



Kestrel Publications



**BELL CH-139 JET RANGER
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 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 fly and maintain these CH-139 aircraft.

Cover Image Notes

CH-139 #139314 in United Nations colours when the helos were used for a deployment in Central America. -
(CF Photo # REC90-1376)



Kestrel Publications
Ottawa, Ontario, Canada
www.kestrelpublications.com

CH-139 Jet Ranger Serials

Serial #	Manufacturer	c/n	Designation	Name
139301	Bell	3324	CH-139	Jet Ranger III

TOS: 13 May 1981 - Taken on strength

With No. 3 Canadian Forces Flying Training School at CFB Portage, MB. Flew in the 1992 *Dragonflies* demonstration team, the last year this team performed. As C-FTHA, on May 6, 2015, this a/c was on mission NAV 1 of the Phase III pilot training course out of 3 CFFTS in Portage la Prairie, MB on when it suffered an accident. During the return to base, the flying instructor gave the student pilot a simulated engine failure emergency at approximately 500 ft above ground level. The flying instructor reduced the throttle to idle to simulate the unexpected engine flameout while advising the student pilot of the simulated emergency. The student pilot responded by reducing the collective to enter autorotation. The student pilot established the a/c into wind on final approach to the selected landing area – a field of low-cut hay. With no intention of continuing the autorotation to a landing, the flying instructor took control of the helicopter at approximately 120 ft above ground level and initiated a power recovery, but the engine did not respond as expected. The flying instructor flared and used what energy remained in the rotor to settle the helicopter onto the ground. The helicopter landed firmly with considerable forward speed and came to a stop approximately 200 ft past the initial touch down point, after which the helicopter was shut down. The helicopter sustained serious Cat “C” damage to the tail boom and numerous components surrounding the main rotor transmission. There were no injuries. The helicopter was repaired and returned to service.

SOS: 13 November 1922 - To civil register as C-FTHA with Allied Wings

139302	Bell 206B-3	3325	CH-139	Jet Ranger III
--------	-------------	------	--------	----------------

TOS: 13 May 1981 - Taken on strength

With No. 3 Canadian Forces Flying Training School at CFB Portage, MB. Flew in the 1992 *Dragonflies* demonstration team, the last year this team performed.

SOS: 29 September 1992 - To civil register as C-FTHB with Allied Wings

139303	Bell 206B-3	3339	CH-139	Jet Ranger III
--------	-------------	------	--------	----------------

TOS: 13 May 1981 - Taken on strength

With No. 3 Canadian Forces Flying Training School at CFB Portage, MB.

SOS: 29 September 1992 - To civil register as C-FTHC with Allied Wings

139304	Bell 206B-3	3340	CH-139	Jet Ranger III
--------	-------------	------	--------	----------------

TOS: 13 May 1981 - Taken on strength

With No. 3 Canadian Forces Flying Training School at CFB Portage, MB.

SOS: 29 September 1992 - To civil register as C-FTHJ with Allied Wings

139305	Bell 206B-3	3351	CH-139	Jet Ranger III
--------	-------------	------	--------	----------------

TOS: 11 June 1981 - Taken on strength

With No. 3 Canadian Forces Flying Training School at CFB Portage, MB.

SOS: 13 April 1992 - To civil register as C-FTHK with Allied Wings

139306	Bell 206B-3	3352	CH-139	Jet Ranger III
--------	-------------	------	--------	----------------

TOS: 11 June 1981 - Taken on strength

With No. 3 Canadian Forces Flying Training School at CFB Portage, MB.

SOS: 1 February 1993 - To civil register as C-FTHL with Allied Wings



139307	Bell 206B-3	3357	CH-139	Jet Ranger III
---------------	--------------------	-------------	---------------	-----------------------

TOS: 13 May 1981 - Taken on strength

With No. 3 Canadian Forces Flying Training School at CFB Portage, MB.

