

Name of Collection

Fredericton Historical Aerial Photo Orthomosaic 1951

Description of Collection

Historical aerial photo Orthomosaic of Fredericton, October 1951. Created from a series of 33 aerial photo survey images collected over three flight days in October 1951. The images that comprise the Orthomosaic were provided digitally to the Geodesy and Geomatics Engineering Department (Remote Sensing Group/Dr. Yun Zhang) at the University of New Brunswick for the *Three Cities New Brunswick Project* (Dr. Sasha Mullally, Dr. Yun Zhang) by the Nova Scotia Aerial Photography Library via special permission by Danny Crain (*Director of Information Systems and Departmental Services Branch, New Brunswick Department of Natural Resources*, February 2023).

Capture

Photographic Capture

Roll	Capture Date	Pilot	Navigator	Camera Operator	Air Photos in Orthomosaic	Time of Day
2231	October 10th, 1951	Bach		Gormley	063, 064, 065, 066, 067	1040 - 1115
2241	October 15th, 1951	W. Ross	N. Parent	E. Young	107, 108, 109, 110, 111, 112, 113	1055-1142
2238	October 17th, 1951	Bach		Gormley	305, 306, 307, 308, 308, 310, 311, 312	1216-1253
2238	October 17th, 1951	Bach		Gormley	407, 408, 409, 410, 411, 412, 413	1255-1325
2241A	October 17th, 1951	W. Ross	N. Parent	E. Young	065, 066, 067, 068, 069, 070, 071	1252-1328

Flight structure

Multiple flights over multiple days.

Relationship between images

Aerial photo survey captured as individual images along survey flight lines.

Geographic scope of the flight

Fredericton and surrounding areas

Purpose of the flight

Unknown

Employing organization or company

Kenting Aviation

Commissioning body

Province of New Brunswick Department of Natural Resources

Original Custody & Early Handling

Initial owner/custodian

New Brunswick Department of Natural Resources

Length of time held by original custodian

Unknown

Original format

Kodak Aero Super XX Film (panchromatic)

Analog print

Evidence of original sequencing or labeling

Individual imagery contains numbering and sequencing based on the available film report issued by Kenting Aviation. See figure below.

KENTING AVIATION / PHOTOGRAPHIC SURVEY

FILM REPORT

Operating Base FREDERICTON NB
 Aircraft Anson DSV
 Type of Photography VERTICAL
 Camera Type & No. GEC 115
 F.L. of Lens .6M
 Filter Mirage-blue
 Light Conditions (...Clear) (...Haze) (...Bright) (...Dull)
 Flying Conditions (...Smooth) (...Bumpy) (...Rough) Average Temp -----

Date OCTOBER 10/43

Time Zone AST

Type of Film SUPER XX

Mag. No. 107

Lens No. 195619

Intervalometer No. 160

Report No. 159

Job No. 383

Flight No. DSV 101

Roll No. 2231

Total Exposures 311 on this Report

Total Exposures 312 on Completed Roll

LINE	HDG	EXPOSURE NO'S	TIME	TIME INTERVAL	ALTITUDE IND. TRUE	POSITION LAT & LONG	REMARKS APERTURE, SHUTTER, ETC.	ANNO NEGATI
1540		159-177	FOG			117,000 6605-6750	# 1/100 Complete	1-
	W	276-277	1010-1115	22	0900			
1539-	E	276-375	FOG	17	"	6750-6605	# # Complete	93-
1538	W	376	FOG		"	6605-6750	# # Complete	1%
		377-467	1112-1226	20				
		158-500	Wound off					
						END OF ROLL		

film in vault



Transfer to Archives

Tracking how the material moved through institutions.

Chain of custody summary

Early chain of custody unknown. New Brunswick Department of Natural Resources air photo library in Fredericton currently retains certain analog prints of the imagery within the Orthomosaic (incomplete due to prints becoming lost over time), and the Nova Scotia Aerial Photography Library contains digital versions of the all the imagery in the Orthomosaic, as well as the negatives in their vault.

Source of acquisition for AIM Project & Format

Service Nova Scotia, Nova Scotia Aerial Photography Library, 33 digital images (TIFFs) in March 2025.

160 Willow Street, Amherst, NS, B4H-3W5

Known storage environments

Film currently in vault at Nova Scotia Geomatics Centre, Nova Scotia Aerial Photography Library in Amherst, NS and select analog images at the Department of Natural Resources New Brunswick in Fredericton, NB.

Technical Provenance

The imagery was georeferenced and orthomosaicked in ArcGIS Pro in August of 2025. Visual artifacts occurred in the result due to internal memory failure, which was not detected until after the Orthomosaic was complete.

Additional information and sources

The following historical documents are also available for this collection:

- Flight Index
 - Fredericton Southside and partial Northside
 - Fredericton Northside beyond Nashwaaksis and Marysville
- Film reports for all rolls contained in the Orthomosaic