

POLARIS



Royal Astronomical Society of Canada
London Centre Newsletter
August 2010

Technology Dependency Patrick Whelan

As our lives become more dependent on technology, we become slaves to a lifestyle we cannot fix or repair when it goes wrong. I remember watching a very good episode of James Burke's Connections where he muses about what happens if the electricity fails for a long time. Immediately elevators and subways don't work and all of our home appliances fail. After a while there is no gasoline because you need electricity to pump it and slowly all of civilization starts to crumble.

It got me thinking just last night. I had a wonderful evening of practicing the piano and then decided to fire up the computer and check emails and the like. Ack! Something was wrong, the computer wouldn't connect to the internet. So I fired up the PS3 and it connected fine. Damn. Back to the computer. After a bit of troubleshooting it seems the network card decided to fail. I need to replace it and of course I don't have a spare lying around so the fix had to wait until the next day. Did you see what I wrote two sentences ago? I said the network card DECIDED to fail. That is called anthropomorphism. That means I gave human characteristics to an inanimate object. It makes cold technology seem a little more friendly. (of course it really isn't friendly)

But this got me thinking about amateur astronomy and its technologies. Let's have a little look.

Dobsonian telescopes: The best of the low tech! No electricity needed for this. You have eyepieces and a big mirror in your telescope. Tech problems: Teflon bearing pads wear down and get sticky or maybe your mirror(s) go bad. Teflon bearings can be 'user replaced' but who knows how to silver a mirror? And can you fix the focuser if needed? My old Coulter had the ultimate low tech focuser, a plumbing compression fitting!

Equatorial or alt-az mounted telescope: These can exist with or without motors. You have slow motion controls that move by hand and clutches on the axes to enable or disable the controls. Tech problems: motors can fail, metal gears can break, metal components that hold the telescope on the mount. Even if the gears break you can

still point the telescope by hand.

Motorized/computerized EQ and alt-az mounts. Now we have a built-in computer running the motors. If the computer fails GOOD LUCK! You need to be an electronics technician or better to fix it. If you don't have manual controls on it, you are dead in the water. These telescopes can come with a GPS built into it also. Definitely not 'user serviceable'. I have a 4" Celestron Nexstar like this. It is computer controlled and has NO manual controls on it. If it fails, there isn't much I could do with it.

There are more technologies in telescopes but let's stop the list now. What are the repercussions of using technology in our hobby? (other than not being able to fix our hardware?)

I think the biggest technology problem in the hobby would be go-to mounts. In the 'days of old' you had to know how to point your telescope by hand. You needed a star chart (or lots of star charts) and a knowledge of the sky to find what you wanted. With go-to mounts all that is gone. You need to know how to align the telescope once and that is it. Aligning the telescope might need you to find 2 stars in the sky and some telescopes can now do even this by themselves! Look Mom, no hands! But when the little computer fails what then? No more hobby. You don't know how to find anything in the sky. That is why when people are completing the various certificate observing lists RASC has you need to find the object yourself. Go-to's are NOT allowed.

Don't get me wrong. I'm not an old fuddy-duddy. (well maybe I am, but that is not the point) I don't criticize technology all the time and I don't live in a house with a wood fire for heat and oil lamps. I like technology and I really love the go-to telescopes I have. But just remember when and where you are using technology and how much you depend on it. And every now and then just think for a bit: what would you do if the technology you use failed for a long time? You will be surprised how much thinking you can do on this topic!



Moon Phases



August 16 2010



August 24 2010



September 1 2010



September 8 2010

The August Polaris

We don't have meetings in August mainly because most of us are busy or (more importantly) we go to Starfest!

