packs (lines of 10 to 20 U-boats strung across anticipated convoy routes). Aircraft patrolling at high altitudes covered areas where intelligence had located U-boats and swept the tracks of the convoy in accordance with the new offensive methods. The result was the first success of EAC aircraft based in Newfoundland. On 30 October a Torbay based Hudson from 145 Squadron was on an anti-submarine sweep ahead of convoy SC 107 to cover an area identified by the OIC in Ottawa. F/L E.L. Robinson sighted the conning tower of U-658 breaking surface two miles (3 km) ahead and immediately began his attack run from 2,000 feet (660 meters). He released four 250-pound (115 kg) Mark VIII depth charges with a Mark VII pistol set to 25 feet (8 meters) at an angle of 30° across the U-boat from port stern to starboard bow. The explosions bracketed the U-boat and raised the hull in the water exposing 60 feet (20 meters) of its stern at a 40° angle above the surface before settling in a large oil slick with air bubbles merging with the rough sea.

Just hours away in the early evening 10 (BR) Digby 747 returning to Gander from an outer anti-submarine patrol with ON 140, came across a U-boat 115 miles (180 km) due east of St. John's. F/O D.F. Raymes descended from 3,200 feet (1,050 meters) and made his attack run directly along the U-boat's track from astern. After the explosion of the four 450-pound (205 kg) Mark VII Amatol filled depth charges, the co-pilot, P/O J. Leigh, watched huge air bubbles and large quantiles of oil come to the surface until darkness fell 30 minutes later; U-520 was confirmed destroyed. It was the seventh attack by 10 (BR) and the third kill by EAC aircraft. (The first U-boat destroyed by EAC aircraft occurred on 31 July 1942 when a 113 (BR) Hudson based in Yarmouth, NS sank U-754 near Sable Island.)



Flying Officer Raymes (Foreground)

November 1942 was an eventful month for 10 (BR). On 3 November, F/O Sanderson in Digby 747 attacked a diving U-boat (either U-106 or U-183) without success. In mid-November, with the approach of winter, EAC closed down flying boat operations in Newfoundland leaving 10 (BR) as the only land-based long-range squadron. Since there was accommodation for only one land-based squadron at Gander, 10 (BR)'s aging and often unserviceable Digbys were replaced by amphibious Canso "A"s of 5 (BR); and between 10 and 15 November 10 (BR)'s Digbys joined the flying boats' pilgrimage to Dartmouth. Two days after operations resumed from Dartmouth F/O M.L. Foster in Digby 751 on an anti-submarine sweep around a convoy spotted a surfaced U-boat. Haze delayed the attack allowing the U-boat to dive before the depth charges were dropped. The submarine was undamaged, but the attack and subsequent surveillance prevented an attack on the convoy. This was the last U-boat attack by a 10 (BR) Digby.

Digbys Retired

In April 1943, 10 (BR) started conversion, to the Very-Long-Range B-24 Liberators and turned their Digbys over to newly formed 161 (BR) at Dartmouth. During the summer of 1943, 161 (BR)'s patrols, searches, and convoy escorts were interspersed with transport runs. In September three attacks were made on suspected U-boats but the contacts were later declared non-submarine. More frustrating than the lack of success were the increasing problems with maintenance; only three of the squadron's eight Digbys were serviceable on 30 September.

Until the introduction of the Canso "A" amphibians the Digby was the only aircraft in EAC able to fly sustained patrols from Newfoundland at ranges of over 300 miles (480 km) during the winter. Digbys made five confirmed attacks on U-boats, including the destruction of U-520 in October 1942. By that time, nine of the original 20 Digbys had been written-off in crashes or had disappeared over the north Atlantic. The remaining Digbys were no longer reliable enough for sustained long-range operations and on 23 December the aircraft were removed from operational duties. In February 1944, after four arduous and successful years of almost non-stop operations, all Digbys were ferried to the RCAF's No. 4 Repair Depot at Scoudouc, NB. for storage and never flew again. The ungainly Digby never achieved the fame of its contemporaries but earned its niche in RCAF history for its ruggedness and reliability that helped to make 10 (BR) the North Atlantic Squadron.

WALL OF HONOUR

Guidelines for designing your "Wall of Honour" Tile.

The tile used is made from high quality marble which is 12 inches square. The tile can be sand blasted in various ways to suit your wishes. All lettering will be in upper case and the tile will be mounted in the diamond orientation as opposed to a square orientation. All Text will run horizontally across the tile.

The options are:

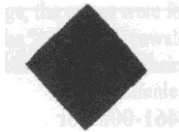
- Option A:** One half tile 12" X 12" x 17" and triangular in shape with up to 5 rows of 3/4" letters for a maximum of 60 letters and spaces. The longest row can accommodate up to 20 letters and spaces. The remaining 4 rows will decrease in length as the border/edge of the tile dictates. It should be noted that the upper half of the tile will start with a short row and the bottom half will start with a long row.
- Option B:** The full tile with up to 6 rows of 1" letters for a maximum of 55 letters and spaces. The two centre rows can accommodate up to 16 letters and spaces. The remaining rows will decrease as the edge of the tile dictates.
- Option C:** The full tile with up to 10 rows of 3/4" letters for a maximum of 120 letters and spaces. The two centre rows can accommodate 20 letters and spaces. The remaining rows will decrease as the edge of the tile dictates.
- Option D:** The "Buddy" Tile - sold only as a full tile. This tile is divided into 4 quarters - each 6" X 6". Each quarter can accommodate up to 6 rows of 1/2" letters for a maximum of 48 letters and spaces. The two centre rows can accommodate up to 12 letters and spaces with the remaining rows decreasing as the tile edge dictates.

