

**GeoBC and NR Sector Data Services
BRITISH COLUMBIA ACTIVE CONTROL SYSTEM**

GNSS ACTIVE CONTROL POINT as of 2023/11/01

STATION: BCCG
GEODETIC MARK: 382358
FULL NAME: BCACS - Castlegar ACP
CLASS: BCACS Primary
LOCATION: Castlegar, B.C., Canada

Installed on mast on building at Selkirk College

- 2007/06/11

MARKER COORDINATES: Latitude N 49° 18' 42.795076"
Longitude W 117° 39' 10.901013"
Hybrid Ellipsoid Height (HEH) 444.137m*
Orthometric Height 459.287m

GEODETIC ATTRIBUTES: Datum/Ellipsoid = NAD83(CSRS) 4.0.0.BC.1
Geoid Model = HTV2.0 (1997.0)
N = -15.146
xi = -2.8s
eta = 0.4s

*The Hybrid Ellipsoid Height was derived by adding the HTV2.0 separation (N) to the levelling-derived orthometric height. It is not a true GNSS-derived ellipsoid height. BCACS, since inception, was designed for optimal compatibility with orthometric heights in the surrounding passive control networks.

REFERENCE NETWORKS:

Inner: 918243, 288977, 638130, 388421

Outer:

COLLOCATION TIES:

- nil

ANTENNA HEIGHT: > vertical distance measured to antenna reference point

- 2006/03/27 00:00UT 0.018m

GPS RECEIVER:

- 2023/11/01 20:00UT Septentrio PolaRx5 SN 3079613
- 2009/12/08 18:05UT Leica GRX1200GG Pro s/n# 355263
- 2008/05/02 18:05UT Leica RS500 s/n# 80255
- 2007/06/06 00:00UT Leica RS500 s/n# 82195

FIRMWARE:

- 2023/11/01	20:00UT	Firmware 5.5.0
- 2015/06/16	15:00UT	Firmware 9.20 / ME 3.823
- 2013/11/06	16:55UT	Firmware 8.71 / ME 3.822
- 2012/05/02	15:15UT	Firmware 8.51 / ME 3.019
- 2011/09/08	16:00UT	Firmware 8.20 / ME 3.019
- 2011/02/22	16:00UT	Firmware 8.10 / ME 3.019
- 2010/09/09	14:50UT	Firmware ver. 8.0
- 2010/05/05	18:30UT	Firmware ver. 7.80
- 2009/12/08	18:05UT	Firmware ver. 7.53
- 2007/06/06	00:00UT	Firmware VER. 5.00

ANTENNA (diagram below):

- 2009/12/08	18:05UT	Leica AT504GG w/ LEIS Dome sn #200316
- 2007/06/06	00:00UT	Leica AT504 w/ LEIS Dome sn #103106

ANTENNA CABLE:

- 2007/06/06	00:00UT	??
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CLOCK:

- 2023/11/01	20:00UT	GNSS Receiver Internal Clock
- 2007/06/06	00:00UT	GPS Receiver Internal Clock

COMPUTER HARDWARE:

- N/A

MODEMS:

- 2009/12/08	18:05UT	n/a
- 2007/06/06	00:00UT	Lantronix MSS100 sn10231901

UNINTERRUPTABLE POWER SUPPLY:

- 2023/11/01	20:00UT	Provided by Selkirk College
- 2007/06/06	00:00UT	Unknown

STATUS:

