



# Winnicentric

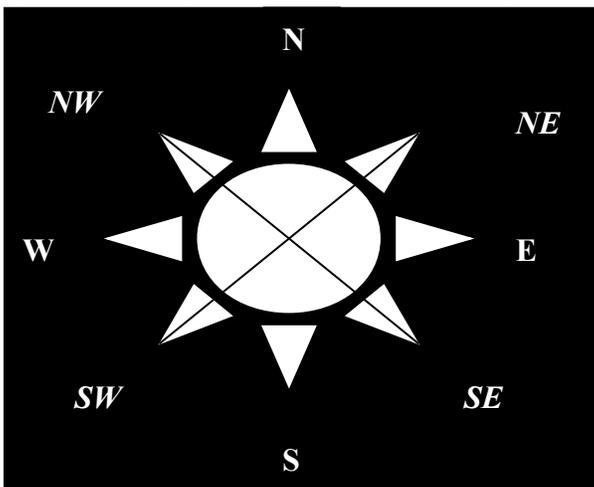
The Journal of the Winnipeg Centre of the Royal Astronomical Society of Canada

## **“River of the Sun” - The Inca Milky Way** Part **One** by Nicole Choptain

*In the winter December sky, the Milky Way sparkles on a clear night and dedicated astronomers head out to observe the heavens in much the same way the Inca people did over 600 years ago. To the Inca people, the Milky Way was a great river connecting the worlds of the gods and the world of the dead or ancestors with the world of the living.*

*The Inca cosmology was made of a reciprocal relationship between these realms. The Inca believed in “as above, so below”. To them, what occurred in the heavens directly impacted life on earth as ties with the dead ensured the welfare of the living. This connection was important to every aspect of the Inca way of life infusing village architecture and ancient myths.*

*For the Inca, when the solstice sun entered the Milky Way the entrance to the other worlds was ‘open’. Each year at the June and December solstice, the Inca priests would walk upstream along the Vilcamayu or “River of the Sun” to Vilcanota the “place of the Sun.” In other words, the Inca would follow the path of the Milky Way to the sun’s farthest location in the stars.*



*At the June solstice, the heliacal rise of the Milky Way was the river or pathway to the land of the gods. During the December solstice, the rise of the Milky Way linked the world of the ancestors with the living. At this time, the Inca celebrated the festival of the dead. This connection was so important that the Inca, sometimes called the people of the sun, followed solar movement in everyday life. They built villages in the Andes with pathways forming a large inter-*

*cardinal cross.*

*Continued on page 8*

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**Friday January 12**

7:00-7:30 Beginner's Session: Observing Deep Sky Objects with Gerry Smerchanski

7:30-7:40 Welcome and Announcements: Ron

7:40-7:50 News: Scott Young on Government funding for space exploration.

7:50-8:00 Constellation of the Month – Orion the Hunter: Gail Wise

8:00-8:10 What's up: Jay Anderson

8:10-8:30 What's New and posting PoM: Jennifer West

8:30-8:50 Break

8:50-9:00 Picture of the Month – the Bullet Cluster: Syrena Oswald

9:00-9:50 **RASC Observing Certificates:**

Ron Berard, Lindsay Price and Mike Stephens

Ron Berard will discuss the National RASC Observing Certificate programs and challenge members to take one on. Lindsay Price will review the "Explore the Universe Certificate" followed by Mike Stephens who will bring us up to date on the "Isabel Williamson Lunar Certificate".

**Friday February 9**

7:00-7:30 Beginner's Session: Observing the Sun with Peter Toth

7:30-7:40 Welcome and Announcements: Ron

7:40 to 7:50 News: Ron will introduce "Tip of the Month"

7:50-8:00 Constellation of the Month – Gemini the Twins: Gail Wise

8:00-8:10 What's Up: Jay Anderson

8:10-8:30 What's New and posting PoM: Jennifer West

8:30-8:50 Break

8:50-9:00 Picture of the Month: Speaker TBA

**MEETINGS**

Room 118, St. John's College,  
University of Manitoba Fort Garry Campus  
Beginners Session 7:00pm. Regular Meeting 7:30pm

9:00-9:50 Guest Speaker: Adam Rogers:

**Modeling Gravitational Lenses**

**MEMBERS OBSERVING NIGHTS****Glenlea Observatory****Saturday January 13****(Weather Permitting)****8:00 p.m till ???****Your hosts this month:****Ron Berard and Tim Kennedy****Saturday February 10****(Weather Permitting)****8:00 p.m till ???****Your hosts this month:****Lindsay Price and Ralph Croning*****News in a minute . . .***

Tim Kennedy and his family arrived safe and sound for their Christmas holidays in Valledupar, in the Northern part of Colombia near Venezuela. He reports that it is VERY HOT, from 30 to 39 Celsius at times. Tim has promised to share lots of pictures with us when he returns.

