

Name of Collection

Fredericton Historical Aerial Photo Orthomosaic 1975

Description of Collection

Historical aerial photo Orthomosaic of Fredericton, May 25th, 1975. Created from a series of 193 aerial photo survey images collected on May 25th, 1975. The images that comprise the mosaic were provided as analog prints (209 air photo prints total, 193 used in the Orthomosaic) 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* (3CT-NB, Dr. Sasha Mullally, Dr. Yun Zhang) by Felix McCarthy, GIS Analyst at the City of Fredericton in 2021. They were then digitized by the Provincial Archives of New Brunswick (PANB – P960) in 2022 and are currently held there for permanent preservation.

Capture

Photographic Capture

Roll	Line	Capture Date	Pilot	Navigator	Camera Operator	Air Photos in Orthomosaic	Time of Day
75013	1W	May 25 th , 1975	J. Campbell	J. Campbell	H. Kemper	259-265, 267, 269-280	1348-1351
75013	2E	May 25 th , 1975	J. Campbell	J. Campbell	H. Kemper	236-250, 252-258	1340-1345
75013	3W	May 25 th , 1975	J. Campbell	J. Campbell	H. Kemper	215-218, 220-227, 231-235	1324-1336
75013	4W	May 25 th , 1975	J. Campbell	J. Campbell	H. Kemper	099, 102-104, 106-112,	1246-1255
75013	5W	May 25 th , 1975	J. Campbell	J. Campbell	H. Kemper	006-020, 023, 024, 026, 027-036	1225-1230

75013	6E	May 25 th , 1975	J. Campbell	J. Campbell	H. Kemper	040-055, 057-069	1235-1240
75013	7E	May 25 th , 1975	J. Campbell	J. Campbell	H. Kemper	124-137, 139-146	1304-1309
75013	8W	May 25 th , 1975	J. Campbell	J. Campbell	H. Kemper	159-170, 172-183	1314-1319
75013	9E	May 25 th , 1975	J. Campbell	J. Campbell	H. Kemper	192-212	1325-1329

Flight structure

Single flight over one day.

Relationship between images

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

Geographic scope of the flight

Fredericton and surrounding area.

Purpose of the flight

Unknown

Employing organization or company

Capital Air Surveys Limited

Commissioning body

Maritime Resource Management Service

Original Custody & Early Handling

Initial owner/custodian

Aerial photo prints initially held by the City of Fredericton. The Interdepartmental Committee on Air Survey Air Photography Report was provided by Service Nova Scotia, from the Nova Scotia Aerial Photography Library.

Length of time held by original custodian

Within the year of capture (1975) to 2021.

Original format

Kodak DX Estar Film

Evidence of original sequencing or labeling

Individual imagery contains numbering and sequencing based on the available film report issued by the Interdepartmental Committee on Air Surveys, Government of Canada (Fig 1). There is also sequencing evidence placed upon on the first negative of every flight line, per the annotating standards outlined in the air photo standards document (Fig 2) produced by the Government of Canada in 1973 (Interdepartmental Committee on Air Surveys, Specification for aerial survey photography, Fig 4b, p. 3-7).

Figure 1

Photo print annotations and connection to Air Photography Report

SIDE 1		INTERDEPARTMENTAL COMMITTEE ON AIR SURVEY AIR PHOTOGRAPHY REPORT										ICAS 2 1973	
CONTRACTOR'S JOB NO.		7510		FILM TYPE		B & W, Colour		I.C.A.S. JOB NO.		FEDERAL ROLL NO.			
CAMERA TYPE		Zeiss RUMA 15/23		Kodak DX Estar		X		NR. 75013		75233			
LENS NO.		116258		EMULSION NO.		M406-17-02		EXPIRY DATE		June '77			
CALIBRATED F.L.		150.93mm		MAGAZINE NO.		111614		FILTER TYPE & NO.		Zeiss B 115351		AVERAGE SCALE	
Date	Annotated Neg. Nos.	Line No. & Direction	Exposure No.	Start	Finish	GMT	TRUE ALT.	ASL	Camera Exposure	REMARKS			
May 25	1 - 39	SW	134	179	1225	1230	3200	5.6/200	5.6/200	5701-SP001	1:6400		
	40 - 71	SE	180	217	1235	1240	"	"	"				
	72 - 115	NE	218	209	1245	1255	"	"	"				
			270							Blanks			
			1	5						Blanks			
	116-143	SE	6	41	1304	1309	3200	5.6/200	5.6/200	1:6400			
	149-135	SE	42	84	1314	1319	"	5.6/250	"				
	186-214	SE	95	120	1325	1329	"	"	"				
	215-235	SW	121	144	1324	1336	"	"	"				
	236-259	SE	145	170	1340	1345	"	"	"				
	259-281	SW	171	198	1340	1351	"	5.6/300	"				
			199							Blank			
			<i>feld nr 1000</i>										

