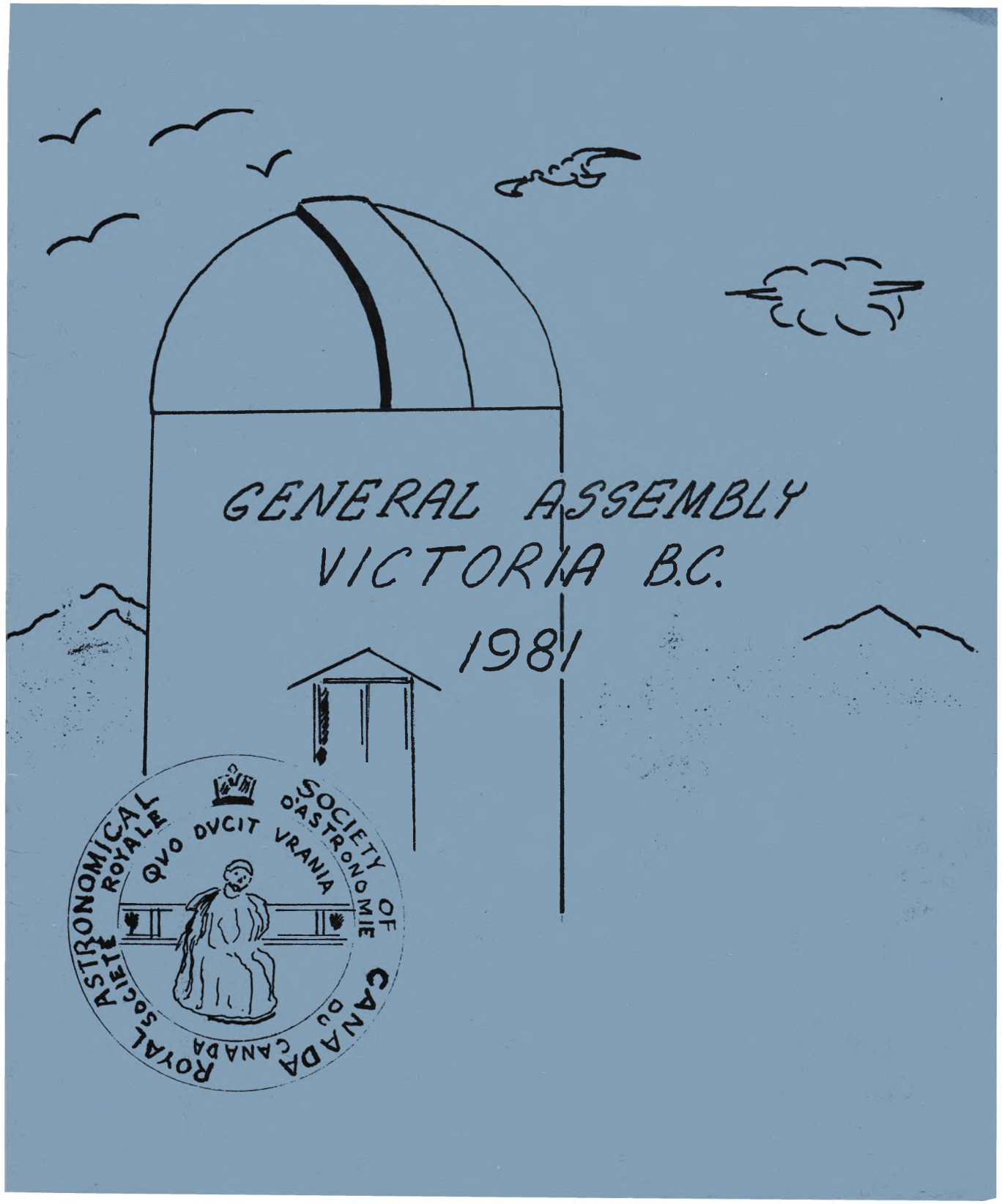
GENERAL ASSEMBLY
VICTORIA B.C.
1981
ROYAL ASTRONOMICAL SOCIETY OF CANADA
SOCIETE ROYALE D'ASTRONOMIE DU CANADA
QVO DVCIT VRANIA

Displays are in the Elliott Building Lecture Wing, main floor lobby and basement, and will be judged on Saturday.

