



Restrel Publications



SIKORSKY CH-124 SEA KING ROYAL CANADIAN AIR FORCE SERIAL NUMBERS & INDIVIDUAL HISTORIES



by T.F.J. Leversedge

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Overview

This publication is intended to provide a brief overview / summary of individual aircraft histories using information drawn from personal documents / records and other publicly available references identified at the end of the publication. In addition, this information has been further supplemented and / or verified against available RCAF incident / accident reports.

About the Author



Terry Leversedge was born in Moose Jaw, Saskatchewan, while his father was serving at Royal Canadian Air Force (RCAF) Station Moose Jaw. He later graduated from the Royal Military College, Kingston, with a degree in Mechanical Engineering in 1979, and then received a Masters degree in aerospace vehicle design from the Cranfield Institute of Technology in the United Kingdom. His career in military aerospace engineering encompassed a wide number of positions at both field units and within the headquarters of the RCAF, before he retired after 35 years of service at the rank of Brigadier General. Now an aviation consultant and amateur historian, he is the author of other commercially available books on Canadian military aviation subjects and has published numerous articles as the Editor-In-Chief at *Airforce* magazine, the flagship publication of the Royal Canadian Air Force Association.

Additional Information

The information in this serial as accurate and up to date as possible based upon the available public sources. It should not, however, be construed as an "official" list nor 100% accurate. Any errors of commission or omission are solely those of the author. As with all endeavours of this nature, however, the author would be pleased to hear of any additional information and / or corrections. Please provide any details to: Kestrel Publications at kestrelpubs@gmail.com

Dedication

This publication is dedicated to all those who flew and maintained these CH-124 *Sea King* aircraft and especially to those who gave their lives in the service of their country while flying or maintaining them.

Cover Image Notes

A CH-124 #4007 in the original colour scheme for the Royal Canadian Navy. - (CF Photo # SWC88-513-13)



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CH-124 Sea King Serials

	Designer	Manufacturer	c/n	variant or model	name
4001 124401	Sikorsky	Sikorsky in USA	61-179	CH-124A / B / B-2	Sea King
<p>TOS: 14 August 1970 - renumbered from RCN 4001</p>					
<p>With HS 50 at Shearwater shortly after Integration. Onboard HMCS Athabaskan in 1979, for visit to Dublin, Ireland. Operated from HMCS Annapolis, by 443 Squadron, during tour of Great Lakes in 1982. Converted to CH-124B. One of 6 CH-124B updated with HELTAS to CH-124B-2 standard early 1990s. Received nose mount for FLIR. Crashed on take-off from HMCS Iroquois (DDH-280), back onto the flight deck during an emergency recovery, after a single engine failure, on 27 Feb 2003. Rolled onto its starboard side, spilling its fuel tanks, plus 2,200 rounds of 7.62mm ammunition. Cat "B" damage. The ship was 100 km south east of Halifax NS, en route to the Arabian Sea for Operation <i>APOLLO</i>. All four aircrew successfully evacuated the aircraft with only minor injuries. The heavily damaged aircraft was secured on deck and the ship returned to Halifax where the airframe was recovered by crane. Rebuilt as a training aid, returned to CAF in December 2004. Retired to Shearwater Aviation Museum on 28 July 2018 and preserved in its original RCN colour scheme.</p>					
<p>SOS: 28 Jul 2018 - Preserved at Shearwater Aviation Museum, Shearwater, NS</p>					
4002	Sikorsky	Sikorsky in USA	61-189	CH-124A	Sea King
<p>TOS:</p>					
<p>On Nov. 30, 1967, crewmen Cdr Claire Tully and PO Douglas Mander are killed when #4002 crashes at sea due to pilot error near HMCS Bonaventure. Having just completed an instrument overshoot procedure off a night radar approach to the aircraft carrier HMCS <i>Bonaventure</i>, Sea King 402 was established on radar vectors at 200 feet altitude and 90 knots airspeed in transit to a designated holding area. The crew had been airborne for 3.5 hours under instrument meteorological conditions (IMC). The helicopter was scheduled to fly an additional 30 minutes prior to final recovery. Distracted by the presence of another Sea King (#12427) operating in the same area, neither pilot recognized the subtle aircraft descent profile until water impact. Both pilots were ejected through the front windows while still strapped in their seats. The observer and naval aircrew man in the cabin area both perished on impact, while the two pilots were ejected on impact and miraculously survived and were later rescued by naval personnel.. This was the first of 14 accidents to claim both a Sea King and to cause casualties.</p>					
<p>SOS: 30 Nov 1967 - Cat "A" write-off</p>					
4003 124403	Sikorsky	Sikorsky in USA	61-191	CH-124A	Sea King
<p>TOS: 14 August 1970 - renumbered from RCN 4003</p>					
<p>Received SKIP upgrades c.1972, to become a CH-124A. Served with HU 21 At Shearwater, dates unknown. Based at from CFB Shearwater, NS, with FLIR nose mount, in 1990's. Operated from HMCS Preserver.</p>					
<p>SOS: 2018 - Scrapped by Dartmouth Metals in Sep 2018</p>					
4004 124404	Sikorsky	Sikorsky in USA	61-219	CH-124A	Sea King
<p>TOS: 14 August 1970 - renumbered from RCN 4004</p>					
<p>With No. 443 Squadron at CFB Shearwater, NS. Onboard HMCS Annapolis and HMCS Fraser in 1983. Received "Gulf War" modifications for Operation FRICTION, 1991. At IMP, for overhaul or in storage, in 1995. Rotor brake caught fire during shut down at CFB Shearwater, NS, on 19 July 1999. Caused by broken hydraulic line, spraying fluid on brake disc. Fitted with nose FLIR installation. Participated in final Sea King formation flight by 443 Sqn before the fleet's retirement on 15 Dec 2018.</p>					
<p>SOS: 15 Dec 2018 - Sold to Rotor Maxx Support - 30 Oct 2019</p>					



