WEB PAGE OF THE Month



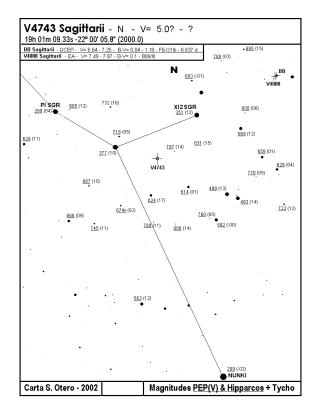
http://members.shaw.ca/rascvan/

Come to a Meeting and See for Yourself

The Vancouver Centre of the R.A.S.C. meets at **7:30 p.m.** on the **second Tuesday of each month**, downstairs in the auditorium of the H.R. MacMillan Space Centre. Each meeting usually has a program which is a blend of current astronomical research and local amateur activities. The meeting is followed by an informal gathering at the Gordon MacMillan Southam Observatory for the three "c's"; coffee, cookies and conversation.

THE ROYAL ASTRONOMICAL SOCIETY OF CANADA VICTORIA CENTRE

Skynews





October 2002

Number 238

http://victoria.tc.ca/~rasc/

This Month

October 9, 2002

Ernie Pfannenschmidt

Ernie talks about his adventures siting observatories, particularly the three years he spent in Saudi Arabia.

Annual General Meeting

Run for cover! We still need a Recorder. We'll need a new President and our Treasurer would like to move on. Volunteer—you'll have a job that's not difficult and, when we ask for volunteers for other tasks, you can quite smugly say that you are already doing something important.

Sandy Barta

Address Change? Information Incorrect?

Telephone: (416) 924-7973 (toll-free at (888) 924-RASC in Canada)

Fax: (416) 924-2911

E-Mail: rasc@rasc.ca Website: www.rasc.ca

Postal Mail: RASC, 136 Dupont Street, Toronto, ON, M5R 1V2, Canada

Future Meetings

November

I am pleased to announce that we have a banquet speaker, and a good one. J.J. Kavelaars from DAO will speak to us on his work discovering planetary moons. He has been involved in a number of recent discoveries, including a new moon of Uranus announced yesterday.

December

We have tentatively booked Dr. Dr. Richard K. Herd, Curator, National Collections, Geological Survey of Canada. His will talk about meteorites.



October 2002 SKYNEWS 1

ROYAL ASTRONOMICAL SOCIETY OF CANADA VICTORIA CENTRE

RASC Victoria Council	This Month	
President: David Lee	Every	Astronomy Cafe
764 Mapleton Place Victoria, BC V8Z 6W2 479-5187 David_Lee@telus.net	CLEAR Friday	At Sandy Barta's, 2949 Michelson Road, Sooke, BC Call 642-0205 for more information or directions.
Vice President: Chris Gainor 380-6358		And you WILL need directions!
cgainor@islandnet.com		The Astronomy Café is an astronomical conflab and if it's clear (and we are willing
Treasurer: Laura Roche 8581 Sentinel Place Sidney, BC V8L 4Z8		to give up our comfy chairs) we observe under an unbelievably dark sky.
656-2396		Newcomers are most welcome.
Iroche@shaw.ca		Come and enjoy!
Secretary: Robert Walker		Please:
rwalker@shaw.ca	<u>-</u>	Call or check our website to find out
Recorder: Your name here		if it's likely to be clear.
Librarian & Telescopes: Sid Sidhu J.SSidhu@telus.net Past President: National Representative: Sandy Barta	Oct 25	New Observer's Group At Sid Sidhu's: 1642 Davies Road (off Millstream Lake Road) at 8:00 PM. Call 391-0540 for more information or
642-0205 sbarta@pinc.com		directions
Honourary President: George Ball		
Members at Large: Bill Almond, Don Dundee, Dr. James Hesser, Betty Hesser, John Howell, Ed Maxfield, Frank Ogonoski,	Oct 16	Council Meeting Uvic Astronomy Lounge 7:30 PM. Everybody welcome
Skynews Editor: Sandy Barta Website Editor: David Lee		
New Members Liason: Ron Bell (477-7063 bellstartelescopes@yahoo.ca Sandy Barta	Nov 16	Annual Dinner see page 13