Congratulations to Terra Jentsch on finishing all of her observations for the Explore the Universe certificate!

As the new year begins we see Draco the Dragon coming between Mother Bear and her cub. Early in February Leo the Lion is starting to rise, which means that spring cannot be far away.

Welcome to our newest member!  
Marni Dangerfield, Winnipeg

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*Winnicentrics* is produced by and for the members of the Winnipeg Centre, and any opinions expressed are those of the author. If you have comments, questions or concerns about *Winnicentrics*, you can contact any of the councilors or write to RASC, Winnipeg Centre, Box 2694 Winnipeg MB R3C 4B3

# Members' Observing

The following members are working towards their:

## Messier Certificates:

Eugene d'Auteuil	41
Murray Rennie	19
Lindsay Price	40
Kris Keller	68

## Finest NGC's:

Sean Ceaser	70
Ray Andrejowich	107

## Herschel 400's:

Stan Runge	178
Sean Ceaser	141
Mike Stephens	147

## Explore the Universe:

Terra Jentsch	62 finished!
Stan Runge	13
Tim Kennedy	58
Judy Starr	22
Ray Starr	21
Eugene d'Auteuil	12
Murray Rennie	6
Sandy Shewchuk	47
Peter Toth	13

## Isabel Williamson Lunar

Mike Stephens	138
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If you are interested in using the Warm Room please contact Lindsay Price for a key (\$10.00 deposit required). If you would like training on the LX200 Lindsay will be running training sessions, but not on Members Observing Nights. You can contact him at 227-4684 or flprice@mts.net or talk to Lindsay at a meeting.

*The following members have completed their:*

### Explore the Universe

Gail Wise  
Janet Pollock  
Janice Low  
Mike Stephens  
Lindsay Price  
Ralph Croning

### Messier Certificates

Kevin Black  
Alan Sherlock  
Mike Stephens  
Rick Turenne  
Gail Wise  
Ray Andrejowich  
Stan Runge  
Bernie Plett  
Sean Ceaser  
Mike Karakas  
Gil Raineault