4005 124405	Sikorsky	Sikorsky in USA	61-202	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4005					
Operated by No. 423 Squadron at CFB Shearwater, NS. Onboard HMCS Nipigon, 1982. Received "Gulf War" modifications for Operation FRICTION, 1991. Operated in UN mission to East Timor, Operation TOUCAN. With 406 (HT) Squadron, CFB Shearwater, 1999. Later with 443 Squadron. In 2010, this a/c was repainted in original RCN colours to commemorate 100th anniversary of the RCN. As one of the last Sea Kings flying; it was flown to Trenton on 20 Nov 2018 for preservation by the National Air Force Museum of Canada (NAFMC). Retired with 17,755 flying hours.					
SOS: 20 Nov 2018 - Preserved at NAFMC, Trenton, ON					
4006 124406	Sikorsky	United Aircraft Canada	61-207	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4006					
With HS 50 at Shearwater when renumbered. With VT 406, 1983. Seen onboard HMCS Athabaskan in 1983. Received nose mount for FLIR.					
SOS: 2018 - Scrapped by Dartmouth Metals 2018					
4007 124407	Sikorsky	United Aircraft Canada	61-213	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4007					
Onboard HMCS Saguenay in 1982. Deployed on HMCS Calgary. Received nose mount for FLIR. With 406 (HT) and 443 Squadrons, CFB Shearwater, 1999. This a/c was repainted in original RCN colours to commemorate 25 th anniversary of type in service on 2 August 1988. This aircraft also received a special paint scheme which commemorated the 60 th anniversary of 443 Squadron operations. Retired and preserved at the Comox Air Force Museum (CAFM) in 2019.					
SOS: 2018, Preserved at CAFM, Comox, BC					
4008 124408	Sikorsky	United Aircraft Canada	61-218	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4008					
With No. 433 Squadron in 1982, VT 406 in 1983, all at CFB Shearwater, NS. Operated from HMCS Annapolis in 1982. With No. 433 Squadron in 1995. With 423 Squadron, CFB Shearwater, 1999. Retired and then displayed at the Shearwater Aviation Museum in 2013 - 2019.					
SOS: 29 July 2013 - Sold to Rotor Maxx Support - July 2019					
4009 124409 910B	Sikorsky	United Aircraft Canada	61-234	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4009					
With No. 423 Squadron. Onboard HMCS Assinaboine, 1982. Ditched 4 November 1987 near CFB Shearwater. While conducting a post-maintenance test flight in the local Shearwater dip sector area, a newly installed main gear box (MGB) chip detect light illuminated which indicated potential problems within the recently refurbished MGB transmission. Several attempts to burn off the debris using the new and unfamiliar automatic chip burn-off system proved unsuccessful. Anticipating a catastrophic MGB failure, the aircraft captain executed an immediate controlled ditching in the Halifax harbour approaches. Once safely established on the water surface, the aircraft was shut down and the crew exited the aircraft, which sank after approximately 45 minutes on the ocean surface. The aircrew were rescued by a second Sea King crew operating in the local area and returned to Shearwater without injury. The aircraft was subsequently salvaged and became ground instruction airframe #910B from 3 April 1994, used at CFB Borden. Still there in 1995, when it was declared surplus.					
SOS: 1995? - Likely scrapped					



