



Three views of Mars. Photos by Murray D. Paulson

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Stardust Articles may be submitted by email to mward@interbaun.com or aaquisto@macewan.ca or edmpresident@edmontonrasc.com. Submission deadline is the last day of the previous month (e.g. for the May issue submit by 30 Apr). Preferred format is MSOffice OR OpenOffice OR AbiWord OR plain text. For alternative forms of delivery, call Michael Ward (editor, 439-3584) or Orla Aaquist (assistant editor, 486-8661). Articles may be edited for length or clarity.

Editor's Message – A Solitary Body of Water on Mars

Mars, of course, has been a popular subject of late. I have seen frequent references to a surface feature hitherto unknown to me: *Solus Lacus*. Before you condemn me for ignorance of Martian geography, I hasten to add that I *do* know of something called *Solis Lacus*, the Lake of the Sun. It's an easy mistake to make, with either the brain or the fingers (look at your keyboard). If you search Google for "solus lacus", the first item at the top of the search results is a question: "Did you mean *solis lacus*?". A common error indeed. *Solus Lacus*, by the way, means "Lone Lake".

Upcoming Events, Meetings, Deadlines

2005	December 12	December General Meeting: guest speaker Robert Hilts on the chemistry of Titan (see abstract below)
	December 31	Submission Deadline for January issue
2006	January 9	Annual General Meeting & General Meeting: guest speaker national president Peter Jedicke on Neutrinos and Astronomy (see abstract below)
	January 24	Council Meeting, Grant MacEwan rm 5-238, 7:15pm

The Chemistry of Titan: abstract available at <http://www.edmontonrasc.com/generalmeetings.html>

Neutrinos and Astronomy: In 2001, the Sudbury Neutrino Observatory announced the solution of the solar neutrino problem. This talk will provide a general introduction to neutrinos, the history of the solar neutrino problem and other aspects of neutrinos in astronomy. No neutrinos were harmed in the making of this talk.

President's Message By Orla Aaquist

Council has been busy with only three things since September: deciding how to allocate the remainder of our Casino, updating our Bylaws, and finalizing the budget for 2006. We spent two meetings on the first task, and at this month's meeting you will let us know if we were successful. If you examine the money motions, you will notice that there is still about \$25,000 left in the Casino account. We have permission from Alberta Gaming to bank this amount pending feasibility studies of some long term projects such as the Black Nugget Lake Observatory initiative (BNLO), and it looks like we will not be tied to the two year spending limit for our next casino, thanks to the efforts of Franklin, our Casino Manager.

Updating our Bylaws has taken a long time. I am told that there have been several false starts, but now the task is almost done thanks to Richard Vandenberg, Krista Stefan, Cheryl Salava, and Franklin Loehde. These folks spent a good part of the summer creating an initial draft. This draft was presented to council in September for consideration and feedback. Following a week of deliberation on the Council's Yahoo discussion forum, the Bylaws Committee incorporated Council's suggestions into a second draft. This second draft was presented to Council at the November 29th council meeting, where Richard led us through 8 of 16 Articles. Lively discussions took place, particularly around the issue of Article 8: Officers. Council is split about which positions should be elected and which should be portfolio. Council is made up of the elected officials, whereas portfolio positions are selected by Council and do not have a vote. The Bylaws Committee had come to the conclusion that we should have fewer elected officials, whereas several council members feel that all positions that contribute significantly to the Centre should have a vote. At 11 PM, on November 29, we adjourned with only 7 of 16 articles completed.

I am presently sitting in a computer lab at Grant MacEwan College on Saturday morning of December 3 proctoring a laboratory exam. I have a cup of coffee and an apple square to the right of my laptop on which I am typing these very words. Life is pretty good. As I type, I am having a little debate as to whether there should be two spaces after a period or just one. When I took typing in grade 10 at Queen Elizabeth High School way back in 1967, I was trained to insert two spaces. Now I hear rumours that there should only be one space. What is this world coming to! But the unfinished bylaws, and my president's report are tugging at my shirt sleeves begging for attention, as are 25 ungraded astronomy essays, 45 unmarked astronomy assignments, three final exams that have to be created, Christmas shopping to be done, a trip to Winnipeg on December 19 to be planned, final exams to be graded, marks to be submitted, course outlines to be updated for the next semester, and a partridge in a pear tree.

