

POLARIS



Royal Astronomical Society of Canada
London Centre Newsletter
July 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



July 18 2010



July 26 2010



August 3 2010



August 10 2010

Mark Twain Quotes (Why? Well, why not?)

A person who won't read has no advantage over one who can't read.

A person with a new idea is a crank until the idea succeeds.

Action speaks louder than words but not nearly as often.
Age is an issue of mind over matter. If you don't mind, it doesn't matter.

All generalizations are false, including this one.

Always do right. This will gratify some people and astonish the rest.

Be careful about reading health books. You may die of a misprint.

Buy land, they're not making it anymore.

Civilization is the limitless multiplication of unnecessary necessities.

Courage is resistance to fear, mastery of fear, not absence of fear.

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LONDON RASC MONTHLY MEETINGS

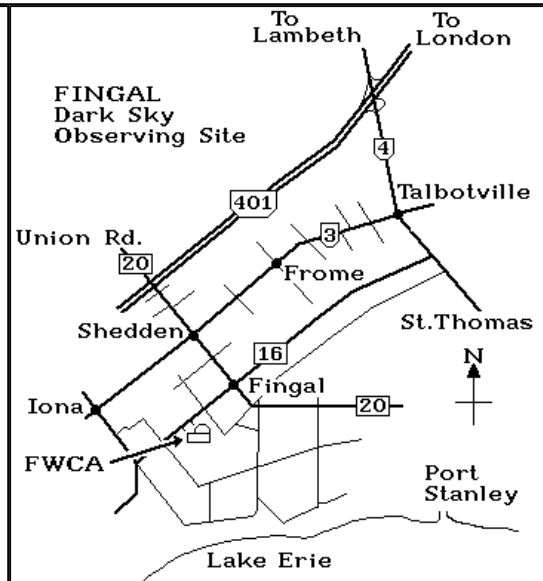
The London RASC group meets at Fanshawe College in London Ontario, September through July on the third Friday of the month at 19:00. We meet in room B1073.

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 & Other Events 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 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



July 2010 Pocket Sky Atlas Challenges

Star Part season is in full swing. It is an interesting exercise to work through a list of objects at your usual observing site, and then compare the views to those you may find at your star party site. It also gives you a starting place to look under unfamiliar skies.

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

Naked Eye:

Eltanin and Rastaban, Page 52. Kaus Borealis Kaus Media and Kaus Australis, Page 67

Small Scopes and binoculars:

Epsilon Lyra, Page 63 (this will be nice in larger scopes as well). Sulafat and Sheliak, Page 65

Larger Scopes:

Harvard 20, Page 64. M13, page 52. Blaze Star (T Coronae Borealis), Page 55

Bonus Objects

IC 4665, Page 54, UGC 10822 Page 52

Remember: Bug spray and optics do not blend well together. Always spray well away from your (or anyone else's) equipment.

Happy hunting!
John Kulczycki

were gone before 11:30 p.m. and the RASC members stayed for a little more observing before leaving close to midnight.

Springwater Campground Star Night, June 26th, 2010

A mix of clear sky and clouds greeted Tom Czinege, Steve Imrie and me (Bob Duff) for the star night at Springwater Campground, hosted by the Friends of Springwater, Saturday, June 26th, 9:00 p.m. Tom set up his 20.3cm Celestron Schmidt-Cassegrain on its EQ6 Pro Sky-Watcher Go-To mount, Steve had his 20.3cm Orion SkyQuest Dobsonian and I brought my 20.3cm Meade on its homebuilt Dobsonian mount.

Between clouds drifting overhead from the west we showed the campers Saturn, Epsilon Lyrae, M57, Albireo, Mizar and Alcor. A couple of campers brought small refractors. There were in all about 30—40 adults and children. We watched an International Space Station pass at around 10:30 p.m. We packed up around 11:15 p.m., after a very satisfactory evening of stargazing.

Cronyn Observatory Saturday Evening Summer Open House, May 1st—August 28th, 2010

By Robert Duff

Cronyn Observatory Open House, Saturday, June 19th, 2010

Peter Jedicke reported a busy evening at the Cronyn Observatory Saturday evening Open House, June 19th, 8:30—11:00 p.m. Graduate students Jackie Otaguro and Sarah Malek made the digital slide presentation and operated the big 25.4cm refractor in the dome, respectively. Henry Leparskas of the department support staff also dropped in for a

while. Besides Peter, RASC London Centre members present included Adam Priestap-Suttis with his mother Cheryl, Mike Roffey, Steve Imrie, Greg Andres and Paul and Charlene Kerans.

Paul and Charlene set up their Meade Lightbridge 30.5cm Truss-Tube Dobsonian on the Observatory's roof patio along with Greg and Adam, each with their 20.3cm Dobsonians. Steve set up his 20.3cm Dobsonian on the Observatory's front lawn along with Mike and his Sky-Watcher ED 80mm refractor on a Celestron CG4 EQ mount. Objects observed included the First Quarter Moon, Venus, Saturn and the Ring Nebula (M57). In all there were about 50 visitors to the Cronyn on what was a generally clear night with few clouds.

Cronyn Observatory Open House, Saturday, June 26th, 2010

Peter Jedicke reported mostly overcast skies at the Cronyn Observatory Open House, Saturday, June 26th. Richard Gibbens was also there. Graduate student Ahmed Ahmed showed visitors the Full Moon through the 25.4cm refractor in the dome after Horace Liu had given a digital slide presentation on star formation and led a lively discussion among the 20 visitors. They also watched an International Space Station pass at around 10:30 p.m.

Cronyn Observatory Open House, Saturday, July 3rd, 2010

Visitors to the Cronyn Observatory Saturday evening summer Open House, July 3rd, enjoyed clear skies and a lively digital slide presentation, "Galactic Train Wrecks: Starbirth in Cosmic Collisions," by Dr. Sarah Gallagher. There were 34 people for the first presentation and 75 visitors 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 east end of the Observatory's roof patio. I set up the London Centre's 25.4cm Dobsonian on the roof patio and Steve Imrie set up his 20.3cm Orion Dobsonian on the front lawn of the Observatory. Adam helped one visitor set up his 50mm alt-azimuth refractor on the roof patio.

Graduate students Gamal Hamed and Rajib Saha operated the big 25.4cm refractor in the dome, directing it first at Venus (32mm Erfle eyepiece, 137X) and later towards Saturn. Saturn made a very nice image in the big refractor through the 28mm Meade Super Wide Angle eyepiece (157X).

Through the amateur telescopes visitors enjoyed views of the star Arcturus, the planets Venus and Saturn, the Messier objects M13 and M57, and the stars Albireo, Antares, Mizar and Alcor. We watched an ISS pass, going northwest to northeast, from the east side of the roof patio. We began closing down the Observatory around 11:15 p.m. after an enjoyable and informative evening under the stars.

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.