4010 124410	Sikorsky	United Aircraft Canada	61-245	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4010					
Reported by Rankin-Lowe and Cline as received "Gulf War" modifications for Operation FRICTION, 1991; and at CFB Shearwater in 1995. Participated in final Sea King formation flight by 443 Sqn before the fleet's retirement on 15 Dec 2018.					
SOS: 15 Dec 2018 - Sold to Rotor Maxx Support - 30 Oct 2019					
4011 124411	Sikorsky	United Aircraft Canada	61-249	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4011					
Visited King George V docks in Glasgow, Scotland in late 1970s, with #124422. Ditched 19 September 1989 into the Atlantic off Bermuda. Believed to be with No. 406 Squadron at the time. This uniquely configured test aircraft from the Helicopter Operational Test and Evaluation Facility (HOTEF) was embarked on HMCS <i>Fraser</i> in support of operational flight trials. Operating at mid-day in the Bermuda operations area, the crew suddenly experienced indications of a massive MGB transmission failure. Once an actual loss of MGB transmission oil was confirmed, the aircraft was ditched. A decision to shut down followed because the tail rotor blades were striking the ocean surface in a pronounced sea-swell condition. All crew members successfully departed the aircraft before it sank and eventually were returned to <i>Fraser</i> . The crash Highlighted a generic MGB transmission deficiency inherent to the Sea King fleet. The airframe was eventually recovered and became ground instruction airframe at CFB Shearwater.					
SOS: 14 February 1990 - Struck off, but remained in use as instructional airframe.					
4012 124412	Sikorsky	United Aircraft Canada	61-253	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4012					
Received "Gulf War" modifications for Operation FRICTION, 1991. With 423 Squadron, CFB Shearwater, 1999. Also served with 443 Squadron.					
SOS: 2018 - Sold to Rotor Maxx Support - 21 July 2019					
4013 124413	Sikorsky	United Aircraft Canada	61-256	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4013					
Received "Gulf War" modifications, for Operation FRICTION, 1991. With No. 443 Squadron when it visited downtown Vancouver on 21 September 2004. Carried nose FLIR at that time. Still with No. 443 Squadron on west coast in 2005.					
SOS: 2018 - Sold to Rotor Maxx Support - 4 Dec 2019					
4014 124414	Sikorsky	United Aircraft Canada	61-260	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4014					
With 406 (HT) Squadron, CFB Shearwater, NS in 1983 and 1999. Used as water landing trainer in 1995. Aircraft in this role can be recognized by yellow tape applied around access door seams on nose and lower fuselage. Rotor strike on rear fuselage during tight turn while taxiing at Shearwater, 16 June 1999. With No. 443 Squadron, dates not known.					
SOS: 2018 - Sold to Rotor Maxx Support - 22 Jun 2020					



4015 124415	Sikorsky	United Aircraft Canada	61-264	CH-124A	Sea King
TOS: 14 August 1970? - renumbered from RCN 4015					
Struck off, after being lost at sea due to engine compressor problems near Bermuda on 24 June 1969. The HMCS <i>Saguenay</i> help was conducting early-morning daylight crew training just off the coast of Bermuda. While established in the hover with 50 feet of sonar ball deployed in the water, both the No.2 engine fire light and the "T" handle light suddenly illuminated. As the ball was being raised to depart the hover and achieve safe single-engine flight parameters, the aircraft captain suddenly noted No.2 engine temperature pegged at maximum and elected to secure the hot engine prior to attaining forward flight airspeed. Unable to stay airborne with one engine, the aircraft ditched straight ahead into the wind. While attempting to water taxi after the landing, the second engine also failed, at which point all aircraft systems were secured and the crew abandoned the aircraft. The aircrew and passenger (ship's captain) departed the aircraft without incident and were rescued by local vessels. This CAF serial number is reported in some sources, but it was probably still not marked before aircraft was struck off.					
SOS: 12 September 1969 - Cat "A" write-off					
4016 124416	Sikorsky	United Aircraft Canada	61-282	CH-124A/CH-124B	Sea King
TOS: 14 August 1970 - renumbered from RCN 4016					
With VT 406, dates not known. Operated from HMCS Athabaskan, 1977. Converted to CH-124B. Served with 443 Squadron, CFB Shearwater, NS. At IMP, for overhaul or storage, in 1995. Seen at London, ON air show in 1999.					
SOS: 2018 - Sold to Rotor Maxx Support - 27 Oct 2020					
4017 124417	Sikorsky	United Aircraft Canada	61-283	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4017					
Operated from HMCS Saguenay, 1983. Received "Gulf War" modifications for Operation FRICTION, 1991. With 423 Squadron, CFB Shearwater, NS in 1999. Took part in 2005 Abbotsford air show. With No. 443 Squadron in November 2005. Repainted in RCN colour scheme prior to retirement of the fleet. Participated in final Sea King formation flight by 443 Sqn before the fleet's retirement on 15 Dec 2018.					
SOS: 15 Dec 2018; Preserved at 443 Sqn, Esquimalt, BC					
4018 12418	Sikorsky	United Aircraft Canada	61-285	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4018					
With HS 50 when it ditched on 26 April 1973. Converted to utility configuration, no change in designation, but unofficially known as a CH-124U. Later received SKIP upgrades to become a CH-124A. On 26 April 1973 while crew training in the Shearwater dipping area, the a/c suffered an engine failure while in the hover. The a/c impacted the water heavily; the crew egressed safely but the a/c sank. The airframe was later recovered but was heavily damaged and written-off. The engine failure was eventually attributed to the failure of the No. 2 bearing static seal.					
SOS: 7 January 1974 - Cat "A" write-off					
4019 124419	Sikorsky	United Aircraft Canada	61-285	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4019					
Converted to utility configuration, no change in designation, but unofficially known as a CH-124U. Later received SKIP upgrades, to become a CH-124A. Served with VT 406, dates not known. Sustained serious damage on 27 Aug 2003, while serving with 443 Squadron.					
SOS: 2018 - Sold to Rotor Maxx Support - 4 Aug 2020					



