

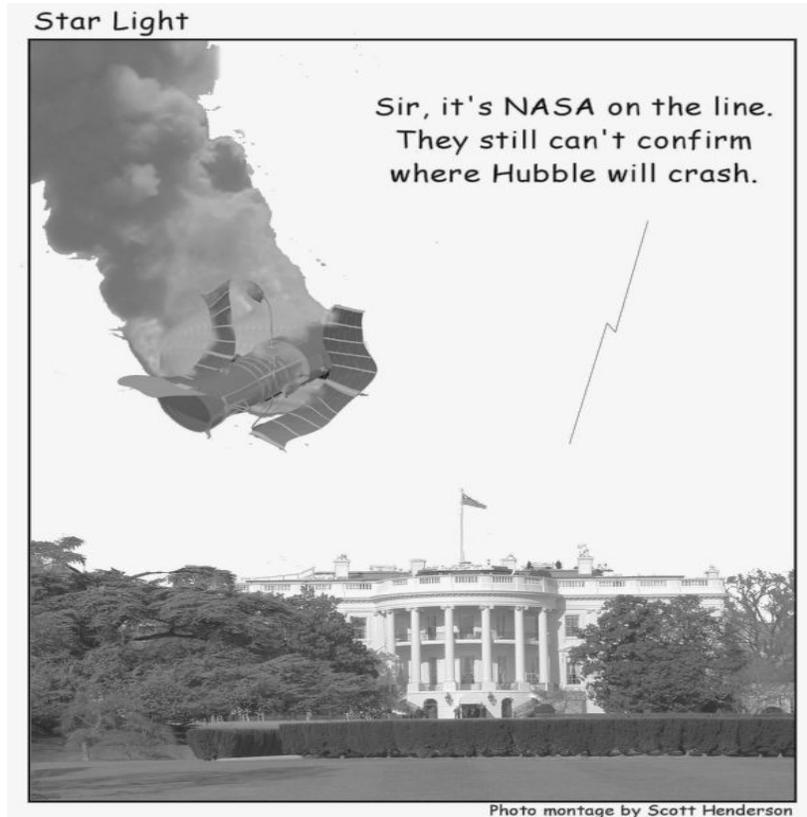
STARBUST

Newsletter of the Royal Astronomical Society of Thule
Edmonton Centre



April 2006

Volume 51 Issue 8



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Centre Contact Information

If you do not want your email and/or phone listed here, please contact the editor.

| Council Positions | | | |
|---|----------------------|--|--|
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| Past-president | David Cleary | | |
| Vice-president | Krista Stefan | | |
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| Treasurer | Cheryl Salava | | |
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| Councillor | Sheldon Helbert | | |
| Councillor | Roy Ramdeen | | |
| Councillor | VACANT | | |
| Observing Group Chair | Larry Wood | | |
| Stardust Editor | Michael Ward | | |
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| Astronomy Days Coordinator | VACANT | | |
| Casino Manager | Franklin Loehde | | |
| Equipment Director | Bob Jahrig | | |
| George Moores Workshop Coordinator | Sherry Campbell | | |
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| Librarian (backup) | VACANT | | |
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| Membership Secretary | Mark MacDonald | | |
| New Member Advisor | Pat Abbott | | |
| Outreach Coordinator | Dave Robinson | | |
| Public Education Director | VACANT | | |
| Public Relations/Promotion Officer | Shelly Sodergren | | |
| Scope Rentals | Larry Wood | | |
| Scope Rentals - backup | Roy Ramdeen | | |
| Social Director | VACANT | | |
| Speaker Coordinator | Orla Aaquist | | |
| Stardust Distribution | Mark MacDonald | | |
| Web-site Administrator | Howard Gibbins | | |

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Stardust Articles to Stardust 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).