### Finest NGC's

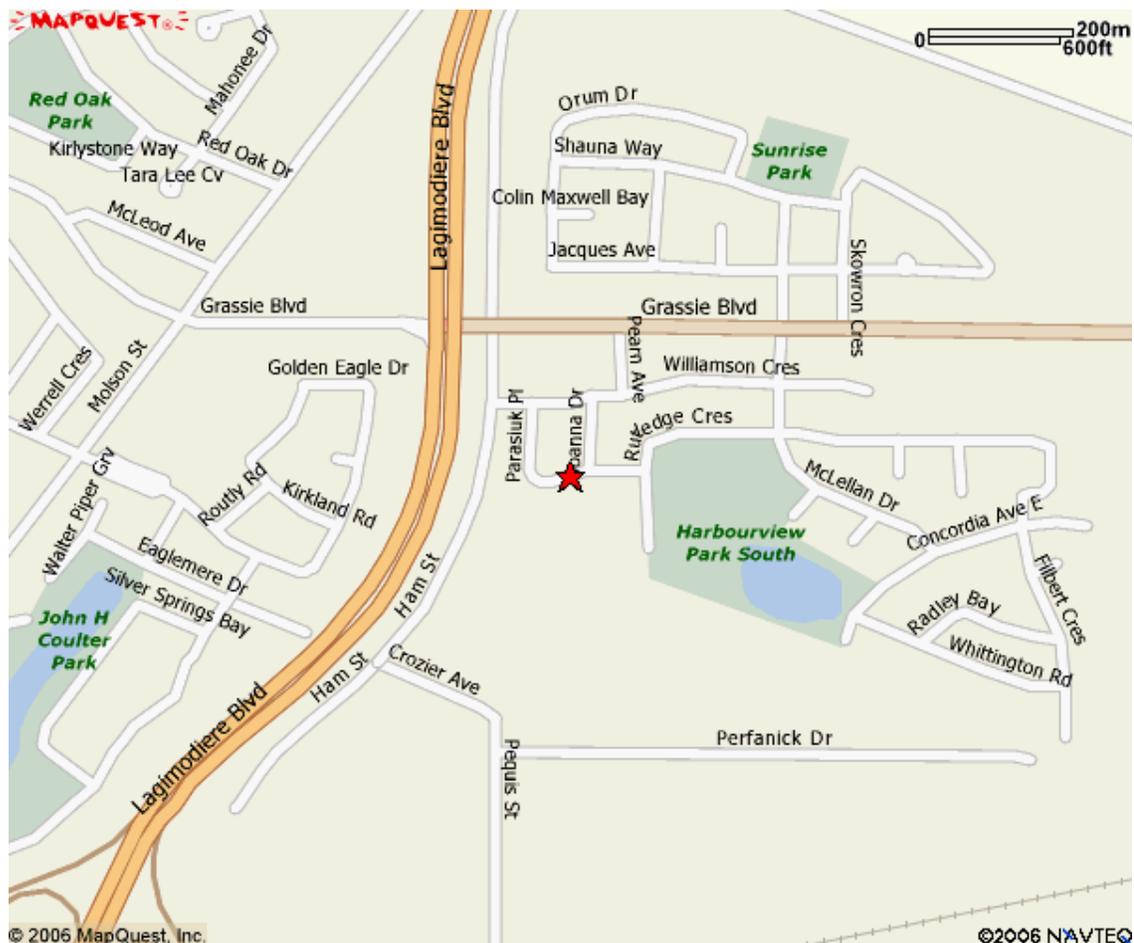
Kevin Black  
Stan Runge  
Gail Wise

## ***PARTY, PARTY, PARTY!!***

Winnipeg RASC members are invited to a winter Potluck at 55 Parasiuk Place, Winnipeg (Terra Jentsch's place) on Saturday, January 27, 2007 at 7 pm. It is a bungalow with a tyndalstone front and forest green roof & trim. The large driveway can hold 12 vehicles and there is more parking on the street in front. See map for directions or phone 669-8003 for more details. Please bring a food dish, your favourite beverage and your spouse/special friend, not necessarily in that order. For those more daring bring a towel and bathing suit as there is an indoor hot tub.

Supper will start around 8 pm. RSVP's to 669-8003 would be appreciated. Hope to see you all there!

*Lucille Eustache*



## President's Corner

*by Ron Berard*

It's hard to believe that we're already approaching the end of the first quarter of my first term as President. One of the reasons I've endeavored to contribute an article to each Winni is not only to keep members apprised of the activities of their Council and Executive, but to also give myself pause to reflect on these activities as they unfold. And it certainly has been an eventful first few months to say the least.

I'd like to start out by expressing my gratitude. First, a big thanks to all the council members who have been steadfast in carrying out their duties. Having been on the council for going on 5 years now, I've had a pretty fair idea of how much work people put into keeping our club going. However, as President, I've come to realize how vital it is to have a reliable crew of talented people willing to put some time into something we all value so highly; the RASC Winnipeg Centre. And we certainly do have a lot of talent in our club to be grateful for.

To start with, we have a rich pool of astrophotographers in our midst. In the last two meetings we heard Kevin Black provide an excellent overview of digital astrophotography. We learned a great deal about the technology basics, the pros and cons of DSLRs vs dedicated CCDs, and the virtues of certain brands and models of DSLRS. We also touched upon a number of programs that can be used to process the captured images. The following month, Jen took the topic of digital imaging a step further by honing in on the details of how photons are captured and converted to digital information, and then showed us how an open source (free), cross platform program, Image J, can be used to process images. She certainly got this author exited about using the program for both conventional image processing, as well as a few innovative techniques such as making movies and star trails. These two presentations were both exiting and densely packed with information. Yet, both only scratched the surface of what can be discussed on the topic of astrophotography, and this is only one of many directions the hobby of astronomy can take us on. And that brings us to the next topic I want to broach in this article, as well as the next group of members I owe thanks to.

There are so many facets to our hobby, that we are hard pressed to offer a venue that satisfies the need of all members. This was brought into sharp focus at our "Visioning Session" on November 26. I'd like to personally thank everyone who attended and/or contributed to this process. In hindsight, I regret using "Visioning" to describe what could have been referred to as "Brainstorming" or "Strategic Planning". I've taken a lot of ribbing for using a trendy "admin-speak" term, but it does best describe the process that unfolded. A complete report of the outcome of this meeting is included in this issue of the Winni and will eventually be uploaded to the website; however, I'd like to touch on a few key areas.

First of all, it did result in our re-defining the mission statement of our club. Using the RASC credo "*Dedicated to the advancement of astronomy and allied sciences*" we made a small but significant addition to come up with our own version that better describes what we felt our club's mission should be:

*"Dedicated to the advancement, promotion and enjoyment of astronomy and allied sciences".*

To describe the importance of including "promotion and enjoyment" in our mission statement, we only need to look at what we find the highest number of members participating in. That would include activities such as the following: "Attending meetings, observing, public outreach (Astronomy day, public observing events), socializing and discussing astronomy (both face to face and electronically). While these are not by any means the only important activities undertaken by our members, these activities always seem to percolate to the top of most of our member surveys, and our visioning session seemed to confirm this assumption. A follow up member's survey will be undertaken to further refine our understanding of the member's needs.