On Monday, December 5, Council will reconvene to hammer out Article 8 (and the rest). When you read this, the deed will be done. But as of now, the future is not clear, so I ponder ... I dream ... To be, or not to be elected, that is the question. Whether 'tis nobler in the mind to suffer without a vote, or to take arms against the Bylaw's Committee and stir up a sea of troubles. And by opposing end them? To die. ... We have shuffled through these Bylaws, and this must give you pause: there's no respect. We make calamity of this long, drawn out procedure; for who would bear the whips of the general membership as they scorn these new rules. The insolence of office that we take it upon ourselves to think that we can create laws. We grunt and sweat under a weary life of Council, but that the dread of something after Council, the undiscovered joy of being an ordinary member, free to pursue astronomical pleasures, to let others rule. Thus conscience does make cowards of us all, and thus the native hue of resolution: who shall sit on Council? Who shall have a vote? I sicken o'er with the pale cast of thought, for this truly is an enterprise of great pith and moment. With this regard my currents turn awry, and lose the name of action. - Soft be you now on us, your humble Council! The fair RASC! Be all our sins forgotten.

In the end, of course, you have to vote on the new Bylaws. This vote will likely take place in February or March. If all goes well, you should have a copy of the Bylaws under your Christmas tree ... Yes! This coming Christmas. Read them over. Let me know what you think.

For the last few months, I have been asking for volunteers to help out with council and portfolio positions, and the nominating committee has been busy looking for candidates. Four brave gentlemen (George Graham, Roy Ramdeen, Sheldon Helbert, and Andrew

Soon) have stepped forward to be nominated for four vacant council positions: three councillors and one National Representative. At the AGM in January, they will be elected by acclamation unless someone puts forth nominations from the floor. If this happens, be prepared for pandemonium, since I have been told that this has never transpired in the history of the Centre; but please, do not let this stop you. If you want to volunteer but do not want to sit on Council, there are four portfolio positions open: Public Education Coordinator (Sherrilyn Jahrig is stepping down), Scope Rentals (Larry Wood needs a break), Backup Scope Rentals (Keith Tutton has no time), and Social Director (has been vacant for over a year). Soon we will also need volunteers for Astronomy Day, the upcoming Casino, and our Outreach Coordinator (Dave Robinson) would also like to have volunteers to give presentations at schools and other functions. Finally, if you are new to astronomy, there is never any harm hanging out at the Observing Deck to learn some astronomy and to meet RASC volunteers, TWOS staff, and Deck visitors.

The awards committee has submitted their selection of candidates for this year's awards. There are six awards: The President's Award for Service to the Centre, The Observer of the Year Award, The Angus Smith Award for Excellence in Telescope Making and Design, The Bryce Heartwell Memorial Award for Excellence in Astro-imaging, The George Moores Memorial Award for Excellence in Public Education, and The Franklin Loehde Award for Project of the Year. These awards are presented annually at the AGM in January. If you have suggestions regarding candidates for any of these awards, you must let me know soon (almost immediately) before the club plaque and the individual plaques are sent for engraving.

This brings to a close my December message (and the end of the Laboratory Exam that I am proctoring). It has been a fruitful year for the Centre. Michael Ward is doing a wonderful job with Stardust, Sherry Campbell has reawakened the George Moores Workshop, our charitable status has been restored, the Dark Sky Preserve and the Black Nugget Lake Observatory initiatives are in good health and hopefully will be fully realized in 2007, Warren has found several new dark sites as alternatives to Blackfoot, and your president has not yet been dragged off to the psych ward.

The Planets *By Murray D. Paulson*

Ah what a lovely Mars apparition! And, it's not over yet! November was a great month with many observing windows and uncharacteristically balmy evenings. The bonus was the number of those warm evenings that had relatively good seeing. Not great, but adequate. It has been a far cry from that crazy 2000/1999? Leonids on Obed summit. -25 C in a snow storm, and no "storm".

December starts off with a good morning apparition of Mercury. At the beginning of the month, Mercury rises an hour and a half before the sun. It shines at magnitude 1.0, and will show you an 8.9" diameter thin crescent in the eyepiece. Nice view! On December 8, Mercury was at dichotomy and showed a 7", -0.2 magnitude disk. A few days later, on December 12, Mercury goes through it's greatest western elongation where it will shine at magnitude -0.4 and show you a 6.7" slightly gibbous half-moon in the eyepiece. It will fill out and shrink in size over the next few weeks. These December morning apparitions are great, and sustained. If you are lucky, you might even be able to follow it until after Christmas when it rises just over an hour before the sun. Mercury now shows a 5.3" gibbous disk and shines at -0.4. A year ago we had that spectacular Venus-Mercury conjunction. No dice this time around.

