CALB DAZER

Jack C. Charleson was the first civilian helicopter pilot in Canada, and he played a crucial role in establishing commercial operations in the country.

STORY BY BOB PETITE





TALENTED BUSH PILOT JACK C. CHARLESON WAS A VISIONARY

and trailblazer when it came to the establishment of the civilian helicopter industry in Canada. The country's first civilian helicopter pilot, he pioneered the use of helicopters on Canada's icebreakers, and also helped determine regulations governing civil helicopter operations in Canada.

Charleson was born in the frontier village of Hazelton in northern British Columbia on Jan. 30, 1908. His parents — Edward (Ned) and Agnes — had moved to northern B.C. to help his grandfather construct the Yukon telegraph line. Around 1912, the family moved to Ottawa, Ontario.

Family life was forever changed with the outbreak of the First World War. Ned joined the fighting in France, and was killed on Nov. 18, 1916.



Not knowing what he wanted to do in life, Charleson found work in his teens on a merchant tanker. One evening, while the ship was docked in Boston, Massachusetts, he saw an airplane in the sky above. As soon as his shift ended, he headed out on foot across the city toward the airfield, finally arriving just before dark. He found the pilot and asked if he could pay for a ride. Instead of the expected short flight, they flew over Boston for about 20 minutes. Charleson was thrilled with the experience, and decided he was going to be an aviator.

Back in Canada, Charleson began flying lessons, quickly earning his private pilot's and commercial licenses. He then flew for International Airways in northern Ontario and in the Toronto area using Cirrus-powered de Havilland Moths.

However, finding full-time employment in aviation in Canada was a challenge, so Charleson decided to try his luck in the U.S. In 1930, he became a test pilot and instructor for Great Lakes Aircraft in Long Island, New York.



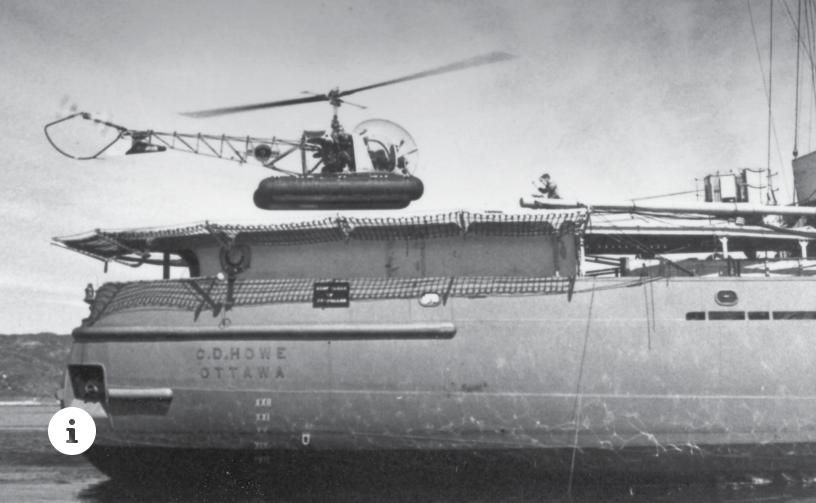
He returned to Ottawa in 1935, marrying Marion Gordon Gale (and later raising four daughters in the city). Charleson worked as a flight instructor with the Ottawa Flying Club, and obtained his license to carry passengers, mail and goods, and later his "AIR engineer" ticket. He also flight-tested military aircraft for Armstrong Siddeley.

In January 1938, Charleson joined Laurentian Air Service, flying air mail from Quebec City to Rimouski, Quebec. From there, he flew all over the province.

The following year, he started with Imperial Oil's air division, flying ski- and float-equipped Stinson Reliant aircraft all over northern Ontario.

"These operations required long periods in semi-isolation, which did not fit in very well with the life of my growing family," wrote Charleson in a letter outlining his experience in aviation. "When I was offered a flying position in Ottawa in 1939 with the Civil Aviation Division of the Federal Department of Transport [DOT], I accepted with pleasure."

Initially, Charleson was tasked with selecting airport sites, sighting suitable locations for their associated radio range stations, and laying out the runway locations. He also advised on the type of lighting needed and flew DOT's transport aircraft.



"While thus being employed with DOT, I became personally interested in helicopters and their future in Canada," wrote Charleson. He had followed the exploits of Igor Sikorsky and his early development of experimental helicopters, and Bell Aircraft's Model 30 closely.