In addition to clarifying the club's mission, a few important priorities were brought to the fore through a process of discussing club activities and the work involved in maintaining the club and its member services. The extensive list of member services that you can see in the report should highlight the importance of setting priorities. With so many diverse interests being served, it would be easy for council to be spread out too thin to achieve any significant growth or even to maintain the club's integrity and assets to a satisfactory degree. With this challenge in mind, the three priorities that will demand the most attention are as follows:

1. **Establishing bylaws and incorporating the club:** Many members may not be aware that our centre does not have bylaws or legitimate non-profit status with the government. The importance of this being done soon is echoed at a National level. The Society is currently promoting the voluntary incorporation of all centers and may soon make it mandatory to have bylaws in place to maintain RASC affiliation. Ultimately, we are limited in what we can do as an unincorporated entity so that makes the task essential to our viability and persistence. This process is well underway and we hope to have bylaws drafted and ready to ratify by fall of 2007.
2. **Update and improve the website:** The website is a key tool for disseminating information to both members and public. It is often the first point of access to the club for non-members and is therefore a critical link in the chain of key activities of the club. It is also a lot of work to maintain a comprehensive site and we've long been tied to a model that requires one individual to upload and maintain all the information on the web. We are currently exploring alternative models that would give us both a more user-friendly interface as well as the capacity to have several individuals updating and maintaining the site. We should see the first step in a transition to this new model early in the New Year.
3. **Establish budget and improve fiscal status (fund raising):** I would like to preface this by reinforcing that we are not in a financial crisis. That said, we have recently invested in a PA system and projector, so we are looking at a deficit this year and will need to be looking at some ideas for both cutting costs and fund-raising. This is where the importance of incorporation becomes the most salient. We need to be registered with the government as a non-profit body in order to qualify for raising funds. We are quite committed to getting us "back in black" by next fiscal year.

So there you have it. The agenda for your president and council is quite full! Regardless, we have a dedicated council and a talented and active membership, so I feel quite confident that we can accomplish the goals we've set out before us and see this club become even stronger and more active than ever.

### Mr. Bud . . . does astronomy *by Murray Toews*



## *River of the Sun*

*continued from page 1*

*The cross was formed by two main paths running from NE to SW and from SE to NW intersecting in the village centre. These pathways were important because each inter-cardinal axis united the June solstice sunrise point (NE) on the horizon with the December solstice sunset (SW) and vice versa.*

*This system provided a practical means of tracking the stars rising and setting during both solstices. Andean priest astronomers monitored the heliacal rise of the stars to serve as a benchmark for refining the solar calendar.*

*In the Andes, the sage astronomer was a watchful shaman that contemplated and mediated on the stars for his gods and religious ideas. The shaman or “paqo” would rise before dawn and pray to the rising sun. This ritual observation of the helical rise of the Milky Way at solstice was recorded in myth and song.*

*One classic myth called *The Llama* was first recorded by Christian priests:*

In ancient times, this world was in danger of disappearing. A male llama, who was pastured on a hill with excellent fodder, knew that the Mother Sea had decided to overflow, to fall down like a waterfall. This llama became very sad; he kept crying out “in, in” and didn’t eat. The llama’s master became very angry, and hit him with an ear of maize. The llama, speaking as if he were a man, told the Shepherd, “Pay very close attention, and remember what I am going to tell you: Five days from now the great ocean will be here and the whole world will be flooded.” And the shepherd was stricken with fear; he believed him, the llama. “We will go somewhere to escape. Let us go Mount Vilcacoto; there we must save ourselves; bring food for five days.” And so, from that instant, he started walking, taking his family and the llama. When he was about to reach the top of Mount Vilcacoto, he found that all the animals were reunited: puma, fox, huanaco, condor, every species of animal. Hardly had the man arrived than the water began to fall in rivers; and so there they were, squeezed together at the top of Huillcacoto, in a tiny space, at the very peak, where the water couldn’t quite reach. But the water did manage to reach fox’s tail and get it wet, which is why fox’s tail, to this day is black. And after five days, the waters began to recede and dry up. The dry part began to grow. The sea retreated more, and as it retreated and things dried out, it killed all the men. Only he of the mountain survived....

