

Saskatoon Skies

The Newsletter of the Saskatoon Centre of the Royal Astronomical Society of Canada

Vol. 45, No. 2

February 2014



Observatory 1966
Smaller trees and bushes, old dome, and sundial intact



Observatory Classroom

Left: A vintage black and white photo of the U of S Observatory as it looked in the 1960's **Right:** The observatory classroom with as it looked in the 1970's. To learn more about the observatory and a bit of history of our Centre, see the feature article on pages 5 & 6 (Photos courtesy of U of S Archives)



Saskatoon Centre
The Royal Astronomical Society of Canada
P.O. Box 317, RPO University
Saskatoon, SK S7N 4J8

WEBSITE:

<http://www.rasc.ca/saskatoon>

E-MAIL: skstars@shaw.ca

To view *Saskatoon Skies* in colour, see our Website:

<http://homepage.usask.ca/~ges125/rasc/newsletters.html>

In This Issue:	
Membership Information / Bottle Drive / Officers of the Centre	2
U of S Observatory Hours / Light Pollution Abatement Website	2
Calendar of Events / Notice of Meeting	3
Minutes of January Executive Meeting – Tenho Tuomi	4
Minutes of January General Meeting – Tenho Tuomi	4
A Bit of Saskatoon Centre History – E. Frazer-Harrison	5 & 6
More on Jim Young's Archival Photo – Rick Huziak	7
Sky Buys and Mirror Cells	7
In Memoriam – John Dobson	8
Supernova in M82 – Rick Huziak	8
Saskatoon Centre Financial Report	9
Observing Clubs and Certificates	10

MEMBERSHIP? JOIN TODAY!

Regular: \$80.00 /year

Youth: \$41.00 /year

Associate: \$33 /year

The Saskatoon Centre operates on a one-year revolving membership. You will be a member for the next 12 months no matter when in the year you join. If you do not want to join at this time, ask to get onto our FREE 3-month Temporary Membership list. You will receive regular mailings of our Saskatoon Skies newsletter and will be invited to participate in Centre activities. Members are encouraged to renew early to avoid disruption in publications. Renew through the National Office at <national@RASC.ca>!

Benefits of Membership in the Saskatoon Centre

- knowledgeable & friendly amateur astronomers
- use of the Sleaford Observatory
- use of the U of S Observatory (after training)
- Saskatoon Skies Newsletter
- Observer's Handbook
- Journal of the RASC (electronic format)
- SkyNews Magazine (bimonthly)
- use of the Centre library
- rent the Centre's Data Projector to give astronomy outreach presentations – contact Les Dickson at astrochem@sasktel.net
- rent the Centre's Telescopes <http://homepage.usask.ca/ges125/rasc/telescopes.html>
- discounts to Sky & Telescope Magazine*
- free, no-cost, no-obligation, 3-month temporary membership if you don't want to join right now!

*New subscription or renewal of Sky & Telescope? Send new info or renewal notice, plus credit card # to Norma Jensen, 128 – 4th Street East, Saskatoon, SK S7H 1H8, or email her at norj@sasktel.net.

U OF S OBSERVATORY

The U of S Observatory is open to the general public every Saturday of the year. Admission is free. The observatory is located on campus, one block north of the Wiggins Avenue and College Drive entrance. On clear nights, visitors may look through the vintage 6-inch and tour several displays. Current events are recorded on the Astronomy Information Line at 966-6429.

Observatory Hours:

January-February	7:30-9:30 pm
March	8:30-10:30 pm
April	9:30-11:30 pm
May-July	10:00-11:30 pm
August	9:30-11:30 pm
September	8:30-10:30 pm
October-December	7:30-9:30 pm

SASKATOON CENTRE'S MAIN OFFICERS:

President – James Gorkoff, 644-1343
Secretary – Tenho Tuomi, 306-858-2453
Vice-President – Jim Goodridge, 370-8530
Treasurer – Norma Jensen, 244-7360

**Bottle Drive &
Canadian Tire \$**
By Colin Chatfield

If you cannot make it to a meeting but would like to contribute your Canadian Tire money please call me at 934-7046.