PROGRAM

Friday 26 June

12.00 PDT	Registration opens, Cadboro Commons Block
14.00	National Council meeting
19.00	Wine and Cheese Reception, Purple Lounge, Commons Block
20.30	Song Contest, Purple Lounge
21.00	Slides and Discussions

Saturday 27 June

08.30	Late registration, Cadboro Commons Block
09.00	Paper session, Elliott Building room 168
10.45	Group photograph and Coffee break
12.45	Lunch, available at University Centre Cafeteria
14.00	Paper session, Elliott Building room 168
18.00	Bar opens, East-West Lounge, Student Union Building
19.00	Banquet, East-West Lounge Presentation of Awards Northcott Memorial Lecture by Dr James Hesser: "Below the Tip: New Controversies in Globular Cluster Star Research"

Chairmen of paper sessions are Frank Shinn, Bernadette Harris, Len Orr and Roy Belfield.

Sunday 28 June

09.00) 10.30)	Buses depart for Marine Drive to Inner Harbour (see Buss Schedule)
	Free time to visit Provincial Museum, Legislative Buildings, Wax Museum, Undersea Gardens, Crystal Gardens, Maritime Museum, Beacon Hill Park, or other nearby attractions.
12.30) 13.30)	Buses leave Provincial Museum for UVic.
14.00	RASC Annual Meeting
16.00	National Council meeting
18.30	Marine Drive north to the Dominion Astrophysical Observatory (see Bus Schedule)
19.00	Picnic Buffet at the DAO
	Tour of DAO facilities and observing with the 1.85 metre telescope.
	Buses returning to the University from 22.00 to 24.00.

Monday 27 June

08.30	Minibus to Schwartz Bay for the Gulf Islands cruise on the ferry 'Mayne Queen' (4 hours)
09.00	Bus to Butchart Gardens; this bus also carries those booked for Institute of Ocean Sciences/ Pacific Geoscience Center, Patricia Bay; bus returns to UVic campus by 13.00.
	Cruise bus returns to UVic campus by 14.30.

BUS SCHEDULE

Please note: departure and arrival point at the University of Victoria is, in all cases, the parking lot (Lot 5) off Sinclair Road, adjacent to the University residences and the Cadboro Commons Block.

Sunday 28 June

09.00 PDT	First bus leaves for Marine Drive (south), via Cadboro Bay, Uplands, Beach Drive, Dallas Road and Beacon Hill Park, stopping for photographs at several scenic points en route, arriving at the Provincial Museum parking lot about 10.00.
10.30	Second bus leaves for Marine Drive (as above), arriving at Provincial Museum at 11.30.
12.30	First bus departs Museum parking lot to return directly to UVic.
13.30	Second bus departs Museum parking lot for UVic.
18.30	Two buses depart for Dominion Astrophysical Observatory by Marine Drive (north), via Arbutus Road, Mount Douglas Park and Royal Oak Drive, arriving by 19.00.
22.00 on	Bus leaves DAO for return to UVic, cycling back to the Observatory until all passengers have returned to the University by about midnight.

Monday 29 June

08.30	Minibus leaves for Schwartz Bay and ferry trip round Gulf Islands, returning passengers to UVic by 14.30.
09.00	Bus leaves for Butchart Gardens (arriving 9.30) and Institute of Ocean Sciences (arriving 10.00)
12.00	Bus departs IOS/PGC for Butchart Gardens (leaving there by 12.30), returning to UVic by 13.00.

ABSTRACTS OF PAPERS PRESENTED

Design and Construction of a 10-foot diameter Aluminum Domed Observatory by John Hicks, Keswick, Ontario. Site requirements for the amateur observatory and discovery of material suppliers are discussed. The subject is broken down into consideration of various aspects of the problem: footings, base wall, pier, dome and ring design, site preparation, and assembly when the initial stages of fabrication have been completed, with some of the problems related to the weights, etc, and finally costs.