SOS: 13 April 1992 - To civil register as C-FTHM with Allied Wings

139308	Bell 206B-3	3358	CH-139	Jet Ranger III
---------------	--------------------	-------------	---------------	-----------------------

TOS: 13 May 1981 - Taken on strength

With No. 3 Canadian Forces Flying Training School at CFB Portage, MB. Flew in the 1992 *Dragonflies* demonstration team, the last year this team performed. One of 8 CH-139 helicopters used in Honduras c.1990 to 1992 for Operation *SULTAN*, Canadian Forces support for the UN mission disarming former rebels in that country. Operated by No. 89 Light Observation Helicopter Unit (later 89 Rotary Wing Aviation Unit) in all white scheme, from bases in Honduras and Nicaragua. Displayed at 1990 Abbotsford airshow in UN markings.

SOS: 13 April 1992 - To civil register as C-FTHN with Allied Wings; **written-off** 2 July 2002

139309	Bell 206B-3	3381	CH-139	Jet Ranger III
---------------	--------------------	-------------	---------------	-----------------------

TOS: 11 June 1981 - Taken on strength

With No. 3 Canadian Forces Flying Training School at CFB Portage, MB. Flew in the 1992 *Dragonflies* demonstration team, the last year this team performed.

SOS: 15 July 1993 - To civil register as C-FTHP with Allied Wings

139310	Bell 206B-3	3382	CH-139	Jet Ranger III
---------------	--------------------	-------------	---------------	-----------------------

TOS: 11 June 1981 - Taken on strength

With No. 3 Canadian Forces Flying Training School at CFB Portage, MB. One of 8 CH-139 helicopters used in Honduras c.1990 to 1992 for Operation *SULTAN*, Canadian Forces support for the UN mission disarming former rebels in that country. Operated by No. 89 Light Observation Helicopter Unit (later 89 Rotary Wing Aviation Unit) in all white scheme, from bases in Honduras and Nicaragua.

SOS: 17 December 1993 - To civil register as C-FTHQ with Allied Wings

139311	Bell 206B-3	3387	CH-139	Jet Ranger III
---------------	--------------------	-------------	---------------	-----------------------

TOS: 19 June 1981 - Taken on strength

With No. 3 Canadian Forces Flying Training School at CFB Portage, MB. Also used by Flying Instructor School at Portage.

SOS: 29 September 1992 - To civil register as C-FTHR with Allied Wings



139312	Bell 206B-3	3383	CH-139	Jet Ranger III
--------	-------------	------	--------	----------------

TOS: 19 June 1981 - Taken on strength

With No. 3 Canadian Forces Flying Training School at CFB Portage, MB. Suffered Cat "B" damage on October 29, 1999. While in the hover, at approximately four feet above ground, the instructor asked the student to prepare to return to the base. While conducting a 180° clearing turn the student experienced some difficulty maintaining a steady hover. As the clearing turn placed the aircraft in a downwind position, he allowed the wind to lift the tail of the helicopter. The student overcompensated with aft cyclic which resulted in some rearward motion of the aircraft, as well as a corresponding drop in the tail. While concentrating on correcting his error he allowed the helicopter to descend slightly from the four-foot hover height. He attempted to regain his height by lowering the collective slightly; this only aggravated the situation. Thinking that his first correction was not sufficient, the student lowered the collective more aggressively, resulting in the aircraft hitting the ground. This sequence of events occurred over a very short period of time. The instructor initially allowed the student to correct his faulty collective application and was anticipating the second collective input to be in the upward direction. Following the student's second downward collective input, the instructor did not have sufficient time to prevent ground impact. The helicopter was repaired and returned to service.