This is an August sub-issue. The only new articles from July are: moon phases (above) and so is John's article **Pocket Sky Atlas Challenges.**

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Find the Polaris newsletters on the internet at: www.patusratus.ca/Polaris

LONDON RASC MONTHLY MEETINGS

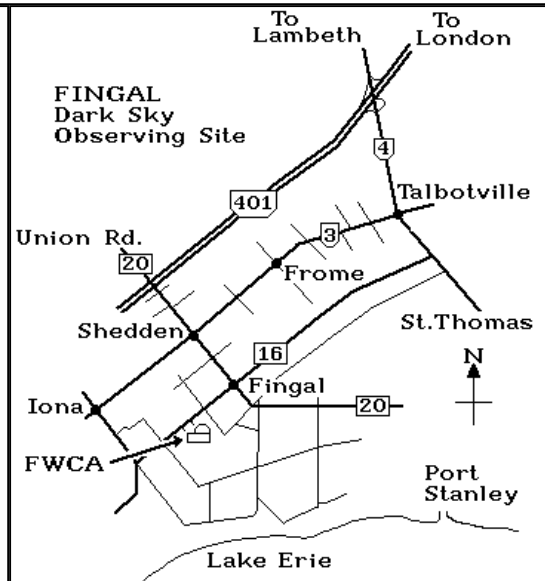
The London RASC group meets at Fanshawe College in London Ontario, September through July on the third Friday of the month at 19:00. We meet in room B1073.

Everyone interested in astronomy is invited to attend and enjoy our guest speaker, member activity and observing reports, announcements of new discoveries and upcoming events, telescopes and telescope accessories show and tell, and other fun activities. Have a look at our future and past activities on our website to see what we are doing.

Parking is free on Friday evenings, and there is plenty of room in the east parking lot off Oxford St. and parking spaces on the south side of B building. Enter the college by B building doors near Oxford Street, just west of the bus stop. College signs at key hallway locations will help you find us.

The London RASC webpage can be found at: www.rasc.ca/London

Our dark sky observing site is at the **Fingal Wildlife Management Area.**



Sky Events for late July and early August 2010

July 21 Antares 1.8 S of Moon
 July 27 Mercury 0.3 S of Regulus
 August 1 Mars 1.9 S of Saturn
 August 3 Moon 0.6 S of Pleiades (M45)
 August 7 Mercury greatest elongation E
 August 7 0.05 S of M35
 August 12 Mercury 2 N of Moon
 August 13 Perseid Meteor shower peaks
 August 13 Double shadow transit on the Moon
 August 13 Venus 5 N of Moon
 August 17 Antares 1.9 S of Moon



Mars is in the Western sky in Leo moving to Virgo
Venus is in the Western evening sky
Jupiter rises due East in the late evening
Saturn is low in the Western mid-evening skies
Uranus is in the Eastern morning sky in Pisces
Neptune visible all night

R.A.S.C. London Centre Library Books of the Month July 2010 By Robert Duff

In order to make our library collection available to members, I bring three books to our general monthly meetings. These "Books of the Month" are available for loan, to be returned at the following monthly meeting.

The books for July 2010 are as follows:

The Backyard Astronomer's Guide, by Terence Dickinson & Alan Dyer. Revised Edition. 2002.

Pale Blue Dot: a Vision of the Human Future in Space, by Carl Sagan. c1994.

Universe on a T-shirt: the Quest for the Theory of Everything, by Dan Falk. c2002.

For a complete listing of our library collection please see our RASC London Centre Library Web page at: http://www.astro.uwo.ca/~rasc/newrasc_library.html

If there is a particular book or video you wish to borrow, please feel free to contact me by telephone at (519) 439-7504 or by e-mail at rduff@sympatico.ca



Star Nights & Cronyn Observatory By Robert Duff

Longwoods Road Conservation Area Star Night, June 19th, 2010

Some 26 campers including some Girl Guides enjoyed relatively clear skies for the star night at Longwoods Road Conservation Area, Saturday, June 19th. Beginning around 8:00 p.m., Dave McCarter made his digital slide presentation "The Power of Observation" in the Longwoods Interpretive Centre and handed around several meteorites. This was followed with observing in evening twilight on the grassy lawn near the campsite. Rick Saunders had his 102mm