Upcoming Events, Meetings, Deadlines, Announcements

| | |
|-------------|---|
| April 10 | Starbust Meeting (Members' Night) |
| April 18 | Council Meeting, EBA Engineering, 14940 - 123 Ave, 7:15pm |
| April 21-23 | George Moores Astronomy Workshop |
| May 6 | Astronomy Day |
| May 8 | General Meeting (Members' Night) |
| May 13/14 | Casino (Volunteers needed!) |
| May 30 | Council Meeting, EBA Engineering, 14940 - 123 Ave, 7:15pm |
| June 12 | General Meeting (Members' Night) |

Observing schedule (note no dates for June)

| | | | |
|----------|---------|-----------|---------|
| February | 24 & 25 | August | 25 & 26 |
| March | 24 & 25 | September | 22 & 23 |
| April | 28 & 29 | October | 20 & 21 |
| May | 26 & 27 | November | 17 & 18 |
| July | 28 & 29 | December | 15 & 16 |

Star Parties

| | |
|----------------|--------------------------------|
| Aug. 18 – 27 | Mount Kobau Star Party |
| Aug. 24 – 27 | Saskatchewan Summer Star Party |
| Sep 26 – Oct 1 | Northern Prairie Starfest |

Resident's Massage by *Ollie Aqueous*

At the March 28 council meeting, all of the councilors were away chasing a total solar eclipse. No one told me about the eclipse, so I was alone at the meeting. Apparently, the people you elected to council, except for your dedicated president, consider chasing some stupid solar eclipse across Africa more important than their council duties. Despite this apparent lack of quorum, I decided to proceed on my own. The meeting was called to order at 7:15 PM.

For the first order of business, I reminded council that on March 16th, Steve Savage of Sky-Skan Incorporated conducted a special VIP demonstration for RASC members of a new technology that is being considering for a new dome theatre at the Telus World of Science (TWOS). The 60+ members who attended this demonstration were treated to a 180 degree panoramic tour of our universe starting with a trip through the Saturnian system, followed by a faster than light excursion through our local solar neighborhood, and ending with a supersized view of the universe based on the Sloan Digital Sky Survey. Within the next few years, TWOS is considering replacing the Margaret Zeidler Star Theatre with this new system housed in an entirely new theatre. This is an ambitious project, and at the March 28 council meeting, I passed a motion to support this project and to direct all of our next casino earnings to TWOS so that they can conduct a detailed feasibility study.

As most of you know, Sherrilyn stepped down as Public Education Director (PED) in January, and as we have yet to find a replacement, we have no one to coordinate Astronomy Day. I suggested to council that we direct our remaining general funds (about \$25,000) to hire my wife Shannon to do the job. After a heated debate, I agreed with myself that this was a good idea, and the motion was passed.

Both of the above motions will be presented to the membership at our April general meeting, and I expect that they will be passed with a strong majority, as is the usual case for motions brought to the membership by Council.

To make the PED's job easier, I took the liberty of assigning most of her duties to four members. Cornelia Blunck will be the Deck Activity Coordinator (DAC), Paul Campbell will remain in his current position of Observatory Planning Committee Chair (OPCC), Dave Robinson, will answer to the acronym ORC or Outreach Coordinator, while the position of Astronomy/Earth Day Coordinator (ADC) will remain open until Shannon can find someone to fill the position, her first duty as Public Education Director. She has told me that she will get to it as soon as she, in her position as Centre Librarian, manages to round up all of the overdue library books.

The council meeting adjourned at 7:16 PM.

New Members Report by *Bat Rabbott*

Merle Rusnak became interested in astronomy a year ago. Merle lives on an acreage near St Albert and has an 8" Next Star and is interested in clusters and galaxies. He has a good north sky but the south is spoiled by the Edmonton light dome. He has had some problems with the go-to as he has trouble keeping the scope level.

Norman Searle has had a lengthy interest in astronomy. He has observed at 80degrees north. He has an old Selsi 80mm refractor that works better now that he has replaced the poor eyepieces that came with the telescope. He now has a 10" Skywatcher newtonian and a pair of 9x63 Meade binoculars. He

lives in Devon but has access to a friend's acreage which is only ten minutes drive away.

Mark Sutherland has had an interest in astronomy since he was a child. He has a Meade 5" ETX which he uses in his backyard. Although he lives in the city he feels he has a reasonable exposure from his backyard. He is impressed with his go-to. He hopes to make it to a dark-site.

Dave Boyle first used a telescope 15 years ago but it was not of good quality.

He has recently bought a Celestron 5" Newtonian, but due to the inclement weather, he has not yet had the chance to use it. He

also has a pair of binoculars. He is just waiting to view Saturn if the skies ever clear!