*In a groundbreaking essay, Hamlet's Mill, the author explained how myths from around the world used technical language to transmit information concerning precessional motion. There were three main rules to*

*this language. Animals were stars, gods were planets, and topographical references are metaphors for location, usually of the sun, on the celestial sphere.*



*Using the rules outlined in Hamlet's Mill, William Sullivan decodes the myth in "The Secret of the Incas" by learning Andean symbolism and languages. In Andean language, 'the sea above' is a common reference to the starry heavens. Assuming the 'great big sea' was the celestial sphere and stars are animals, then to decode the myth one would need to find which stars the llama represented. In the southern hemisphere, the ancient constellation of the celestial llama was a beautiful cloud of interstellar dust against the background glow of the Milky Way. It runs from the star epsilon Scorpius to the stars alpha Centauri and Hadar, which form the eyes of the llama. These two bright stars appear during the traditional llama birthing period.*

*The Quechua word for male llama is a paqo, same as the word for shaman. It is as if the words of the myth are those of the shaman, saying 'pay very close attention...' Putting these two concepts together, the shaman astronomer as the celestial llama in the sky was watching the heliacal rise of some object in the east as the llama set in the west shortly before dawn. The next challenge was to determine what the shaman was watching and on which day.*

*By reviewing both the Aymara and Quechua languages, Sullivan learned that the word "vilca" means sun and "coto" is a pile or sun pile. But "coto" also has another meaning as the Andean word for the Pleiades. The Pleiades were related to crop-planting time and were thought of as a pile of seeds. To put "coto" with "vilca" meant to watch the Pleiades in relation to the sun. By employing the third rule set out in Hamlet's Mill, that topographical references are usually metaphors for the location of the sun, then the mountain in the myth would refer to the high place of the sun. In Andean tradition, the image of a towering mountain was associated with the June solstice.*



The Pleiades  
Photo Courtesy of: Ron Berard



*Even modern day fables of Andean way of life reinforce this message. In the Secret of the Andes, a minstrel on Pipes of Pan sings about the*

*Pleiades and how they guarded the new seeds sleeping in the deep earth, about Venus the page boy to the sun, and about the Milky Way that is a great river flowing across the heavens. One song specifically is dedicated to a group of sister stars called the “Orqo-cil-ya.”*

*“Orqo-cil-ya, Sister Stars, Orqo-cil-ya in the night sky,  
You are the keepers, the keepers, the keepers,  
You are the keepers of the llama herd”*

*In other words, the myth was stating that in some era when the Pleiades rose heliacally before the June solstice, some precessional event or “flood” transpired. This provided a testable hypothesis if the myth was an intentional transmission of important astronomical observation. Sullivan took his hypothesis to the planetarium using another version of the myth, which stated the flood was to occur 30 days before the solstice.*

*Using the latitude of Cuzco, the planetarium computer searched back through time to a date when the heliacal rise of the Pleiades occurred thirty days before the June solstice. The planetarium computer stopped at on the Julian date of May 20, 650. The llama constellation was in the process of setting. Following the llama was another black-cloud constellation, the celestial Fox. As is told in a common Andean folktale, “the fox is in the sky, in the river, he always follows the llama.” Then because the myth told of celestial animals visible during the December solstice and given the Andean tradition to watch track the rising of one solstice with the setting of another, Sullivan turned the planetarium computer to the December solstice in the same year. At the December solstice in A.D. 650, the Incas watching the objects rise in the Milky Way would have seen the Fox almost completely above the horizon except for his tail, now soaked by the rising waters of the celestial sea. The Fox’s tail was no longer visible due to precessional motion.*

*As Sullivan states, “the experiment showed that in the southern Andes at about A.D. 650 the Milky Way had ceased to rise heliacally at June solstice, for the first time in more that eight hundred years. In other words, an observer waiting to see the Milky Way’s reappearance at the June solstice, along the horizon at the point where the June solstice sun rises, would have seen...nothing. The junction of the solstice sun in the Milky Way had been “destroyed” by the passage of time.”*

*The cessation of the helical rise of the Milky Way at the solstice equalled the destruction of the entrance to the world of the gods. This change constituted disaster to priest-astronomers of the Andes. Believing in “as above, so below”, they were concerned about the impact of this phenomenon on the world of the*

*living. Interestingly, archaeological record shows that the years immediately around A.D. 650 marked the commencement of major warfare in the region and one of the most tumultuous times in Andean history.*

*With only the oral tradition of passing on myths and fables, the Inca people were seen as an ignorant, lesser race, lacking the tools of writing and ship-building technology that marked civilized society by the Spanish. A Spanish priest in 1573 stated, “if they had known the use of writing, they would not have been so dull and blind”. Yet the Inca encoded key events into myths that entwined religious, social, environmental, and astrological observations. This ingenious system provided a dating system more accurate than carbon dating.*