SOS: 29 September 1992 - To civil register as C-FTHV with Allied Wings

139313	Bell 206B-3	3390	CH-139	Jet Ranger III
--------	-------------	------	--------	----------------

TOS: 19 June 1981 - Taken on strength

With No. 3 Canadian Forces Flying Training School at CFB Portage, MB. Flew in the 1992 *Dragonflies* demonstration team, the last year this team performed. On August 23, 1999, during a VFR Lesson Plan, the instructor and his student in this a/c experienced a hard landing while attempting to overshoot from a 250 ft turning autorotation. The instructor took control as the aircraft passed through 90 degrees of turn and approximately 150 ft AGL. The instructor initiated the overshoot by applying full throttle and rolling the aircraft towards a level attitude. Two to three seconds later, with torque indicating 120% (gauge maximum), the aircraft hit the ground slightly nose-high and right skid low. The airspeed at impact was approximately 40 Kts. The a/c then bounced 30 ft vertically while continuing forward. The instructor applied full left pedal and full right cyclic to regain control of the aircraft, which nevertheless reached 30 degrees of right yaw and 30-45 degrees of left bank. The instructor then achieved a stable hover and landed the aircraft approximately 300 ft from the point of original ground contact. The student suffered minor injuries and the a/c sustained serious Cat "B" damage. The helicopter was repaired and returned to service

SOS: 29 September 1992 - To civil register as C-FTHW with Allied Wings

139314	Bell 206B-3	3391	CH-139	Jet Ranger III
--------	-------------	------	--------	----------------

TOS: 19 June 1981 - Taken on strength

With No. 3 Canadian Forces Flying Training School at CFB Portage, MB.

SOS: 29 September 1992 - To civil register as C-FTHX with Allied Wings

ADDITIONAL NOTES:

The CF Contracted Flying Training and Support (CFTS) Program oversees the flying training and support services contract for the Primary and Basic Flying Training, Multi-Engine and Helicopter pilot training programs conducted at the Southport Aerospace Centre (SAC), formerly known as Canadian Forces Base Portage-La-Prairie, MB. 3 Canadian Forces Flying Training School (3 CFFTS) conducts flying training on the Multi-Engine and the Helicopter training programs while the contractor, Allied Wings (AW), provides all other aspects of training and support services including infrastructure, aircraft, accommodation, meals, academic training, simulator training, air traffic control, etc and flying training on the Primary, Basic and Advanced training programs.

On 30 March 2005, the Minister of National Defence announced the government's intentions to proceed to award a 22-year \$1.77B contract for the CFTS to KF Aerospace (formerly known as Kelowna Flightcraft Ltd (KFL)). The KF



Aerospace team consists of Allied Wings leading KF Aerospace, Canadian Helicopters, Atlantis Systems Intl, Black & Macdonald, and Coastal Pacific Aviation. Under the CFTS contract, Allied Wings provides the Grob G120A aircraft for Primary and Basic Flying Training, the Raytheon King Air C90B for Advanced Multi-Engine Flying Training and it has converted the Bell 206 Jet Ranger and Bell 412 Griffon helicopters drawn from CF's inventory for Advanced Helicopter Flying Training. Full motion flight simulators were also installed to support the Multi-Engine and Helicopter Flying Training programs. A 80,000 sq ft training facility was constructed at Southport for provide a fully-equipped state-of-the art training environment. Initial training commenced in 2006 and the contract ends in 2027.

Operating Units

The following units are using or have flown CH-136 helicopters:

- No. 3 Canadian Forces Flying Training School, Southport, MB
- No. 89 Light Observation Helicopter Unit (later 89 Rotary Wing Aviation Unit) in Honduras and Nicaragua.

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-136 Jet Ranger Cat "A" write-offs = 1 (~ 7% of the total fleet)

ABBREVIATIONS

a/c	=	aircraft
AW	=	Allied Wings
Cat	=	Category
CF	=	Canadian Forces
CFB	=	Canadian Forces Base
C/N	=	Construction Number
ft	=	feet
IP	=	Instructor Pilot
kts	=	knots
MB	=	MB (Canada)
NATO	=	North Atlantic Treaty Organization
OTU	=	Operational Training Unit
QFI	=	Qualified Flying Instructor
RCAF	=	Royal Canadian Air Force
RTB	=	Returned To Base
SK	=	Saskatchewan (SK)
SP	=	Student Pilot
S/N	=	Serial Number

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

Sqn = Squadron
SOS = Struck Off Strength
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 Reports - <http://www.rcaf-arc.forces.gc.ca/en/flight-safety/investigation-reports.page>
- <http://www.forces.gc.ca/en/training-establishments/contracted-flying-training-support.page>

Websites

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