

## Name of Collection

Fredericton Historical Aerial Photo Orthomosaic 1975

## Description of Collection

Historical aerial photo Orthomosaic of Fredericton, May 25<sup>th</sup>, 1975. Created from a series of 193 aerial photo survey images collected on May 25<sup>th</sup>, 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 <sup>th</sup> , 1975 | J. Campbell | J. Campbell | H. Kemper       | 259-265, 267, 269-280           | 1348-1351   |
| 75013 | 2E   | May 25 <sup>th</sup> , 1975 | J. Campbell | J. Campbell | H. Kemper       | 236-250, 252-258                | 1340-1345   |
| 75013 | 3W   | May 25 <sup>th</sup> , 1975 | J. Campbell | J. Campbell | H. Kemper       | 215-218, 220-227, 231-235       | 1324-1336   |
| 75013 | 4W   | May 25 <sup>th</sup> , 1975 | J. Campbell | J. Campbell | H. Kemper       | 099, 102-104, 106-112,          | 1246-1255   |
| 75013 | 5W   | May 25 <sup>th</sup> , 1975 | J. Campbell | J. Campbell | H. Kemper       | 006-020, 023, 024, 026, 027-036 | 1225-1230   |

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

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).

### Photo print annotations and connection to Air Photography Report

| SIDE 1               |                    | INTERDEPARTMENTAL COMMITTEE ON AIR SURVEY |              |                 |      |               |               |                 |                   |  |  | SIDE 2           |  |
|----------------------|--------------------|---|--------------|-----------------|------|---------------|---------------|-----------------|-------------------|--|--|------------------|--|
| CONTRACTOR'S JOB NO. |                    | AIR PHOTOGRAPHY REPORT                    |              |                 |      |               |               |                 |                   |  |  | I.C.A.S. JOB NO. |  |
| 7510                 |                    |   |              |                 |      |               |               |                 |                   |  |  | 1073             |  |
| CAMERA TYPE          |                    | FILM TYPE                                 |              |                 |      | B&W Colour    |               | SERIAL ROLL NO. |                   |  |  |                  |  |
| Zeiss PMMA 15/23     |                    | Kodak DX Estar                            |              |                 |      | X             |               | NR 75013        |                   |  |  |                  |  |
| LENS NO.             |                    | EMULSION NO.                              |              | EXPIRY DATE     |      |               |               |                 |                   |  |  |                  |  |
| 116258               |                    | E-006-17-02                               |              | June '77        |      | 75233         |               |                 |                   |  |  |                  |  |
| CALIBRATED F.L.      |                    | MAGAZINE NO.                              |              | FILM TYPE & NO. |      | AVERAGE SCALE |               |                 |                   |  |  |                  |  |
| 150.93mm             |                    | 111614                                    |              | Zeiss B 115351  |      |               |               |                 |                   |  |  |                  |  |
| Date                 | Amounted Neg. Nos. | Line No. & Direction                      | Exposure No. |                 | GMT  |               | TRUE ALT. ASL | Camera Exposure | REMARKS           |  |  |                  |  |
| May 25               | 1 - 39             | 5W  | 134          | 179             | 1225 | 1230          | 3200          | 5.6/200         | 5701-SP001 1:6400 |  |  |                  |  |
|                      | 40 - 71            | 6E  | 180          | 217             | 1235 | 1240          | "             | "               | "                 |  |  |                  |  |
|                      | 72 - 115           | 4W  | 218          | 209             | 1245 | 1255          | "             | "               | "                 |  |  |                  |  |
|                      |                    |   | 270          |                 |      |               |               |                 | Blanks            |  |  |                  |  |
|                      |                    |   | 1            | 5               |      |               |               |                 | Blanks            |  |  |                  |  |
|                      | 116-143            | 7E  | 6            | 41              | 1304 | 1309          | 3200          | 5.6/200         | 1:6400            |  |  |                  |  |
|                      | 149-195            | 8W  | 42           | 84              | 1314 | 1319          | "             | 5.6/250         | "                 |  |  |                  |  |
|                      | 186-214            | 9E  | 85           | 120             | 1325 | 1329          | "             | "               | "                 |  |  |                  |  |
|                      | 215-235            | 3W  | 121          | 144             | 1324 | 1336          | "             | "               | "                 |  |  |                  |  |
|                      | 236-259            | 2E  | 145          | 170             | 1340 | 1345          | "             | "               | "                 |  |  |                  |  |
|                      | 259-281            | 1W  | 171          | 198             | 1348 | 1351          | "             | 5.6/300         | "                 |  |  |                  |  |
|                      |                    |   | 129          |                 |      |               |               |                 | Blank             |  |  |                  |  |
|                      |                    |   |              |                 |      |               |               |                 |                   |  |  |                  |  |
|                      |                    |   |              |                 |      |               |               |                 |                   |  |  |                  |  |