An Observatory Building Project by Leo Enright, Sharbot Lake, Ontario. A member of the Kingston Centre shows how, over a number of years, a small but carefully planned observatory was constructed at a dark-skies site.

The Orion Nebular Variable Stars: A Symphony of Delicacy and Brilliance by David H. Levy, Tucson, Arizona. Considers the results and the observing procedure of a five-season program of watching twenty young variable stars in the M42 region. As seasons went on, the methods of observing became more standardized, and as a result the data acquired greater levels of reliability. Some unusual findings are reported.

The Effect of Astronomical Influence on Geological Events by Richard Linkletter, Bremerton, Washington. Covers material gleaned from reports by expert geologists regarding correlation of gravitational influence of solar system objects on the earth, including earth tides and geologic events, with a note on the behaviour of Mount St Helens.

Eye Injuries following the Solar Eclipse of February 1979 by Bernt Ralph Chou, University of Waterloo, Ontario. The analysis of a survey of eclipse-related eye injuries following the solar eclipse of February 1979 is presented. Specific target populations for future advisory campaigns are identified. The presentation of instructions for safe eclipse watching, and compliance with these instructions, appear to be significant factors in preventing eclipse retinopathy.

A Small Collection of Antique Instruments at the McLaughlin Planetarium by Thomas R. Clarke, McLaughlin Planetarium, Toronto. The McLaughlin Planetarium possesses a collection of about 30 European instruments many of which are of the 17th and 18th century and of astronomical interest. Descriptions and identifications were originally prepared by Henry King but few items have been documented outside the Royal Ontario Museum. The collection will be briefly documented and illustrated, with the intent that its existence be more widely known and that it might encourage the identification and preservation of similar items of Canadian significance. Of particular interest are 14 sundials of various types, a 53 mm brass achromatic refractor by Peter Dollond and a 76 mm brass Gregorian also by Dollond.

An Account of the 6-inch Cooke Refractor in Toronto by Brian Beattie, Scarborough, Ontario. This paper traces the history of the 6-inch Cooke refractor presently housed at the David Dunlap Observatory. This instrument, now almost 100 years old, had a central role in the growth of astronomy in Canada. The paper outlines its various uses by the Meteorological Service, the RASC and the University of Toronto.

Cleveland Abbe and Otto Struve by Alan H. Batten, Dominion Astrophysical Observatory, Victoria. Cleveland Abbe, a nineteenth-century American astronomer and meteorologist, spent two years (1865 and 1866) at Pulkovo Observatory in Russia under the direction of the first Otto Struve (1819-1905). A friendship developed between the two men, and letters from Struve to Abbe are now preserved in the Library of Congress in Washington, DC. Abbe also wrote many letters home while he was in Pulkovo and these, too, have been preserved. Extracts from the letters help to recreate the personalities of the men and life at Pulkovo.

Astronomical Installations in Britain - Ancient and Modern by Donovan H. Fallows, Ladysmith, BC. A short illustrated presentation regarding the installations in Britain from the period of Stonehenge to Greenwich and Herstmonceux. There is a short aside to the astronomical clock in York Minster, which is a memorial to the fliers of World War II, and there are glimpses of the country around the various sites.

Some Activities in Communicating Astronomy at the McLaughlin Planetarium by Thomas R. Clarke, McLaughlin Planetarium, Toronto. In recent years astronomers and planetarians have become more involved in taking astronomy out of their institutions and into the community in a variety of ways. Over the past twelve months the staff at the McLaughlin Planetarium has been involved in a number of new initiatives in communicating astronomy including: International Planetarium Week, General Interest Courses in Astronomy, Public Lectures, School Broadsheets, Circulating Displays. This report will briefly describe and evaluate these activities.