Option A



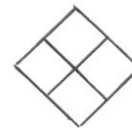
\$300

Option B & C



\$600

Option D



\$600

Wall Tiles may be purchased through monthly installments.

Half Tiles - \$100 day of purchase - \$100 per month for the following two months.

Full Tiles - \$200 day of purchase - \$ 100 per month for the following four months.



ENGRAVING REQUEST

The colour of the tile will be 'Belmont Rose'. If the submission requires any alteration, the subscriber will be contacted by phone or email by the coordinator for further discussion. REMEMBER TO COUNT THE SPACES!

From:

NAME: _____

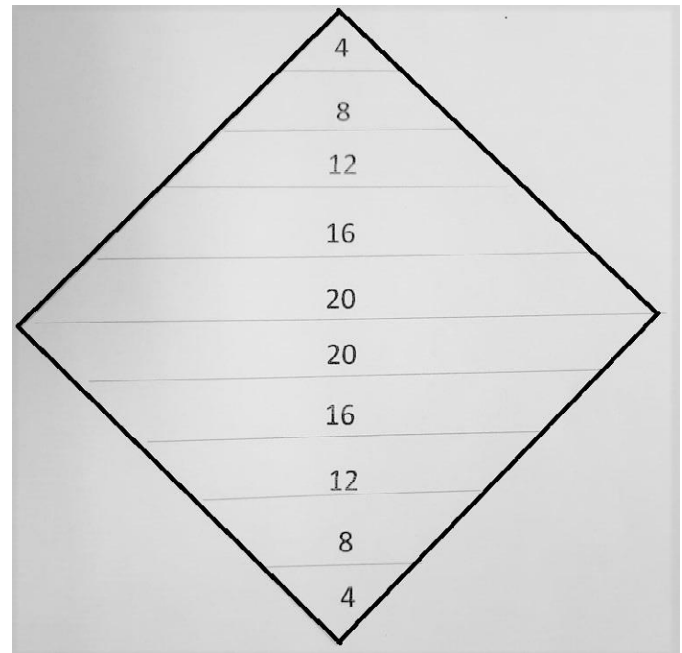
ADDRESS: _____

CITY: _____

PROV: _____ POSTAL CODE: _____

TELEPHONE: _____

EMAIL: _____



Number of spaces per line

TYPICAL OPTION 'C' above

CIRCLE CHOICE: OPTION 'A' OPTION 'B' OPTION 'C' OPTION 'D'

Method of Payment: Cheque (made payable to SAMF or SAM Foundation) Money Order Cash

VISA/MASTERCARD Card # _____ Exp. Date: _____

3# security code on the back of card _____

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Please check engraving details for accuracy before sending. We cannot be responsible for misspelled words on your order form.





Notice of SAMF AGM
Wednesday, 6th of September
2023

1000 hours at SAM
Please email by Sept 6th if you
would like to take part by
Zoom online
samf@samfoundation.ca

From the Past President

A wise nation preserves its records, gathers up its muniments, decorates the tombs of its illustrious dead, repairs its great public structures, and fosters national pride and love of country by perpetual references to the sacrifices and glories of the past.

Joseph Howe, 31 August 1871

It is time, said the spider to the fly, to think of many things.
Of joyous summers on the beach, as we all stretch our wings.

Of winters skiing east and west, oh how I long for them once more,
And trips to the great unknown to discover things long sought for.

And as I prepare to “depart the fix” it is with thoughts so clear,
To hope that our efforts here have helped this cause, which is so near and dear.

So many faces from my past, have willingly joined the fray,
It was good to have them all aside me while we continued with the fray.

So, until the boatman arrives to take me to the other side,
I will continue to advocate for this cause and watch it grow with great pride.

I take great pride in all the endeavours of our beloved Maritime Aviation community, and all who went before us as they sought to do this noble work. This museum portrays it all, from Naval Air to Air Command and everything in between. To our loyal members, I thank you for your continuous financial, as well as moral support. It can't be done without the cash element which has been so generously supported by so many former Naval Air persons.

The new team is here, and will be formally installed in September at the AGM. I welcome them all and hope that we can continue the terrific progress that has been made and continues to be made. It has been humbling by times as I watch the love that the folks who work here have for this museum and what we are trying to do here.

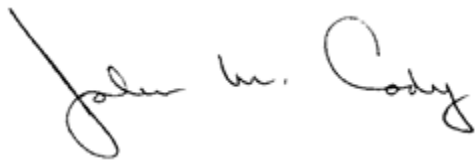
(Refer to Joseph Howe's statement written above).

