



# *kestrel Publications*



## LOCKHEED CP-140 AURORA 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](mailto:kestrelpubs@gmail.com)

## **Dedication**

This publication is dedicated to all those who fly and maintain these CP-140 *Aurora* aircraft.

## **Cover Image Notes**

CP140 *Aurora* #140118 on the ramp in 17 Wing Winnipeg, MB circa 2011. - (CF Photo #WG2011-0186-29)



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## CP-140 Aurora / CP-140 Arcturus Serials

Designer	Manufacturer	c/n	Designation	Name
140101	Lockheed 285B	285B-5682	CP-140	Aurora

**TOS:** 5 June 1980

Company tests as N64996. First flight on 22 May 1979, with US registration. Delivered on 28 June 1980. With No. 405 (MP) Squadron at CFB Greenwood, NS in April 1995. Regularly used by the Maritime Proving and Evaluation Unit at Greenwood. First aircraft to complete the AIMP (Aurora Incremental Modernization Project) upgrade, with first flight on 6 May 2004. Took part in 2006 Canadian International Air Show at Toronto. Still with 14 Wing at Greenwood in September 2006. One of three a/c to receive Block 3 (interim) iBLOS (satellite) communication system and deployed on Op IMPACT in Middle East.

140102	Lockheed 285B	285B-5689	CP-140	Aurora
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**TOS:** 20 August 1980

Company tests as N64959. Delivered on 27 May 1980. With No. 407 (MP) Squadron at CFB Comox, BC in 1991. With 14 Wing at CFB Greenwood, NS in April 1995. Back to 407 Sqn. in October 2005.

140103	Lockheed 285B	285B-5693	CP-140	Aurora
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**TOS:** 8 July 1980

Company tests as N64854. Delivered on 14 July 1980. Based at CFB Greenwood, NS in 1991. At IMP, Halifax for overhaul in April 1995. With No. 407 (MP) Squadron at CFB Comox, BC in November 2003, and still there in 2006. Suffered Cat "B" damage on August 27, 2015. The a/c was taking off from 14 Wing Greenwood, NS, on a transit mission to Iqaluit, in support of Op QIMMIQ. Thunderstorms had recently passed over the airfield and the runway surfaces were wet. During the takeoff roll, the crew observed a flock of birds flying towards the runway. Perceiving a conflict and concerned about the risk of collision, the a/c comd called "Malfunction" and the pilot flying aborted the takeoff. During the abort procedure, the pilot flying the aircraft rapidly selected full reverse on all four propellers. Both propellers on the left side of the aircraft went into full reverse; however, both propellers on the right side of the a/c continued to produce forward thrust, resulting in asymmetric thrust pushing the aircraft left of the runway centreline. The crew was not successful at keeping the a/c on the runway and it departed off the left side of the runway, approximately 1000 ft before the departure end. The propellers contacted a runway distance marker and a precision approach path indicator (PAPI) light. The a/c plowed through the soft earth and the nose gear collapsed, causing the inside propeller on the right side of the a/c to strike the ground and break away from the engine. After the a/c came to a stop, all personnel on board exited the aircraft safely; only minor injuries were incurred.

140104	Lockheed 285B	285B-5697	CP-140	Aurora
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**TOS:** 8 May 1980

Company tests as N64959. Delivered on 27 May 1980. First Aurora accepted by Canadian Forces. Based at CFB Greenwood, NS in 1991, still there April 1995.

140105	Lockheed 285B	285B-5704	CP-140	Aurora
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**TOS:** 8 July 1980

Carried US registration N4007A for company tests. Delivered on 1 August 1980. With No. 407 (MP) Squadron at CFB Comox, BC in 1991, and in April 1995. With 14 Wing at CFB Greenwood, NS in January 2004. Back with 407 Sqn. in 2006.



<b>140106</b>	Lockheed 285B	285B-5706	CP-140	Aurora
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**TOS:** 21 July 1980

Company tests as N40035. Delivered on 9 September 1980. Based at Greenwood, NS in 1991. With No. 407 (MP) Squadron at CFB Comox, BC in April 1995. Back with 14 Wing at Greenwood in August 2001, still there in 2006.