4020 124420	Sikorsky	United Aircraft Canada	61-286	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4020					
On Nov 7, 1971 the a/c suffered a single engine failure on take-off from HMCS <i>Nipigon</i> while in the Caribbean Sea. Pilot attempted to return while also dumping fuel. Flight deck ready for emergency recovery but a/c became uncontrollable and crashed near the ship. Black moonless night. Both pilots and the observer perished on water impact, while the navigator miraculously managed to egress the submerged aircraft through the tactical navigator's side window. Arriving in the crash location minutes after the crash, <i>Nipigon's</i> rescue boat recovered the navigator (Lt (N) Bud MacLean) amongst the aviation fuel and aircraft debris. Date was 7/11 local, so 8/11 GMT. (HEG, ship air controller).					
SOS: 28 August 1972 - Cat "A" write-off					
4021 124421	Sikorsky	United Aircraft Canada	61-287	CH-124A / C	Sea King
TOS: 14 August 1970 - renumbered from RCN 4021					
With No. 423 Squadron at CFB Shearwater, NS in 1982. Converted to CH-124C. Operated by Helicopter Operational Test and Evaluation Facility, CFB Shearwater, NS, for trials including door gun firing. Rotated through regular squadron use when not involved in testing. With 406 (HT) Squadron, CFB Shearwater, 1999. Also known as CH-124A(OT&E), both this and CH-124C designation also used.					
SOS: 2018 - Sold to Rotor Maxx Support - 29 Sep 2020					
4022 124422	Sikorsky	United Aircraft Canada	61-288	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4022					
With VT 406 and No. 423 Squadron, CFB Shearwater, NS, dates not known. Visited King George V docks in Glasgow, Scotland in late 1970s, with 12411. Operated from HMCS Margaree in 1983. Lost at sea off HMCS <i>Protecteur</i> after a MGB failure. The aircraft departed HMCS <i>Protecteur</i> after a mid-day hot fuel/crew change to prosecute a submarine contact. Shortly after entering the initial sonar hover, the aircraft MGB transmission hot caution light illuminated, confirmed by the MGB oil temperature gauge that was pegged at "maximum." After making an immediate emergency distress call the aircraft left the hover to begin a 23-mile high-speed, low-level transit to <i>Protecteur</i> . Shortly after leaving the hover, however, the pilot noticed that the MGB oil pressure gauge was fluctuating and decreasing. He re-entered the hover to further evaluate the aircraft's status. Excessive heat from the MGB transmission area and a pronounced "welding-smell" convinced the captain that a catastrophic MGB transmission failure was imminent. Due to a pronounced sea swell, the aircraft was shut down immediately after water landing and the crew departed the aircraft in the six-man life raft. The Australian frigate HMAS <i>Adelaide</i> - first on scene - recovered all crewmembers and returned them to <i>Protecteur</i> . The aircraft sank approximately 45 minutes after ditching in extremely deep water that precluded aircraft salvage.					
SOS: 23 June 2000 - Cat "A" write-off					
4023 124423	Sikorsky	United Aircraft Canada	61-289	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4023					
With No. 443 Squadron and later No. 422 Squadron, CFB Shearwater, NS, in 1980s. Ditched on 27 February 1993 due to electrical problems off west coast of Florida, back with No. 443 Squadron by then. The HMCS <i>Nipigon</i> aircraft was conducting a night training mission in the Gulf of Mexico, operating at an altitude of 3,000 feet above an overcast cloud layer condition. A sudden "Battery Hot" cockpit indication induced the pilot to select the battery switch to "OFF" in accordance with published aircraft checklist procedures. A complete electrical failure situation ensued in night IMC. As the pilot descended the aircraft through the cloud layer with minimal flight instruments and without a flight control stabilization system, he turned the battery switch to "ON". Although some electrical capability was regained, it was considered insufficient to maintain safe night flying. Subsequent indications of smoke in the cockpit resulted in the decision to ditch the aircraft, at which point the aircrew departed the aircraft prior to sinking. Recovered 1 May 1993, but not repairable due to salt water corrosion issues					
SOS: 1 February 1995 - Cat "A" write-off					