*In the 1500’s, the Inca believed once again in the looming failure of the Milky Way to rise at the solstice signalling the end of the connection to the world of the dead and doom for the Inca Empire. Could it be that the Inca belief system about the heavens led to the strange and surprising events in 1532 and the collapse of the Inca Empire? In part two, this question and more Inca astronomy will be explored.*

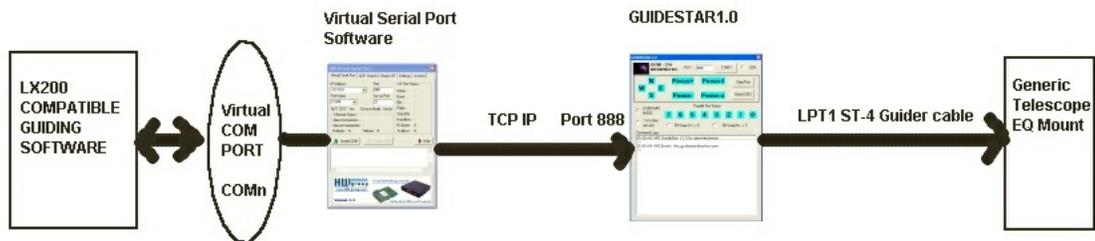
#### *References:*

- 1) Secret of the Inca’s by William Sullivan. (1996)*
- 2) Secret of Andes by Ann Nolan Clark. (1952)*
- 3) Guns, Germs, and Steel by Jared Diamond. (1997)*

## Autoguiding Using LX200 commands on a ST4 compatible Mount by Gord Tulloch, RASC Winnipeg Centre

I had the chance to borrow a Skywatcher EQ6 not long ago as a probable replacement for my CG5 based setup that would allow for more weight to be reliably carried on the mount plus better GOTO performance. One of my main interests for a new mount is to finally make some use my Meade Deep Sky Imager and integrated Autostar Suite after a lengthy hiatus from imaging, I wanted something that I could use some of the features of that software, including autoguiding. However, since the software is primarily aimed at LX200 telescopes, this would prove to be a problem with the EQ6. Or would it?

Enter the Internet – some surfing and I had a solution. Initially because the autoguider port on the EQ6 is compatible with the SBIG ST-4 autoguider I was looking at an ST-4 setup for autoguiding but still wanted to use the Autostar Suite for autoguiding, not to mention the cost of an ST4! Sure enough, a little surfing provided the answer – a free application called Guidestar. Since the Autostar program that runs the Meade DeepSky Imager autoguiding function outputs a stream of guiding data to the serial port, this software (using HW-Groups's HW Virtual Serial Port) redirects this stream to a socket on the computer. The Guidestar program listens to this stream and picks out any autoguiding commands, translates them into printer port guide pulses that can be fed out of the PC parallel port directly into the ST-4 port on the mount using a \$40 Guide Port interface cable from Shoestring Astronomy Products.



### Links:

Guidestar [http://www.skyinsight.net/wiki/index.php/GuideStar\\_LX200\\_Software\\_Emulator](http://www.skyinsight.net/wiki/index.php/GuideStar_LX200_Software_Emulator)  
 Serial Port [http://www.hw-group.com/products/hw\\_vsp/index\\_en.html](http://www.hw-group.com/products/hw_vsp/index_en.html)  
 Interface [http://www.store.shoestringastronomy.com/gpint\\_pt.htm](http://www.store.shoestringastronomy.com/gpint_pt.htm)

## Budget Notes from Mike Stephens, Winnipeg Centre Treasurer

### PROPOSED BUDGET 2006-07

#### INCOME

Membership	\$2,650.00
Calendar Sales	\$500.00
Donations	\$300.00
Life Member Grant	\$66.00
Glenlea Flood	\$60.00
<b>TOTAL</b>	<b>\$3576.00</b>

#### EXPENSES

Newsletter	\$1300.00
Insurance	\$946.00
Travel	\$500.00
Glenlea Flood	\$300.00
Bursary	\$200.00
Meetings	\$250.00
Web Site	\$144.00
PO Box	\$116.00
Obs Electricity	\$100.00
Science Fair	
Winner	\$85.00
Bank Fees	\$50.00
<b>TOTAL</b>	<b>\$3991.00</b>

**NET** - \$415.00

In order to improve our financial situation efforts to increase revenue and decrease expenses need to be undertaken. Here are some possible changes

#### Increase revenue:

1. Consider making a donation to the Winnipeg Centre through the National website. Donations are tax-deductible and 100% of the donation goes to the named centre.
2. Reinstatement of the centre surcharge. Currently, 17 of the 27 RASC Centres have a surcharge averaging \$5.00. While this could raise \$600+ per year for the centre a membership retention rate of 88% is required to break even with membership revenue before the surcharge. (The surcharge has not been reinstated: this is merely a possible source of revenue.)
3. Increase centre membership. Every new adult member brings in \$22.00/year.