To all our new members, *Cead mile failte (a hundred thousand welcomes)*

Focal Point by *Hott Scenderson*

As the Sun slowly sets, and the trees cast their long shadows across the grass, I hear the sky calling me, and decide that some astronomy was necessary. Slowly, the sky blackens and the stars, like heavenly diamonds, fade into view. Ah, there they are, my old friends! The Big Dipper... Cassiopeia, Orion... seeing them again is like running into an old friend! I put on some music to add to the event. "Slowly, gently, night reveals her splendor." I sing along as best I can, soaking up the moment. Now that darkness has come, a billion stars hang before me.

Ah... there's Saturn... let's have a closer look. Breathtaking! Seeing that creamy jewel, I feel as if I'm looking at a sunny day on an alien sky! Magnificent! Like chips of diamond, I count 6 moons floating nearby. The seeing is rock-steady, and my magnification soars to un-before heard of heights! I stare in amazement, soaking up every detail the view will provide. I can see the ring divisions with ease! Incredible!

Soon, I move on to Jupiter. Amazing! The clouds are revealing so much detail, I feel like I'm looking at a Voyager photograph! And there are its moons! Will the seeing allow me

to see surface detail on the moons? I've heard of it being done, but I've never tried it myself. I magnify further and further until... OH MY YES! I can see Jovian lunar details!!! I wipe the tears from my eyes... it's just such an emotional moment! I sit and stare for two hours straight, going from moon to moon, then back to those incredible clouds. I feel like I'm in a spaceship, floating before that giant planet!

Next, I move on to the deep sky. I pull M-13, the monster globular cluster of Hercules into view. The steadiness allows me to see right to the core of the cluster! Again, I magnify to limits I've never tried before. The view is filled with stars! AMAZING!

I pull back, and look at the entire sky. There's no light pollution here, and the sky is perfectly transparent. I've never seen so many stars at once. I feel as if I could just float up and...

Suddenly, a large grey object appears across the sky...

"Please register to continue using Super Starry Sky Pro"

What the? That website said this was FREEware! Piece of crap!!!

A different kind of eclipse experience by *Mike deCanmore*

The March 29th solar eclipse was my third total eclipse. "Seen one ya seen 'em all", as they say; I wanted to do something a little different. How about photographing the moon during totality instead of the usual boring corona that everybody else was doing? I knew from looking at published eclipse photos that one couldn't just point the Brownie at the sun/moon and open the shutter. No, it would take flash photography to do it right. I got out my pencil and slide rule and started to do some calculations.

The first consideration is that the moon is pretty far away, so it would take quite a bright flash to illuminate it like a full moon. I had the use of an 8" reflector, so I could improve things by directing the flash into the eyepiece and having it come out the front. Since light takes a little more than 2 seconds to get there and back, I'd have plenty of time to put the camera on in place of the eyepiece and get her focused up. Then click the shutter and she'd be done. The calculations showed that a standard camera flash would not be bright enough. The Calgary eclipse tour that I had joined were set up at a luxury hotel near Antalya, Turkey. I approached the concierge with my plan. Such a hotel was sure to have shore power, and just about anything you want can be obtained with enough Turkish Lira. I kept my plan secret from Doug Hyoob and the rest of the serious astronomers, so that nobody could scoop my idea.

As totality approached and the level of excitement grew, I quietly slipped on my protective gear. I already had the welder's helmet, and had the equipment disguised as a cooler of beer. Just to be sure nobody suspected what I had hidden in the box, I had

spent the whole of the partial phase drinking beer. The ruse worked. Except for the unfortunate incident when I fell over and knocked down Doug Hyoob's tripod, everything went well.

Just as Don LaDuke yelled out "Filters off" I whipped out the electrodes, powered up the arc welder and struck a spark near my eyepiece. Something must have happened to the other astronomers, because just after I did that, there were howls of rage and pain from all over the observing area. I could not see what was going on, because like everybody else, I had taken off my welder's helmet when Don said to, and I was somewhat blinded by the flash. Actually, I was blinded for just over 4 minutes, as was everybody within 30 meters of my scope.

Fortunately, I had practiced replacing the eyepiece with the Brownie, and had cleverly made them parfocal. I got the Brownie on and shutter opened within 2 seconds, and was ready for the return flash from the moon.

Was it worth it? Well, I did had to pay extra for the damage to the welding machine that happened when the other astronomers recovered enough vision to see what I had done. And I'll need a new scope (for the same reason), and the eyepiece was melted by the arc welder. Fortunately, although the Brownie was somewhat the worse for wear after the melee, I managed to keep the film from being damaged. All in all, it was a worthwhile exercise. The only downside: it looks like I'll have to make my own arrangements for the next eclipse.