Venus has surprised me over the month of November. I have had many occasions to spot it just before sunset, low on the horizon, and quite striking. On one spectacular evening, Venus was wreathed in a flaming pink sunset. A diamond in a blue and pink setting. At the beginning of December, Venus was a fat, 36.6" crescent which shone at magnitude -4.6. By the end of the month, it will sit 20 degrees from the sun, but still sets 2 hours after the sun. It will be a nice view in the eyepiece, a 57" slim crescent shining at Magnitude -4.4. For those who saw the Venus transit, this brings back how big that planet can be. What a fine way to start off the new year!

As stated earlier, this has been a great apparition, and it is not over. By now, Mars is high enough in the early evening sky to enjoy in a telescope. Show the kids, and tell them that because it is red, that must be where Santa comes from. Mars has cruised through Pisces and is now in the constellation of Aries. On December 11 at 09:55pm MST, the Moon and Mars will be only 23' apart. This will be a good photo op. with both planet and moon visible in a high power field. Mars will shine at magnitude -1.2 and displays a 15" disk. In early December, Syrtus Major dominated the visible side of the planet, just like near opposition. By December 15, the Mare Sirenum region has turned toward us, and we are headed back to the face that lacks in lots of details as we slide into the Winter Solstice with Mare Chimerium. Mars now shows a 13.6" gibbous disk in the eyepiece and has declined in brightness to Magnitude -0.8, no longer the brightest "star" in the night sky. As we slide through Christmas, Solis Lacus turns its eye toward us, and the surface features really start to get more interesting. Hopefully you have some very high-power eyepieces to get into the image scale up there where the details are visible. 300 power is about right. With the coming of the new year, we roll into the Mare Acidalium-Elesium region and the Sinus Meridiani club shape is heralding the return of Syrtus Major to our view in the following week. By early January, Mars has shrunk to 10.6" and shines at magnitude -0.2, just a dim ember of the visage we enjoyed. There is still some stuff to see on the planet, so give it a whirl. Serious observers watch it until it retreats below 6 arc seconds.

Saturn is rapidly returning to our evening sky, and you can now observe it before midnight. At the beginning of the month, Saturn shines at 0.0 and shows 19.6" disk in the eyepiece. Saturn rises in the constellation of Cancer at 8:00 pm and is well positioned for observing by 11 pm. I saw it pairing with the moon in late November as I prepared for bed, but this month you don't have to wait up quite so late. On the morning of December 19, the gibbous moon passes 3.2 degrees above Saturn before sunrise. By New Years, Saturn rises just before 7 pm and is well above the horizon for late evening viewing. It has increased in size marginally to 20.15", and shines at magnitude 0.0. This is exactly the same size as Mars was at opposition. Note how much the tilt of the pole has declined from last year, when it was 23 degrees. The north pole is now tilted 18 degrees away from us, and by next season, it will be down below 14 degrees. Saturn will be the icing on the cake over the holiday season.

Jupiter comes up in the morning hours and was the companion of Mercury in the first half of December. It shines at magnitude -2.1 and will show an early morning observer a 35" disk in the eyepiece. Just the right thing to offer Santa whilst he makes his rounds because on the morning of Boxing day, a thin crescent moon will join Jupiter in the morning hours. It should be a nice view, and a good photo op.

with the pair so close to the horizon.

Enjoy the Holiday season, and the best to you and your families. Hope there is something special under your tree!

New Members Report *By Pat Abbot*

Rene Belland and his son **Daniel** are both fascinated by astronomy. They both recently joined the RASC Edmonton Centre. They have a Meade 10" LX200. Rene is in the process of arranging for remote operation of the telescope so that they can pursue astrophotography from the comfort of the house. He has been very impressed with the go-to feature of the LX200.

Michael Rooke has a 130mm Orion Newtonian. He has only once taken his scope out of town, but finds the moon and planets are fine from the city. He has been very impressed with the views he has had of Mars this Fall.

Mikki Hendren has had an interest in astronomy for years and has recently joined RASC Edmonton Centre. She is looking for some help with her Skywatcher reflector, as she has had trouble finding things in the sky. She would like to get out to the dark sites to escape the city light pollution.