Newsletter Editor – Ron Waldron
Copy & Collate – Les & Ellen Dickson
Labels & Temps – Mark de Jong
Web Posting – Gord Sarty

Saskatoon Skies is published monthly by the Saskatoon Centre of the RASC. Distribution is approximately 100 copies per issue. Saskatoon Skies welcomes unsolicited articles, sketches, photographs, cartoons, and other astronomy or space science material. **Articles can be sent by mail in any format to the Centre's mailbox.** Submitted materials can be returned upon request. Submissions may also be sent by e-mail to the editor at rmwaldron@shaw.ca as a .doc, no indents, no tabs, one line between paragraphs. Images: .jpg please, no larger than 1 – 1.5 MB, sent by e-mail as attached files. **Deadline for submission of all articles for an upcoming issue is the first Friday of the month!**

A separate by-mail subscription to Saskatoon Skies is available for \$15.00 per year. Saskatoon Skies is also posted on our Saskatoon Centre homepage as a .pdf file and can be downloaded free-of-charge. Members may choose to receive the newsletter by regular mail or via the Internet. Articles may be reprinted from Saskatoon Skies without expressed permission (unless otherwise indicated), provided that proper source credit is given. **DEADLINE for submissions** for each month's issue is the 1st Friday of the month. Saskatoon Skies accepts commercial advertising. Please call the editor 306-665-3392 for rates. Members can advertise non-commercial items free of charge.

**LIGHT POLLUTION
ABATEMENT
WEBSITE AT:
www.ras.sk.ca/lpc/lpc.htm**

RASC CALENDAR OF EVENTS

Feb. 10	Executive and General Meeting – Rm 175 Physics	Jim Gorkoff
Feb. 22	Observer’s Group at Sleaford	Larry Scott
Mar. 22	Observer’s Group at Sleaford	Larry Scott
Mar. 28	Messier Marathon at Sleaford	Larry Scott
Mar. 29	Earth Hour with Telescopes at Circle Park Mall	Jim Goodridge
Apr. 4	Astronomy Week Activities - Public Observing at Lakewood Civic Centre	Jim Goodridge
Apr. 5	Astronomy Week Activities – Public Observing at Beaver Creek	Jim Goodridge

For a complete list of club events, please check out: <http://www.usask.ca/rasc/activities.html>



General Meeting for all members and guests

Monday, February 10th at 8:00 PM

Program

“Eyepiece Theory”

Only an idiot would do a presentation on eyepieces and Jim Goodridge is your idiot this month. Ever wonder why there is no 10mm Panoptic or whether or not a true plossl eyepiece is symmetrical or non-symmetrical? This is your opportunity to find out the answers and then take part in the arguments afterwards. We will be examining different eyepiece types and discussing the theory behind them.

Note: *there will be an Executive meeting at 7:00 PM*

Minutes of January's Executive Meeting – *Tenho Tuomi*

Chairman Jim Gorkoff opened the meeting at 8:05 PM.

Moved by Barb Wright and Norma Jensen that the minutes of the November 18 Executive meeting be accepted as circulated. Carried.

Committee Reports:

Vice-President's report by Jim Goodridge.

- John Dobson who popularized the Dobsonian telescope mount passed away. We should do something in his memory.
- List of upcoming meeting speakers [editor has this list]

Moved by Jim Goodridge and Les Dickson that Jeff Swick be appointed as Events Co-ordinator. Carried.

Treasurer's report by Norma Jensen. 2013 financial statements were passed around. Norma asked that all cheques for the club be given to her directly.

Fundraising report by Jim Goodridge. The Soby's fundraising project raised \$250.00 and should be done again.

Observing Co-ordinator's report. Next observing night will be January 25.

Newsletter report. Deadline for the February newsletter is January 31.

Sleaford site report. There have been problems with the locks.

Event's co-ordinator report by various people.

- March 28 Messier Marathon if we can change from the 29th
- March 29 Earth Hour at the Mall at Circle and Eighth
- Astronomy Week - Tentative April 4th at Lakewood Civic Centre; April 5th at Beaver Creek
- Saskatoon Farmer's Market - May 24 or 31 to coincide with the Nature City Festival, Solar observing.
- STARLAB at the Children's Discovery Museum TBD

SSSP report by Jim Goodridge.

- Need two more volunteers for the committee.
- Need a Meadow's co-ordinator.
- Book your rooms early.

Other business.

Some things that we should purchase,

- Two replacement banners, a table, and sandwich boards.
- Portable microphone and speaker system.
- New modern website that can handle PayPal for SSSP.

Prices for the above will be presented at the next meeting.

Meeting adjourned at 8:10 PM.