It has been a pleasure serving this museum for the five years I have been here as President. Time for the new blood to step in. I wish every success to Jason Miller and his team. Perhaps they may be able to crack the glass ceiling of finally making the museum *such* a great place to bring the kids and grand kids for a visit that we will reach the Nirvana of having lines at the front door, smiles on all the faces and a desire to learn about those brave men in 1918, who took the original first few USN aircraft, which were held together seemingly by strings and love, all the way through to modern times, as men and women from all across our great country have joined our fray, and taken up the cause of making new memories for museums to document and portray.

I wish the very best to everyone who I have crossed paths with over my aviation career, whether they be Air Force, Navy or civvy aviation. To all our museum supporters and worker bees at SAM and SAMF, and especially to a great lady who runs our office organization, Karen Collacutt- McHarg. Without her tremendous efforts on our behalf, our successes would not be as they are. Our task is simple: we raise the funds that ensure the museum can continue on in perpetuity. Yes, there are some significant challenges to the task, but progress is happening. Keep up the very good work Team!

I wish each and every one of you the best of health and good luck in your personal endeavours. Until we can all meet again, where I will be waiting at the Red Bridge Pond, with my Springer Spaniels chasing everywhere, and having as good a time as I have personally had over my 50 years in the Maritime Helicopter business, then in business with General Dynamics Canada, and dare I say it, Naval Operations, which I also miss so dearly.

Until we meet again



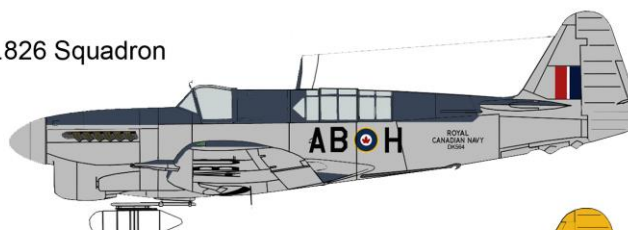
John M. Cody
Past President
SAM Foundation



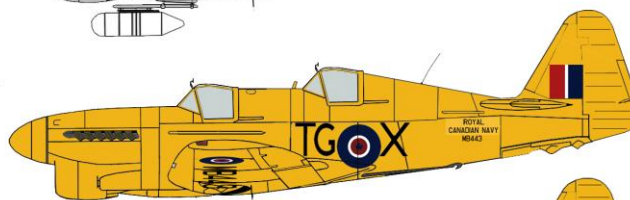
FIREFLY!

Leo Pettipas, Winnipeg

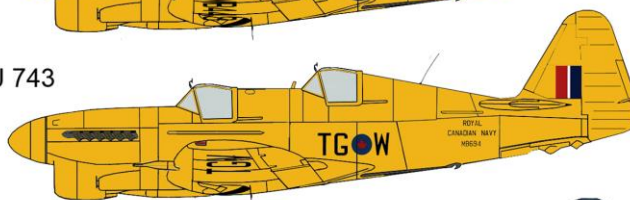
Firefly FR.I DK564 VG-AB*H No.826 Squadron
April 1949



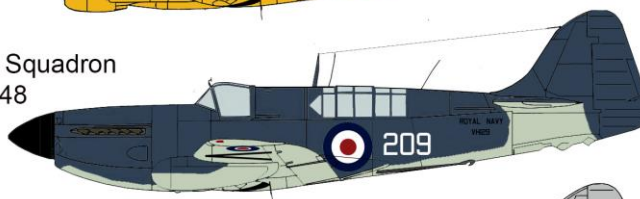
Firefly T.I MB443 TG*X FRU 743
RCNAS Dartmouth August 1948



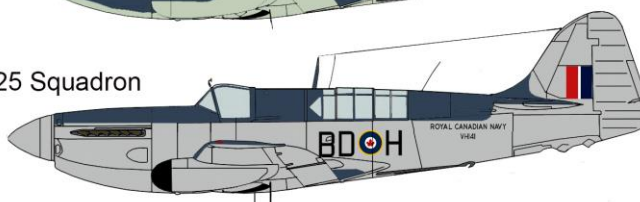
Firefly T.2 MB694 VG-TG*W FRU 743
RCNAS Dartmouth March 1950



Firefly FR.IV VH129 209 No.825 Squadron
HMCS Magnificent August 11, 1948



Firefly AS.5 VH141 BD*H No.825 Squadron
HMCS Magnificent late 1950



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Martin Slides Patrick Martin

Above -- RCN Firefly Summary:

A collage of Firefly sub-types that served in the RCN. Artwork and captions by Patrick Martin.

Introduction

The two-seat Fairey Firefly was heir to the British naval doctrine, economic realities, and technological status quo of the inter-war years (1919-1938). Limited-range R/T communications capability and lack of appropriate navigational (homing) devices discouraged the operation of single-seat fighters far from British carriers. The solution to the problem was made good by the addition of a second crew member -- a navigator ("Observer," "Looker") equipped with appropriate instruments and a wireless telegraphy set. These assets allowed him to maintain contact with the home carrier and with other aircraft with which he was operating, and made possible long-range escort of attack a/c.

In addition, the scarcity of aircraft prompted naval planners to develop versatile, multi-purpose machines whose roles could be varied as needed. Where over-the-sea reconnaissance was called for, the Observer in the two-seat fighter provided an extra set of Mk 1 eyeballs with which to observe.