Andrew Soon is one of the rare group of members of RASC Edmonton Centre; that is, a member engaged in "useful" astronomy. He is currently using the U of A 20" cassegrain to measure double stars. He points out that many doubles have not been measured for perhaps thirty to fifty years. He also uses a robotic scope based in Teneriffe. He was a member of RASC Calgary Centre 15 years ago, but we won't hold that against him!

To all our new members: cead mile failte! (a hundred thousand welcomes)

Observer's Report *By Larry Wood*

The nice weather during November made for some good observing during the month. I headed over to Coronation Park on several occasions to look at Mars and was rewarded with some impressive views. Bob Drew joined me once, and a couple of times members of the public stopped by to have a look. On one evening we had a lovely view of the first quarter Moon.

On Nov 24/25 about a dozen people showed up at Blackfoot and had quite good conditions to do some deep sky observing. Jnani Cevvel and Roy Ramdeen were looking at the stars in the "Trapezium" in Orion. They were contemplating also seeing the "G" and "H" stars in the group, but as they are fainter than magnitude 15 and in the presence of the bright nearby components, you would likely need a very big telescope to see them. Sharon Tansey was busy hunting up some faint galaxies in Aries - NGC 803 and NGC 772. The latter is a fairly large bright elongated galaxy, while the former is a faint knot of nebulosity, made much fainter by a nearby magnitude 11.5 star. She decided to move on and hunt for something a little less challenging. Ashesh Patel was busy chasing down some Messiers - he got six I believe, and I was looking at a couple of faint PNs - IC5217 and NGC7139. Warren Findley and Dave Robinson had their own projects as well as joining all of the rest of us in viewing Mars as it transited overhead. A lovely night of observing despite some faint sky glow.

It is the season for frost and moisture to form on any optical surface, so care must be taken when packing up after a night of observing. The main thing to watch out for in a Newtonian is to make sure the mirrors are free of all moisture before storing them. Make sure the mirror is dry if you plan on standing the tube on its end as any water may gather in the bowl of the mirror. If you store the scope in a cool place one simple solution is to put a trouble light in the tube overnight and the heat will soon dry everything - then you can cap it. The same for your eyepieces - check that ALL moisture is removed from them before putting the caps on (especially plastic caps). I leave my eyepieces uncapped in the EP case unless I expect very dusty conditions.

One place that I often found moisture is inside my finder. A loose fitting eyepiece was allowing moisture to sneak in and I wouldn't notice until the next time I went out observing and found my finder soon fogging up. A bit of electrical tape fixed the problem.

December/ January Observing Opportunities - All times are MST

Dec 12 at 10:11 p.m. **Tonight after the meeting** the Moon will occult the the magnitude 4.9 star Zeta Arietis. The star will re-emerge at 23:05 p.m.

On Wednesday, December 14 the Geminid Meteor shower peaks and occurs as the radiant is rising in the mid-evening. The Moon will be in the sky, which will diminish the number of members seen, downward from the expected ZHR of 120/hr. Any meteors from this shower will be travelling at 35 km/sec (medium speed) and will radiate from a point near the bright star Castor (the northern-most star of the Gemini Twins). Even with the Moon in the sky you will see more meteors from a dark location, well away from the city's over abundance of light. The shower is active from Dec 7 to Dec 17.

On the evening of December 18 the Moon will pass less than 4° above Saturn.

On Dec 25 you will be up early opening some gifts anyway so why not go outside and observe the Moon occulting the first magnitude star Spica (Alpha Virginis). Disappearance is at 6:08 a.m. and reappearance is just over an hour later at 7:14 a.m.

The peak of the Quadrantid Meteor Shower is at noon on Jan 3. The maximum ZHR is 120/hr with a short high activity period that is only 0.6 days long and the shower is active from Jan 1 to 5. The radiant is circumpolar from Edmonton. If the weather co-operates, some meteors can be seen if observing in the morning or the evening of Jan 3. A dim crescent Moon is in the morning sky so will not hinder the view too much. Again, a dark observing site is almost a must to get best results.

On Jan 8 the Moon will be 3° from Mars in the early evening sky.

On the evening of January 9 (meeting night again) the Moon will pass near the Pleiades Star Cluster and so will occult a few

magnitude 6 and 7 stars.

There will be some Jovian Moon mutual events visible beginning in the New Year.

Have a Merry Christmas, and good observing.