Minutes of January's Executive Meeting – *Tenho Tuomi*

Chairman Jim Gorkoff opened the meeting at 8:20 PM.

Moved by Ellen Dickson and Barb Wright that the minutes of the November 18 General meeting be accepted as circulated. Carried.

Vice-President Jim Goodridge gave a recap of the Executive meeting.

The meeting adjourned at 8:25 PM followed by a presentation and PowerPoint pictures by Rick Huziak of the 2013 General Assembly and opening of the David Thompson Astronomical Observatory at Thunder Bay during the July 1 weekend.

A Bit of Saskatoon Centre History (Pt.1) – Errol Frazer-Harrison

Editor's Note: A little over a month ago, I asked returning member of our society, Errol-Frazer Harrison if he would consider putting to pen a bit of the history of the Saskatoon Centre as he recalls it. I was delighted when he agreed and even included photos! Below is the first of a two part essay on the history of the Saskatoon Centre, RASC

I wasn't even thinking about getting involved with astronomy when I first joined the Saskatoon Astronomical Society back in 1963.

I was attending the Teachers' College in Saskatoon when I met a young fellow named **Wayne Assman**. He lived close to me on Adelaide Street and what attracted me to him was that he owned a telescope. In those days, telescopes were rather exotic instruments and were really quite expensive. Add to this the fact that there were few telescope dealers in Saskatchewan and therefore they had to be ordered from out of province. Wayne's telescope was not big by today's standards; it was a three-inch refractor with a beautiful equatorial mount and had a wooden case in which everything was neatly stored: telescope, mount, balancing weight, eyepieces and even the tripod itself. It was fascinating to me to see how the equatorial mount allowed the telescope to track stellar objects along only one axis. With the telescope finally set up, I saw things in the sky I had heard of, but never actually seen before.

Wayne was a member of the Saskatoon Astronomical Society and he invited me to attend a meeting with him and to possibly become a member. The meetings were held in the Observatory at the University of Saskatchewan. There I was introduced to the president of the society, **Dave Rodger**. Dave was not a stranger to me. I had seen

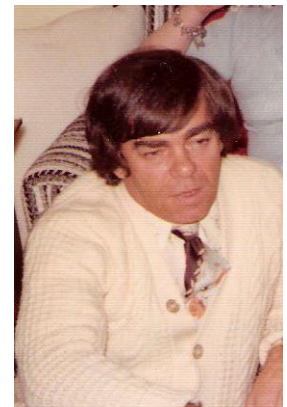


Dave Rodger
on the set of CFQC's
noon time "Astronomy"
show
CF-3778 Saskatoon Public Library
Local History Room.

him on TV. He was an employee of CFQC-TV and once a week, during the noon hour, he presided over an astronomy show for children and, I might add, also for the astronomy-deprived such as myself at the time. When Dave heard that I was interested in becoming a member, he personally took me on a tour of the Observatory. I was impressed that he took time to encourage a new member so willingly. He explained that the society was a working group and that everyone tried to advance their knowledge by being involved in a project of their own choosing. As an example, he took me up to the telescope and gave me my first chance to operate that awesome instrument by myself. It just so happened that Jupiter was riding high in the sky that night, so he had me maneuver both the telescope and the dome to observe that planet. He had something he wanted to do, so he left me there with the instructions that I was to spend the time observing as much as I could about Jupiter. As the time went by, I began to see bands of various colours. I wanted to see the Red Spot, which I had heard so

much about, but to no avail. After about 10 minutes, Dave returned with a clipboard, paper and a pencil. He said that he wanted me to make a drawing of Jupiter as it appeared at that moment in time. I began drawing and, when finished, I took the paper to Dave. "Where are the moons?" he asked. Embarrassed, I returned to the telescope to finish the job properly. At that time, I didn't really know how to tell a moon from a star, but I guessed that the bright objects could well have been those famous moons. That was my introduction to astronomy and to the S.A.S.

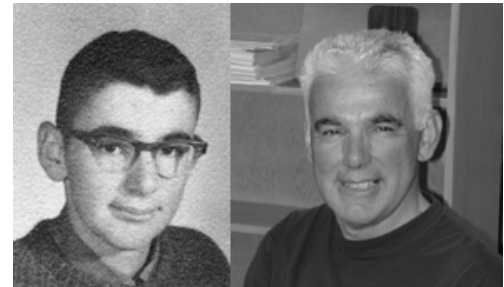
After a while, I began to meet other people in the society. **Wendel Frenzel** was part of the executive, and he had a key to the Observatory. At that time, I was living on 7th Street near Clarence Avenue and he lived on Clarence Avenue around 14th Street. We became friends and I spent many hours at the observatory learning how to accurately use the instrument and increasing my limited knowledge of astronomy.



