



Kestrel Publications



BEECH CT-145 KING AIR 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 fly and maintain these CT-145 *King Air* aircraft.

Cover Image Notes

CT-145 C-FMFY is seen here wearing the wartime shark mouth motif flown on one of the RCAF's Avro Lancasters from the Second World War. - (CF Photo #FA2013-5200-120)



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CT-145 King Air Serials

Registration	Manufacturer	Model	c/n	Designation	Name
C-GMBC	Beechcraft	C90A	LJ-1300	CT-145	King Air

TOS: 22 September 1992 - Registered to Bombardier, Inc.

Built in 1992. Purchased by Bombardier on or prior to 8 April 1992. Employed by No. 3 CFFTS at the Canadian Aviation Training Centre in Southport, MB. Also wore code #901. Exported to USA after deletion from Canadian register. To US register from 20 December 2005. Registered to Pavilion Air of Fresno, California as N920TT from 18 September 2006.

SOS: 1 September 2005 - Deleted from Canadian civil register

C-GMBD	Beechcraft	C90A	LJ-1301	CT-145	King Air
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TOS: 22 September 1992 - Registered to Bombardier, Inc.

Built in 1992. Purchased by Bombardier by 16 April 1992. Employed by No. 3 CFFTS at the Canadian Aviation Training Centre in Southport, MB. Also wore code #902. Deleted from Canadian register on 1 September 2005, exported to USA. To US register by 22 December 2005. Registered to Carolina Aviation of Mooresville, North Carolina as N924TT on 11 July 2007.

SOS: 31 August 2005 - Bombardier registration cancelled

C-GMBG	Beechcraft	C90A	LJ-1304	CT-145	King Air
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TOS: 29 September 1992 - Registered to Bombardier, Inc.

Built in 1992. Purchased by Bombardier by 23 July 1992. Employed by No. 3 CFFTS at the Canadian Aviation Training Centre in Southport, MB. Also wore code #903. Deleted from Canadian register on 1 September 2005, exported to the USA. To US register by 24 December 2005. Registered as N465JB to Island Aviation of Indianapolis, Indiana on 24 March 2006.

SOS: 31 August 2005 - Bombardier registration cancelled

C-GMBH	Beechcraft	C90A	LJ-1309	CT-145	King Air
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TOS: 29 September 1992 - Registered to Bombardier, Inc.

Owned by Bombardier by 26 August 1992. Employed by No. 3 CFFTS at the Canadian Aviation Training Centre in Southport, MB. Also wore code #904. Deleted from Canadian register on 1 September 2005, exported to US. First US Certificate of Airworthiness issued on 14 October 2005. Registered to Aerolease LLC of Fargo, North Dakota as N709EA, on 24 Sep 2007.

SOS: 31 August 2005 - Bombardier registration cancelled

C-GMBW	Beechcraft	C90A	LJ-1310	CT-145	King Air
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TOS: 10 September 1992 - Registered to Bombardier, Inc.

Employed by No. 3 CFFTS at the Canadian Aviation Training Centre in Southport, MB. Also wore code #905. Deleted from civil register on 1 September 2005, exported to US. First US Certificate of Airworthiness issued on 23 December 2005. Registered to Flying Fish Aviation of Wilmington, Delaware as N463JB on 3 March 2006.

SOS: 31 August 2005 - Bombardier registration cancelled



C-GMBX	Beechcraft	C90A	LJ-1313	CT-145	King Air
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TOS: 20 October 1992 - Registered to Bombardier, Inc.

Employed by No. 3 CFFTS at the Canadian Aviation Training Centre in Southport, MB. Also wore code #906. Deleted from Canadian register on 1 September 2005, exported to US. First US Airworthiness Certificate issued on 21 December 2005. Registered to West Land Holdings of Memphis, Tennessee as N928TT on 21 May 2007.

SOS: 31 August 2005 - Bombardier registration cancelled

C-GMBY	Beechcraft	C90A	LJ-1317	CT-145	King Air
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TOS: 25 November 1992 - Registered to Bombardier, Inc.

Employed by No. 3 CFFTS at the Canadian Aviation Training Centre in Southport, MB. Also wore code #907. Deleted from Canadian register on 1 September 2005, exported to the US. First US Certificate of Airworthiness issued on 24 January 2006. Registered to G S L Air LLC of Miami, Florida as N929TT on 3 February 2006.