The two-seat configuration of such fighters imposed a penalty in terms of speed and manoeuvrability, but it was reasoned that while at sea they would be operating beyond the range of land-based, high-performance enemy fighters. Furthermore, their targets would be relatively slow bombers and patrol aircraft against which the speed and manoeuvrability of the two-seat fighters would be adequate. If the Fleet was operating within range of fast, shore-based enemy interceptors, the latter could be dealt with by the RAF. Regardless of how valid or otherwise this thinking may have been, it does explain why the Firefly fighter was designed around a two-man crew.

The Fairey Firefly, as an aircraft “type,” officially came on strength with the RCN on 1 June 1946 and was struck off charge almost eight years later on 1 March 1954. A total of 64 Fireflies served with the Canadian Navy; these aircraft comprised five different marks: FR I, FR 4, AS 5, T I and T2. Fireflies were standard equipment in three operational squadrons -- 825 (FR I, FR 4, AS 5), 826 (FR I), and 880 (AS 5) -- and in the Operational Training Unit (OTU) of No. 1 Training Air Group, or 1 TAG (T I and T 2). The type saw service aboard two of the three Canadian carriers, *HMCS Warrior* (FR I, 1946-1947) and *HMCS Magnificent* (FR I, FR 4, AS 5, 1948-1951).

FR Mk I

The first front-line Fireflies to see service with the Canadian Navy were, appropriately enough, Mark Is, of which twenty-eight examples of the fighter-reconnaissance (FR) variant were taken on strength between June 1946 and April 1947. Canadians became introduced in squadron strength to the Firefly FR I in November 1945. At that time, the Royal Navy's 825 Squadron was by now manned largely by Canadians who, with their Fireflies, were also working up in Great Britain in preparation for embarkation in the aircraft carrier *HMCS Warrior* and subsequent departure for Canada. Another Canadian-manned RN squadron, No. 826, was equipped with Fireflies in January 1946 but was temporarily disbanded the following month due to early post-war manning shortfalls.

On 24 January 1946, *Warrior* was commissioned into the Canadian Navy and 825 Squadron became a unit of the RCN. Thus, when the Navy's air arm first became operational in late March of 1946, only one squadron was equipped with Fireflies. And in fact, these aircraft were at the time on the RCAF's, not the Navy's, register pursuant to an agreement struck the previous year that gave the Air Force management of all RCN shore-based aviation activity. The aircraft in question formed part of the settlement of war claims between Canada and Great Britain, and as a consequence no money was actually paid for them by the Canadian government. Being of the fighter-reconnaissance configuration, they were distinguished by a bomb-shaped ARI 5607 air-to-surface homing (ASH) radar pod slung below the engine cowling, a radar scope in each of the Pilot's and Observer's cockpits, and an F 24 aerial camera aft of the Observer's seat.

In 1946, a Firefly was one of several naval aircraft to participate in the Canadian National Air Show in Toronto. This was the first of the Air Arm's appearances at the annual CNE extravaganza in the years that followed. In the fall of that year, a Firefly was dispatched to the Winter Experimental Establishment (WEE) at *RCAF Station Namao* for cold-weather testing at Watson Lake, Yukon during the winter of 1946-47. All twelve first-line aircraft aboard *Warrior* were Fireflies when she made her one and only cruise to the West Coast (*HMCS Esquimalt*) during that same time.

The first-ever night deck-landing exercises to be conducted by the RCN were carried out with 825 Squadron's Firefly Is in the spring of 1947 aboard *Warrior*. In mid-May of that same year, No. 826 was reactivated as part of the newly-formed 18th Carrier Air Group (18 CAG). The unit's aircraft were gently-used Firefly FR Is acquired from 825 Squadron whose personnel were bound for Great Britain that summer for training on the new Firefly FR 4s. In July, the Navy was allocated its own aircraft register, and the FR I Fireflies officially became the property of the RCN.

In October 1947, 826 Squadron celebrated Trafalgar Day with a rocket attack (and prompt sinking) of the ex-German U-boat U-190; and in November the squadron's Fireflies took part in the final training exercises aboard *Warrior*, which was scheduled for decommissioning and return to the British early in the new year. It was also in the fall of 1947 that the FR Is began to appear in the distinctive RCN Dark Grey/Light Grey colour scheme, maple leaf roundels, and ICAO marking codes adopted around the same time by the Canadian military.

In the summer of 1948, 826 Squadron's Firefly Is scored another first when, as elements of the 18th CAG, they participated in the initial ground support training programme at the *Joint Air School*, Rivers, Manitoba. Upon their return to their home-base at *RCAF Dartmouth*, they were joined up with the Navy's other Firefly (FR 4)-equipped operational squadron to comprise the 18th CAG. As a consequence, Firefly Is were very much in evidence the following summer when the CAG was despatched to *USNAS Quonset Point* and *USS Saipan* to obtain training in the American technique of carrier deck-landing; in 1949 both the Canadian and British naval air arms decided to adopt the American technique because the US Navy was the largest of the three and standardization was needed to facilitate joint exercises.