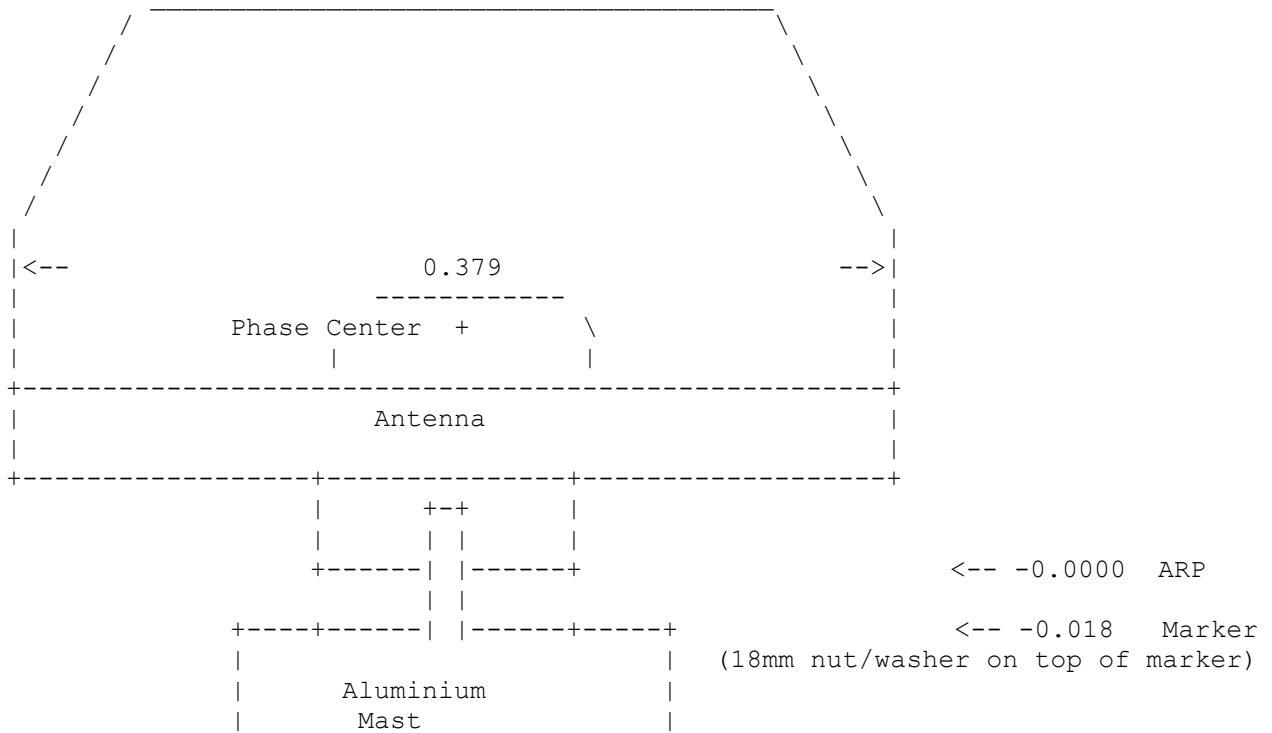
- 2007/06/06	00:00UT	Operational
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AGENCY: GeoBC and NR Sector Data Services
Natural Resource Information & Digital Services Division
Ministry of Water, Land and Resource Stewardship

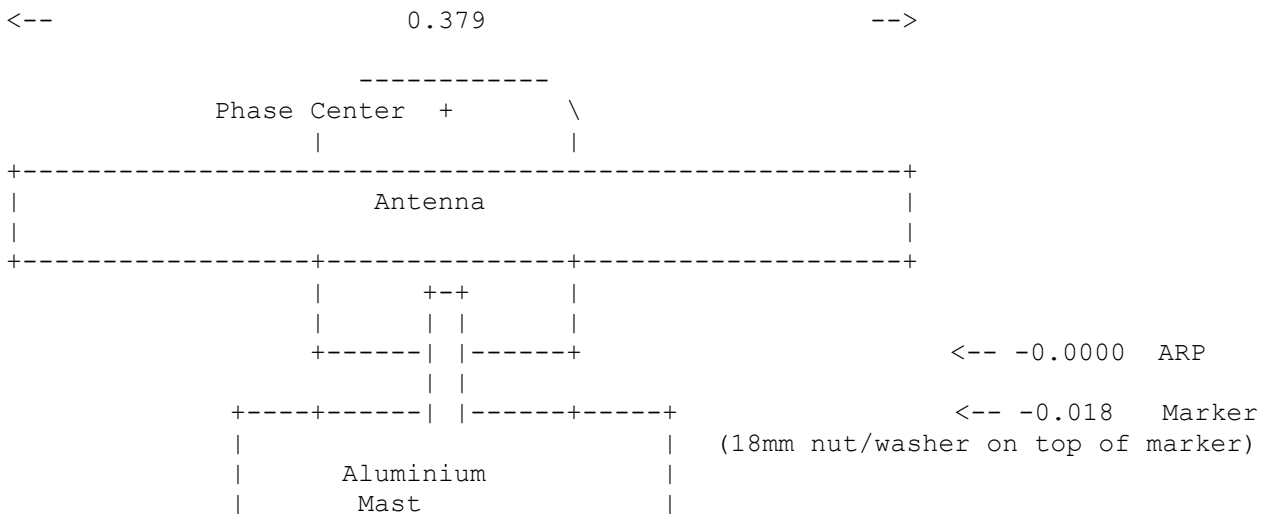
CONTACT: Foundational Information and Technology Branch
3400 Davidson Ave.
Victoria, BC, Canada V8Z 3P8
email: GeoBCinfo@gov.bc.ca

ANTENNA DIAGRAMS:

2009/12/08 Leica AT504GG w/ Leica dome (AT504GG LEIS)



2004/11/04 Dorne Margolin Leica Choke Ring with Leica dome (AT504 LEIS)



ACRONYMS

ACP ... Active Control Point
ARP ... Antenna Reference Point
BCACS ... British Columbia Active Control System
GNSS ... Global Navigation Satellite System
HEH ... Hybrid Ellipsoid Height
HTV2.0 (1997.0) ... Height Transformation Model Version 2.0 Epoch 1997.0
N ... geoid-ellipsoid separation
NAD83(CSRS) 4.0.0.BC.1... North American Datum 1983, Canadian Spatial
Reference System, Version 4, Epoch 2002, British Columbia