LEARNING ROTARY-WING FLIGHT

In early 1945, Charleson attended a U.S. Embassy function in Ottawa. When in conversation with the U.S. Ambassador, Charleson was thanked for his contribution in helping the U.S. with some airport problems during the wartime construction of the Canada/Alaska Highway in B.C and the Yukon. The Ambassador asked what he could do to thank Charleson for his service, and he said he would like to learn to fly helicopters.

To Charleson's surprise, a few weeks later he received war orders to report to the U.S. Army Air Forces base in Sheppard Field, Texas. Years later, at a meeting of the Canadian Aviation Historical Society in 1983, Charleson relayed what happened as he took the orders to his superior Robert Dodd. "They must be out of their minds!" Dodd told him. "You are a Canadian, and they are telling you to report." However, Dodd gave him permission to attend the training course.

Charleson began his training in a Sikorsky R-4B two-place helicopter. After 5.5 hours of dual training, he soloed on July 20, 1945. Much of the flying had to be completed in the cool mornings as it was too hot in the afternoon — and the underpowered R-4B did not perform well in hot temperatures.

Rotary-wing flight seemed to come naturally to Charleson. By the end of July, he had flown 10:40 hours of dual, and accumulated 6:30 hours of solo time. He transitioned to the slightly more powerful Sikorsky two-place R-6A the following month, and then

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the more advanced three-place Pratt and Whitney-powered Sikorsky R-5. He ended his helicopter training with a total of 36 hours — 18 hours of dual training, and 18 hours solo. His training had included all three types of Sikorsky helicopters used by the Army during the Second World War.

Charleson graduated on Aug. 25, 1945 — becoming the first civilian helicopter pilot in Canada.

In a letter to A.D. McLean, the Controller of Civil Aviation in Ottawa, Charleson detailed the prospects for

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helicopter operations in Canada. "Helicopters could be used for experiment, test, training, transportation and rescue work in isolated areas," he wrote. "Particularly during periods when the ice would not be safe for a fixed-wing aircraft, or at a lighthouse when rough water made small boat operation too dangerous."

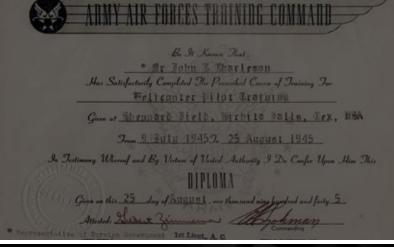
Charleson returned to Canada to resume his flying duties with the DOT, and soon became a member of the "Twirly Birds" — the international organization of pioneering helicopter pilots who flew before the end of the war.

It wasn't long before commercial helicopters arrived in Canada. The Photographic Survey Company in Ontario, Skyways Services Ltd. in Manitoba, and Okanagan Air Services in British Columbia all purchased Bell Model 47B-3s in 1947. Intercity Airlines in Montreal was constructing the civil Sznycer SG-VI, and the Royal Canadian Air Force received its first Sikorsky S-51/H-5 helicopters the same year.

BIRTH OF AN INDUSTRY

During 1948, Charleson contacted Commander Frank Erickson, U.S. Coast Guard operating from Floyd Bennett Field, regarding his experience using helicopters on







icebreakers for ice patrols. Charleson was already thinking about the potential of using helicopters in the northern waters of the Arctic.

By January 1949, Charleson was looking at the DOT's requirements for icebreaker construction and the types of helicopters best suited to operate from ships. Through the DOT's Marine Services, funding was made available for a helicopter to operate off the new icebreaker, the Canadian Government Ship (CGS) *C.D. Howe.* This was an Arctic patrol vessel that would make Canada's presence in the region more visible. Charleson oversaw the construction of a helicopter deck at the back of the ship, which was designed with the help of Commander Erickson, and developed procedures for operating helicopters off icebreakers.

Charleson recommended a Sikorsky S-51 for the icebreaker support role, at a cost of C\$107,000. It was equipped with flotation gear, radios, a rescue hoist, stretcher installation, provision for a camera, a canvas seat in the back, and dual controls.

His next task was to design a flight deck and hangar facilities for two helicopters for the CGS *D'Iberville*, which was under construction. It was to be the largest icebreaker in Canada.

In March 1950, Charleson had his first flight in an S-51, when he was flown by Sikorsky chief pilot Jim Viner at the company's factory in Bridgeport, Connecticut. The following month, he was stationed on a U.S. Coast Guard icebreaker as an observer for helicopter operations.



Charleson trained on the S-51 along with Charlie Parkin, who was hired to pilot the DOT's new aircraft. The two then flew the S-51 from Bridgeport to Montreal, and later to Ottawa. There, it flew demonstrations for government officials.