4024 124424	Sikorsky	United Aircraft Canada	61-290	CH-124A / B / B-2	Sea King
TOS: 14 August 1970 - renumbered from RCN 4024					
With No. 423 Squadron, dates unknown. Operated from HMCS <i>Algonquin</i> during exercises of Norway in 1982. Converted to CH-124B. One of 6 CH-124B updated with HELTAS to CH-124B-2 standard early 1990s. With No. 443 Squadron in 1995. At Abbotsford air show, August 2004. Scheduled for conversion to troop transport during 2006, to support the new Standing Contingency Task Force (SCTF). Modification will include removal of HELTAS and other ASW gear, installation of seats, and upgrades to communications and self-defence gear. All conversions were to be completed in November/ December 2006. .					
SOS: 2018 2 - Sold to Rotor Maxx Support - 15 Sep 2020					
4025 124425	Sikorsky	United Aircraft Canada	61-324	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4025					
VT 406, CFB Shearwater, NS, in 1982. Converted to utility configuration, no change in designation, but unofficially known as a CH-124U. Later received SKIP upgrades, to become a CH-124A. Also reported as crashed in July 1993, apparently repaired. Crashed again on 28 Apr 1994 after an on-board fire during a ferry flight while in the cruise at 6,000 ft. The fire was initiated by a leak in a main engine fuel line that was chafed through by a drain line. During the forced landing the aircraft rolled on to its side. The wiring to the Fuel Shut Off Valves had burn through, so these could not be activated. The two pilots (Maj Bob Henderson; Maj Wally Sweetman) died and the two rear crew were seriously injured.					
SOS: 28 Apr 1994 - Cat "A" write-off					
4026 124426	Sikorsky	United Aircraft Canada	61-328	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4026					
With No. 443 Squadron, CFB Shearwater, NS. Operated from HMCS Athabaskan in 1983. Visited Portsmouth, England onboard HMCS <i>Algonquin</i> , 1 April 1984. Received Gulf War modifications for Operation FRICTION, 1991. At CFB Shearwater, NS in 1995. Also with No. 423 Squadron, dates not known.					
SOS: 2018; Preserved at CASM, Ottawa, ON					
4027	Sikorsky	United Aircraft Canada	61-330	CH-124A	Sea King
TOS:					
On 22 Feb 1968, while on exercise with the submarine HMCS <i>Onondaga</i> , #4027 experienced an engine failure and settled into the water. Three attempts to get airborne failed and, when one of the floatation bags failed to inflate, the helicopter rolled over. The two pilots, two naval air crewmen and two observers bailed out and were rescued by HMCS <i>Onondaga</i> and returned to the carrier by "Pedro" the HOS4-3 rescue helicopter. <i>Sea King</i> 4027 was hoisted aboard "Bonnie", washed with fresh water and flown to Canadian Pratt & Whitney (CP&W), Montreal, by a USAF Douglas C-124 <i>Globemaster</i> transport but, due to salt-water corrosion, could not be returned to squadron service. This helicopter was then slated to be used as a mock-up for future <i>Sea King</i> modifications.					
SOS: 22 Feb 1968 - Cat "A" write-off					
4028 124428	Sikorsky	United Aircraft Canada	61-332	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4028					
With No. 443 Squadron at CFB Shearwater, NS. At IMP, for overhaul or storage, in 1995. Onboard HMCS Ville de Québec in 2004.					
SOS: 2018; Preserved at NDHQ Carling Campus, Ottawa, ON					



4029 124429	Sikorsky	United Aircraft Canada	61-334	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4029					
Operated by No. 443 Maritime Helicopter Squadron, CFB Shearwater, NS. Also with 423 Squadron, CFB Shearwater, for detachments on HMCS <i>Huron</i> (date unknown) and on HMCS <i>Athabaskan</i> in 1983. With No. 443 Squadron in 1995. On display at CNE air show, Toronto, Ontario, September 1996. Onboard HMCS <i>Iroquois</i> , 1999.					
SOS: 2018; Preserved at CFB Borden Military Museum, Borden, ON					
4030 124430	Sikorsky	United Aircraft Canada	61-336	CH-124A / B / B-2	Sea King
TOS: 14 August 1970 - renumbered from RCN 4030					
With No. 423 Squadron at CFB Shearwater, dates not known. Converted to CH-124B. One of 6 CH-124B updated with HELTAS to CH-124B-2 standard early 1990s. At CFB Shearwater, NS in 1995. Took part in Canadian National Exhibition air show, at Toronto, ON in 2005. With No. 443 Squadron at CFB Comox in November 2005. Converted to troop transport configuration during 2006, to support the new Standing Contingency Task Force (SCTF).					
SOS: 2018; initially preserved as a training aid / egress trainer in Esquimalt, BC; sold to Rotor Maxx as 18 Feb 2021					
4031 124431	Sikorsky	United Aircraft Canada	61-338	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4031					
With No. 423 Squadron at CFB Shearwater, 1983. Later with 443 Squadron. At CFB Shearwater, NS in 1995. Operated in UN mission to East Timor, Operation TOUCAN.					
SOS: 2018; preserved at Shearwater Aviation Museum, Shearwater, NS					
4032 124432	Sikorsky	United Aircraft Canada	61-340	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4032					
With 406 (HT) Squadron, CFB Shearwater when it crashed at Shearwater on 15 November 1972 due to tail rotor buzz issues. The flight crew was assigned to conduct a post-maintenance test flight at the Shearwater, NS, heliport area. While performing controllability checks in a 20-foot hover, the aircraft unintentionally entered an out-of-wind hover flight condition known as tail rotor buzz (TRB) that exceeded Sea King tail rotor system limitations. As a result of tail rotor failure, the aircraft climbed to an altitude of approximately 100-feet, then rapidly descended to ground impact. Fortunately, the aircraft transitioned forward on descent and landed on softer ground beyond the paved tarmac area. The aircrew were carefully extracted from the aircraft wreckage with serious yet non-fatal injuries.					
SOS: 7 December 1972 - Cat "A" write-off					
4033 124433	Sikorsky	United Aircraft Canada	61-342	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4033					
With HS 50 at Shearwater when renumbered. With 406 (HT) Squadron, CFB Shearwater, dates unknown. With No. 433 Squadron in 1995.					
SOS: 2018 - Sold to Rotor Maxx Support - 7 July 2020					
4034 12434	Sikorsky	United Aircraft Canada	61-344	CH-124A / B / B-2	Sea King
TOS: 14 August 1970 - renumbered from RCN 4034					
With VT 406, dates not known. Visited Stockholm, Sweden, 18 May 1981. With 423 Squadron, 1983. Converted to CH-124B. One of 6 CH-124B updated with HELTAS to CH-124B-2 standard early 1990s. Received nose mount for FLIR. Seen at Millville, NJ, in May 2003. Converted to troop transport configuration during 2006, to support the new Standing Contingency Task Force (SCTF). This a/c was later painted in an elaborate colour scheme to commemorate the 50 th anniversary of Sea King operations.					
SOS: 2018 - Sold to Rotor Maxx Support - 1 Sep 2020					