SOS: 31 August 2005 - Bombardier registration cancelled

C-GMBZ	Beechcraft	C90A	LJ-1319	CT-145	King Air
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TOS: 22 December 1992 - Registered to Bombardier, Inc.

Employed by No. 3 CFFTS at the Canadian Aviation Training Centre in Southport, MB. Also wore code #908. Deleted from Canadian register on 1 September 2005, exported to the US. First US Certificate of Airworthiness issued on 13 October 2005. Registered to Airsea Charters of Omaha, Nebraska as N719EA on 30 March 2006.

SOS: 31 August 2005 - Bombardier registration cancelled

C-FMFQ	Beech	C90B	LJ-1740	CT-145	King Air
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TOS: 16 November 2005 - Registration issued to Allied Wings consortium

Employed by No. 3 CFFTS at the Canadian Aviation Training Centre in Southport, MB, from 2006. This a/c received shark tooth markings on the engine nacelles and the "Queen of Spades" card (Lancaster) nose art with mission markings on the fuselage in 2013.

SOS: In-service

C-FMFR	Beech	C90B	LJ-1744	CT-145	King Air
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TOS: 28 December 2005 - Registration issued to Allied Wings consortium

First registered to Allied Wings Aviation on 23 December 2005. Employed by No. 3 CFFTS at the Canadian Aviation Training Centre in Southport, MB, from 2006. On 08 Nov 2010, this a/c suffered a "C" Cat accident after it departed the hard surface of the runway while completing a full stop landing. The right main lower drag brace arm bolt failed on touch down and the RH gear collapsed pulling the a/c off the runway. The a/c was repaired and returned to service. This a/c received shark tooth markings on the engine nacelles and the "Ruhr Express" (Lancaster) nose art with mission markings on the fuselage in 2013.

SOS: In-service

C-FMFS	Beech	C90B	LJ-1745	CT-145	King Air
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TOS: 13 March 2006 - Registration issued to Allied Wings consortium

Imported in 2005. Employed by No. 3 CFFTS at the Canadian Aviation Training Centre in Southport, MB, from 2006.

SOS: In-service



C-FMFU	Beech	C90B	LJ-1746	CT-145	King Air
<p>TOS: 28 December 2005 - Registration issued to Allied Wings consortium First registered to Allied Wings Aviation Limited on 23 December 2005. Employed by No. 3 CFFTS at the Canadian Aviation Training Centre in Southport, MB, from 2006.</p> <p>SOS: In-service</p>					
C-FMFX	Beech	C90B	LJ-1747	CT-145	King Air
<p>TOS: 14 December 2005 - Registration issued to Allied Wings consortium Employed by No. 3 CFFTS at the Canadian Aviation Training Centre in Southport, MB, from 2006.</p> <p>SOS: In-service</p>					
C-FMFY	Beech	C90B	LJ-1749	CT-145	King Air
<p>TOS: 6 February 2006 - Registration issued to Allied Wings consortium First imported in 2005. Employed by No. 3 CFFTS at the Canadian Aviation Training Centre in Southport, MB, from 2006. This a/c received shark tooth markings on the engine nacelles and the "Ropey" (Lancaster) nose art with mission markings on the fuselage in 2013.</p> <p>SOS: In-service</p>					
C-FMFZ	Beech	C90B	LJ-1750	CT-145	King Air
<p>TOS: 6 February 2006 - Registration issued to Allied Wings consortium First imported in 2005. Employed by No. 3 CFFTS at the Canadian Aviation Training Centre in Southport, MB, from 2006. This a/c received shark tooth markings on the engine nacelles and the "Zombie" (Lancaster) nose art with mission markings on the fuselage in 2013.</p> <p>SOS: In-service</p>					
C-????	Beech	350		CT-145	Super King Air
<p>TOS: Unknown Leased by the Instrument Check Pilot (ICP) School in 17 Wing, Winnipeg, MB for their use. Precise dates / details unknown. Coded "145201" with ICP crest on the tail with "201" repeated on the nose</p> <p>SOS: Unknown</p>					
C-????	Beech	350		CT-145	Super King Air
<p>TOS: Unknown Leased by the Instrument Check Pilot (ICP) School in 17 Wing, Winnipeg, MB for their use. Precise dates / details unknown. Coded "145202" with ICP crest on the tail with "202" repeated on the nose</p> <p>SOS: Unknown</p>					
C-GDVF	Beech	B200	BB-1940	CT-145	King Air
<p>TOS: June 2009 Leased starting in June 2009 from Aero Support Canada Inc. of London, Ontario, for use by the new Multi-Engine Utility Flight at 8 Wing, Trenton, ON. Coded #208. Lease expired & replaced by Super King Air (see below).</p> <p>SOS: 2015?</p>					