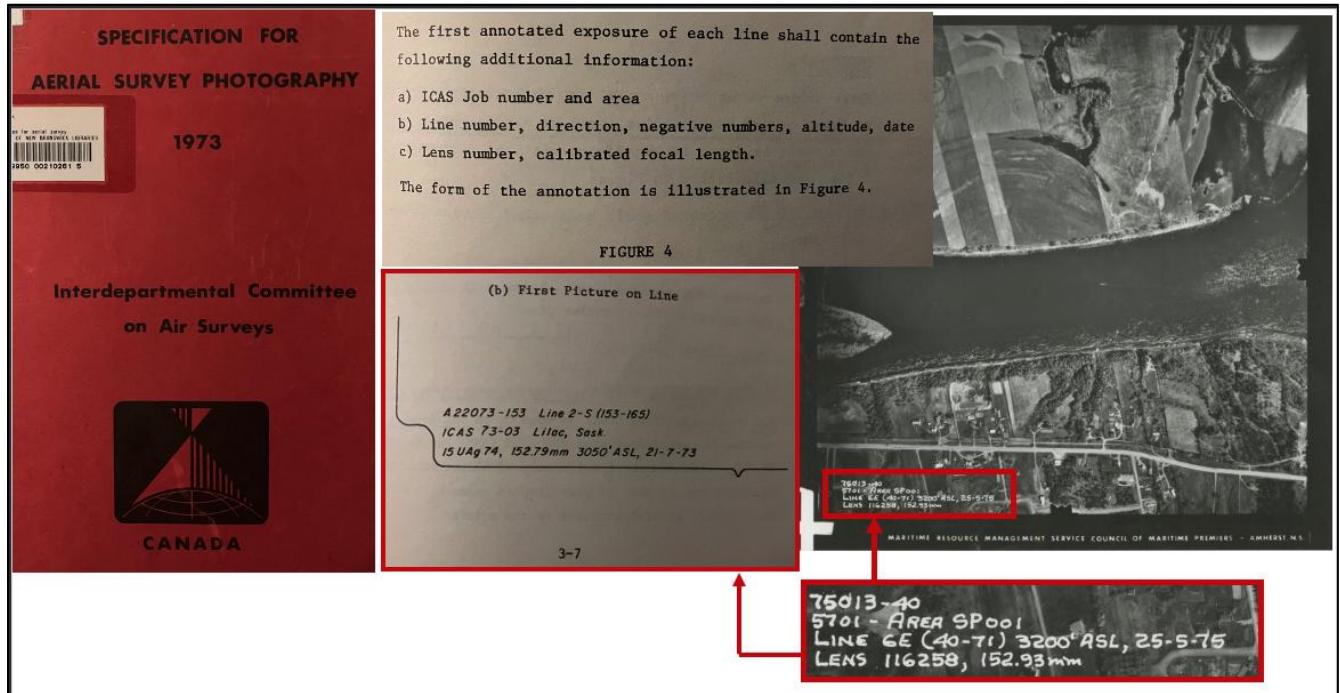


75013 41

MARITIME RESOURCE MANAGEMENT SERVICE COUNCIL OF MARITIME PREMIERS - AMHERST, N.S.

Figure 2

First exposure of each flight line annotation standards and connection to air photo



Interdepartmental Committee on Air Surveys (1973). Specification for aerial survey photography. The author.

Transfer to Archives

Tracking how the material moved through institutions.

Chain of custody summary

The imagery in the mosaic (193 out of 209 aerial photo prints) is part of a collection that was held at Fredericton City Hall as analog prints within its year of capture (1975) until the summer of 2021. The analog imagery was then given to the Geodesy and Geomatics Engineering Department (GGE, Remote Sensing Group/Dr. Yun Zhang) at the University of New Brunswick (UNB) for the *Three Cities New Brunswick Project* (3CT-NB, Dr. Sasha

Mullally, Dr. Yun Zhang) by Felix McCarthy, GIS Analyst at the City of Fredericton (2021). The images were then organized and given to the Provincial Archives of New Brunswick (PANB – P960) for digitization and preservation of the analog prints (2021). The digitized imagery was then given to the geomatics analyst in the 3CT-NB Project in GGE at UNB (2022) and processed for the 3CT-NB project (2023 and again in 2024). The film negatives and the air photography report for the imagery in the mosaic are currently held at the Nova Scotia Aerial Photography Library.

Source of acquisition for AIM Project & Format

City of Fredericton, Felix McCarthy, GIS Analyst, 209 analog prints

Known storage environments

Film (vault, Nova Scotia Aerial Photography Library, current), analog prints (banker box in Fredericton City Hall, within capture date (1975) – 2021), E13 Remote Sensing Lab for sorting and interpretation at UNB in GGE (2021), PANB (digitizing and preservation, 2022 – present)

Technical Provenance

The imagery was georeferenced in ArcGIS Pro (2022) and then mosaicked and enhanced visually in PCI Geomatica (2023), then orthomosaicked in ArcGIS Pro (2024).

Additional information and sources

The following documents are also available for this collection:

Air Photography Report