

## RCAF H-34A Serials

RCAF#	Manufacturer / Model #	Construction Number	Designation	Model #
9630	Sikorsky S-58	58-160	H-34	H-34A

**TOS:** 3 November 1955 - Taken on strength at No. 108 (Com) Flt Bagotville

Winterization kit installed starting on 6 Jan 1956. Received further engine and engine clutch mods in June 1956. With No. 108 (Com) Flight at Rockcliffe, ON when it was detached to Great Whale, QC on 11 April 1957. Carried Minister of Defence, Mr. Pearks, and high ranking RCAF staff, from Rockcliffe to Lac St. Denis in August 1957. Reached 1,000 flight hours later in August 1957, first RCAF H-34 to reach this time. Detached to Sept Isle, QC in January 1957. Flew 108 Flight's 25,000th hour in February 1958. To overhaul with 11 TSU as of 30 May 1958. To 102 C&R Flt Trenton as of 24 Jul 1958. To 111 KU Flt in Winnipeg, MB as of 20 Jan 1959. To overhaul with 11 TSU as of 21 Nov 61. To CEPE in Cold Lake as of 22 Mar 1962. To overhaul with 11 TSU as of 10 Sep 1965. Awaiting disposal instructions at 11 TSU as of 5 Aug 1966. To CADC as of 19 Apr 1967. Sold to Carson Helicopters, registered as N1563. This registration cancelled in 1971.

**SOS:** 19 April 1967 - to Crown Assets Disposal Corporation; later sold



RCAF#	Manufacturer / Model #	Construction Number	Designation	Model #
9631	Sikorsky S-58	58-161	H-34	H-34A

**TOS:** 3 November 1955 - Taken on strength at No. 108 (Com) Flt Bagotville

Winterization kit installed starting on 6 Jan 1956. With No. 108 (Com) Flight detachment at Great Whale, QC in Apr 1956. Damaged in hard landing after engine failure near Site # 342 on 2 May 1956. The pilot received a back injury and Cat "B" damage to the airframe. Slung out from crash site by another H-34. To CPW for repair and overhaul. Returned to service in Jun 1957. After only another 169 flying hours, crashed again at Great Whale River due to a broken damper bracket on 3 Sep 1957, with only minor damage but received further damage when it was dropped due to a cable shearing while being slung out of the crash site by #9630. To CPW for repairs as of 16 Sep 1957. Back to No. 108 (Com) Flt as of 2 May 1958. Employed for the rescue of a T-33 pilot from 30 miles south of Ottawa during night of 18 May 1958. With No. 5 (H) Operational Training Unit at RCAF Station Rockcliffe, ON in summer of 1958. Took part in air show at Stanstead, QC on 1 Jul 1958. Received VIP interior in Jul 1958, and was used to transport Princess Margaret and party around western and eastern Canada in Jul and Aug. Used for a medivac mission to Amos, QC in Nov 1958. To North Bay in Dec 1958, to take part in search for missing CF-100 crew. Transferred to No. 4 OTU Trenton as of 6 Jun 1958. To CPW for modifications as of 3 Feb 1959. With No. 111 (KU) Flight Winnipeg as of 9 Apr 1959. Back to CPW for overhaul and replacement of main rotor blades and other repairs as of 27 Apr 1960. Returned to 111 KU. Still with No. 111 KU, but detached to RCAF Station Cold Lake, AB when it crashed on 27 April 1961. #9631 was transporting civilian construction workers from the Primrose Lake Air Weapons Range back to RCAF Station *Cold Lake* when the aircraft crashed approximately 55 km north of the station and then burned after an engine failure. Three military and six construction workers on board were killed. The only survivor was the pilot, F/L J.L. Jeffs, who suffered minor injuries. Among the crew, LAC G.B. Compton and LAC M.H. Chapman were killed.

**SOS:** 26 June 1961 - Crashed - Cat "A" write-off



RCAF#	Manufacturer / Model #	Construction Number	Designation	Model #
9632	Sikorsky S-58	58-202	H-34	H-34A