In the American technique, the Pilot circled the carrier in a descending turn and, from a distance of about 400 feet out, approached the ship at a constant height of about 40 feet for a powered landing. Just before he reached the aft end of the flight deck, he was signalled to cut the engine by the Deck Landing Control Officer. However, the Canadian and American approaches to deck-landing were sufficiently different to create problems for the Canadians, whose aircraft tended to experience undercarriage damage and "hook-bounce" when attempting the American technique.

Perhaps a bit unusual, in terms of venue at least, was the use of Fireflies in support of Army manoeuvres in the Halifax area in June of 1949. The aircraft were scheduled to contribute to the exercise with simulated gunnery and rocket attacks on Citadel Hill located in the centre of the city (try to arrange something like that in this day and age!). Anyway, the Pilots were instructed to stay clear of broken cloud that was positioned at between 4,000 and 7,000 feet. The diving attack was to begin at 5,000 feet and, in the words of Roy de Nevers who led one of the two participating flights, "the main problem was that there was cloud-cover at 5,000 feet over the Citadel stretching to as far as the position from which I was to begin my attack. In my opinion, I could not safely lead my flight down through the cloud without risking a collision with the other flight. Fortunately, by the time I had my flight below the cloud, the other flight had already passed the Citadel."

Although the RCN recorded a number of "firsts" with the FR I, not all of them were auspicious: the first aircraft to ditch off *Warrior* was a Firefly, as was the first aircraft to be involved in a fatal flying accident out of the *Dartmouth* base when, in July 1947, one of them crashed into the sea near Musquodoboit Harbour just up the coast from the aerodrome. Both crewmen lost their lives as a consequence.

Magnificent's 1950 spring cruise to the Caribbean was the last occasion in which Firefly Is, as elements of the 18th CAG, operated from her deck. One example was retained as a ship-to-shore transport and communications aircraft (the forerunner to the carrier on-board delivery, or COD, concept) during a diplomatic and show-the-flag cruise to Europe later that year; the others were transferred to the Navy's remote storage facility at *RCAF Station Debart*. They were subsequently sold to Denmark and Ethiopia, the last being struck off strength from the RCN in early March 1954.

FR Mk 4

Basically, an FR I on steroids, the Firefly FR 4 provides an excellent example of how "one thing leads to another" in the evolution of aircraft design. Recognizing that the Mk I was under-powered, the Mk 4 was provided with an up-rated engine. To take advantage of the increased power, a four-blade propeller was installed. This in turn caused the aircraft to yaw -- that is, to skew from side to side -- so the fin and rudder were broadened and a fin-root fillet provided. The large intake beneath the nose had a detrimental effect on performance, so this arrangement was deleted and replaced by leading-edge radiator intakes on the stub wings. These increased the overall wing area to an unacceptable degree, so the wing tips were cropped, which enhanced the rate of roll and hence improved one more aspect of the aircraft's overall performance. To further streamline the front end, a sharper, more pointed propeller spinner was fitted. The more powerful engine called for more fuel, so a fuel pod was added beneath the outer port wing. To preserve symmetry and balance, a similar nacelle containing the ASH radar scanner was correspondingly positioned on the starboard wing.

The First Firefly Mk 4 to appear on the Canadian register was an experimental machine that went to the WEE cold-weather trials in the winter of 1947-48. In August of 1947, the RCN's 825 Squadron, based at *RNAS Eglinton* in Northern Ireland, became the first operational unit anywhere to be equipped with the new FR 4 variant of the Firefly.

Having "learned the ropes" on the type at *RNAS Eglinton*, and having received twelve of them on temporary assignment from the British in May of 1948 for carrier work-ups, the squadron embarked in the recently-commissioned *HMCS Magnificent* and returned to Canada in early June. In July, one of the new Fireflies made an appearance at *RCAF Rockcliffe* where H.N. Lay, Assistant Chief of Naval Staff for Plans, pronounced it to be "a very fine aircraft." Further comment on the new generation of Firefly, in particular the closely similar AS 5, will be recounted below.

The FR 4 was armed with four 20-mm cannon (two per wing as was the case with the FR I), and its ordnance inventory further comprised 60-lb rocket projectiles and 1000-lb bombs appropriate to its fighter-reconnaissance configuration. For armament drills, 11.5-lb practice bombs could be fitted, and a 45- or 90-gallon drop tank could be accommodated for long-range travel.

On 2 September 1948, a small task force comprising HMC ships *Magnificent* and Tribal-class destroyers *Haida* and *Nootka* departed Halifax for a northern sovereignty cruise. Aboard the carrier were 803 (Sea Fury) and 825 (Firefly FR 4) squadrons of the 19th Carrier Air Group. "Exercise Grindstone," a double air-to-ground strike against one of the Magdalen Islands by the aircraft, was carried out early in the voyage. Subsequently, a Lancaster and a Canso from *RCAF Station Greenwood* conducted task force interceptions, shadowing, homing's, and patrols under simulated war conditions when weather permitted. The naval aircraft conducted fighter interceptions and shadowing drills, although fog curtailed these activities.