"Damn, it's nearly new Moon! Now what was I going to observe?" A decade ago, Sheriff Mike Knoble would have arrested me for such an utterance, followed by judge Bob Draws sentencing me to several all-night sessions in Arizona linging it in through the Hickson catalog from Ursa Major through Coma Berenices down into Corvus. But this is the naughties, and local civilization has come a long way. In the absence of Dave Clyburn, Randy Pecan, and Bob Draws, those stalwart neo-conservative deep-sky juntas, the rest of us can now observe in fear of only the cougar and her cubs, or better yet, from the safety of our backyards and driveways.

That's right, deep-sky's out and everything else is in. It's so passé, Bob became very tensed and conjugated his name to Drew to fit in. Llaarryy is watching satellites, Denis "softie" is predicting them, Paul "sunny boy" is limited to things brighter than mag -15 (not 15th), and the club action is focussing on lunar and asteroid occultations.

The freedom to observe what you want has its costs however. I had to buy "Atlas of the Lunar Terminator" to help send my eyes on an expedition to the south pole. In trying a bit too hard to focus my camera on my cratered quarry, I stripped the gears of my motofocus. Giving the ocular the old "in-out" brought back memories of the old days with my helical focuser. On the other hand, it's a great preventative since no one wants to look through my scope (not that they ever did with PK stellar planetaries in there).

You may not be aware of all the "hidden" costs to occultations. First, you have to lose time learning about something new, and it's always changing! Unlike galaxies which don't move during our lifetime, asteroids are constantly criss-crossing starfields, seemingly trying to skip around background stars. You can just hear those Messier marathoners "yep, there's M71, right where it was plotted on my Uranometria atlas last year. I had better check on M68 now." Isn't that less stressful than having to figure out what Township road near Ponoka you need to find, and show up an hour early to set up? Blackfoot's easy to get to, none of this new site for every observation. Organizing occultation expeditions is like, well, organizing an expedition! Endless emails and phone calls, cursing the weather man (maybe we should change tactics and start bribing him), and then those maps to print out: map of the profile, map of the province, medium and close up

roadmaps and Google blended satellite imagery. All that paper and ink to recycle after a cloudy session, money spent on gas, GPS units, shortwave radios, video time-stampers, portable power units, and the sweet coffee shop misery talk. Carbon dioxide and biogas emissions - so much for Kyoto. All this on a week night. For deep-sky observing, you just wait to see if it's clear Saturday night near New Moon, bring last year's charts, and the only planning required is "hey, see you at Blackfoot tonight".

Sure I observed a lot more this winter than the last ten put together. I logged just over 80 observing sessions (I'm not bragging) between October 1 and March 31. I discovered that one of the great things about observing the Moon is that only totally overcast skies and New Moon can stop you! I watched it through cirrus, during the day (impending overcast), after a night shift, through stratocumulus, altocumulus (natural filtering too). I could pull the scope onto the driveway, look for 15 minutes, then pack up and still get a whole evening with the family. This sort of unending observing put me in a great mood, hence the James Brown reference for the title to this piece. Lots of life's little irritations can be brushed off with a smile. Deep-sky observers tend to be grumpier because of perpetual twilight, winter, and the weather.

On the other hand, or I should say foot, spending that much time going up and down the ladder, always on tip toes or crunched to get the right height, produced a repetitive strain injury: plantar fasciitis. It's like standing on a marble every time you put your foot down. So I started to favour that foot, putting more pressure on my other leg, walking with a bit of a limp. Don't you know that's bad for posture? Out on the couch with back spasms a few days later? after some muscle relaxants and recovery, I found myself sitting on the top of the ladder to take the weight off the feet. But then the edge of the ladder digs into the thigh cutting off circulation to the lower leg and foot. Ever tried to stand without muscle control? You find out just what 9.8m/s^2 causes in a half second as you plummet to the ground. The clipboard's wind resistance is not enough to slow your descent.

I haven't read it, but there must be a backyard astronomy guidebook that says "all in good measure: a little planetary, a few variables, some deep-sky, a touch of moon dust, some shadow seeking, and a couple of Advils."