Annual Diner



November 16, 2002 Gorge Vale Golf Club

Bar opens at 6:30 Dinner at 7:30 Speaker at 8:30



Artisan Bread & Rolls - Island Butter

SALADS - choice of 6

Seasonal Greens Red Baby Bliss Potato Traditional Caesar Thai Noodle Coleslaw Greek Tomato Boccanchini
Curry Rice
Mushroom with Feta & Balsamic
Bow-Tie & Marinated Vegetable
Fresh Green Bean & Pepper
Marinated Cucumber & Onion

COLD PLATTERS

Seasonal Vegetable & Dip Assorted Deli Meat Traditional & Imported Cheeses Relish Trays Decorated Salmon Fresh Sliced Seasonal Fruit

HOT CARVED - choice of 1

Roast Striploin with Herb Au Jus Turkey with Apple-Sage Stuffing Date & Crouton Stuffed Pork Loin

Choice of - Roasted Potatoes or Rice Pilaf

Seasonal Vegetables

HOT ENTREES – choice of 1

Honey Garlic Chicken Indian Curried Shrimp BBQ Ribs

Beef Bourguignonne Pasta Primavera Lasagna (meat or vegetarian)

Seafood Thermador Chicken Lemon PepperFillet Salmon Saffron Cream

Chicken Breast with Wild Mushroom & Port Sauce

Chef's Choice Desserts & Pastries

Coffee, Tea \$28.00



Please let Lauri know that you are coming by November 9

President's Message

It's raining outside tonight. September has passed with some pretty nice observing nights. I guess it's time for armchair astronomy, going through those images from the summer, building telescopes, etc. I have some wonderful memories of moonrises, viewing objects in the Summer Triangle and seeing a nova in Sagittarius.

The Crescent Moon tours have been keeping Sandy and myself very busy this summer but we enjoy every minute of it. The secret is out, it truly isn't the hardship we make it out to be, all that gourmet food and viewing the night sky from a kayak at dusk. Well somebody has to do it!

The annual dinner is coming up in November. We will have J.J. Kavelaars from the DAO who will speak to us on his work discovering planetary moons. Just a reminder that there will be a major change in executive in the coming year as many executive member's terms will be coming to an end, including yours truly. Please let Sandy Barta know if you have any ideas about who should be serving on executive ... you may even want to offer your own services!

David Lee

Cover

Did you see it?

Star map: Sebastian Otero's chart for V4743 Sgr = Nova Sgr 2002 (No. 3).

http://ar.geocities.com/varsao/Carta_V4743_Sgr.htm

This nova was an easy find in binoculars—it would have been an easy unaidedeye object if the Moon wasn't so bright. More details:

http://vsnet.kusastro.kyoto-u.ac.jp/vsnet/Novae/nsgr02-3.html

I published the finding and confirmation on our own Victoria RASClist. Check your back issues for subscription details. Let us keep in touch with you and let's hear from you.

The deadline for the next issue of Skynews is

October 25 2002 ATTENTION READERS!

Get your Skynews early and in colour. Tell Laura, our Treasurer, that you get Skynews on line and we won't mail you a copy.

October 2002 SKYNEWS 2

October 2002 SKYNEWS 2

June 12, 2002 Minutes

The meeting was held June 12, 2002 at UVic in Room 152 of the Fraser building at 7:35 PM.

Welcome: David Lee welcomed everyone and asked if there were new members. Two new members found us as a result of Astronomy day and our web page.

David and Sandy Barta discussed this weeks eclipse event held at the Centre of the Universe. There was fairly extensive media coverage of the eclipse and both local stations had their reporters at the COTU for live coverage. The one issue that did come up was the poor media coverage of safe solar viewing during an eclipse. One idea mentioned for the future is to have a media package to send out prior to an eclipse so the media have the facts ahead of time. There was a also a short discussion on care and maintenance of solar filters for your scope. Anyone with questions about maintenance of various types of solar filters should ask Sandy or David.