All three ships proceeded together through Hudson Strait to Wakeham Bay at the extreme northern tip of Quebec. In the process they became the first HM Canadian vessels to carry the White Ensign into Arctic waters, but not until suspected seawater contamination of the aviation fuel on board *Magnificent* resulted in the loss of two of the Fireflies. When the carrier subsequently shaped course for Halifax in improving weather, the opportunity was taken to engage in more drills with the RCAF.

The same FR 4s were also the aircraft that equipped 825 Squadron when the latter was combined with 826 to form the 18th CAG in November of 1948. The FR 4s were operated by the RCN for only six months before being

returned to the British. By mid-January of 1949, all of them had been struck from the Canadian register and replaced the following month with AS 5s.

AS Mk 5

The AS 5 was the final operational Firefly variant to see service with the RCN. Eighteen machines were taken on strength by 825 Squadron in February 1949 in place of the FR 4s, although eleven of the Mk 5s were initially configured as 4s and subsequently converted to AS 5s. Although designed to carry four wing-mounted 20-mm cannon, it was soon determined that these were of scant value in dealing with submarines and so they were removed. The AS 5 could carry a payload similar to that of the FR 4, or combinations of sonobuoys, mines, depth-charges, rockets, bombs, drop tanks and air/sea rescue kits. With the Mk 5 Firefly came power-folding wings, and in fact the first machine to be so equipped was among those delivered to the RCN in early 1949.

By the time the AS 5s had come on strength, the two Canadian operational Firefly squadrons had been reorganized to form the 18th CAG. Accordingly, 825 Squadron's AS 5s were among the aircraft that went to *Quonset Point* in mid-1949 to undergo American-style deck-landing training.

As elements of the 18th CAG, the Firefly 5s in company with Firefly FR Is participated in Caribex 50, a joint American-British-Canadian exercise in which the RCN Fireflies engaged in anti-submarine patrol and search and strike drills on "enemy" fleets, strikes on enemy airfields, and in providing air cover for their own fleet. And finally, except for the single Firefly FR I that performed a carrier on-board delivery "COD" function, AS 5s were the only Fireflies to be involved in a 1950 European Diplomatic Cruise, the purpose of which was to "show the flag" and consolidate friendly ties with our newly-acquired allies under NATO.

The year 1951 was noteworthy primarily for the reorganization of air groups and squadrons, and the retirement of the AS 5s from squadron service. In January, 825 Squadron was again combined with 803 (Fighter) Squadron, this time to form the "19th Support Air Group" (SAG). Less than four months later, 825 was renumbered 880 Squadron, and the air group of which it was part was renumbered the 31st SAG. In November, 880 Squadron replaced its Fireflies with Avenger AS 3s, and the Fireflies were allocated to operational reserve. By the spring of 1954, all of the RCN's surviving AS 5s had been struck off charge, most of them having been sold to the British and Dutch governments. The majority of those handed over to the British were converted to U.9 target drones.

For many, the Firefly, and especially the Mk 4 and 5 with their sharp, clean lines, were classic naval aircraft. One latter-day British writer for the magazine *Air International* referred to the Firefly as a "masterpiece." For the Canadian Navy, however, it was something of a liability; speaking of the AS 5 in particular, it was difficult to maintain, reportedly did not respond well to the American style of deck-landing that was adopted by the Canadians and the British, and was difficult to control just above the stall during approach for landing aboard ship. Glare from the engine exhaust pipes hampered night operations. It was deficient in all-weather performance, and in order to maintain appropriate weight and balance, the Observer had to be less than a predetermined weight!

In addition, visual search -- an important function in airborne ASW work -- was structurally hampered and the Observer could observe but little. The Firefly's two and one-half hours endurance was insufficient for long-range patrols. The increasing sophistication of airborne anti-submarine warfare of the day called for more electronic equipment and an additional (third) crewman to operate it, and the Firefly had room for neither. Furthermore, the payload was inadequate for the specialized job of ASW: the number of sonobuoys and smoke markers the Firefly 5 could carry was limited to the extent that it had to be augmented on occasion by Sea Fury fighters in order to complete the sonobuoy-laying pattern. Clearly, the Firefly 5 had no growth-potential as an ASW vehicle; it was a

dead-end item in the progressive evolution of NATO's sea-lane protection programming.

Intended expressly for anti-submarine work, the AS 5s differed from the FR 4s in having provision for US-made AN/CRT-1 sonobuoys and AN/ARR-3 sonobuoy-receiver equipment. In his 1993 book "Hands to Flying Stations," Stuart Soward noted with disgust that "this rather pathetic attempt by Fairey Aviation to classify the Mk V Firefly as an ASW aircraft through the installation of such limited, basic equipment was fairly typical of the current lack of progressive ASW aircraft development by the Royal Navy."

For those who were not familiar with the Firefly through first-hand experience, some of the above reasons for the Canadians' dissatisfaction with it can be difficult to grasp. For example, anti-dazzle shields that could be positioned above the exhaust pipes were not only available but in use on both the Canadian FR Is and 4s. According to the celebrated RN Test Pilot Eric "Winkle" Brown, the highly innovative Fairey-patented Youngmann area-increasing flaps provided for excellent carrier-landing characteristics. As for the problems with the American-style carrier-landing technique to which the RN converted around the same time as did the Canadians, suffice it to say that both Fireflies and Sea Furies of the Fleet Air Arm carried out 1300 accident-free landings aboard *HMS Theseus* during the early phase of the Korean War.