KidScopes Program

This item, regarding the telescope loaner program with Alberta Parks, was received too late for the November issue. RASC Outreach Coordinator **Dave Robinson** received a letter from **Jeanette Brooks**, Heritage Team Leader for Alberta Parks and Protected Areas, at the conclusion of the program. Bold and italics mine. - Editor

Dave Robinson reports:

I thought I would pass along the following information from **Jeanette Brooks** of Alberta Parks on how they used the kidscopes in their interpretive program this year. It looks like the experiment was a resounding success and I look forward to its repeat next summer. Two of the scopes are still out, one is waiting another event later this month and the other will be returned when the user gets into town. Many thanks go to **Warren Findlay** for setting this up, delivering the scopes, and training the Parks folks.

Hi Dave,

As promised, I did say I would give you a brief report on the use of the telescopes this past summer. Here are the statistics followed by a couple of comments:

Miquelon Lake Provincial Park - 4 summer programs totalling 103 participants - focus on general astronomy, star gazing, and the dark sky initiative. Miquelon has one additional November program to come.

Sir Winston Churchill - 2 programs with a total of 40 participants - probably similar themes

Wm. A. Switzer - 2 programs with a total of 85 participants - ABC's of Astronomy" evening amphitheatre program followed with "searching the night skies" point duty.

Overall 8 programs and 228 participants. We could easily grow this number, we just did not offer as many programs as we would have liked. These sites are often working with one interpreter which made it difficult for them to manage the telescope. Logistically, it takes two to manage these programs, just for the set-up, monitoring/guarding, and take down. That being said, we loved the opportunity to expose the public to something different, they loved it, and we had a chance to try it. We now know what we need, our programs are scripted and ready to go for next year, so we would like to use them again if they are available. Huge thanks for this opportunity; I think these scopes are opening up another inspiring world for us and our visitors. Looking forward to next year.

Jeanette Brooks

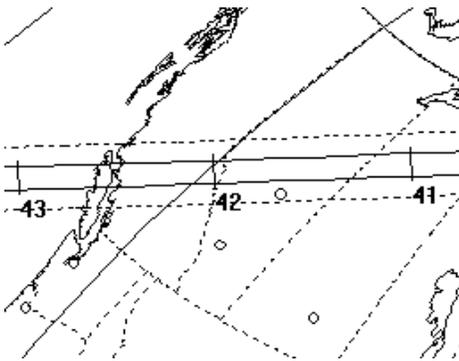
Have you ever been standing outside when all of a sudden the light plummets as a plane passes in front of the Sun? If this occultation event is slow enough, you can see that the shadow has a shape that matches the body of the occulter. If there is a group of you, each person will see something different: one will have a brief wing tip shadow, another will get a long event as the length of the body passes by, and those just outside the shadow path get a miss. Together, your information can re-create the shape of the plane. That's what astronomers try and do with asteroid occultations – recreate the shape of the rock.

Thanks to recent advances in the accuracy of both asteroid and star positions, predictions are much more accurate than a decade ago. Before, you were lucky to get one or two chances a year. Because we can now go to fainter limits on both the stars and asteroids, many more events can be predicted, with the average running closer to two per month. In October, we had an opportunity for two tries in one night (but both were clouded out).

The place to go to get a list and find out more is Steve Preston's web site: <http://www.asteroidoccultation.com>. He's made it easy for us to get all we need. Especially handy are the ready-prepared finder charts, from guide ranging from wide field down to a telescopic ½ degree. So all you have to do is to press print.

There's an easy to read help page with answers to frequently asked questions (FAQs). Conveniently, the ground path has Edmonton (city center) and Calgary plotted.

The plot (left) shows the predicted occultation path with solid parallel lines showing the edges of the asteroid's shadow as it travels across the earth. The dashed lines on either side of the path lines indicate the effect of a 1-sigma shift in the edge of the path. In theory, there is a 68% probability the actual path of the asteroid's shadow will fall somewhere between the 1-sigma lines. As reliable as the predictions are, this means that there is 32% chance that the event is outside. If you double the distance from the solid to the dashed line, (a 2-sigma shift) there is a 95% chance the event will occur somewhere in there.



Steve Preston notes "We see one-sigma+ shifts often. So, it is always worth observing from near the one sigma line." When you throw in additional sources of error - that the path drawn assumes a spherical asteroid, that the star being occulted might be a multiple, and that the asteroid may have a satellite - you can see the odds are not bad to catch an event outside the dashed lines. If, like me, you can set up pretty quickly and observe from your backyard, you've got nothing to lose by trying.