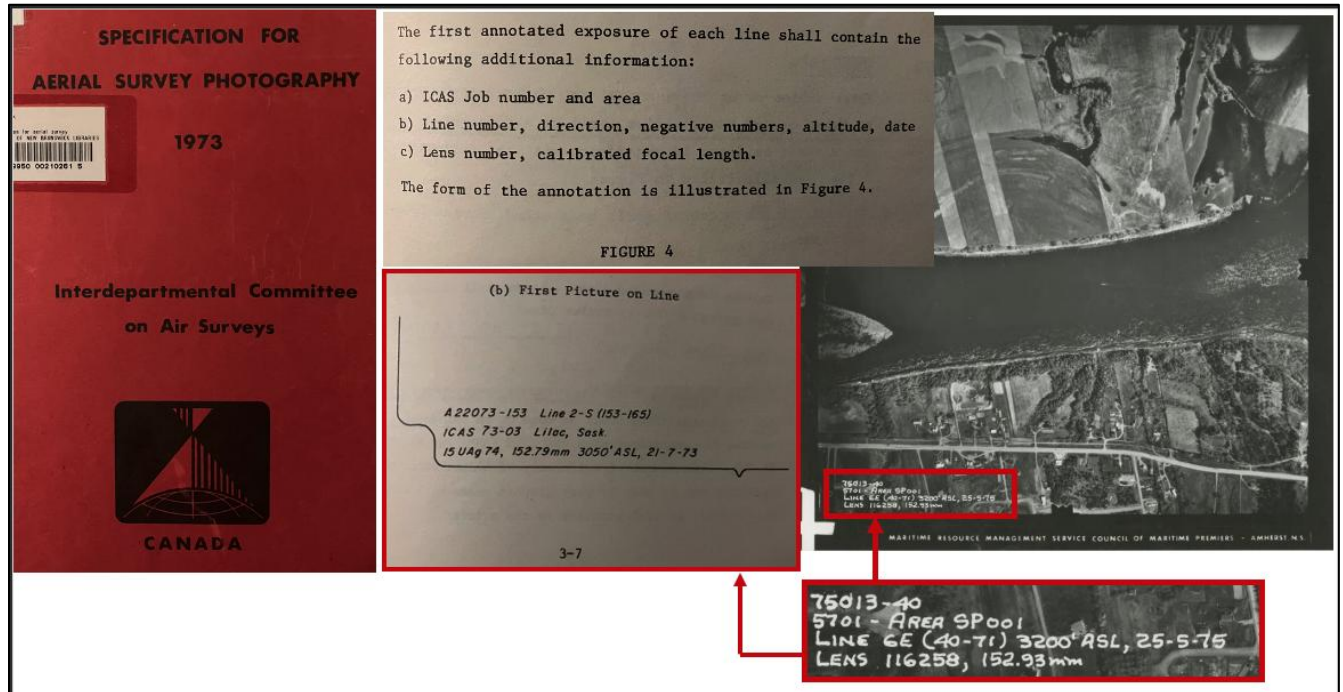
*filed in water*

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

75013 - 41

**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