Nonetheless, the case is well made that the Firefly 5 was not a good anti-submarine warfare vehicle. Despite the fact that two further ASW variants, the AS 6 – basically an AS 5 with British sonobuoy equipment -- and the mediocre AS 7, were available when the RN was seeking an interim aircraft pending the arrival of the Fairey Gannet. The type they chose, ironically enough, was the Grumman Avenger – very same type which had already been providing yeoman first-line service with the RCN for over three years!

T Mk I

It had been determined during the Second World War that the jump from a trainer (like the Harvard) to the high-performance operational fighter was rather considerable, and that a transitional machine would be most useful. This was achieved by adding an instructor's cockpit to standard fighter designs such as the Spitfire and Hurricane and, in the early post-war years, the Sea Fury and the Firefly. Appropriate modification of the Firefly Mk I produced the Firefly T I, the first production example of which made its maiden flight in August of 1947.

Consistent with Ottawa's "Buy British" mentality of the early post-War years and the use of Fireflies as the operational aircraft in the RCN's strike-reconnaissance-ASW role, the air arm procured four Firefly T I trainers in May of 1948 at the same time it acquired its FR 4s. The T Is were unarmed, two-seat, dual-control Pilot-conversion trainers distinguished by the rear (instructor's) cockpit raised a foot above the front (trainee's) position to improve the vision of its occupant (the instructor) while landing.

Painted overall in Trainer Yellow, the T Is were employed by the Operational Training Unit of 1 TAG, and although the aircraft possessed arrester hooks, the Canadians did not involve them in deck-landing training. They were, however, employed in shore-based transition and in refamiliarization flying by Regular Service Pilots. Along with Ansons, the T Is were also used as simulated aerial targets for fighter Pilots undergoing operational training.

In May of 1949, the Navy instituted a program of refresher training for Reservists. The syllabus comprised two- and four-week courses; ten days of the former were spent on Harvards and the remainder on the Firefly T Is. The flying exercises included day-, instrument-, and night-flying experience for Pilots enrolled in the month-long course. The trainers were used for Reservist refresher training in 1949, 1950 and 1951.

For all that, the T Is had by all accounts a rather sporadic serviceability record. One assessment of the Firefly Pilot trainer is provided by Ed Myers, former Naval Air Pilot: "The Firefly trainer (FFT), as was the case with the FF Mk I, was a very stable and delightful aircraft to fly. The visibility was excellent, even from the raised rear seat. This combination would have made it an excellent gun/rocket platform for close air support, i.e., air-to-ground attacks in support of ground forces. However, I never had an opportunity to fire any ordnance from an FFT, nor do I recall anyone else doing so during my tour on squadron.

I also recall that aerobatics in the FFT, as is the case with most aircraft not designed primarily as a fighter, was rather sluggish. Spinning, on the other hand, was rather spectacular, with the aircraft assuming a pronounced nose-down attitude for the first couple of turns, then flattening out for the next turn or so. Meanwhile, much altitude was lost. As the aircraft was rather slow to recover from the spin after corrective action, coupled with rapid loss of altitude, I don't recall letting the aircraft spin more than three or more turns before taking recovery action (not one of my favourite manoeuvres in a relatively heavy aircraft). It should be noted that the FFT was a very popular aircraft in the squadron and was flown whenever serviceable which, unfortunately, was not as often as we would have liked."

With the passage of the FR Is from the scene in mid-1950, and the final replacement of the AS 5s with Avengers in the fall of 1951, the T Is promptly followed suit: the three survivors (one had been written off in a crash) were placed in storage and subsequently sold to Ethiopia. They were officially struck off charge from the RCN on 1 March 1954.

T Mk 2

The final mark of the Firefly to enter service with the RCN was the T 2 variant, a two-seat gunnery (tactical weapons) trainer that differed from its unarmed T I sibling in having a single 20-mm cannon in each wing and a synchronized gyro gunsight in each cockpit. In late March of 1949, two ex-826 Squadron Firefly FR Is were delivered to Fairey Aviation of Canada Ltd for conversion to this mark. By the end of February of 1950, this rework had been completed; however, the advent of the Avenger by and large rendered these aircraft superfluous and they were withdrawn from service in short order. Relegated to "cold storage," they were among the machines that were struck off strength in early March of 1954 and sold to the Ethiopians.

Concluding Remarks

It was pointed out by Stuart Soward in his 1982 article "Canadian Naval Aviation, 1915-1969" that "to enthusiasts, the Firefly V was one of the best two-seater fighters in the world, but to its detractors it was the worst. Both points of view were valid since it was the *only* single-engine, two-seater fighter in existence -- a rather uncertain distinction." Whichever position one chooses to take on the matter, it cannot be denied that the Firefly AS 5 and the variants of the type that led up to it allowed the Canadian Naval Air Arm to cut its teeth, albeit somewhat painfully at times, in the game of carrier-borne aviation and anti-submarine warfare. It was instrumental in helping the RCN decide what it really wanted and needed in an ASW aircraft (i.e., it wasn't any more Fireflies!), and the experience it provided its aircrews played an important role earlier on in the Navy's advancement toward its ultimately achieving a reputation second to none in the NATO Alliance.

