

Restrel Publications

BOEING CH-147F CHINOOK ROYAL CANADIAN AIR FORCE SERIAL NUMBERS & INDIVIDUAL HISTORIES



by T.F.J. Leversedge

COPYRIGHT

Copyright © 2019. All rights reserved. No part of this electronic file may be further reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and digital recording, or by any information storage and retrieval system, without permission in writing from the publisher.

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 <u>not</u>, 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 <u>kestrelpubs@gmail.com</u>

Dedication

This publication is dedicated to all those who fly and maintain these CH-147 aircraft.

Cover Image Notes

CH-147 #147303 is seen here shortly after its initial delivery to the RCAF. - (CF Photo # FA2013-2001-02)



CH-147 Serials

Serial#	Manufacturer	c/n	Designation	Model	Name
147001	Boeing-Vertol	6001/G-001	CH-147	CH-147C	Chinook

TOS: 18 October 1974 - Taken on strength, for record keeping purposes only

US serial 74-22058 assigned, never marked while with CF. Lost on delivery flight to Canada on 18 October 1974, following gear failure in main combining gear box, caused by undetected metal infraction in gear blank before machining. This failure led to drive shaft failure and loss of synchronization. Five fatalities. After lengthy litigation, this airframe was replaced by #147009.

SOS: 29 October 1975 - Cat "A" write-off

147002	Boeing-Vertol	6002/G-002	CH-147	CH-147C	Chinook
--------	---------------	------------	--------	---------	---------

TOS: 9 October 1974 - Taken on strength

US serial 74-22059 assigned, never marked while with CF. With No. 450 Squadron at CFB Ottawa, ON. To Valcartier in August 1977 for Exercise Non Nova, with 5 Brigade Group. To NAS Quonset Point for trials slinging torpedos in February 1979. Recovered escape capsule from USAF F-111 crash in August 1980, north of CFB Bagotville, QC. To CFB Meaford, ON in January 1981 for artillery lifts with Chinooks from US Army 159th Company. To CFB Gagetown, NB in June 1981 for Exercise RV 81. Destroyed at Rankin Inlet, NWT on 17 August 1982, struck a light pole with rotors while taxiing. Aircraft overturned onto airport fuel tanks, and was destroyed by subsequent fire. Three fatalities.

SOS: 29 August 1982 - Cat "A" write-off

147003	Boeing-Vertol	6003/G-003	CH-147	CH-147C	Chinook

TOS: 10 March 1975 - Taken on strength

US serial 74-22060 assigned, never marked while with CF. With 450 Squadron, CFB Uplands, ON. Detached to St. Jean, QC to support Montreal Olympics security in summer of 1976. Took part in flying display at 1978 International Air Show, Toronto, Ont. Later with No. 447 (HT) Squadron at CFB Edmonton, AB. Took part in Canadian/US/RAF mountain flying exercise at Vernon, BC in September 1980. To CFB Gagetown, NB in June 1981 for Exercise RV 81 with this Squadron. Converted by Boeing to CH-47D from 1994, new US serial 93-0661, conversion number M.3661, new company number B725. Delivered to RNLAF on 3 August 1996, their serial number NL001, later D-661. Named "Red October", after a near "incident" during water landing trials. Operated by 298 Squadron. Supported UN operations in Ethiopia and Eritrea in 2001, and in the Former Yugoslavia in 2002. Still active January 2009.

SOS: 7 January 1992 - Struck off, returned to US; further service with RNLAF

147004 Boeing-Vertol	6004/G-004	CH-147	CH-147C	Chinook
----------------------	------------	--------	---------	---------

TOS: 25 March 1975 - Taken on strength

US serial 74-22061 assigned, never marked while with CF. With No. 447 Squadron at CFB Namao, AB and No. 450 Squadron at CFB Uplands, ON. Operated in support of mapping exercises on Baffin Island in June 1978. Delivered two 105 mm guns and crews of 30th Field Regiment, Royal Canadian Artillery from Ottawa to Fort Drum, NY in March 1980. Picked up a Platoon from 48th Highlanders from Moss Park in downtown Toronto in May 1980 for a airmobile exercise in Camp Borden. Forced to jettison CF101 #101010 sling load into Lake Ontario on 25 June 1991, while transporting the Voodoo from Mountain View to Trenton for display. Converted by Boeing to CH-47D from 1994, new US serial 93-0662, conversion number M.3662, new company number B726. Delivered to RNLAF, on 5 April 1996 their serial number NL002, later D-662. Named "Lady Liberty". Operated by 298 Squadron, in Afghanistan by 2006. Still active November 2008.