<b>140107</b>	Lockheed 285B	285B-5708	CP-140	Aurora
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**TOS:** 20 August 1980

Carried US registration N4006S for company tests. Delivered on 9 October 1980. Based at CFB Greenwood, NS in 1991. This a/c received a special paint scheme consisting of "sharkmouth" markings on each of the engines for the 1987 Fincastle ASW Competition. Still with 14 Wing at Greenwood in April 1995, and September 2001. Used as development aircraft for NFIMP upgrade.

**SOS:** 2016; Preserved at 19 Wing Comox Air Force Museum

<b>140108</b>	Lockheed 285B	285B-5709	CP-140	Aurora
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**TOS:** 10 October 1980

Company tests as N4008R. Delivered on 9 November 1980. Based at Greenwood, NS in 1991. Still with 14 Wing at Greenwood in April 1995, and November 2005. First a/c to receive Block 4 BLOS (satellite) communication system, Link 16 tactical data-link and self-defence protection suite.

<b>140109</b>	Lockheed 285B	285B-5711	CP-140	Aurora
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**TOS:** 10 October 1980

Carried US registration N4009K for company tests. Delivered on 13 November 1980. With No. 407 (MP) Squadron at CFB Comox, BC in 1991. At IMP Group at Halifax for overhaul in April 1995. Based at NAS Sigonella, Sicily, Italy in November 2004 for Operation Sirius, tracking suspected terrorist vessels in the Mediterranean. Back to 407 Sqn. by August 2005.

<b>140110</b>	Lockheed 285B	285B-5712	CP-140	Aurora
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**TOS:** 7 November 1980

Company tests as N4835U. Delivered on 5 February 1981. Based at CFB Greenwood, NS in 1991, still there April 1995. With No. 407 (MP) Squadron at CFB Comox, BC in October 2005.

<b>140111</b>	Lockheed 285B	285B-5714	CP-140	Aurora
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**TOS:** 11 December 1980

Carried US registration N64996 for company tests. Delivered on 9 January 1981. Based at CFB Greenwood, NS in 1991. With No. 407 (MP) Squadron at CFB Comox, BC in April 1995. Received 405 Squadron markings plus an eagle head painted on the front fuselage for the 1996 Fincastle ASW competition at Edinburgh, Australia. Second a/c to receive Block 4 BLOS (satellite) communication system, Link 16 tactical data-link and self-defence protection suite.



<b>140112</b>	Lockheed 285B	285B-5715	CP-140	Aurora
<b>TOS:</b> 31 December 1980				
Carried US registration N64854 for company tests. Delivered on 26 January 1981. With No. 407 (MP) Squadron at CFB Comox, BC in 1991, and in April 1995. With 14 Wing at CFB Greenwood, NS in July 2003, carrying No. 405 (MP) Squadron markings.				
<b>140113</b>	Lockheed 285B	285B-5717	CP-140	Aurora
<b>TOS:</b> 27 January 1981				
Carried US registration N4007A for company tests. Delivered on 26 February 1981. Based at CFB Greenwood, NS in 1991, still there in April 1995. With No. 407 (MP) Squadron at CFB Comox, BC in October 2005.				
<b>140114</b>	Lockheed 285B	285B-5719	CP-140	Aurora
<b>TOS:</b> 27 January 1981				
Carried US registration N40035 for company tests. Delivered on 12 March 1981. Based at CFB Greenwood, NS in 1991, still there in April 1995. Carried Second World War memorial markings, including RAF style roundels on fuselage and 415 Squadron code "GX*N", for the 75th anniversary of the RCAF in 1999.				
<b>140115</b>	Lockheed 285B	285B-5720	CP-140	Aurora
<b>TOS:</b> 2 March 1981				
Carried US registration N64959 for company tests. Delivered on 2 April 1981. Delivered on 2 April 1981. Based at CFB Greenwood, NS in 1991, still there in April 1995. One of three a/c to receive Block 3 (interim) iBLOS (satellite) communication system and deployed on Op IMPACT in Middle East.				
<b>140116</b>	Lockheed 285B	285B-5722	CP-140	Aurora
<b>TOS:</b> 26 March 1981				
Company tests as N4006S. Delivered on 9 June 1981. Based at CFB Greenwood, NS in 1991. With No. 407 (MP) Squadron at CFB Comox, BC in April 1995. Back to 14 Wing at Greenwood by September 2006.				
<b>140117</b>	Lockheed 285B	285B-5723	CP-140	Aurora
<b>TOS:</b> 5 May 1981				
Company tests as N4008R. Delivered on 9 June 1981. With No. 407 (MP) Squadron at CFB Comox, BC in 1991. With 14 Wing at CFB Greenwood, NS in April 1995. With 407 Sqn in Comox and received a special paint scheme consisting of a stylized red & white maple leaf on V-Stab with superimposed 407 Sqn crest for the 1997 Fincastle ASW Competition. One of three a/c to receive Block 3 (interim) iBLOS (satellite) communication system and deployed on Op IMPACT in Middle East.				
<b>140118</b>	Lockheed 285B	285B-5725	CP-140	Aurora
<b>TOS:</b> 5 June 1981				
Carried US registration N4009K for company tests. Delivered on 10 July 1981. With No. 407 (MP) Squadron at CFB Comox, BC in 1991. With 14 Wing at CFB Greenwood, NS in April 1995.				



