LAKELSE

Project 79 FDC 2

During the time period May 22, 1979 to June 22, 1979 and July 10 & 11, 1979, a bathymetric sounding of the lake outlet area, 12 cross-sections on Lakelse River, 27 vertical control points, 6 elevation reference monuments and overbank sections of certain areas of the lakeshore were completed in 200 man-days (including travel).

1) The bathymetric sounding was performed using theodolites and echo sounder, covering the outlet bay of the lake and the river channel downstream to Herman Creek. The soundings were positioned by angle intersection from shore stations, which were positioned from trig. stations EATMOR, ADAY, GETSAL using Wild T-2 and H.P. Soundings ploted at Horizontal Scale 1:1250

2) The location of the cross-sections are identified on the following photos:

BC 5611 No. 245	XS 1-5
BC 5611 No. 244	XS 6-7
BC 5611 No. 243	XS 8-9
BC 5611 No. 242	XS 10-12

Elevations of the cross-sections are based on Geodetic Datum, with each cross-section station pin being levelled with a Zeiss Ni 2. The cross-section topography was obtained by stadia using a Kern DK 2.

Levels are recorded in level books 2231 L-1, L-2, L-3.
Field data is recorded in IB.M. Folder 2231 I-1.

Cross-sections are plotted at	Horizontal Scale	1:250
	Vertical Scale	1:25

3) The air-photo mapping vertical control points were established by dual-run level (Zeiss Ni 2) based on Geodetic Datum (GSC 1872-J, GSC 1874-J, GSC 1871-J, GSC 1905-J, GSC 1845-J). The photo points are shown on air photographs B.C. 5611 No. 79, 138, 154, 205, 208, 250, 254, 257, 259, 261, 262.

The elevation reference monuments are based on Geodetic Datum (GSC 1871-J, GSC 1872-J, GSC 1874-J, GSC 1845-J and Sta. TAMIT), established by dual run level.

4) The lake overbank sections were done along the east shore of Lakelse Lake from the Lakelse Hot Springs canal, north to Water Lily Bay, and on the west shore from Lakelse River north to Catt Point. The sections were established by chain and level, using the lake water level as the elevation reference. The positions of the sections were photo identified on air photographs BC 5611 No's. 151, 199, 206, 208, 246.

Field data is recorded in level books 2231 L-5, L-6.

This folder contains:

a) Copies of monument description sheets
b) level adjustment sheets
c) list of T.B.M's placed in the area
d) distance reductions and traverse for horizontal control of sounding stations
e) least-square level adjustment of reference monuments, T.B.M.'s, photo points and river cross-section pins.
f) output of the 12 cross-sections of Lakelse River with half-size plots
g) punch cards for HEC-2 Program
h) output of Lakelse Lake outlet sounding
i) Drawing of the level network
j) Orthophoto maps showing positions of monuments, T.B.M.'s, photo points, river cross-sections, trig. stations, and G.S.C.'s.
k) bridge plan of railroad bridge over Lakelse River.