SOS: 7 January 1992 - Struck off, returned to US; further service with RNLAF



147005 Boeing-Vertol 6005/G-005 CH-147 CH-147C Chinook

TOS: 29 April 1975 - Taken on strength

US serial 74-22062 assigned, never marked while with CF. With No. 450 Squadron at CFB Uplands, ON. Took part in Arctic 78 mapping exercise at Nanasivik, NWT in June 1978. Supported US Navy under ice torpedo trials SUBICEX 79 in March 1979. Used to recover torpedoes fired from the nuclear submarine USS *Archerfish* back to Thule Greenland from locations on the arctic ice pack between Baffin Island and Greenland. 450 Sqn received a US Secretary of the Navy commendation for this mission. Took part in Toronto International Air show in September 1979 and London Air show in June 1980. Carried Governor General Schreyer and party from Rideau Hall in Ottawa to Fesserton, ON on 18 June 1980. Took part in mountain flying exercise near Vernon, BC in September 1980. Attewmpted to recover wreckage of Otter #9407 in mountains near Newburgh, NY on 30 December 1980, after it crashed there on 20 December 1980. To CFB Gagetown, NB in June 1981 for Exercise RV 81 with 450 Squadron. Converted by Boeing to CH-47D from 1994, new US serial 93-0663, conversion number M.3663. Delivered to RNLAF on 8 March 1996, their serial number NL003, later D-663, new company number B728. Named "Blizzard". Operated by 298 Squadron. Still active January 2009.

SOS: 7 January 1992 - Struck off, returned to US; further service with RNLAF

147006 Boeing-Vertol 6006/G-006 CH-147 CH-147C Chinook

TOS: 22 May 1975 - Taken on strength

US serial 74-22063 assigned, never marked while with CF. With No. 450 Squadron at CFB Uplands, ON. To CFB Namao detachment (later 447 Squadron) in 1975. Deployed to NWT in January 1978 in support of Operation Morning Light, recovery of radioactive portions of a Russian satellite that landed in Canada. Converted by Boeing to CH-47D from 1994, new US serial 93-0664, conversion number M.3664, new company number B729. Delivered to RNLAF on 29 December 1995, their serial number NL004, later D-664. Named "Sling King". Operated by 298 Squadron, in Afghanistan by 2006. Still active January 2009.

SOS: 19 December 1991 - Struck off, returned to US; further service with RNLAF

147007	Boeing-Vertol	6007/G-007	CH-147	CH-147C	Chinook

TOS: 18 June 1975 - Taken on strength

US serial 74-22064 assigned, never marked while with CF. To CFB Namao detachment (later 447 Squadron) in 1975. Deployed to NWT in January 1978 in support of Operation Morning Light, recovery of radioactive portions of a Russian satellite. With No. 450 Squadron at CFB Ottawa, ON in 1986 when it lifted wreckage of Canso CF-HFL out of the bush in Labrador, for the Atlantic Canada Aviation Museum. See http://www.chinook-helicopter.com/history/aircraft/Canadian/canada.html for more information. Also used by No. 447 Squadron at CFB Namao, AB. Converted by Boeing to CH-47D from 1995, new US serial 93-0665, conversion number M.3665, new company number B731. Delivered to RNLAF on 28 December 1995, their serial number NL005, later D-665. Named "Bigfoot". Operated by 298 Squadron. With 1 (NL) Air Task Force in Afghanistan summer of 2007. Still active November 2008.

SOS: 7 January 1992 - Struck off, returned to US; further service with RNLAF

147008 Boe	eing-Vertol 6008/G-008	8 CH-147 CH-1	47C Chinook
------------	------------------------	---------------	-------------

TOS: 15 October 1976 - Taken on strength

US serial 74-22065 assigned, never marked while with CF. With No. 447 Squadron at CFB Namao, AB. Deployed to NWT in January 1978 in support of Operation Morning Light, recovery of radioactive portions of a Russian satellite. Took part in Exercise Rapier Thrust III, along Alaska Highway north of Fort St. John, BC in January 1979. Converted by Boeing to CH-47D from 1995, new US serial 93-0666, conversion number M.3666, new company number B732. Delivered to RNLAF on 30 January 1996, their serial number NL006, later D-666. Named "the beast", probably based on US serial number. Operated by 298 Squadron, in Afghanistan by 2006. Still in service November 2008.