Library Report: Sid Sidhu asks that all library books that are due be returned and if anyone is interested in borrowing books for the summer he will meet them after the meeting over in the Elliot building and open the library.

Sid also asks that if anyone would like to borrow a club telescope for the summer to see him after the meeting or call him (his number is in the SkyNews)

The school telescope program has completed for the summer. Please consider volunteering again in the fall.

Sid expressed his thanks to Colin Wyatt for his completing a mirror for Pearson College. The last step is to have it aluminized.

Upcoming Events: The RASC Victoria summer picnic at Pearson College on Saturday July 13

The CVSF Island Star Party this weekend June 14, 15 and 16 at the Victoria Fish and Game Assn on the Malahat

Treasurers Report: Laura Roche reports we have a balance of \$2986. There are a few expenses to pay out;. travel to the GA and the telescope used for the Oak Bay Beach Hotel tours. (ed: did I get this correct Sandy?)

Laura reminds everyone that if they have a change of phone number, mail address or email address to contact the RASC National Office to ensure that the records are kept up to date. The National Office sends us monthly updates. See the June SkyNews (pg 7) for National Office contact information.

Laura has a few membership cards to be handed out after the meeting.

Continued on page 4

October 2002 SKYNEWS 3

ROYAL ASTRONOMICAL SOCIETY OF CANADA VICTORIA CENTRE

Island Star Party 2002

Wasn't that a party? Island Star Party 2002 was a great success. Attendance was down but the level of enthusiasm was up. The weather, for the most part, cooperated nicely throughout the event.

On Friday, the clouds started rolling in and I groaned as I thought of last year's "wonderful" weather. But, it only stayed cloudy and cool long enough for us to get all the work. What a relief!

Brenda's Kitchen staff were all ready for the ravenous supper crowd. After supper, Bill Weller gave us a talk: "The First Four Minutes, (Three Minutes + Inflation)". Then we drew a few door prizes and went out to get ready fo observe. The clouds were persistent but there were many open patches with good seeing until the wee hours.

Saturday was nice and sunny and more people flocked in and set up telescopes and tents. After a good breakfast, we set up solar filters, including the RASC's H-Alpha filter. There were some spectacular prominences and many people, who had never seen such sights before, were thrilled. Several people took images and posted them for everyone to see on the RASC web page.

Guy Walton won this year's Telescope Trophy for his 10-inch Dobsonian telescope. The workmanship and optics are exceptional! He didn't think it was even good enough to enter in the awards and then won it. Such modesty!

Pal Virag presented "Canada in Space", a chronology of Canada's involvement and achievements in space. Freda Eckstein of Mill Bay won the Grand Prize 'Meade ETX 105EC with Autostar'. Freda then promptly joined the StarFinders.

Saturday night was beautifully clear until about midnight when clouds came rolling in. Most people gave up and went to bed but a few of us stayed up and were rewarded at 2 AM, precisely, with clear skies.

Sunday morning we woke up again to bright sunshine and warmth. We did more solar viewing, and Pal Virag talked about and demonstrated his solar scope.

After supper it started to cloud over again but we had a great lecture by Ernie Pfannenschmidt entitled "Telescope Smarts From An Old Hand".

Ernie Pfannenschmidt won the Sky Watcher 32t telescope donated by Brian and Joanne Robilliard of Island Eyepiece. Ed Boddaert won the 4 ½-inch Russian Tal Scope **and** the Bell Expressview satellite system installed for free by Rich Willis of Richly Maintained Services of Victoria.

Next year's Island Star Party: July 26th to 29th at the Victoria Fish and Game Association site.

Thanks to all who put in yeoman service for this year's event:

Until next time, and clear skies

Taken from the StarFInder Journal

The Night Sky Continued

December 1 to December 7

Venus dallies with Mars for the first few days of December. The Moon sallies past Mars and Venus in the dawn sky on the first—can you identify nearbySpica? Venus herself creates quite a stir by the sixth when she shines a brilliant –4.7 magnitude.