Transporting a 12½-inch Newtonian Telescope by Ken Hewitt-White, Vancouver, BC. Work for the McMillan Planetarium requires the easy transport and quick setting up of 12½-inch Newtonian optics. Slides depict the unique telescope configuration in the rear of the van, an arrangement that does not interfere with other interior use of the vehicle. Truck and telescope will be available for inspection throughout the weekend.

Driving Ball-Mount Telescopes by Tom Tothill, Vancouver, BC. The demonstration, on an Astroscan telescope with speeded-up motions for clarity, will show how a ball-mount can be driven about any chosen axis by instant adjustments of the drive mechanism. The telescope can have the usual equatorial drive, can be swept up and down in declination while holding in right ascension, can be instantly converted to altazimuth mode, can sweep up and down in altitude while moving in azimuth, and can be driven about any other axis, including the tube axis. The mechanism is remarkably simple to construct and operate and will be explained.

Solid-State Imagery for the Amateur by Paul Moffat, Winnipeg. Recent articles on the use of CCD image systems at the larger observatories have appeared and were discussed at the General Assembly in Halifax (1980). These sensors are far beyond the reach of amateurs in cost: the sensors of 100 x 100 array size are in excess of $4000 US. But there also exists a family of LINEAR sensors that are just as sensitive and far cheaper. A full sensing system can be built that will interface with most hobbiest computers for less than the cost of a Celestron 8, and yield images superior to the current CCD arrays.

A Cold Camera for Astrophotography by Jack Newton, Victoria. The paper will describe the construction and design of an inexpensive plastic cold camera, and follow its evolution from the optical-plug variety through the vacuum to its final dry-gas model.

Dimensions of Asteroids 216 Kleopatra and 48 Doris from Occultation Timings by Chris Aikman, Dominion Astrophysical Observatory, Victoria. The occultation of a star by asteroid Kleopatra on October 10, 1980, was timed at a number of locations along the shadow path from Edmonton, Alberta, to Goldendale, Washington. These timings yield chord lengths of the shadow projected onto the plans of the sky from each location which indicate the asteroid cross-section to be approximately an ellipse of dimensions 93 x 125 km. The occultation by Doris on March 19, 1981, was observed at Burnaby and Langley, BC, and at Pullman, Washington. Although the data are insufficient to define the asteroid's shape, its diameter in one direction must be at least 196 km, which represents a substantial increase over its previously accepted diameter of 149 km.

July's Partial Eclipse of the Moon by Ian McGregor, McLaughlin Planetarium, Toronto. On the evening of July 16/17, observers in North and South America will be treated to a partial lunar eclipse. The paper will discuss the circumstances of the eclipse and suggest observations which can be made of this event.

Editing a Centre Newsletter by Glenn Graham, Halifax. A ten-minute slide show on the trials and tribulations of being an editor of a newsletter; after which copies of 'Nova Notes' will be distributed to all present.

Economic Considerations for the Future of Optical Astronomy by Peter Jedicke, London, Ontario. There are compelling scientific reasons why attempts to build ground-based optical telescopes should be abandoned in favour of future investments in space and a wider distribution of telescopes with apertures of 2 or 3 metres. Despite this, a number of proposals for such larger telescopes are being promoted. Although these proposals may attract much attention over the coming decade, the astronomical community should realize that waiting for the advent of larger aperture in space is the best policy in the long run.

S P O N S O R S

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The Province of British Columbia
The University of Victoria
Labatt Breweries of British Columbia, Limited
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D O N O R S

The Displays Committee wishes to express its gratitude to the following organizations which have contributed awards so generously:

Eftonscience Incorporated
3500 Bathurst Street, Toronto, Ontario M6A 2C6

McLaughlin Planetarium
100 Queen's Park, Toronto, Ontario M5S 2C6

Hansen Planetarium
15 South State Street, Salt Lake City, Utah, USA 84111

Cygnus-Quasar Books
PO Box 85, Powell, Ohio, USA 43065

Cosmic Search Magazine
Radio Observatory, Box 293, Delaware, Ohio, USA 43016

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