Stellarvue refractor on its Celestron EQ mount; Harold Tutt, his 80mm Stellarvue refractor and Dave McCarter and myself (Bob Duff), our 25.4cm and 20.3cm Dobsonians, respectively. New member Ryan Fraser showed up with his 20.3cm Sky-Watcher Dobsonian and Andy Blanchard of the RASC Hamilton Centre brought his 56cm (22-inch) Obsession Truss-Tube Dobsonian. In all we had 5 RASC London Centre members and one Hamilton Centre member with 6 telescopes.

The campers enjoyed splendid views of the First Quarter Moon, Venus and Saturn, as well as a number of deep-sky objects, including M13, M27, M57 and other objects. Dave

(Continued on page 4)

(Continued from page 3)

McCarter identified sky objects with his green laser pointer. I located M51 in my telescope and Dave verified it after my mentioning starting a Messier list. He also indicated the location of M56 with his laser and I soon found it in my telescope. The campers were gone before 11:30 p.m. and the RASC members stayed for a little more observing before leaving close to midnight.

Cronyn Observatory Open House, Saturday, July 10th, 2010

Visitors to the Cronyn Observatory Open House, Saturday, July 10th, enjoyed clear skies and an interesting slide presentation, "Meteors and Meteorites," by Dr. Margaret Campbell-Brown. There were some 55 people by the end of the evening.

Adam Priestap-Suttis with his mother, Cheryl, was there, setting up his 20.3cm Sky-Watcher Dobsonian on the Observatory's roof patio. I set up the London Centre's 25.4cm Dobsonian on the roof patio while Steve Imrie set up his 20.3cm Orion Dobsonian on the walkway in front of the Observatory. Peter Jedicke and Everett Clark were also there and Richard Gibbens showed up later. One visitor set up his 50mm alt-azimuth refractor on the roof patio as he had done the previous Saturday.

People had the opportunity to observe the planets Venus and Saturn through the big 25.4cm refractor in the dome, operated by Dr. Peter Brown, who also had the sky charting software on the computer running. The big refractor delivered nice views of Venus and Saturn, using the

Meade Super Wide Angle 28mm eyepiece (157X). Visitors also observed Venus, Saturn, globular clusters M13 and M56, the Ring Nebula (M57) and the star Arcturus. Peter Jedicke took over the 25.4cm Dobsonian and found M56 after consulting the sky charting software on the Observatory's computer. I helped visitors view through the big refractor in the dome and answered questions.

Everybody was thrilled by a bright ISS pass at 10:22—10:27 p.m., which reached 68 degrees altitude in the southwest. We closed the observatory at 11:00 p.m. after an enjoyable and successful Open House at the Cronyn Observatory.

(at left is: Bob Duff at the Cronyn Observatory with his Meade Starfinder 8 (20.3cm, f/6) Newtonian telescope on its Dobsonian mount.)



August 2010 Pocket Sky Atlas Challenges

Now it seems there is a little more time to view as summer is at half life. The sky looks just that much darker through midnight and offers opportunities to peer deeper into the galactic mists.

I've indexed the object to the star chart page it's on so this should be easy hunting.

Naked Eye:

M31, Page 3 (find a real nice dark site). Shaula and Lesath, Page 58

Small Scopes and binoculars:

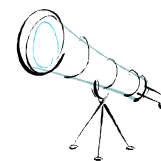
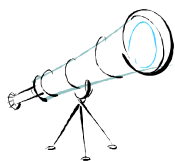
Struve2474 and 2470, Page 63. Herschel's Garnet Star, Page 71, NGC 7662, Page 72

Larger Scopes:

M31, 32,101and NGC 206, Page 3. M75, Page 66. IC 4593, Page 55 (photo op).

Bonus Objects

NGC 6235, Page 56. NGC 5813, Page 57



Happy hunting!
John Kulczycki