One advantage of urban sprawl is that we have observers from St. Albert to Leduc. Steve comments: "You have to think of this as a team effort. With lots of observers spread from + 2 sigma to -2 sigma, the team will gather good data on the asteroid. Unfortunately many observers won't see an event. But that doesn't invalidate their contribution to the team effort. In particular, the "miss" observations nearest the edge of the asteroid's shadow are crucial to determining the actual extent of the asteroid's shadow."

So what do you need equipment wise? At an absolute minimum, just a visual yes/no is more valuable than no observation at all. However, to make it decently useful, you need to capture the time of disappearance and reappearance on a recording with a time signal in the background. I have a short wave radio and a little digital voice recorder, a modern version of the mini-cassette. The next step up would be a digital camcorder or security camera pointed through the scope. We should invest in something like this for the deck at TWOS (still getting used to saying this!). There are folks in the States more than happy to analyse the tape.

At what point is it worth getting up in the wee hours and driving? It depends on a lot of factors, including the weather. The less promising the weather report, the more likely you should stay at home. Of course, it also depends on what state your mind has to be in the next morning. A critical point is the visibility of the target star: if the star is 14th magnitude, you're not going to see this from the city with a 4-inch scope. If it is close to the horizon, it will lose some light, and may very well be lost behind a house or fence. Another factor is the drop in brightness, from the star down to the asteroid. A spectacular event, like the one we missed a few years ago in Fort McMurray, was a naked eye star of 3rd magnitude dropping to 9th. The "typical" event is a star of 9-10th mag dropping down to 14th, a nicely obvious event. For an experienced observer, a drop of 1 magnitude is obvious, but once it gets less than that, slight shifts in averted vision could trick the eye, so direct measurement is necessary. Sometimes the asteroid is brighter than the star it is hiding, and only sensitive equipment will be of any use. So if you want a little sport thrown into your observing, keep an eye on the asteroid occultation web page, and the local email chat list. Really good events will probably be announced in Stardust or at the meetings.

Telescope Rental Program – Larry Wood – 488 8082

Purpose

- To make available scopes for members who
- are deciding what scope to buy
 - don't observe a lot but still want something
 - want a scope for a special event, i.e. travel, eclipse, comet

Scopes Available

- Meade 90mm Refractor: FL 1000mm, good for all around, nice for city viewing, good planetary scope
- Coulter 8" F/6 Dobsonian: FL 1220mm, best, easy to starhop, wide field of view, optics good, good for deep-sky, has a Telrad
- Meade ETX 90mm: FL 1250mm, excellent on planets, most PNs, solar, nice for travel
- "Kids' Scope" – 6-inch on equatorial mount

Cost

- Members: \$15.00/month and a promise to return in good shape
 - Non-members: \$30.00/month and Credit Card imprint
- Scopes not returned after one month are charged double the rate.

Where to Rent

- Telescopes can be rented at the monthly meeting for a period of one month. If renter is unable to make it to a meeting, call Larry.
- Scopes are to be returned at the next meeting. If no one else wishes to rent a returned scope, the same person can rent it for an additional month.

Care of Scopes

After each use, please allow optics to dry thoroughly before capping and storing. *Do not clean optics* except to brush lightly with a photographer's brush. If any of the optical surfaces still appear dirty or you run into a problem, contact Larry.

Safety

Never point the telescope at the sun unless filtered. The same applies to the finder.

Report from the National Council Meeting, Hamilton, 29 October 2005 By Bruce McCurdy

The fall meeting of RASC National Council was hosted by Hamilton Centre on October 29. I represented the Edmonton Centre via teleconference. Although this method lacks the personal contact which is an important component of such affairs, it is much more economical, and with the focus of the meeting on the Society's uncertain finances, I didn't feel I could justify the travel expenses. Subsequent surgery to remove the telephone from my ear was successful, but the painkillers have left me with an imperfect memory of the day's events.

I expected a tense meeting and was pleasantly surprised that consensus was broadly achieved on even the most contentious issues. I emerged with more positive feelings than I had had beforehand. (Of course, positive feelings are hard to come by when sticking a phone in one's ear at @#%&* 8 a.m. on a Saturday morning.)

The Finance Committee reported that 2005 results to date are actually somewhat better than forecast, although the Society continues to lose money at an unsustainable rate. While small savings can and have been achieved on various line items, only three possible major fixes were presented: 1) Discontinue *SkyNews*; 2) Change the delivery system of the Journal; 3) Increase fees significantly.