**TOS:** 3 November 1955 - Taken on strength at No. 108 (Com) Flt Bagotville

Transferred with No. 108 (Com) Flight to Rockcliffe in Dec 1955. Still with this Flight when it performed a med-evac flight carrying a patient with a broken neck from treatment from Grandmere, QC to Montreal (at Molson Stadium) on 7 Oct 1957. At Great Whale River, QC in Nov 1957, but engine changed at detachment. Forced landing in Quebec in January 1958, after engine failure. To CPW as Jun 1958. With No. 5 (H) Operational Training Unit at RCAF Station *Rockcliffe*, ON in summer of 1958, when it undertook a medivac from Perth, ON to Montreal on 23 June 1958. Detached to Chibougamau, QC on 9 Sep 1958 for a "secret operation", probably in support of the *Pinetree* radar station being built there. To No. 4 OTU Trenton of 6 Jan 1959. Suffered Cat "B" damage in 1961 crash while deployed to NF fighting forest fires. To No. 11 TSU with CPW for crash repairs as of 25 Oct 1961. To RCAF Station *Cold Lake* as of 29 Aug 1962. Transferred to Canadian Armed Forces in 1968, with no change in serial number. Operated from CFB Cold Lake, AB in 1970. To Saskatoon, SK for disposal as of 5 Nov 1971. SOS with just 3,480 flying hours in the RCAF / CF. To CADC as of 9 Nov 1972. Sold to Nahanni Helicopter Ltd in Delta, BC. To civil register as C-FFZM, later operated by Kenting Helicopters and Klondike Helicopters. To US civil register as N99482 in 1977, operated in succession by Chicago Helicopters, Jacksonville Helicopters, Garlick Helicopters and then Western Helicopter. Returned to Canada in 1980, again registered as C-FFZM. Next operated by Northwestern Helicopters and then Cypress Helicopters. While with Cypress Helicopters Ltd. the a/c, (now converted to S-58E variant), C-FFZM, on 22 Jul 2002. was departing en route to a fire camp 25 Nm NW of Big River, SK, on a cargo flight. During initial climb, the engine (still a Curtiss Wright R1820) backfired and momentarily lost power. It regained power, but backfired again and the pilot landed the aircraft in a marsh. The aircraft was then consumed and destroyed by a fuel-fed fire. The crew of two and the passenger evacuated the helicopter without injury and were evacuated from the marsh by another helicopter. The aircraft's engine had backfired 30 flight hours before the occurrence, and an inspection after that occurrence revealed a bent intake valve.

**SOS:** 9 November 1972 - to Crown Assets Disposal Corporation; later sold



RCAF#	Manufacturer / Model #	Construction Number	Designation	Model #
9633	Sikorsky S-58	58-223	H-34	H-34A

**TOS:** 12 January 1956 - Taken on strength at No. 11 TSU CPW

Transferred with No. 108 (Com) Flight to Rockcliffe in Jan 1956. With No. 108 (Com) Flight detachment at Great Whale, QC in Apr 1956. To CPW on 7 Sep 1956 for repairs and prototype modification of an adjustable engine air intake shutter. Loaned to RCN from Sep 1957 for deck landing trials at sea, on HMCS *Ottawa*. Received UHF radio modifications and floatation gear at CPW in preparation for this loan. On board HMCS *Ottawa* for NATO exercises in eastern Atlantic in the fall of 1957. Returned to CPW as of 10 Dec 1957 for reconditioning. Back with No. 108 (Comm) Flt at RCAF Station *Rockcliffe*, ON as of 30 May 1958. Performed a med-evac from Molson's Stadium, Montreal on 19 Aug 1958, interrupting CFL football game. Used to evaluate instrument training goggles in Sep 1958. To North Bay in Dec 1958, to take part in search for missing CF-100 crew. To CPW for modifications as of 29 Dec 1958. To No. 4 OTU at RCAF Station Trenton, ON as of 3 Feb 1959. Back to CPW as of 19 Aug 1960 for ARC 552 radio and electrical power upgrade prototyping. Back to No. 4 OTU as of 9 Jan 1961. To 1102 (KU) Flt Trenton as of 10 Feb 1964. With No. 448 (Test) Squadron at RCAF Station Cold Lake, AB as of 10 Sep 1965. Transferred to Canadian Armed Forces in 1968, no change in serial number, still at Cold Lake. To Saskatoon, SK pending disposal instructions as of 5 Nov 1971. In storage at Saskatoon when struck off. SOS with 5,255 flying hours in the RCAF / CF. To civil register when sold, as CF-JTH. Operated by CAT Logging and Nahanni Helicopters. Operating on special flight permit in 1973, for fire fighting only. Converted to S-58E configuration by Jul 1974, when it received a full Certificate of Airworthiness as C-FJTH. Noted as then with 5640.0 hrs logged time. Written off in a hard landing near Ignace, ON on 19 August 1976. The helo was taking off from a camp at Catastrophe Lake, ON with a fire crew, when it sucked a garbage can lid through the main rotor. Registration cancelled 23 March 1977. Later sold to Rilpa Enterprises of Calgary as scrap metal.