SOS: 11 February 1992 - Struck off, returned to US; further service with RNLAF



147009 **Boeing-Vertol** 6009/G-009 CH-147 CH-147C Chinook

TOS: 3 March 1978 - Taken on strength

US serial 74-22066 assigned, never marked while with CF. With No. 450 Squadron at CFB Uplands, ON. Later with No. 447 (HT) Squadron at CFB Edmonton, AB. Took part in Exercise Rapier Thrust III, along Alaska Highway north of Fort St. John, BC in January 1979. To CFB Gagetown, NB in June 1981 for Exercise RV 81 with this Squadron. Converted by Boeing to CH-47D from 1995, new US serial 93-0667, conversion number M.3667, new company number B796. Delivered to RNLAF on 2 March 1996, their serial number NL007, later D-667. Named "Rodney". Operated by 298 Squadron. Still active November 2008.

SOS: 11 February 1992 - Struck off, returned to US; further service with RNLAF

147201	Boeing	B.609	CH-147	CH-147D	Chinook
--------	--------	-------	--------	---------	---------

TOS: 28 December 2008 - Accepted at Kandahar

Originally built as CH-47C, US Army serial number 68-16017, company number B.609. Converted to CH-47D, new serial number 89-00130, conversion number M.3284. Over 39 years old when supplied to CF. Purchased second hand from US Army for use by CF Joint Task Force Afghanistan Air Wing at Kandahar, Afghanistan. In storage at Davis-Monthan AFB in US, arrived on 22 September 2011. Recovered from Davis-Monthan AFB and delivered to 8 Wing Trenton, ON on 17 Over 2016 for restoration and preservation at the National Air Force Museum (NAFM) there.

SOS: 2011; preserved at NAFM, Trenton, ON

147202 Boeing B.520 CH	H-147 CH-147D Chinook
------------------------	-----------------------

TOS:

Originally built as CH-47C, US Army serial number 67-18550, company number B.520. Converted to CH-47D, new serial number 84-24181, conversion number M.3085. Over 40 years old when supplied to CF. Purchased second hand from US Army for use by CF Joint Task Force Afghanistan Air Wing at Kandahar, Afghanistan. Operational, in Canadian markings, by 8 January 2009. On 5 August 2010, Chinook CH147202 was conducting a sustainment mission outside Kandahar Airfield. While transiting at low altitude between two forward operating bases, the aircraft was forced down due to an explosion and in-flight fire. The source of ignition was reported as being due to insurgent fire that was directed towards the a/c Following the sound of a detonation, flames and black smoke immediately began entering the cabin through the left side of the open rear cargo door. Despite the presence of dark smoke in the cockpit, the pilots were able to rapidly and successfully land the a/c in an open field. After landing, all aircrew members and passengers exited the a/c, although some sustained minor injuries from the fire or during egress.

SOS: 5 August 2010 - Cat "A" write-off

147203		Boeing	B.447	CH-147	CH-147D	Chinook
	TOS:					

Originally built as CH-47C, US Army serial number 67-18477, company number B.447. Converted to CH-47D, new serial number 87-00081, conversion number M.3200. (Also reported as ex 62-2133/87-0086/M.3205?) Over 41 years old when supplied to CF. Purchased second hand from US Army for use by CF Joint Task Force Afghanistan Air Wing at Kandahar, Afghanistan. Operational, in Canadian markings, by January 2009. In storage at Davis-Monthan AFB in US, arrived on 22 September 2011. SOS: 2011; later sold



147204 Boeing B.112 CH-147 CH-147D Chinook

TOS:

Originally built as CH-47A, US Army serial number 64-13140, company number B.112, accepted on 16 July 1965. Accumulated 3,598.0 hours flying time as a CH-47A, including a tour in Viet Nam with B Company, 228th Aviation Support Helicopter Battalion. Operated with Thai Air Force before returning to the US for the CH-47D program. Converted to CH-47D from 21 October 1983, new serial number 84-24154, conversion number M.3058. By 22 June 1998 had 5,540.2 hours logged time. Over 43 years old when supplied to CF. Purchased second hand from US Army for use by CF Joint Task Force Afghanistan Air Wing at Kandahar, Afghanistan. Operational, in Canadian markings, by 8 January 2009. Carried name "Black Jack" on forward fuselage. Slight damage on shut down at Kandahar on 18 January 2009. Droop stop fell off on start, rotor blade contacted fuselage on shut down. Stop had been found on ramp, alerting crew and permitting relatively safe shut down. Further Cat "C" accident on 24 January 2010 during a night mission to include hover, simulated slung load, dust-ball and pinnacle landing training. At the time of the occurrence, the senior FE was in the forward cabin (Fwd FE) positioned at the right door and the junior FE was in the aft cabin and positioned at the ramp (Ramp FE). All five crewmembers were wearing NVGs and conducting a pinnacle landing. A pinnacle landing is where the aircraft will land either all four wheels or only the two rear wheels on an elevated surface, a mound or a ridge in order to load or off-load cargo or passengers. In the case of a two-wheel landing, the aircraft's front wheels are held off the ground during the manoeuvre. This procedure can combine various aspects of mountain flying, confined area and off-level landing techniques. The Ramp FE had opened and lowered the ramp to an abovelevel position where he positioned himself on the ramp to observe the right rear wheel and the intended landing spot. He was laying down mid way up the ramp, perpendicular to the longitudinal axis of the aircraft with his head outside of the aircraft and shoulders between the ramp and the airframe. As the wheels touched down, the Ramp FE heard a loud bang, felt the aircraft shudder and simultaneously started feeling crushing pressure on his shoulders. He blacked out and sustained serious injuries. Upon hearing the Ramp FE moans, the Fwd FE and the Door Gunner turned and noticed that the Ramp FE was pinched between the ramp and the airframe. They went back, extracted the Ramp FE and administered first aid as the aircraft proceeded to KAF. The aircraft was met by the Canadian Helicopter Force (Afghanistan) [CHF(A)] Deputy Commanding Officer who instructed the AC to fly to the Role 3 hospital where a medical team tended to the Ramp FE. The aircraft returned to X-ray ramp, was shut down and guarantined. The investigation revealed that the Ramp FE developed his own technique of laying across a partially opened ramp to provide conning and check for obstacles during pinnacle landings. This technique, facilitated by the lack of proper training, the absence of clear direction and an exposure to modified procedures, created an unrecognized hazard during pinnacle landings. In storage at Davis-Monthan AFB in US, arrived on 28 September 2011.

SOS: 2011; later sold



147205 Boeing B.235 CH-147 CH-147D Chinook

TOS:

Built as a CH-47A for the US Army, their serial 66-00103, company number B.235, accepted on 15 September 1966. Logged 2.938.1 hours as a CH-47A. Converted to a CH-47D from 26 March 1986. new serial 86-01650, modification number M.3155. Over 42 years old when supplied to the CF. Purchased second hand from US Army for use by CF Joint Task Force Afghanistan Air Wing at Kandahar, Afghanistan. Operational, in Canadian markings, by January 2009. Carried art work and name "2 for Hooking" on forward fuselage. Destroyed in an accident on 4 August 2010. The night mission called for two CH147D Chinook helicopters to simultaneously insert troops to an unprepared Helicopter Landing Site (HLS) while two CH146 Griffon helicopters provided force protection. After arriving on scene, the Chinooks manoeuvred around the high ground to the south and established themselves on final approach, with the #147205 following the lead aircraft.As it landed, the lead Chinook generated a large dustball, which the #147205 crew assessed would not jeopardize their approach and landing. Descending through approximately 30 feet above ground, both pilots lost visual ground references despite their use of night vision goggles. The landing flare continued until touchdown, at which point the pilots felt an unusual aircraft motion to the right. Realizing that the aircraft would roll over, the Aircraft Captain tried to take control and salvage the landing as the rest of the occupants braced for the crash. Once the helicopter came to a rest on its right side, both engines were shut down, and the five crew and 26 passengers egressed. One passenger sustained serious injuries while eight sustained minor injuries; the helicopter was destroyed. The investigation concluded that the use of inadequate landing procedures in a degraded visual environment (DVE) resulted in the helicopter landing with right drift, causing it to dynamically roll over once the forward right-hand landing gear dug into the ground thereby providing a pivot point. The airframe was salvaged but further damaged by the combat recovery efforts and was later declared a write-off Airlifted from accident site by a USMC CH-53E.