The first option was ruled out, as *SkyNews* was deemed a valuable benefit for new members especially. The bargain rates that the Society receives are contingent on full participation. In fact a small increase of these rates – the first in five years – has been negotiated with Terry Dickenson, who in future will take responsibility for direct mailing. One desirable outcome is that this will eliminate the chronic late arrival of *SkyNews* when bundled with the Journal.

Attention therefore focused on the Journal of the RASC, whose revenues are far outstripped by its publication and delivery costs. The solution proposed by Task Force 21 is a combination Printed and Electronically-Delivered (PED) Journal. In this proposal the primary delivery mechanism for JRASC would be via the Internet, however those members who wish a hard copy can still receive one for an additional cost suggested to be \$15 per year. So effectively members would get a choice between options 2) and 3) above.

A very positive report on the Journal's future was received from the new Editor, Jay Anderson, who said in part: "It is my view that the Journal is not so much unreadable as unread... We can look for a more observational focus in future, with deep sky, planetary, asteroid, and variable star columns, more biographies, descriptions of personal observatories and so on. The challenge will be to find space for the material without increasing (and possibly decreasing) the page count... At the moment the intent is to duplicate the printed version (of JRASC) on the Internet, but this is a waste of Internet capabilities and we need to work on a more expansive version for that medium. Certainly widespread use of colour, additional materials, links, astrophotography and so on are easily added..."

Clearly the objective is to make the Journal more relevant, not less so, by improving its content and capabilities while joining the swelling ranks of organizations who deliver their publications electronically. An optional hard copy remains for those who, like me, prefer reading the printed page in the bath tub.

A rephrased initiative was presented to revisit the fee structure, which is currently cast in stone as a 60/40 split between National and Centre. This has been in place for many years, during which the actual distribution of expenses has evolved more heavily towards the national body, which picks up the entire tab for *SkyNews* as well as increased expenses in such areas as liability insurance. As I understand it the proposed bylaw amendment will not see a decrease in the dollar value received by Centres, but will allow any future fee increases approved by the membership to be distributed as needed rather than bound by a formula.

After a few hours hashing over our financial challenges, it was on to happier news. National Council heard a report from David Levy who, through his and Wendee's Sharing the Sky Foundation, is establishing a pair of remote telescopes to be accessible to members of RASC and the Astronomical Society of the Pacific. The first of these telescopes, a 14-inch reflector, is already in place on David's property in Arizona; it is hoped that a second, similar scope be installed in the southern hemisphere, with Chile and Australia mentioned as possible sites. No doubt there will be more to come on this exciting initiative, which will be available at no cost to either the Society or individual members.

The National Observing Committee continues to gain momentum. There are now four different observing certificate programs from novice to advanced. Eight applicants were approved, including no fewer than three Edmonton Centre members. These certificates will be presented locally by the Observing Group coordinator in the coming months.

ObsComm also announced a new meteor observing section, to be coordinated by myself with help from Roland Dechesne of Calgary

Centre. The plan is to update existing web resources which were prepared for the Sky Scan Science Awareness Project, thus providing a continuing return to the Society for the seed money invested in this project by Edmonton Centre over the past few years. The new section should be up and running in early 2006. It is possible that an extraordinary meeting of the Society could be called early in the New Year to jump start some of the proposed initiatives without having to wait for the next annual meeting. In such an instance, proxy votes will be even more important than usual. Please watch for notices in upcoming mailings from the Society, and by all means talk to me in person, phone or email if you have any questions, concerns, or suggestions.

Casino Volunteers Needed! - Franklin Loehde, Casino Manager

On **Saturday May 13** and **Sunday May 14, 2006** we will be holding our casino, and we need your help.

A significant portion of our in-house expenses, and almost all of our very valuable Outreach Programs, like the Observing Deck, are financed by the monies that our members raise through the infrequent casinos we run. This responsibility has fallen on a few stalwarts in the past who have been willing to help others in the Centre and the general public.

This round I would like to see more than 100 step up to the plate. It certainly makes my job of scheduling the roster for the two day event that much easier. The surroundings are pleasant, the food is great, and the atmosphere largely smoke-free.