4035 124435	Sikorsky	United Aircraft Canada	61-345	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4035					
<p>Visited Europe in late 1970s, on board unknown ship. Visited Portsmouth, England onboard HMCS Algonquin, 1 April 1984. Received nose mount for FLIR. At CFB Shearwater, NS in 1995. With HS 443 in 1997. Also with No. 423 Squadron, dates not known. Suffered serious Cat "B" damage on 15 Jul 2013. The crew planned a night trainer in the local Shearwater area and boarded the aircraft during a hot refuel with engines running and rotors turning. The aircraft had ground taxied to take off from Helipad #3 when it was recalled back to the inner ramp so that the aircraft captain could sign additional electronic aircraft records prior to the flight. After the aircraft came to a complete stop, the aircraft captain started removing his safety harness. The co-pilot then transferred control of the collective lever to the aircraft captain and, at the same time, was motioning to the marshaller. The a/c then pitched forward rapidly. As the a/c's tail rose, the a/c rotated forward and pivoted on the extended main landing gear oleos before lifting off the ground. The main rotor disk then tilted rearward and impacted the tail pylon, causing it to separate from the fuselage. Once the a/c fell back to the ground and started yawing right, it then rolled left as the left sponson collapsed and the main rotor blades struck the ground at the pilots' 11 o'clock position. The aircraft yawed 120 degrees to the right before coming to rest on its left side, after which the crew conducted an emergency shutdown and egressed through the personnel door. There were no injuries or post-accident fire though flying debris damaged the surrounding hangars.</p>					
SOS: 2018 - Scrapped by Dartmouth Metals in 2018					
4036 124436	Sikorsky	United Aircraft Canada	61-347	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4036					
<p>With No. 423 Squadron, dates not known. With 443 Squadron, CFB Shearwater, NS. With No. 443 Squadron at CFB Comox in 1995 and in November 2005.</p>					
SOS: 2018 - Sold to Rotor Maxx Support - 13 Oct 2020					
4037 124437	Sikorsky	United Aircraft Canada	61-380	CH-124A / B / B-2	Sea King
TOS: 14 August 1970 - renumbered from RCN 4037					
<p>With No. 423 and No. 443 Squadrons, CFB Shearwater, NS, dates not known. Onboard HMCS Huron in 1982. Onboard HMCS Fraser, Athabaskan and Protecteur in 1983. Converted to CH-124B. One of 6 CH-124B updated with HELTAS to CH-124B-2 standard early 1990s. At CFB Shearwater, NS in 1995. Converted to troop transport configuration during 2006, to support the new Standing Contingency Task Force (SCTF).</p>					
SOS: 2018 - Sold to Rotor Maxx Support - 14 Nov 2020					
4038 124438	Sikorsky	United Aircraft Canada	61-381	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4038					
<p>Converted to CH-124A in 1975 / 1976, as a result of SKIP upgrade. With 423 Squadron, 1983, while onboard HMCS Skeena. Converted to Operation Friction configuration 1991, no change in designation. Operated in support of UN mission in Somalia, 1993, with nose FLIR mount. At CFB Shearwater in 1995. Crashed in North Sea on 2 February 2006, 18:34 UTC, in open water, at the Kattegat, NW of the island of Anholt, Denmark, while operating from HMCS Athabaskan in NATO exercise. Ship was assigned to Standing NATO Force Atlantic. The tail rotor / boom struck water during flare while attempting a night landing on board. The helicopter pitched forward, became airborne again, and began to yaw to the right. The helicopter then impacted the water in a near level attitude and, while still yawing right, rolled left. Water flooded the helicopter almost immediately as it rolled inverted. All five crewmembers then egressed and were recovered to the Athabaskan, by Zodiac, within approximately 15 minutes. One crewmember received minor injuries. The aircraft remained afloat for approximately one hour, and then sank in 16 m of water. The wreckage was hoisted to surface next day, taken to harbour of Aarhus, Denmark on barge. Cat "A" damage sustained.</p>					
SOS: 02 Feb 2006 - Cat "A" write-off					