SOS: 4 August 2010 - Cat "A" write-off

147206	Boeing	B.187	CH-147	CH-147D	Chinook

TOS:

Built as a CH-47A for the US Army, their serial 65-08015, company number B.187, accepted on 10 May 1966. Logged 3,341.3 hours as a CH-47A. Converted to a CH-47D from 2 April 1986, new serial 86-01651, conversion number M.3156. Over 42 years old when supplied to the CF. Purchased second hand from US Army for use by CF Joint Task Force Afghanistan Air Wing at Kandahar, Afghanistan. Operational, in Canadian markings, by January 2009. In storage at Davis-Monthan AFB, arrived on 28 September 2011. Recovered from Davis-Monthan AFB and delivered to CFB Petawawa, ON on 17 November 2016 for restoration and preservation at the 450 Sqn HQ.

SOS: 2011; preserved at 450 Sqn HQ, Petawawa, ON

147207	Boeing	CH-147	CH-147D	Chinook

TOS: 2010

Leased from US Army in Afghanistan in 2010, as a replacement for 147202.

SOS: 2011; returned to US Army at the conclusion of the lease period

	147301	Boeing	M2051	CH-147	CH-147F	Chinook
--	--------	--------	-------	--------	---------	---------

TOS:

First new built CH-147F. US civil registration N256CN reserved on 13 December 2011 for manufacturer's flight tests. First flight on 24 June 2012, at Boeing-Vertol facility in Pennsylvania. **SOS:** In service



147302 Boeing M2052 CH-147 CH-147F Chinook

TOS:

US civil registration N257CN reserved on 13 December 2011 for manufacturer's flight tests. Assigned to No. 450 Sqn at CFB Petawawa, ON.

SOS: In service

147303	Boeing	M2053	CH-147	CH-147F	Chinook

TOS:

US civil registration N258CN reserved on 16 May 2012 for manufacturer's flight tests. Delivered to Ottawa by a Boeing flight crew on 25 June 2013. Handed over to CF in ceremony at Ottawa on 27 June 2013. Assigned to No. 450 Sqn at CFB Petawawa, ON. Remaining aircraft to be delivered at approximately one month intervals.

SOS: In service

147304	Boeing	M2054	CH-147	CH-147F	Chinook

TOS:

US civil registration N259CN reserved on 13 December 2011 for manufacturer's flight tests. Undergoing manufacturer's tests at Beoing plant in Pennsylvania in June 2013. Assigned to No. 450 Sqn at CFB Petawawa, ON. This a/c was deployed to Mali for UN support operations during Operation PRESENCE in 2018.

SOS: In service

147305	Boeing	M2055	CH-147	CH-147F	Chinook

TOS:

US civil registration N260CN reserved on 9 May 2012 for manufacturer's flight tests. Assigned to No. 450 Sqn at CFB Petawawa, ON.

SOS: In service

147306	Boeing	M2056	CH-147	CH-147F	Chinook

TOS:

US civil registration N261CN reserved on 13 December 2011 for manufacturer's flight tests. Assigned to No. 450 Sqn at CFB Petawawa, ON.

SOS: In service

147307	Boeing	M2057	CH-147	CH-147F	Chinook

TOS:

US civil registration N262CN reserved on 9 May 2012 for manufacturer's flight tests. Assigned to No. 450 Sqn at CFB Petawawa, ON. This a/c was deployed to Mali for UN support operations during Operation PRESENCE in 2018.

SOS: In service

147308	Boeing	M2058	CH-147	CH-147F	Chinook

TOS:

US civil registration N263CN reserved on 9 May 2012 for manufacturer's flight tests. In final assembly at Boeing plant in Pennsylvania in June 2013, scheduled for delivery in December 2013. Assigned to No. 450 Sqn at CFB Petawawa, ON. **SOS:** In service



147309 Boeing M2059 CH-147 CH-147F Chinook

TOS:

US civil registration N265CN reserved on 9 May 2012 for manufacturer's flight tests. In final assembly at Boeing plant in Pennsylvania in June 2013. Assigned to No. 450 Sqn at CFB Petawawa, ON.