Wendel Frenzel

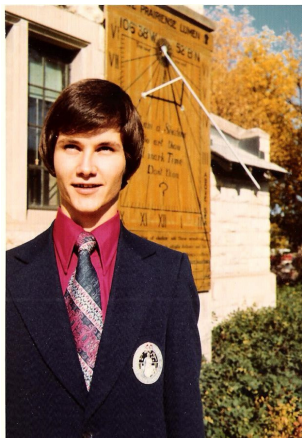
During my time at the Observatory I met Jim Patterson. Jim had been hired to be custodian of the Observatory...he kept it clean and neat. He also conducted his own experiments during his off time. He had learned how to draw a perfect spiral on a card using felt pen and a compass. He mounted the spiral on a slow-turning electric motor and I stumbled across him in the basement of the Observatory trying to hypnotize a friend. He never succeeded, but he was really trying. The room in the basement was where Jim kept all of his cleaning gear and personal stuff. Today, that room has been transformed and serves as the library of the RASC. I'll come back to Jim later.

Meanwhile, Dave Rodger left the SAS—he went on to be very successful as curator of planetariums in Edmonton and Vancouver—and other people took over as President of the SAS, people such as a Dr. Holden who was a microbiologist and interested in astronomy. I also met a young student named **Chris Pritchett** and he impressed me no end—he really knew his stuff inside and out. I should mention, at this time, that Chris went on to attain his PhD in physics at the University of Toronto. This was followed by becoming a research assistant at the Dominion Astrophysical Observatory in Victoria, B.C. From there he joined the faculty of the University of Calgary and later, University of Victoria.



Chris Pritchett

My last information showed him to be the coordinator of the UltraDeep Survey studying dark energy for the Canadian Institute for Advanced Research (CIFAR). Now that's an astronomical success story if ever there was one. The executive of the SAS, at that time, consisted of Dr. Holden (president), Chris Pritchett (secretary), Wendel Frenzel (treasurer) and myself as vice-president. Our executive meetings were held in our private homes. It was around this time that I first met **Ron Waldron**. Ron was in high school and worked in his father's store at Clarence Avenue and 8th Street. Who would have imagined that so many years later we would meet again, only this time in the RASC?



Ron Waldron - 1974

Upon becoming a member of the executive, I got my own key to the Observatory, and it wasn't provided by the University, but by the SAS. My interest in astronomy grew as I began learning all I could about setting circles, calculating sidereal time and using the Observer's Handbook. By this time, I was taking my Bachelor of Education at the U of S and I had room on my schedule to fit in two science classes. It was at this time that the University began offering two half-classes in astronomy taught by **Prof. Ed. Kennedy**.

The first class was fascinating. We learned about space, the solar system, the planets and the laws on which they function, Kepler's laws, etc.—it was fun. We also studied spectroscopy and the red shift and its uses. Prof.



Prof. Ed Kennedy

Kennedy would occasionally assemble the class at the Observatory and there we did practical things like plotting and identifying spectral lines using spectroscopes. In the basement, there were a number a five-gallon buckets filled with concrete, with metal pipe embedded in the concrete. These were used to grind telescope mirrors. I ordered my own set of mirror blanks—I think they cost about \$40 in those days—and they were pieces of Pyrex and were very rough, but with few air bubbles which didn't matter since only the finished surface was important. They came in a kit with all the grinding powders and everything to produce a telescope mirror. You just had to set one blank with tar squares as the actual grinding surface on the stand and grind the other blank into a parabolic shape by pushing back and forth for about 25 hours. Anyway, the second of Kennedy's classes was basically just mathematics and calculating relative magnitudes and distances, etc. I found it interesting because mathematics was one of my majors, but even so, it wasn't as much fun as the first class. *(to be continued in the February issue)*

More on Jim Young's Archival Photo – Rick Huziak



Top row, left to right:

Kevin Atchison (my first RASC contact in Saskatoon)
beside Kevin - Don't remember his name, but do remember the guy.
Doug Beck (went to MIT, didn't he?)
Jim Young
Mike Wesolowski (currently in Calgary)
Greg Towstego

Bottom row:

Gord Patterson
Dapper Dude Rick Huziak
Lillia Wilcox (heard from her 2 months ago!)