#### Decrease expenses:

1. The largest single source of expense each year is the newsletter. As postage and stationary costs are only going to go up, this item is going to cost more and more. Electronic distribution of the newsletter would help to decrease the cost of this item. The executive is examining how to implement this and is looking for input from the membership. If you have any ideas on how we can achieve this please speak to an executive member.
2. Meeting expenses i.e.: coffee and cookies. The executive has approved the introduction of the "Coffee Kitty" tin at center meetings. This is strictly voluntary and those who cannot make a contribution will not be denied refreshments. (The kitty was set up at the December meeting and raised \$25. Your Centre executive thanks all of you!)

The future of the centre is not as bleak as the proposed budget. The centre currently has a reserve of approximately \$4,000.00 (\$3,000.00 in GIC's & \$1,000.00 in cash). The passage of centre by-laws and subsequent incorporation will allow us to participate in fundraising activities such as a worknight at a casino, and provide a larger revenue stream for the Winnipeg Centre.

## **Gear Review - Orion StarBlast 4.5" Rich-field Dobsonian**

*by Scott Young*

I got the chance to try out one of the cute little StarBlast "kids telescopes" this holiday season. It has rated highly as a beginner's telescope in the reviews, so I thought I'd check it out before recommending it to people. Far from being a toy, this Dobsonian scope offers impressive performance for a beginner, and its portability makes it useful for even experienced observers who do a lot of traveling.

The scope comes mostly assembled, although I tweaked the collimation a bit using the included collimating eyepiece. The scope includes a red-dot finderscope, 2 1.25" eyepieces, and a Starry Night CD-ROM for making star charts. Its 114mm f/4 objective is WAY bigger than the Tasco I started with, with enough light gathering to go beyond the "big three" of the Moon, Jupiter, and Saturn. The eyepieces are acceptable but not as nice as the Sirius Plössls that come with Orion's larger scopes, and include a 17mm (26x) and a 10mm (45x). Both gave acceptable images in the center of the field, but the mirror is so fast that the focus is a curved field, and so things get a bit fuzzy around the edges. This isn't a major problem for a beginner, especially compared to looking through those old 0.965" eyepieces!

I popped my trusty Celestron 26mm Plossl in, and got a 17-power field that fit all three of Orion's belt stars in the field. The edge defects seemed a bit better with this eyepiece than with the 17mm as well. Now, I just need someone to discover another Hale-Bopp so I can use the rich field!

On the Orion Nebula, this scope showed the Trapezium well - I could split it with the 10mm, but the 17mm it was hard to see the faintest of the four stars. The nebula was nice and bright, and overall the scope gave a pleasing view. I spent a while just scanning around Orion's environs with the 17mm, enjoying the view. The three Messier star clusters in Auriga were all nicely seen, and the Pleiades were great. The edge effects were a bit annoying here, since you really want to see the whole starfield, but I tried to keep in mind that this is essentially a replacement for the 60mm Tasco on a spindly tripod.

The mounting was solid with smooth motion in both axes, although it's so short you have to put it on top of something to get it to a reasonable height. The table I was using rocked a bit, and so there was some vibration, but a sturdier stool or chair would eliminate that. The red dot finder was easy to use but a bit of a pain to align - the knobs didn't seem to be as smooth as I'd have liked. Of course, I never read the manual to see if I was doing it right!

I had the scope during the last half of the lunar cycle, so I only got a few quick peeks at the Moon at low altitude (my all-nighter days are behind me, it seems!). I would have liked a bit more magnification on the craters, but overall the scope performed well, and gave enough detail to keep a beginner occupied for quite a while. It does provide enough magnification to see the rings of Saturn, but again a bit more power would be nice for planetary viewing.

Overall, this is a great scope for a beginner in its price range. It costs about the same as one of those spindly tiny refractors you can get at department stores, but it's a real telescope that won't discourage new observers. It's got a solid mount and enough aperture to see lots of stuff, with a one-handed carry outside. I think of it like a good pair of binoculars - even when you move on to bigger gear, you'll always bring them along because they're portable and good enough for many views. The StarBlast will stay in my inventory for those quick views, or for the road trips where there's no room for the big scope. It's a good little scope for not a lot of money, and will introduce many new folks to the hobby. (Maybe we should have a couple in the Centre library?)