SOS: In service

147310 Boeing	M2060	CH-147	CH-147F	Chinook
---------------	-------	--------	---------	---------

TOS:

US civil registration N265CN reserved on 9 May 2012 for manufacturer's flight tests. Assigned to No. 450 Sqn at CFB Petawawa, ON. This a/c was used to sling recover a downed CH146 Griffon from the CLAWR in 4 Wing Cold Lake, AB in December 2018.

SOS: In service

147311	Boeing	M2061	CH-147	CH-147F	Chinook

TOS:

US civil registration N266CN reserved on 9 May 2012 for manufacturer's flight tests. Assigned to No. 450 Sqn at CFB Petawawa, ON. This a/c was deployed to Mali for UN support operations during Operation PRESENCE in 2018.

SOS: In service

147312	Boeing	M2062	CH-147	CH-147F	Chinook

TOS:

US civil registration N267CN reserved on 9 May 2012 for manufacturer's flight tests. Assigned to No. 450 Sqn at CFB Petawawa, ON.

SOS: In service

147313	Boeing	M2063	CH-147	CH-147F	Chinook

TOS:

US civil registration N268CN reserved on 9 May 2012 for manufacturer's flight tests. Assigned to No. 450 Sqn at CFB Petawawa, ON.

SOS: In service

147314		Boeing	M2064	CH-147	CH-147F	Chinook
	TOS:					

US civil registration N269CN reserved on 9 May 2012 for manufacturer's flight tests. Assigned to No. 450 Sqn at CFB Petawawa, ON.

SOS: In service

147315	Boeing	M2065	CH-147	CH-147F	Chinook

TOS:

US civil registration N270CN reserved on 9 May 2012 for manufacturer's flight tests. Assigned to No. 450 Sqn at CFB Petawawa, ON.

SOS: In service



ADDITIONAL NOTES

In summary, the RCAF purchased a total of 30 CH-147 helicopters in three separate batches as follows: **First batch:** nine CH-47C purchased new; one aircraft crashed on its delivery flight, remaining eight in service from 1974 to 1992; then retired

Second batch: six CH-47D purchased second-hand from the US Army for use in Afghanistan in 2008, plus one replacement a/c leased in 2010. The surviving aircraft were returned to the US during late 2011. **Third batch:** 15 new build CH-147F, with first flight in June 2012, and deliveries starting in June 2013. They are based at 450 Squadron in CFB Petawawa, ON

It is referred to in CF technical documentation and files as the "CH-147 Chinook".

Operating Units

The following units are using or have flown CH-147 Chinook helicopters:

- TFA Wing, Afghanistan
- No. 447 (Transport Helicopter) Squadron, Namao, AB
- No. 450 (Transport Helicopter / Composite) Squadron, Uplands, ON or Petawawa, ON
- 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-147 Chinook Cat "A" write-offs = 4 (~ 13% of the total fleet)

ABBREVIATIONS

AB	=	Alberta (Canada)	
BC	=	British Columbia (Canada)	
CF	=	Canadian Forces	
CFB	=	Canadian Forces Base	
C/N	=	Construction Number	
FE	=	Flight Engineer	
Flt	=	Flight	
ON	=	Ontario (Canada)	
OTU	=	Operational Training Unit	
RCAF	=	Royal Canadian Air Force	
S/N	=	Serial Number	
Sqn	=	Squadron	
SOS	=	Struck Off Strength	

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



TFA	=	Task Force Afghanistan
TOS	=	Taken On Strength

(Current) RCAF RANKS

Aviator	-	Avr
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

REFERENCES

Government Reports:

- Canadian Forces Flight Safety Investigation Report File # 1010-CH147205 (DFS 2), 27 January 2015, CH147D Chinook 147705 "A" Category Accident
- Canadian Forces Flight Safety Investigation Report File # 1010-CH147202 (DFS 2-5), 10 August 2012, CH147D Chinook 147202 "A" Category Accident
- Canadian Forces Flight Safety Investigation Report File # 1010-CH147204 (DFS 2-4-2), 13 July 2010, CH147D Chinook 147204 "B" Category Accident
- Canadian Forces Flight Safety Investigation Report File # 1010-CH147204 (DFS 2-4-2), 24 January 2010, CH147D Chinook 147204 "C" Category Accident

Websites

<u>http://www.rwrwalker.ca</u>