According to Rick: “ I remember vaguely getting the photo done, and now that I think of it, it is likely the group that did the Orion Photographic Atlas. I think it was 25 or 36 overlapping photos that covered the entire Orion area with a 150mm or 200 mm lens, all manually tracked 20-minute exposures on colour film (likely Fujichrome slide film), then made into a colour photographic atlas with colour Cibachrome print images on one page, and an ID black and white (positive) image of the field with object identification inked on the opposing page. My photo was shot at -42 deg. C. I sat for 20 minutes manually tracking in the snow "igloo" that eventually inspired the Rystrom Obervatory, with construction beginning the next year. We entered the Atlas into the Calgary General Assembly, and won first place. I think the people photo decorated the inside first page of the Atlas. Jim Young may have that Atlas still! I also notice that no one at all is smiling, but this was before we won the award! 1977, I believe, or maybe early 1978. I still have that tie.”

Sky Buys and Mirror Cells



Upgraded Antares 7 X 50 mm Correct Image Finder (black) including mounting rings and all hardware.

Standard 27mm Kellner eyepiece has been replaced with a 20 mm Celestron Kellner to upgrade it to 10 X 50 magnification.

\$75

Contact Ron Waldron: rmwaldron@shaw.ca

In Memoriam

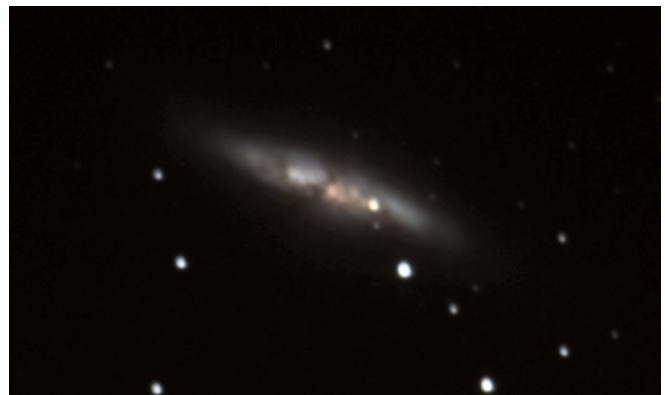
Telescope pioneer and inventor of the popular Dobsonian telescope design, **John Dobson** died on January 15, at 98 years of age. Dobson used and repurposed salvaged or inexpensive materials (ship portholes, cardboard tubing, and plywood) to craft his unique telescopes. Dobson's telescope design is "a simple, sturdy and highly effective wooden mount that allows users to easily point the scope at any spot in the sky". He also co-founded the San Francisco Sidewalk Astronomers. John Dobson leaves behind a son, numerous close friends, and fans and admirers worldwide.

Supernova in M82 – Rick Huziak/Tenho Tuomi



Left - The Supernova is in M82 and was around 12th magnitude on the 22nd of January, so pretty easy visually. It is offset to one side of the nucleus right on the "centerline" of the galaxy with a good ID image here:

Right – Tenho Tuomi's January 22nd photo of the supernova taken in uncomfortably frigid conditions (-24 degrees Celsius)