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Sea King: Going out with style



News Article / July 26, 2018

By Lieutenant-Colonel Travis Chapman

Designed in the late 1950s and procured by Canada through a dynamic acquisition program in the early 1960s, the CH-124 Sea King helicopter has served Canadians with distinction since May 24, 1963. Longevity, avionics and mission system upgrades, and the utility of a medium-lift helicopter came together to create a legacy that ignites a passion spanning multiple generations, unlike any other Royal Canadian Air Force asset.

The CH-124 pre-dates Bill C-243, “The Canadian Forces Reorganization Act”, and so the Sikorsky HSS-2 was acquired as a Royal Canadian Navy (RCN) anti-submarine warfare (ASW) weapon system, and was designated CHSS-2 upon entering Canadian service. A maritime helicopter, it has operated from aircraft carrier Her Majesty’s Canadian Ship

(HMCS) Bonaventure, St. Laurent-class destroyer escorts and Iroquois-class destroyers, auxiliary oiler replenishment ships, and Halifax-class frigates.

In many ways, Canada’s efforts to embark a large aircraft on a small flight deck revolutionized the concept of organic air support to naval operations by showing the theoretical to be possible. Given the capabilities of a larger helicopter, crews could carry more armament, more fuel, and a suite of avionics—with capacity for growth. Considering the rapid advancement of submarine capabilities in the 1950s, the CHSS-2 became a potent counter-punch to non-friendly submarines. Over time, it proved capable of acting as an autonomous, multi-role ASW weapon system through several permanent and temporary modifications that included radar, sonobuoy processing, GPS, automatic identification system, tactical common datalink, and various iterations of tactical navigation computers, as well as the development of aircraft-specific tactics for crews to employ.

Currently, the Sea King is flown by squadrons belonging to 12 Wing Shearwater, Nova Scotia.

To pay tribute to the history of Canada’s esteemed maritime helicopter, Major Trevor Cadeau, 443 Maritime Helicopter Squadron aircraft maintenance engineering officer, initiated a project in December 2017 with technical and operational staff at Director Aerospace Equipment Program Management (Maritime) and 1 Canadian Air Division to change Sea King tail number CH12417’s

modern livery to one inspired by the original RCN livery from 1963 (as pictured on aircraft 4005), and previously applied in 2010 to commemorate the Canadian Naval Centennial.

The success of the latest livery project belongs to a large team from Patricia Bay, British Columbia; Shearwater, Nova Scotia; Ottawa, Ontario; and Winnipeg, Manitoba. Essential to its impressive execution were technicians from 12 Air Maintenance Squadron (AMS), and 423 and 443 Maritime Helicopter Squadrons.

Of course, once painted, it had to be reassembled. Again, personnel from 12 AMS, and 423 and 443 Squadrons worked tirelessly, putting the aircraft back together.

Not only does the special paint scheme honour the Sea King's history and exceptional contributions to RCN and RCAF operations over the last 55 years, but the project presented an uncommon professional development opportunity for many aircraft structures technicians. Those involved in the project were able to exercise their own painting skill sets, using the new paint booth in the 12 AMS hangar in Shearwater, Nova Scotia.

In addition to CH12417, team members also repainted aircraft CH12401 in preparation for its induction into the Shearwater Aviation Museum.

Although 423 Squadron ceased Sea King flight operations on Canada's east coast in January 2018, and has already transitioned to the CH-148 Cyclone, 443 Squadron, which belongs to 12 Wing but is based at Patricia Bay, has been flying

the CH-124 throughout 2018 in support of deployed operations onboard HMCS St. John's, and domestic taskings and advanced force generation at Arundel Castle in Patricia Bay.

On June 13, 2018, a crew from 443 Squadron left Shearwater on a cross-country ferry flight bringing CH12417 from the home of maritime aviation in Shearwater to Pat Bay. 443 Squadron is proud of our history and success with the Sea King, and will enthusiastically fly CH12417 during the fleet's final six months of RCAF service.

Over the summer, civilians and service personnel can expect to see CH12417 in its new clothes at various airshows, and in the skies over Victoria and Pat Bay. Adding an extra dose of excitement, Cyclones will operate alongside Sea Kings at 443 Squadron from August until the end of December 2018.

Post-retirement, it is expected that CH12417 will remain at 443 Squadron as a "gate guardian". It will also be present at the Sea King Retirement 2018 festivities planned in Victoria from November 30 to December 1, 2018. The organizing committee is planning an impassioned salute to this workhorse's 55 years of service to Canada, and CH12417 should feature prominently in both the flying and ground events.

The livery is an outstanding testament to our pride in our aircraft and our community's history. It is a fitting compliment to a weapon system that has served generations of Canadians at home, and Canada's foreign policy abroad, for more than 55 years.



"Akassa Recce"

Ceylon Torpedo Attack August 23th 1943

Painting by Don Connelly

The original painting was donated to the Shearwater
Aviation Museum by David Widdows