<b>140119</b>	Lockheed 285B	285L-5828	CP-140A	Arcturus
<b>TOS:</b> 10 December 1992				
Carried US registration N6563L for company tests and ferry flight to Canada. Delivered to IMP Group at Halifax for completion on 31 March 1992. Based at CFB Greenwood, NS in 1993, and April 1995. Reported in use as an instructional airframe at Greenwood by July 2005. Struck off and repositioned outside in the 14 Wing Greenwood Military Aviation Museum Air Park.				
<b>SOS:</b> 2016; Preserved at 14 Wing Greenwood Military Aviation Museum				
<b>140120</b>	Lockheed 285B	285L-5829	CP-140A	Arcturus
<b>TOS:</b> 11 February 1993				
Carried US registration N6564R for company tests and ferry flight to Canada. Delivered to IMP Group at Halifax for completion on 31 May 1992. Based at CFB Greenwood, NS in 1993, still there April 1995.				
<b>SOS:</b> 2010; ferried to long-term storage at AMARG Davis-Monthan AFB, AZ				
<b>140121</b>	Lockheed 285B	285L-5830	CP-140A	Arcturus
<b>TOS:</b> 20 April 1993				
Carried US registration N6567L for company tests and ferry flight to Canada. Delivered to IMP Group at Halifax for completion on 31 August 1992. Based at CFB Greenwood, NS in 1993, still there April 1995. Suffered engine failure during fly by at 2001 Greenwood open house, but landed without further incident. Still with 14 Wing at Greenwood in May 2005.				
<b>SOS:</b> 2010; ferried to long-term storage at AMARG Davis-Monthan AFB, AZ				

## ADDITIONAL NOTES

### Operating Units

The following units are using or have flown CP-140 Aurora / CP-140A Arcturus:

- No. 404 (Long Range Patrol & Training) Squadron, Greenwood, NS
- No. 405 (Long Range Patrol ) Squadron, Greenwood, NS
- No. 415 (Long Range Patrol Force Development) Squadron, Greenwood, NS (Amalgamation of MP&EU & 14 SES)
- No. 407 (Maritime Patrol) Squadron, Comox, BC
- Maritime Proving and Evaluation Unit (MP&EU), Greenwood, NS

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

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

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

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

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

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



**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 CP-140 Cat “A” write-offs = 0**

## ABBREVIATIONS

AB	=	Alberta (Canada)
a/c	=	aircraft
AMARG	=	Aerospace Maintenance and Regeneration Group
BC	=	British Columbia (Canada)
BLOS	=	Beyond Line Of Sight (Satellite Communication System)
Cat	=	Category
CF	=	Canadian Forces
CFB	=	Canadian Forces Base
C/N	=	Construction Number
ft	=	feet
NATO	=	North Atlantic Treaty Organization
NS	=	Nova Scotia (Canada)
OTU	=	Operational Training Unit
RAF	=	Royal Air Force
RCAF	=	Royal Canadian Air Force
RTB	=	Returned To Base
SES	=	Software Engineering Support
S/N	=	Serial Number
Sqn	=	Squadron
SOS	=	Struck Off Strength
TOS	=	Taken On Strength
UK	=	United Kingdom

## (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:

### Books

- Reade, David, *The Age of Orion: The Lockheed P-3 Orion Story*. Atglen, Pennsylvania, USA: Schiffer Publishing Ltd., 1998.



**Websites**

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

(Data as of 15 Mar 2020)