RASC Saskatoon Centre Financial Report

October 1, 2012, to September 30, 2013

by Norma Jensen, Treasurer

	Current Year Sept 30, 2013	Previous Year Sept 30, 2012
Revenue		
Membership fees	\$ 2,721.35	\$ 2,068.97
Public Education	-	1,810.00
Retail Sales	1,135.94	998.00
Donations	529.00	572.55
Fundraising		
Star Party	19,447.57	16,658.18
Dinners, Raffles, etc.	63.00	432.53
Telescope Rentals	135.00	50.00
Advertising	-	25.00
Soby's Gift Program	240.00	-
Interest	159.49	478.74
Total Revenue for the Year	<u>\$ 24,331.35</u>	<u>\$ 23,093.97</u>
Expenses		
Public Education	\$ 363.45	\$ 1,860.48
Taxes & Licences	65.00	-
Saskatchewan Summer Star Party	16,398.40	13,731.87
Utilities	576.00	1,224.09
Insurance	1,627.00	1,613.00
Repairs & Maintenance	683.40	196.05
Office Supplies & Postage; Newsletter	692.01	886.29
Retail Sales	918.07	982.89
Depreciation	1,282.46	740.42
Total Expenses for the Year	<u>\$ 22,606.01</u>	<u>\$ 21,215.09</u>
Net Surplus (Deficit) for the Year	<u>\$ 1,725.34</u>	<u>\$ 1,878.88</u>
Assets		
Cash – on hand	\$ 1,109.94	
– in bank	5,969.54	
– less outstanding cheques	-	
Total Cash	\$ 7,079.48	\$ 4,072.56
Term Deposits	34,678.67	35,535.23
Raffle Fund	430.14	430.14
Fixed Assets		
Equipment	24,363.73	14,667.89
Other Assets - Retail Inventory	481.00	886.00
Total Assets	<u>\$ 67,033.02</u>	<u>\$ 55,591.82</u>
Liabilities - Accounts Payable	9,715.86	\$ -
Surplus (Deficit)		
Balance Forward	\$ 55,591.82	
Current Year Surplus (Deficit)	<u>1,725.34</u>	
Balance end of Year	<u>57,317.16</u>	57,317.16
Total Liabilities and Surplus	<u>\$ 67,033.02</u>	<u>\$ 55,591.82</u>

Observing Clubs and Certificates

Join the Club! Observe all 110 Messier, 110 Finest NGC, 400 Herschel I or II, 140 Lunar, 154 Sky Gems or 35 Binocular objects, or Explore the Universe and earn great OBSERVING CERTIFICATES!

MESSIER CLUB

Certified at 110 Objects:

*R. Huziak, G. Sarty, S. Alexander,
S. Ferguson, D. Jeffrey, D. Chatfield, B.
Christie, K. Noesgaard,
M. Stephens, B. Hydromako, T. Tuomi, L.
Scott, G. Charpentier, B. Johnson, M.
Clancy, L. Dickson, B. Burlingham, K.
Houston*

Norma Jensen	110
complete	
Ron Waldron	105
Wade Selvig	75
Garry Stone	57
Bernice Friesen	45
Wayne Schlapkohl	43
Barb Wright	40
Ellen Dickson	34
Jeff Swick	24
Graham Hartridge	9

Chatfield BINOCULAR CERTIFICATE

Certified at 35 to 40 Objects:

*M. Stephens, T. Tuomi, M. Clancy,
R. Huziak, K. Maher*

Jim Goodridge	Up!	12
---------------	-----	----

FINEST NGC CLUB

Certified at 110 Objects:

*R. Huziak, D. Jeffrey, G. Sarty,
D. Chatfield, T. Tuomi*

Larry Scott	Done!	110
Scott Alexander		97
Norma Jensen		66
Sandy Ferguson		23
Kathleen Houston		23
George Charpentier		13
Mike Clancy		7

EXPLORE the UNIVERSE

Certified at 55 to 110 Objects:

*M. Clancy, T. Tuomi, K. Maher,
B. Gratias*

Wayne Schlapkohl	Done	55
Sharon Dice		31
Jim Goodridge	Up!	35

Isabel Williamson Lunar Observing Certificate

Certified at 140 Objects:

T. Tuomi

Norma Jensen	133
Jeff Swick	29

HERSCHEL 400 CLUB

Certified at 400 Objects:

*D. Jeffrey, R. Huziak, D. Chatfield, T.
Tuomi*

Gordon Sarty	251
Scott Alexander	117
Sandy Ferguson	18
Larry Scott	20

HERSCHEL 400-II CLUB

Darrell Chatfield	Done!	400
Rick Huziak		246

LEVY DEEP-SKY GEMS

Certified at 154 Objects:

Tenho Tuomi	150
Darrell Chatfield	70



The Messier, Finest NGC and David Levy's Deep-Sky Gems lists can be found in the *Observer's Handbook*.

The Explore the Universe list is available on the National website.

On-line Messier and Finest NGC lists, charts and logbooks: <http://www.rasc.ca/observing>

On-line Herschel 400 List: <http://www.astroleague.org/al/obsclubs/herschel/hers400.html>

Binocular List is at: http://homepage.usask.ca/~7Eges125/rasc/Chatfield_Binocular_List.pdf

"Isabel Williamson Lunar Observing Program Guide:

<http://www.rasc.ca/observing/williamson-lunar-observing-certificate>

Program details can be found at: <http://www.rasc.ca/williamson/index.shtm>