Local Member Wins New RASC Observing Award by *Ala Orquist*

In the past, the RASC has offered three observing certificate programs to promote active observing: Explore the Universe Certificate, Messier Certificate, and the Finest NGC Certificate. At the 2005 General Assembly, the **Isabel Williamson Certificate** was adopted as a new national observing award for lunar observers. I am delighted to report that our very own Bruce McCurdy is the very first recipient of this new certificate, and that he was presented with the award at the April meeting of our Centre. Our national website states that "The Isabel Williamson Lunar Observing Certificate is new certificate program that was designed by the RASC Observing Committee. The Moon is by far the most detailed astronomical object to observe through a telescope and this comprehensive new program will guide you through a complete tour of our near neighbour's incredible surface. The list contains many outstanding craters, mountains, valleys,

scarps, dorsa, and more. A sixty page printed booklet has been prepared for the Isabel Williamson Certificate Program by the Observing Committee ..."

[<http://www.rasc.ca/observing/moon.html>] As well as the Isabel Williamson Certificate, Bruce received the two awards leading up the Certificate requirements: The **Isabel Williamson Lunar Observing Challenge Award** for observing 100 or more of the challenge features listed in the official Isabel Williamson lunar observing booklet, and the **Isabel Williamson 1000 Named Lunar Features Award** for observing 1000 or more officially named lunar features as recognized by the International Astronomical Union.

On behalf of our Centre, congratulations to Bruce on his achievements in lunar observing.

For Sale (Spring Cleaning) – contact **Roy Ramdeen** – see Contacts on Page 2

SkyQuest XT10 Classic Dobsonian Reflector

Includes a 2" rack-and-pinion focuser which accepts both 1.25" and 2" eyepieces,
Navigation knob
9x50 finder scope,
Telrad with upgrade flash kit
2 - 1.25" Sirius Plossl eyepieces,
Eyepiece rack,
Quick-collimation cap
Hard dust cap.
Orion Carrying case for OTA /Original boxes
\$800.00 or best offer



Meade LX-5 - 8" Schmidt Cassegrain 2080/2110 about early 1980s

Complete for visual observing, optics are good, scope needs very fine collimation. A good beginner scope that is non-goto.
Includes OTA/Forks/Drivebase
Dewshield
Kendrick 8" corrector dewstrap heater
Eyepiece/Visualback/Stardiagonal

9x50 Finder/Red dot Finder
Deck motor
Hand Box
Standard wedge
Field Tripod
Trunk for OTA and Base
\$1000.00 or best offer

Tasco Starguide 4GT Telescope

Aperture:102mm (4") Maksutov-Cassegrain
F ratio F/13
Go-To/Pec
Red Dot Finder
1.25 eyepiece 25mm MA Eyepiece - (53x)
1.25 eyepiece 10mm MA Eyepiece - (133x).
Lightweight aluminum tripod with adjustable wedge
The Sky Level I Astronomy Software
NexStar Observer's List (NSOL) control software
Carrying case included/Original boxes
\$650.00 or best offer



Observer's Report by Cary Wood

All times are MDT

- In the early morning of April 17 the Moon will rise when less than one degree from the bright star Antares (Alpha Scorpii)
- On the evening of April 17 the Moon will be in close proximity to the Open Cluster M35.
- On the morning of April 18 at about 5:30 a.m. Venus and Uranus will be only 18 arc seconds apart and the pair will be less than two degrees to the left of the star Lambda Aquarii.
- April 22 is the peak of the Lyrid meteor shower, with the shower active from April for a couple of days. This is not a great shower as the maximum ZHR is 20 meteors/hr with a peak expected just before noon. Any Lyrids will be travelling at medium speed (48 km/sec).
- On the morning of April 24 the Moon will be only 1.5

degrees from Venus as they rise in the east just after 5:00 am. See how far you can see Venus into morning light.

- May 5 is the peak of the Eta Aquarid meteor shower. The ZHR is 60 meteors/hr, and the shower members will zip across the sky very fast (65 km/second). The shower lasts about 5 days and with the first quarter Moon lighting the sky the number of meteors seen will be somewhat diminished.
- Some club members are planning on heading down to the southern part of the province during New Moon weekend in May to get some darker skies. Contact me if you are interested.
- Locate the asteroid Pallas using the finder chart included below, also see page 211 in the Observer's Handbook.