C-GDNH	Beech	B200	BB-1946	CT-145	King Air
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TOS: June 2009

Leased starting in June 2009 from Aero Support Canada In of London, Ontario, for use by the new Multi-Engine Utility Flight at 8 Wing, Trenton, ON. Coded #209. Lease expired & replaced by Super King Air (see below). This airframe de-registered from Cdn register as of 28 Oct 2016.

SOS: 2015?

C-GPDC	Beech	350	FL114	CT-145	Super King Air
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TOS: 2021

Leased from Air Tindi, for use by the Multi-Engine Utility Flight at 8 Wing, Trenton, ON.

SOS: Mar 2024

C-GSYC	Beech	350	FL20	CT-145	Super King Air
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TOS: 2021

Leased from Air Tindi, for use by the Multi-Engine Utility Flight at 8 Wing, Trenton, ON.

SOS: Mar 2024

C-GEAS	Beech	350	FL17	CT-145	Super King Air
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TOS:?

Leased from *Air Tindi* for use by the Multi-Engine Utility Flight at 8 Wing, Trenton, ON. The a/c departed on 31 Jan 2022 on a training mission with three crew members on board. The aircraft departed 8 Wing Trenton on an Instrument Flight Rule flight plan, with a destination of Thunder Bay Airport, ON. Following a routine climb out and cruise, the aircraft was cleared for the RNAV Z 25 instrument approach into Thunder Bay, ON. The a/c was configured for the approach and flown utilizing automation. Approximately two miles back from the runway and with the airport visual, the pilot elected to continue the remainder of the approach manually and disconnected the autopilot. As the aircraft crossed over the runway threshold with a height above ground of approximately 50 ft, the pilot flying moved both power levers to idle with the intent of landing. A left yaw quickly developed followed by a rapid drop of the left wing. The pilot monitoring the approach took control and initiated an overshoot, however the left wing tip contacted the runway surface and the aircraft progressed uncontrolled into the snow-covered infield. Once the aircraft came to rest, the three crew members egressed the aircraft. The a/c sustained very serious damage and the pilot flying suffered a minor injury, while the other crew members were not injured. The investigation determined that the a/c was documented serviceable prior to the flight and that no issues were evident to the crew before the power levers were brought to idle. Post-accident analysis of the recovered aircraft flight data and components determined that a part within the propeller speed governing system failed to function nominally, specifically the beta valve or the beta solenoid. This led to the left-hand propeller windmilling, which was the most likely cause of the accident. Since the beta valve was damaged and internal parts lost during the accident sequence, a definitive determination of its serviceability could not be conducted.

SOS: Cat "B" & possible Cat "A" write-off; NB - Air Tindi launched a lawsuit against DND for damages incurred



145404	Beech	350ER	FL-1218	CE-145C	Vigilance
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TOS: 23 February 2024

The Cdn gov't has contracted for three King Air 350 Extended Range a/c equipped with advanced Intelligence, Surveillance and Reconnaissance capabilities for support of SOF. The acquisition of the aircraft will be completed through Foreign Military Sales. DND awarded L3Harris Technologies a firm-fixed price contract of an undisclosed amount to modify these King Air 350ERs into intelligence, surveillance and reconnaissance aircraft. The associated In-service support of the a/c will be procured through a competitive process. Arrived at 8 Wing Trenton in February 2024.