December 8 to December 14

The Geminid meteor shower peaks on the 14th. We're probable enjoying a terrestrial shower but we can still hope for clear skies. The Moon is nearing full and you may want to wait until it sets, so maybe it doesn't' matter too much if we miss this year's Geminids.

Mercury won't be much to see in the evening sky over the rest of the month, but that shouldn't stop you from getting out for a glimpse.

December 15 to December 21

Saturn reaches "opposition" on the 17th and is opposite the Sun in from our earthly vantagepoint. This special event means that Saturn is the biggest and brightest of this apparition—you'll notice the planet dimming and growing smaller as we pass this marvel in our faster race around the Sun.

Don't forget to observe the winter solstice; the long dark nights are great for observing, but I like the warm, casual summer Milky Way.

December 22 to December 28

Okay all you astro-imagers—pay attention! Saturn closes in on the Crab Nebula and I demand pretty pictures and sketches for the January AND February issues.

December 29 to January 4

Remember—take pictures and sketch Saturn and the Crab. Can you tell that Saturn passes in front of the nebula? When does it do this? Catch Saturn's moons dancing in front of this shredded star. Light takes only an hour and a bit to travel from the planet and its moons; light takes 6000 years to travel from this supernova remnant to your eyes.



Sid's Ikeya-Zhang

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June Minutes Continued

RASCVic Mail Lists: Joe Carr gave us an overview of a new service for RASC Victoria centre members. He has set up a mailing list server with two lists.

The first is notification list for the SkyNews publication and is an outgoing list only. The second is a general discussion list for RASC Victoria members

For complete details on how to subscribe to either list see the June SkyNews page 12. Note that anyone who has told Laura Roche that they will pickup SkyNews on the web will be automatically added to the SkyNews Notification List. This will be done shortly and you should see a notification in your email.

GA Report: Chris Gainor attended the General Assembly in Montreal on the Victoria Day long weekend. Full details are in the June SkyNews on page 3.

The next GA is in Vancouver on June 26 through July 1, 2003

Speaker: David Lee introduced tonight's speaker Chris Gainor.

Chris spoke on his recently released book: "Arrows to the Moon". He provided a fascinating overview of many of the highly skilled engineers who had worked for Avro Canada on various programs, including the cancelled Arrow program, and how many found their way into NASA during its early years. NASA had been formed around the time of the cancellation of the Arrow program, and was tasked with putting a man on the moon, but was short of skilled people. Many of these engineers from Avro were hired by NASA and went on to play key roles in the Mercury, Gemini and Apollo space programs. Some later continued on to work on the Space Shuttle and the International Space Station programs as well.

The meeting adjourned at 9:20 pm

Robert Walker for the recorder.

Congratulations Bill Weir!

Greetings Bill,

This email is to let you know that we received your application for the Messier Certificate. Congratulations on completing this!

We will bring your application before the council meeting in October and issues the certificate shortly thereafter.

Best wishes for clear skies for the summer!

Bonnie Bird, Executive Secretary

Royal Astronomical Society of Canada

The Kid's Place



From Brobdingnag to Lilliput: My Travels Through 30 Years of the Space Program

By Diane K. Fisher

In the early 70s, as minor character in the Apollo Program, I worked in the Vehicle Assembly Building at KSC. Stepping into the VAB, I felt like the incredible shrinking woman. The space inside accommodated six 45-story office towers with vast open spaces to spare. In the vertical spaces between the office towers, the 363-foot high Saturn Vs were assembled.

From my third floor office in one tower, I often delivered documents to higher floors in other towers. Between riding the stomach-dropping glass elevators and dashing across to other towers on narrow, open catwalks at the 28th or 44th floor levels, I soon overcame my fear of heights.

On these excursions, I would see the Saturn Vs come together in the 500-foot high bays. After hundreds of engineers and technicians had toiled around the clock for months, the morning of high-bay rollout would arrive. Slowly, the Crawler Transporter would bear forth the Mobile Launch Platform and the majestic Saturn V rocket. The morning sun reflecting off its gleaming white form would take my breath away.