4039 124439	Sikorsky	United Aircraft Canada	61-382	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4039					
With VT 406, CFB Shearwater, NS, in 1982. Still with this unit when it crashed on 4 August 1991 at air show in Schenectady, New York. Aircraft approached landing from a high hover, and apparently entered ring vortex state during descent, resulting in sudden and large increase in sink rate close to the ground. One landing gear sponson collapsed on impact causing the aircraft to roll onto its side, which then destroyed the main rotor blades prior to engine shutdown. Several minor crew injuries were experienced. Originally classified as Cat "B" (repairable), but later re-classified as Cat "A" write-off on 21 August 1991. To Aircraft Maintenance Development Unit at CFB Trenton on 25 August 1991.					
SOS: 21 August 1991 - Cat "A" write-off					
4040 124440	Sikorsky	United Aircraft Canada	61-383	CH-124A	Sea King
TOS: 14 August 1970 - renumbered from RCN 4040					
With HS 50 at Shearwater when renumbered. This a/c received a special paint scheme to commemorate 75th anniversary of the RCAF. With 406 (HT) Squadron, CFB Shearwater. Received nose mount for FLIR. Onboard HMCS Ville de Quebec 23 September 2005, for NATO exercises in Baltic Sea. Still operating in North Sea on 7 October 2005. Seviceability problems during later visit to the UK, diverted to Stornoway for repairs. May have been on HMCS <i>Halifax</i> at that time? Still with NATO group in March 2006, when it visited Woensdrecht, Holland. Seen at De Kooy, Holland on 18 to 23 March 2006, reportedly off HMCS <i>Athabaskan</i> . On board HMCS Regina in 2013.					
SOS: 2018 - Sold to Rotor Maxx Support - 30 Oct 2019					
4041 124441	Sikorsky	United Aircraft Canada	61-384	CH-124A / B / B-2	Sea King
TOS: 14 August 1970 - renumbered from RCN 4041					
With No. 423 Squadron at CFB Shearwater, NS, 1982. With 443 Squadron, onboard HMCS <i>Athabaskan</i> , in 1983. Converted to CH-124B. One of 6 CH-124B updated with HELTAS to CH-124B-2 standard early 1990s. Still with No. 423 Squadron, CFB Shearwater, in 1999. Converted to troop transport configuration during 2006, to support the new Standing Contingency Task Force (SCTF).					
SOS: 2018 - Preserved at Shearwater Aviation Museum, Shearwater, NS					

ADDITIONAL NOTES

In summary, the RCN / RCAF received a total of 41 *Sea King* helicopters. It was referred to in RCN documentation as the CHSS-1 and in CF technical documentation as the "CH-124 Sea King".

Operating Units

The following units flew CH-124 *Sea King* helicopters:

- HS-50 (RCN), Shearwater, NS
- VX-10 (RCN), Shearwater, NS
- VT406 / No. 406 (Operational Training) Squadron, Shearwater, NS
- No. 423 (Maritime Helicopter) Squadron, Shearwater, NS
- No. 443 (Maritime Helicopter) Squadron, Esquimalt, BC
- Helicopter Operational Test & Evaluation Flight (HOTEF), Shearwater, NS
- Aerospace Engineering Test Establishment (AETE), Cold Lake AB



Aircraft (or Air Vehicle) Damage Level (ADL) Categories ¹

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 CF CH-124 Sea King Cat "A" write-offs = 14 (~ 34% of the total fleet)

Sea King Attrition Summary

NB: This is an excerpt of an article originally published in *Airforce Magazine*, (Winter, 2008). It is reprinted here with the permission of the publisher. The article provides an analysis of the fates of the lost *Sea Kings* as follows:

As the Maritime Helicopter community reflects on 40 years of CH-124 *Sea King* operational service, one sobering thought relates to the fact that only 27 of 41 original aircraft remain on the Canadian Forces inventory. Catastrophic accidents have claimed a total of 14 aircraft since the helicopter first entered military service in the mid-1960s, together with the loss of seven naval aviators. Given the unforgiving nature of low-level maritime aviation, and the unsavoury maritime elements, a 33 percent aircraft attrition rate over such a long period could be viewed as impressive on one hand, yet offer some cause for reflection on the other.

Calamitous aviation accidents tend to assume mythical proportions over time, ultimately become distorted through rumour, gossip and innuendo. Initially, the purpose of this article was merely to chronicle the circumstances surrounding each missing *Sea King* aircraft to distinguish fact from fiction. As the data was being compiled and reviewed, however, some intriguing trends began to emerge in the form of statistical tendencies.

The 55-year Saga (1969-2018). A snapshot synopsis of the 14 major *Sea King* accidents is provided in Table 1. This lists each aircraft loss in chronological order along with pertinent investigative details.