Some Asteroid occultations occurring near Edmonton

Twilight, Thursday eve April 20th ~9:03pm MDT:

www.asteroidoccultation.com/2006_04/0421_505_5085.htm

Pretty good event if you can find the star in the twilight. Unfortunately the track is 3 sigma north of Edmonton. Last update Mar 17th.
Monday Evening, April 24th ~ 11:58pm MDT:

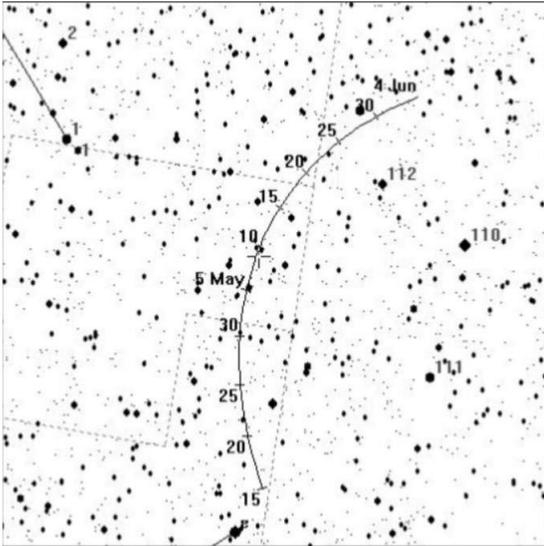
www.asteroidoccultation.com/2006_04/0425_1661_7510.htm

Near Saturn in Cancer. Star fairly bright (9.4). Uncertain; misses Edmonton by 2 sigma. Named "Granule". Maybe it was discovered on a grainy plate :-). Last update Mar 17th.

Tuesday Evening, April 25th ~ 11:29pm MDT:

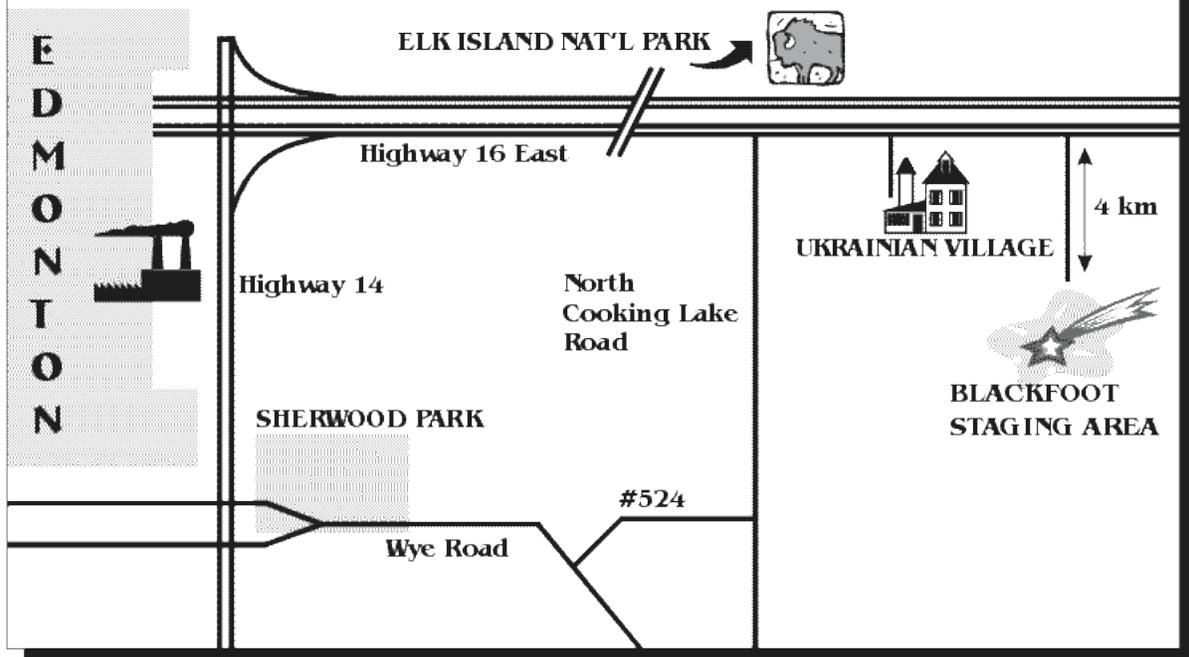
www.asteroidoccultation.com/2006_04/0426_27_5106.htm

Low in sky. Small delta mag. Better suited to video. Grazes Edmonton.



Asteroid Pallas April 15 - June 4

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of SCIENCE
edmonton

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* Ask for details. Discount not applicable on some items.

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