The volunteer form is available from me at the meetings, or from the RASC website as a PDF:

<http://www.edmontonrasc.com/documents.html>

Book Donation

The following books have been kindly donated to the RASC Edmonton Centre by **Mr. Norman Searle** of Devon, AB. Many thanks to Mr. Searle for his generosity.

Catalog of Cometary Orbits, by Brian G. Marsden

Comets: Vagabonds of Space, by David A. Seargent

Comets, by Laurel L. Wilkening, Editor

The Astronomer's Sourcebook, by Bob Gibson

The Cambridge Photographic Atlas of the Planets, by G.A. Briggs & F.W. Taylor

Books For Sale

Burnham's Celestial Guides to the Universe

Vol. 1 Andromeda through Cetus

Vol. 2 Chamelion through Orion

Vol. 3 Pavo through Vulpecula

All volumes are revised and expanded

Price - \$40.00 for all volumes

Astrophotography for the Amateur [2nd edition] Michael A. Covington

Reprinted [with corrections] 2000

Price - \$15.00 or \$10.00 if bought with the Burnham books.

Sky Atlas 2000.0 Desk Version [white]. By Tirion & Sinnott.

The Northern Hemisphere has been laminated as the have instructions and index. This package includes the Messier card and large Miller Planisphere.

Price - -\$60.00.

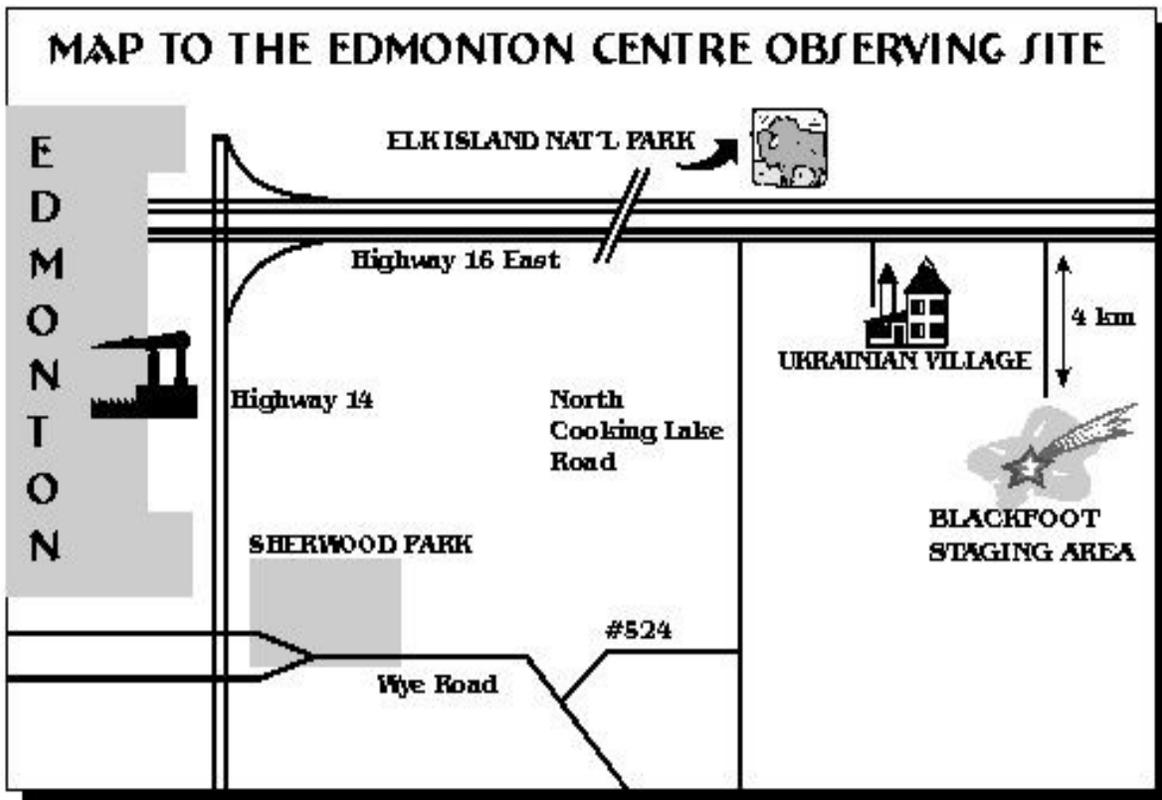
If all the above bought as one package the price is \$100.00. All brand new, never been used.

Contact **Gerard Moorman**

467-3215 (home)

233-3211 (cell) after 5 PM

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