Table 1 – CH-124 Sea King Attrition

Ser.	A/C#	Date	Accident Location	Salvage	Fatality	Cause (Primary)
1	402	Nov 67	At Sea	No	2	Pilot - Fatigue
2	427	Feb 68	At Sea	No	0	Engine - Failure

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



3	415	Jun 69	At Sea	No	0	Engine - Compressor
4	420	Nov 71	At Sea	No	3	Engine - Failure
5	432	Nov 72	Shearwater	N/A	0	Pilot – Tail Rotor
6	418	Apr 73	Off Halifax	No	0	Engine - Failure
7	409	Nov 87	Off Halifax	Yes	0	MGB – Chip Lights
8	411	Sep 89	At Sea	No	0	MGB – Oil Loss
9	439	Aug 91	Schenectady, NY	N/A	0	Pilot – Vortex Ring
10	423	Feb 93	At Sea	Yes	0	Electrical - Battery
11	425	Apr 94	Saint John, NB	N/A	2	Engine - Fire
12	422	Jun 00	At Sea	No	0	MGB – Overheat
13	401	Feb 03	At Sea	Yes	0	Engine – Power Loss
14	438	Feb 06	At Sea	Yes	0	Pilot

It readily becomes apparent that engines, transmissions (MGB – Main Gear Boxes), and personnel input were the three primary cause ingredients related to *Sea King* attrition. Such findings tend to confirm the late-1990s NDHQ decision to upgrade the *Sea King* fleet with enhanced GE MK100 engines and 24000 series MGBs was appropriate. Indeed, the documented evidence suggests that the improved engine and transmission programs most likely saved many aircraft and lives.

While only seven human fatalities are associated with the Table 1 accident summary review, eight airmen were actually lost on *Sea Kings* over this 55-year period. The eighth aircrew fatality was a Naval Aircrewman, P1 (Royal Navy) Ron Greenbury, who was declared missing on Mar 22, 1967 during a night low-level training mission in the Shearwater dip sectors. Indicating that he was moving to the rear cabin area to investigate a fuel leak, the aircrewman disappeared – never to be seen again. Despite an exhaustive search of the aircraft and the training area, no trace of the missing airman has ever been found. His fate remains a mystery to the present day.

Epilogue

Following the retirement of the *Sea King* helicopter in December 2018, the Department of National Defence and Public Services and Procurement Canada developed a divestment plan for the venerable aircraft. Nine helicopters were selected to be displayed publicly and one was kept as a training aid. The remaining fifteen aircraft were identified for sale to a qualified bidder. Rotor Maxx Support (RMS) Limited, a Canadian-based company in BC, was the eventual successful bidder and purchased these helicopters along with associated spare parts. The company intends on refurbishing the aircraft and remarketing them to eligible customers. The 15 ex-CH-124s will complement RMS's current fleet of eight civilian S61s and allow for expansion of its existing aircraft leasing/sale and total aircraft support (TAS) programs. The acquisition includes a significant inventory of parts, tooling and equipment which, when



added to RMS's already comprehensive stock, will contribute extensively to the TAS program included with each aircraft delivery.

ABBREVIATIONS

AB	=	Alberta (Canada)
BC	=	British Columbia (Canada)
CF	=	Canadian Forces
CFB	=	Canadian Forces Base
C/N	=	Construction Number
FE	=	Flight Engineer
Flt	=	Flight
NF	=	Newfoundland (Canada)
NS	=	Nova Scotia (Canada)
ON	=	Ontario (Canada)
OTU	=	Operational Training Unit
RCAF	=	Royal Canadian Air Force
RCN	=	Royal Canadian Navy
SK	=	Saskatchewan (Canada)
S/N	=	Serial Number
Sqn	=	Squadron
SOS	=	Struck Off Strength
TOS	=	Taken On Strength
UK	=	United Kingdom

RCAF RANKS (After 1968)

Private	-	Pte
Corporal	-	Cpl
Master Corporal	-	MCpl
Sergeant	-	Sgt
Warrant Officer	-	WO
Master Warrant Officer	-	MWO
Chief Warrant Officer	-	CWO
Officer Cadet	-	Ocdt
2nd Lieutenant	-	2nd Lt
1st Lieutenant	-	Lt
Captain	-	Capt
Major	-	Maj
Lieutenant Colonel	-	LCol
Colonel	-	Col
Brigadier General	-	BGen
Major General	-	MGen
Lieutenant General	-	LGen

RCN RANKS (Before 1968)

Ordinary Seaman	-	O/S
Able Seaman	-	A/S
Leading Seaman	-	L/S
Petty Officer 2nd class	-	PO 2nd
Petty Officer 1st class	-	PO 1st
Chief Petty Officer 2nd class	-	CPO 2nd
Chief Petty Officer 1st class	-	CPO 1st
Midshipman	-	Mid
Acting Sub-Lieutenant	-	AS/Lt
Sub-Lieutenant	-	S/Lt
Lieutenant (N)	-	Lt (N)
Lieutenant Commander	-	LtCdr
Commander	-	Cdr
Captain (N)	-	Capt (N)
Commodore	-	Cmdre
Rear Admiral	-	RAdm
Vice Admiral	-	VAdm

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(Updated as of May 2023)