The new S-51 completed its maiden landing on an icebreaker on June 12, 1950, on the deck of *C.D. Howe.* The following week, the ship left for Arctic waters, and the aircraft seemed to perform well throughout July.

However, on Aug. 6, the S-51 crashed during takeoff near Fort Chimo, Quebec, falling into the Koksoak River. Parkin escaped with one passenger, but the second — an Inuit translator — drowned. The Sikorsky S-51 was a total loss.

It was later found that the left tie-down had not been removed prior to the flight.

Despite the crash, it was clear that rotary-wing aircraft had plenty of potential to aid future northern operations, and plans were made to replace the helicopter the following year.

TESTING TIME

In January 1951, Charleson was tasked with supervising the flight test trials for the certification of Canada's first manufactured helicopter — the Sznycer SG-VI-D "Grey Gull." It was a cold, blustery month, and the trials required exhaustive tests.

Charleson soloed the helicopter on Jan. 18 under the watchful eye of test pilot Jack Godsy. Tests included five days of flying with little maintenance, power-off landings at full gross weight, and numerous autorotations. Designer Bernard Sznycer was elated after the grueling flights were complete, as he was worried that Charleson was going to damage his helicopter. The "Grey Gull" passed all the required tests, and became the first helicopter designed and constructed in Canada to be type certified on March 15, 1951.

Meanwhile, the DOT had decided to replace the S-51 with the smaller (and much more practical) three-place Bell Model 47D-1. Charleson began training on the type at Bell Aircraft in Niagara Falls, New York, and then ferried the DOT's aircraft to Ottawa.

Charleson accompanied the *C.D Howe* on its next trip to the Arctic, with Ken Wallingford in charge of maintenance. During the journey, Charleson trained new aircrew on the Bell 47D-1, including Royal Ccanadian Air Force flying officer Robert Richie. The aircraft was used to transport personnel and supplies to ice-bound communities, and aided in the navigation of the icebreaker through ice fields.

The 1951 Arctic trip was completed with few problems, and the helicopter performed successfully throughout the voyage.

The following year, Charleson trained Wallingford as a pilot, and the two flew the type during the 1952 icebreaker voyage.

In early December 1952, Charleson, Wallingford and maintenance engineer Bill Glennie traveled to Bell Helicopter in Fort Worth, Texas, to pick up two more new Bell 47D-1s for the DOT. Glennie received dual training on the trip home from Charleson, who by this time had reached 200 flight hours in helicopters.

Glennie received additional training in 1953, and he soloed later in the year off the icebreaker *D'Iberville* over the sea around Labrador. That year's Arctic voyage was a complete success. One of the two helicopters on board was used to transport ballot boxes for voting to various ports along the Labrador coast. The other was used to establish an RCMP post on Ellesmere Island.

"Ken Wallingford and Bill Glennie were two of the most successful students that I trained on helicopters, who both had started as helicopter mechanics," Charleson later told a meeting of the Canadian Aviation Historical Society. Glennie became the senior pilot in the Coast Guard, with Wallingford becoming the chief pilot of Ontario Hydro.

A CHANGE OF PACE

In 1954, after 14 years at the DOT, Charleson (now senior inspector) decided it was time for a change.

He joined Piasecki Aircraft in its new maintenance base for RCAF H-21s in Arnprior, Ontario — but only lasted about five months.

He then joined Okanagan as vice president of development, and found the work both productive and satisfying. Since his responsibilities were largely focused in Eastern Canada,



he was able to keep his home base in Ottawa. His ability to acquire new contracts soon became evident.

"We acquired major Okanagan contracts on the Mid-Canada Line, the DEW [Distant Early Warning] Line in the far north, BRINCO, the Newfoundland Government, and the United States Air Force in Goose Bay, Labrador," wrote Charleson in a letter detailing his aviation experiences.

He stayed with Okanagan Helicopters until 1962, when Canadian Pratt and Whitney Services Ltd. approached him. Charleson became the firm's Ottawa manager, and was responsible for government relations and the promotion of the company's products and services. He stayed with Pratt until his retirement in 1974.

In retirement, Charleson continued to write about his affection for aviation, completing articles for various publications and newspapers. He was known for his amazing aviation stories, which he gladly passed on, and he loved to talk about aviation and helicopter history.

Charleson passed away at his home in Ottawa on June 20, 1984. He was 76 years old. Charleson will be always remembered as Canada's first civilian helicopter pilot, and for his remarkable influence on the birth of Canada's civilian helicopter industry.

Editor's Note: Jack Charleson's daughter Janice MacAulay, and Larry Milberry contributed to this story.