**SOS:** 14 January 1973 - to Crown Assets Disposal Corporation; later sold



RCAF#	Manufacturer / Model #	Construction Number	Designation	Model #
9634	Sikorsky S-58	58-224	H-34	H-34A

**TOS:** 12 January 1956 - Taken on strength at No. 11 TSU CPW

Transferred with No. 108 (Com) Flight to Rockcliffe in Jan 1956. With No. 108 (Com) Flight detachment at Great Whale, QC in Apr 1956, for summer construction season. Returned to Bagotville at end of 1956 construction season, back to Great Whale in June 1957. To No. 11 TSU CPW for 1,200 hr inspection as of 30 May 1958. Transferred to No. 111 KU Flt in Winnipeg, MB as of 18 Jul 1958 While assigned to No 111 KU on 30 Nov 1958, #9634 was tasked for a med-evac flight to a northern First Nation reservation. The H-34A and its three man crew proceeded to Pine Falls, MB, where they picked up a doctor before flying north to the Bloodvein Reservation. There, they picked up a local citizen that guided them to the small community of Rabbit Point. A native mother and child had been severely burned in a house fire and required evacuation. The pilot flew back to Bloodvein where he dropped off the local guide. A strong wind was blowing with snow flurries when the helicopter took off for the return flight to Pine Falls Health Centre. During the flight, the helicopter crashed onto the frozen ice of Lake Winnipeg near Manigotagan, MB resulting in the deaths of all six occupants including F/L J.C. Smith, Cpl J.W. Bain and LAC JW Wotherspoon.

**SOS:** 10 February 1959 - Crashed - Cat "A" write-off



RCAF#	Manufacturer / Model #	Construction Number	Designation	Model #
9635	Sikorsky S-58	58-245	H-34	H-34A

**TOS:** 12 January 1956 - Taken on strength at No. 11 TSU CPW

Transferred with No. 108 (Com) Flight to Rockcliffe in Jan 1956. With No. 108 (Com) Flight detachment at Great Whale, QC in April 1956. Operating in Quebec again in summer of 1957. To No. 11 TSU CPW for 1,200 hr inspection as of 11 Jun 1958. Transferred from No. 5 (H) Operational Training Unit at Rockcliffe to Central Experimental and Proving Establishment (CEPE) at Cold Lake as of 23 Sep 1958. Remained with No. 448 (Test) Squadron (CEPE det) at RCAF Station Cold Lake, AB in 1960s. Transferred to Canadian Armed Forces in 1968, no change in serial number. Remained with AETE. Withdrawn from service as of 5 Nov 1971 and stored in Saskatoon, SK. SOS with 6,482 flying hours in the RCAF / CF. In storage at Saskatoon when struck off. Sold initially to Northern Helicopter Ltd in Abbotsford, BC. To US civil register as N99275. Crashed at Flat Rock, Michigan due to engine failure on 16 Oct 1977, and reported as damaged beyond repair. US civil registration cancelled on 16 Apr 2013, reported as "expired".

**SOS:** 14 November 1972 - Struck off, to Crown Assets Disposal Corporation; later sold



## ADDITIONAL NOTES

In summary, the RCAF received a total of 6 Sikorsky H-34 helicopters. Although the helicopter type was given the name, *Choctaw*, in US Army service, there is no documentation or other indication that this name was ever used for the type while in RCAF service. It is simply referred in RCAF technical documentation and files as the "H-34A".

### Operating Units

The following units used or flew Sikorsky H-34A helicopters:

- No. 4 Operational Training Unit, Trenton, ON
- No. 5 Operational Training Unit, Rockcliffe, ON
- No. 102 (KU) Composite Unit, Trenton, ON
- No. 108 (Comm Flt) Communication Flight, Bagotville, QC & Rockcliffe, ON
- No. 111 (KU) Composite Unit, Winnipeg, MB
- No. 448 Squadron, Cold Lake, AB; a sub-unit of the Central Experimental Proving Establishment (CEPE)
- Base Rescue Flight, Cold Lake, AB

### Aircraft (or Air Vehicle) Damage Level (ADL) Categories: <sup>1</sup>

The RCAF's ADL is a qualitative categorization system used to determine the level of damage sustained by an aircraft / air vehicle during an occurrence. The following damage level definitions are used to reflect the degree of damage:

**Cat "A"** = Destroyed / missing: The aircraft has been totally destroyed, is assessed as having suffered damage beyond economical repair or is declared "missing";

**NB** - Aircraft totally destroyed are normally written off the inventory. Accidents with a lower ADL may also subsequently result in administrative write-off of the aircraft for reasons (primarily economic) not directly related to the original damage assessment.

