

ALL COMMUNICATIONS SHOULD BE ADDRESSED TO THE  
DIRECTOR OF SURVEYS AND MAPPING  
THE REPLY TO THIS LETTER SHOULD BE MARKED  
FOR THE ATTENTION OF:



YOUR FILE NO.

Circular Letter No. 257  
OUR FILE NO.

DIRECTOR AND SURVEYOR-GENERAL X  
FIELD OPERATIONS DIVISION  
LEGAL SURVEYS DIVISION  
MAP PRODUCTION DIVISION

**SURVEYS AND MAPPING BRANCH**  
DEPARTMENT OF LANDS, FORESTS,  
AND WATER RESOURCES  
VICTORIA, BRITISH COLUMBIA

March 5, 1975.

CIRCULAR LETTER TO ALL B.C. LAND SURVEYORS, REGISTRARS,  
AND SURVEY STAFF IN LAND REGISTRY OFFICES.

Dear Sir:

Re: Adoption of U.T.M. Rectangular Coordinates.

The adoption of the Universal Transverse Mercator projection and rectangular coordinates to replace the system based upon the Polyconic projection will, sooner or later, have its impact upon all B. C. Land surveyors. This letter is therefore addressed to all surveyors and whether or not you currently conduct surveys in Integrated Survey Areas you are urged to take note of its content.

For Integrated Survey Area No. 8, District of Mckenzie, a new Certificate dated 3 March 1975 has been issued with U.T.M. coordinates and U.T.M. grid bearings and distances in metres between intervisible control monuments. The first page of the Certificate is enclosed as a sample. It will be noted that the mean scale and sea level factors and a combined factor for the area are listed. In addition to the sea level (S.L.) U.T.M. coordinates which are the official coordinates, a secondary set of ground level (G.L.) coordinates, from which the scale factor has been eliminated, are also listed. These ground level coordinates should never be used to refer to a point or control monument in any document and are issued purely for the convenience of land surveyors and Land Registry Office staff in dealing with cadastral surveys.

Until such time as metric conversion is complete and distances are shown on survey plans in metric units there will be the inconvenience of conducting surveys in feet but using control in metric units. Possibly the simplest solution is to divide the G.L. coordinates by the factor 0.3048 to convert them to feet, subtract some arbitrary large constant and then work entirely in feet at ground level.

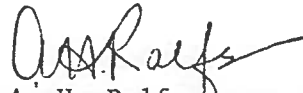
When U.T.M. replace Polyconic coordinates in any area there will also be a change of up to about two degrees in the grid bearings unless, as in the case of Mckenzie, the central meridians of the Polyconic and

U.T.M. zones happen to coincide in which case bearings on the two systems will (happily) be virtually identical. The bearings of common lines on plans of surveys conducted in Integrated Survey Areas before and after the change to U.T.M. coordinates may therefore be different, but in any one Integrated Survey Area the swing should be constant for all practical purposes.

The new Certificate for Integrated Survey Area No. 8, District of Mckenzie has been deposited in the Land Registry Office at Prince George and at the District Office in McKenzie where it is open for inspection and the obtaining of copies of pages as required in accordance with the procedures of the office concerned.

Your attention is further directed to the current General Instructions for Cadastral Surveys in Integrated Survey Areas - B.C. Reg. 576/74.

Yours truly,



A. H. Ralfs,  
Surveyor-General and Director,  
Surveys and Mapping Branch.

Enclosure.

INTEGRATED SURVEY AREA NO.8 DISTRICT OF MACKENZIE

CARIBOO DISTRICT  
 UNIVERSAL TRANSVERSE MERCATOR PROJECTION (U.T.M.)  
 ZONE 10 CENTRAL MERIDIAN 123  
 CO-ORDINATES BASED ON SURVEYS OF AUGUST 1971,  
 JUNE 1972, JULY 1973 & AUG 1974  
 ORDER IN COUNCIL NO. 1094-72.  
 ADOPTED MEAN SCALE FACTOR (SC) = 0.9996000  
 SEA LEVEL MEAN GROUND LEVEL 772 METRES.  
 COMBINED FACTOR (CF) = SC X SL = 0.9994792  
 SEA LEVEL (SL) FACTOR = 0.9998791  
 ADDED MEAN SCALE FACTOR (SC) = 0.9996000  
 SEA LEVEL COORDINATE OR DISTANCE = GROUND LEVEL COORDINATE OR DISTANCE X CF

CCNTROL MONUMENT	NORTHING METRES	EASTING METRES	CONTROL MONUMENT	GRID BEARING	SEA LEVEL GRID DIST METRES	GROUND DISTANCE METRES
POST 9451	SL 6130981.714 GL 6134176.604	495129.611 495387.626	POST 9454	240 59 37	238.151	238.275
POST 9452	SL 6131820.590 GL 6135015.917	494667.228 494925.002	POST 9459	108 34 14	219.205	219.319
POST 9453	SL 6130863.787 GL 6134058.615	494805.410 495063.255	POST 9484	324 53 09	189.059	189.158
POST 9454	SL 6130866.233 GL 6134061.063	494921.332 495179.239	POST 9454	088 47 28	115.949	116.009
POST 9455	SL 6131503.213 GL 6134698.374	494401.446 494659.082	POST 9488	269 58 55	682.904	683.260
POST 9456	SL 6131533.989 GL 6134729.167	494206.109 494463.643	POST 9475	320 57 25	543.116	543.399
POST 9457	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 74H2632	320 19 26	369.656	369.849
POST 9458	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9451	060 59 37	238.151	238.275
POST 9459	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9453	268 47 28	115.949	116.009
POST 9472	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9457	145 21 35	163.339	163.424
POST 9475	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9456	279 57 13	197.747	197.850
POST 9477	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9457	145 21 35	163.339	163.424
POST 9478	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9456	279 57 13	197.747	197.850
POST 9479	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9457	145 21 35	163.339	163.424
POST 9480	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9456	279 57 13	197.747	197.850
POST 9481	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9457	145 21 35	163.339	163.424
POST 9482	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9456	279 57 13	197.747	197.850
POST 9483	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9457	145 21 35	163.339	163.424
POST 9484	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9456	279 57 13	197.747	197.850
POST 9485	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9457	145 21 35	163.339	163.424
POST 9486	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9456	279 57 13	197.747	197.850
POST 9487	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9457	145 21 35	163.339	163.424
POST 9488	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9456	279 57 13	197.747	197.850
POST 9489	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9457	145 21 35	163.339	163.424
POST 9490	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9456	279 57 13	197.747	197.850
POST 9491	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9457	145 21 35	163.339	163.424
POST 9492	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9456	279 57 13	197.747	197.850
POST 9493	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9457	145 21 35	163.339	163.424
POST 9494	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9456	279 57 13	197.747	197.850
POST 9495	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9457	145 21 35	163.339	163.424
POST 9496	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9456	279 57 13	197.747	197.850
POST 9497	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9457	145 21 35	163.339	163.424
POST 9498	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9456	279 57 13	197.747	197.850
POST 9499	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9457	145 21 35	163.339	163.424
POST 9500	SL 6131368.828 GL 6134563.919	494494.292 494781.976	POST 9456	279 57 13	197.747	197.850