The last Apollo mission was 30 years ago. As the Apollo program ended, some thought human missions to the Moon, Mars, and beyond would continue apace. Though they didn't continue, the Apollo program remains a single, large step in our technological evolution as a species. It is a great tribute to the intelligence, ingenuity, and dedication of the people responsible for the Apollo missions that they were so successful and the disasters so few. NASA's program today continues to build on the technological and managerial legacy bequeathed us by Apollo.

And just where are we now? Among its other tasks, the International Space Station is teaching people to live in space for long periods. Robotic space missions are studying issues like land use and global warming and discovering the wonders of the universe, its history, and our place in it. With humanity's many other pressing needs, such quests must be done efficiently.

Continued on page 6

The Night Sky

October 27 to November 2

Are you out under the night sky? Are you learning a new constellation each time you step out to enjoy the evening? Do you look up at our galaxy, step off the edge of our planet and cast off into the non-earthly phosphorescent phoam? Ok, okaay. Way too wordy flotsam!

November 3 to November 9

Start your Mars watch in earnest. Mars brushes Virgo's brighter stars in this month's morning sky. Let's see your sketches. We're closing in on Mars and 2003 will bring us the best views of Mars we've had for a thousand years. And we have telescopes this time 'round.

November 10 to November 16

Still struggling with Neptune and Uranus? Or do you just want to enjoy a pretty Moon-planet arrangement? Catch the Moon sailing through Capricornus on the 10th and 11th; it passes below Neptune at 8 PM on the 10th and below Uranus around 3 AM on the 11th.

November 17 to November 23

Mark November 18 on your calendar and cancel your funeral, wedding, ... you're going to stay up late. Missed the awesome Leonids last year? Predictions look good for this year and you'll kick yourself if you miss another spectacle! Last year was too breezy and cold for my liking BUT the sky was CLEAR! Dare we hope for the same? If the skies are clear, don't waffle, hesitate, think about it, plan too much, or sleep in—you might miss the meteor shower of the century.

Between the 22nd and the 26th, our Moon traces a path over Saturn and Jupiter.



November 24 to November 30

The planet season just gets better and better! Taurus still tosses Saturn in his horns but gives Orion a chance to catch this precious bauble. Are you sketching this ancient ball game? Pump up the power and sketch the planet's open rings. Can you spot the Cassini division and name the tow prominent rings? Did you glimpse the crepe ring?

Continued on page 11

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Laughing and Grief - Part 2 Continued

The most familiar example in astronomy of the last entry on this list is one ephemeris, two ephemerides. I can also think of an astronomical example of a rather irregular Latin plural, which will be of interest only to those who compute orbits. There is a geometrical property of an ellipse called the latus rectum, and an ellipse has two of them. I have seen even professionals puzzle over what to use for the plural. They ought to know that an ellipse has two latera recta.

The most usual call for knowing Latin or Greek plurals arises in the names of features on the surfaces of the Moon and the planets. Here is a list of some of the commonest encountered. The word "chasma" is Greek; the rest are Latin. You can compare the plurals in this table with the ones you would predict from the previous table.

Singular	Meaning	Plural
Catena	Chain	Catenae
Chasma	Chasm	Chasmata
Collis	Hill	Colles
Corona1	Crown	Coronae
Crater	Crater	Cratera
Dorsum	Ridge	Dorsa
Fossa	Ditch	Fossae
Linea2	Linear feature	Lineae
Mare	Sea	Maria
Mons	Mountain	Montes
Planitia	Plain	Planitiae
Planum	Plateau	Plana
Patera3	Dish	Paterae
Regio	Region	Regiones
Rupes	Cliff	Rupes
Sulcus	Furrow	Sulci
Terra	Highland	Terrae
Tholus	Dome	Tholi
Vallis	Valley	Valles

Notes:

- Athough corona in Latin means crown, in a planetary context the word refers to certain large (hundreds of km) circular features unique to Venus, and also to some quite unrelated features on Miranda.
- 2. The word linea is used to describe the long, meandering linear scribblings on Europa, as well as for features on some of the other planetary satellites, such as Dione.
- The word patera in Latin is an offering-dish, but in the planetary context the word is
 used to describe certain irregularly-shaped mountains or similar features, particularly
 on Venus and Mars, that do not fit in well with the usual more regular features such as
 cratera and montes.