**Cat "B"** = Very Serious: The aircraft has sustained damage to multiple major components;

**Cat "C"** = Serious: The aircraft has sustained damage to a major component;

**Cat "D"** = Minor: The aircraft has sustained damage to non-major components; and

**Cat "E"** = Nil: The aircraft, including the power plant, has not been damaged.

**Number of RCAF Sikorsky H-34 Cat "A" write-offs = 2** (~ 33% of the total fleet)

### Preserved or Surviving Aircraft

There are no surviving H-34s from the RCAF. Two aircraft were written off in accidents while in RCAF service and the remaining four were struck off strength and sold into civilian service. One of these latter helicopters also crashed and was written-off and all remaining aircraft have disappeared from civil registers. The Reynolds-Alberta Museum, located in Wetaskiwin, AB, lists a 1953 Sikorsky S-58 as being part of its collection and this aircraft was also painted in a pseudo-RCAF "Rescue" colour scheme (but without any serial number or any other markings). This helicopter is not, however, an ex-RCAF aircraft and may instead be an ex-USMC Sikorsky UH-34D/E *Seahorse*, c/n 58-730, which was later sold and became N94495 on the US civil register.

## ABBREVIATIONS

AB	=	Alberta (Canada)
Comm	=	Communication (Flight)
C/N	=	Construction Number
Flt	=	Flight
KU	=	Composite (Flight)
MB	=	Manitoba (Canada)
ON	=	Ontario (Canada)

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<sup>1</sup> Drawn from: A-GA-135-001/AA-001 *Manual of Flight Safety for the CF*

OTU	=	Operational Training Unit
RCAF	=	Royal Canadian Air Force
S/N	=	Serial Number
Sqn	=	Squadron
SOS	=	Struck Off Strength
Stn	=	Station
TOS	=	Taken On Strength
US	=	United States

### **RCAF RANKS**

Aircraftman, 2nd Class	-	AC2
Aircraftman, 1st Class	-	AC1
Leading Aircraftman	-	LAC
Corporal	-	Cpl
Sergeant	-	Sgt
Flight Sergeant	-	F/Sgt
Warrant Officer, 2nd Class	-	WO II
Warrant Officer, 1st Class	-	WO I
Pilot Officer	-	P/O
Flying Officer	-	F/O
Flight Lieutenant	-	F/L
Squadron Leader	-	S/L
Wing Commander	-	W/C
Group Captain	-	G/C
Air Commodore	-	A/C
Air Vice-Marshal	-	A/V/M
Air Chief Marshal	-	A/C/M

### **REFERENCES**

#### **Canada Aviation & Space Museum:**

- RCAF H-34 Equipment Record Cards

#### **Library & Archives Canada:**

- R112 Vol 33466 RCAF File 1038EE81 - Equipment & Supplies - Sikorsky (H-34) Helicopter - Procurement
- R112 Vol 33467 RCAF File 1038EE-180 - Equipment & Supplies - Sikorsky (H-34) Helicopter
- R112 Vol 33467 RCAF File 1038EE-182 - Equipment & Supplies - Sikorsky (H-34) Helicopter
- R-24 Vol 33468 Box 6473 HQ-1038ET-80 -Equipment and Supplies:A/C- Sikorsky Helicopter - Part 4
- Heritage Canada: Royal Canadian Air Force operations record books : Microfilm # C-12404
- Heritage Canada: Royal Canadian Air Force operations record books : Microfilm # C-12405

#### **Books**

- Griffin, J.A., *Canadian Military Aircraft - Serials and Photographs*, Canadian War Museum, Ottawa, ON. 1969

#### **Articles:**

- Heaslip, R.T. "Molding the Mid Canada Radar Line", *Canadian Aviation*, July - August 1968
- French, S.G. "The Mid-Canada Line Part Two", *Roundel Magazine* - May 1958
- French, S.G. "The Mid-Canada Line Part Three", *Roundel Magazine* - Jun - Jul 1958
- "Sikorsky S-58", *Flight Magazine* - 11 November 1955
- "Ten killed, one injured when chopper crashes near military base", *Edmonton Journal*, 17 Apr 1961
- "Last of the H-34s", *Sentinel Magazine* - May 1972.

#### **Websites**

- <http://www.helis.com/database/model/865/>