SOS: TBD

Beech	350ER	FL-1228	CE-145C	Vigilance
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TOS: 2024

The Cdn gov't has contracted for three King Air 350 Extended Range a/c equipped with advanced Intelligence, Surveillance and Reconnaissance capabilities for support of SOF. The acquisition of the aircraft will be completed through Foreign Military Sales. DND awarded L3Harris Technologies a firm-fixed price contract of an undisclosed amount to modify these King Air 350ERs into intelligence, surveillance and reconnaissance aircraft. The associated In-service support of the a/c will be procured through a competitive process. Delivery is expected in 2024.

SOS: TBD

Beech	350ER	FL-1233	CE-145C	Vigilance
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TOS: 2024

The Cdn gov't has contracted for three King Air 350 Extended Range a/c equipped with advanced Intelligence, Surveillance and Reconnaissance capabilities for support of SOF. The acquisition of the aircraft will be completed through Foreign Military Sales. DND awarded L3Harris Technologies a firm-fixed price contract of an undisclosed amount to modify these King Air 350ERs into intelligence, surveillance and reconnaissance aircraft. The associated In-service support of the a/c will be procured through a competitive process. Delivery is expected in 2024.

SOS: BD

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.

For flight safety reporting purposes the Beech King Air trainers have been designated by the RCAF as CT-145 trainers. On 8 November 2010, CT-145 C-FMFR operated by 3 CFFTS departed the hard surface of runway 13R at



Portage la Prairie as the aircraft was completing a full stop landing. The aircraft was crewed by a Qualified Flight Instructor (QFI) in the right seat and a student pilot in the left seat, under training as part of the Multi-engine Pilot Course. Immediately after touchdown, the right wing began to sink due to failure of the right main landing gear. Attempts to maintain runway centreline proved futile as the aircraft drifted right, departing the hard surface of the runway approximately 600 meters after touching down. The aircraft came to a full stop at the crest of a drainage ditch, 78 meters right of runway 13R centreline. Both pilots were able to safely egress with no injuries. The aircraft sustained "C" category damage. The investigation revealed that the right main landing gear lower drag brace arm bolt failed due to fatigue prior to achieving the design criteria of six years or 8,000 landings. Recommendations were therefore made to change the main landing gear lower drag brace arm bolt on King Air C90 operated at 3 CFFTS in Portage la Prairie Manitoba after 2,500 landing cycles. Subsequent detailed analysis on other drag brace arm bolts revealed cracks were present at substantially less cycles than the previous design criteria of 8,000 cycles, which supported the decision to replace the bolts at a reduced cycle frequency.

In 2009, the Canadian government entered into a contract with Discovery Air of London, Ontario and its subsidiary Top Aces to provide two civil-registered King Airs equipped for the ISR mission (Intelligence, Surveillance, and Reconnaissance) in support of the Canadian military mission in Afghanistan. Both aircraft had left Afghanistan by the end of 2011. Registrations C-GDTS and C-GVDS were used.

Two Super King Airs were leased in June 2009 from Aero Support of London, Ontario, for use by the Multi-Engine Utility Flight at CFB Trenton. Initially received with civil registrations C-GDVF and C-GDNH. They are coded 208 and 209. These were subsequently replaced by Super King Airs C-GSYC and C-GPDC eased from Transwest Air in Prince Albert, SK. Air Tindi had the latest leasing contract with the RCAF but announced in March 2024 that the RCAF would not exercise its two, one-year options for renewal under the Multi-Engine Utility Flight (MEUF) contract currently operating out of 8 Wing Trenton. By not exercising the RCAF's two, one-year lease options, DND/CAF will save approximately \$3.6 million per option year (approximately \$7.2 million in total). Starting March 31, 2024, the functions provided by the MEUF will be absorbed by the RCAF's regular transport fleet.

Operating Units

The following units are using or have flown CT-145 trainers:

- No. 3 Canadian Forces Flying Training School, Southport, MB
- Multi-Engine Utility Flight (MEUF), Trenton, ON

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 CT-145 King Air Cat "A" write-offs = 0 (~ 0% of the total fleet)

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



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
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.rcaf-arc.forces.gc.ca/en/flight-safety/article-template-flight-safety.page?doc=ct145-king-air-epilogue/hl6j9igg>
- <http://www.forces.gc.ca/en/training-establishments/contracted-flying-training-support.page>
- <https://www.canada.ca/en/air-force/corporate/reports-publications/flight-safety-investigation-reports/ct145d-epilogue.html>

Websites

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