Jeremy B. Tatum

The Kid's Place Continued

Part of NASA's mission is to develop the technologies to do cost-effectively what has never been done before at all. NASA's New Millennium Program develops and validates new technologies for space. Missions such as Deep Space 1 and Earth Observing 1 carry and test multiple new technologies (such as ion propulsion and advanced imaging instruments) previously untried in space. And, unlike the Saturn V, the ultimate gas-guzzling muscle car of the 70s, the new technologies must be the "zero emission" vehicles of the 21st century-small, efficient, and capable beyond anything done before.



The Saturn V and Mobile Launch Platform are carried to the launch pad on the Crawler Transporter. Notice the tiny humans below the platform

Continued on page 7

The Kid's Place Continued

Diane K. Fisher is the developer and writer for The Space Place web site.

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.

Many of the New Millennium technologies are described for adults at:

http://nmp.nasa.gov/

And for children at The Space Place:

http://spaceplace.nasa.gov/

If you're a teacher, check out:

http://spaceplace.nasa.gov/teachers_page.htm

Bolide Research

I am part of a west coast Sandia Bolide Detection Network operating a video allsky patrol camera from my observatory in Courtenay, B.C. on Vancouver Island. You can see a photo of the Sandia camera mounted on the roof of my observatory at:

http://www.amsmeteor.org/spectra/maidenobs.html

We periodically get reports of bright fireballs over mainland British Columbia, often too far away from our cameras to be recorded. As far as I'm aware, there are no all-sky cameras operating on the mainland. The nearest other patrol network is in Calgary and Edmonton. I would think it would be of interest to fill this gap.

This is just a preliminary survey to see if anyone would be interested in operating an all-sky camera on **mainland** B.C. You have to be serious about the project as VHS video tapes have to be changed every 8 hours. The cameras operate 24 hours per day. If you are interested, contact me with details of your location and your interest in doing this. This is just a preliminary survey to see who would be interested in operating such a camera. If suitable sites are available I will make a recommendation that you be considered for such a camera. There is no guarantee that you will get one however as I can only make the recommendation.

epmajden@SHAW.CA

Ed Majden—Sandia Bolide Detection Network-EMO Courtenay, B.C. Station

October 2002 SKYNEWS 7

ROYAL ASTRONOMICAL SOCIETY OF CANADA VICTORIA CENTRE

Laughing and Grief - Part 2

I remember as a child how I had mastered the simple principle that, in order to form the plural of a word, all that was necessary was to add the letter s. I was quite surprised to learn later that not everyone adheres to this simple principle. Germans and Italians don't, for example, and even the French slip up from time to time, because they seem to insist that the plural of cheval is chevaux. Likewise, the ancient Romans were not as enlightened as we are, and they formed their plurals in many different ways.

Our local newspaper has not quite grasped the difference between singular and plural, and it quite regularly prints such words as bacteria, data, media, criteria, phenomena, etc., as if they were singular and could be followed by the verb "is". The first three are Latin plurals, whose singulars are bacterium, datum, medium. The last two are Greek plurals, whose singulars are criterion, phenomenon.

The following table of how to form Latin and Greek plurals will probably cover most words, though I don't by any means guarantee that there will be no exceptions:

If the singular ends in	the plural (probably!) ends in	
	Latin words	
-a	-ae	
-us	-i (sometimes -us)	
-um	-a	
-0	-ines	
-io	-iones	
-es	-es	
-is	-es	
None of the above	You have a problem	
Greek words		
on	-a	
-a	-ata	
-is	-ides	

Continued on page 9