## **RASC, Winnipeg Centre Mission Statement and Strategic Planning Document**

The following document is a consolidation of the ideas put forward by participants of the “Visioning Session” of the RASC Winnipeg Centre on November 26, 2006. This document will serve as the focal point for work undertaken to build upon and improve the activities of our Club.

**Mission Statement: “Dedicated to the advancement, promotion and enjoyment of astronomy and allied sciences.”**

### **Current and “*Potential*” (in italics) Club Activities**

1. **Member Services:** Activities directed towards providing members with resources and opportunities to facilitate the enjoyment of the various facets of their astronomy hobby. This includes a variety of resources, venues and activities.
  - Observing:
    - i. Observatory
    - ii. Member meetings
    - iii. Star Parties
    - iv. Observing Certificates
    - v. *Dark sky site(s):*
    - vi. *Remote observatory:*
  - Information dissemination/sharing:
    - i. Website
    - ii. Newsletter
    - iii. RASC email list (local)
    - iv. RASCals email list (national)
    - v. RASC publications
    - vi. eNews (national)
    - vii. Library
    - viii. Lectures/guest speakers
    - ix. *Special interest groups: Astrophotography, cosmology, space exploration etc,*
    - x. *Workshops: Telescope building, image processing etc...*
    - xi. *Public Lectures*
    - xii. *Youth Group*
    - xiii. *Family Events*
    - xiv. *New Member Packages*
  - Access to equipment/resources:
    - i. Loaner Scope
    - ii. Observatory dome/LX200
    - iii. Warm room
    - iv. Projector
    - v. PA System
    - vi. Group purchasing: ie. Baader Solar Filters, etc..
    - vii. *Time share observatory*
    - viii. *Group trips: (Eclipse, dark sky locations)*

- Socializing:
    - i. Member meeting coffee breaks
    - ii. Boston Pizza
    - iii. Annual Barbeque
    - iv. Annual Holiday Season Potluck
    - v. Spruce Woods Star Party
    - vi. *Annual Banquet*
2. **Administration:** All those activities geared towards the maintenance and governance of the club and of its resources and activities.
- Council meetings:
  - Budgeting/fiscal management:
  - Observatory maintenance:
  - Lease negotiation: (meeting rooms/observatory):
  - Fund raising:
  - Recruitment:
  - Awards:
  - Establishing bylaws and policy and procedures:
  - Membership Surveys:
  - Networking:
    - i. RASC National and other centres
    - ii. Planetarium
    - iii. Schools
    - iv. Youth Organizations: Scouts, Girl Guides, Naturalist Society
3. **Outreach:** Activities geared towards promotion of the club and its activities to the general public and other organizations with similar interests.
- Web Site:
  - Recruiting new members:
  - Astronomy Day:
  - Brochures:
  - Light Pollution Awareness Committee:
  - Public Observing Events:
  - Scholarship
  - *Developing “promo packages”*
  - *Media relations*
  - *Light Pollution Abatement Activities/lobbying:*
  - *Establishing Dark Sky Preserve*
  - Co-sponsored events:
    - i. Pi Kinewabum
    - ii. Fort Whyte
    - iii. Oak Hammock

From the discussion of current and potential activities, a number of activities were prioritized as follows:

1. **Establish bylaws and incorporate club:** critical to the viability and legitimacy of the club in terms of its relationship with RASC National, and the Provincial Government: Currently underway with Bylaws Committee developing draft for review by council and National, and ratification by general membership in fall 2006. (Ron B., Jay A. & Jen W.)
2. **Update and improve website:** Key to information dissemination and outreach. *Need to establish work group to be established to investigate resources (ie., alternative hosting options and server side tools).* (Ron Berard, Nicole Choptain, Gord Tulloch)
3. **Establish budget and improve fiscal status (fund raising):** Deficit budget established for 2006/2007: Fundraising activities hinge on incorporation of clubs; options need to be investigated by working group. (Mike Stephens, Nicole Choptain, council).
4. **Further consolidation of Visioning/Brainstorming data into database:** Includes membership survey to better establish goals and priorities for club. (Ron Berard, Nicole Choptain)
5. **Re-organizing loaner scope program:** includes review and consolidation of current inventory and alternative models of exchanging and maintaining scopes and accessories. (Gail Wise, Ralph Croning)
6. **Maintaining and improving Glenlea:** includes general maintenance, repairs, flood protection measures, discussions with University on internet link, dike construction, road maintenance, lease arrangements etc... (Needs work group to be established and review of role of Observatory Director Tim Kennedy, Nicole Choptain, Mike Stephens).
7. **Improving Monthly Member Meetings:** includes updating beginners sessions, attracting guest speakers, improving flow, improving technical glitches, *creating meeting coordinator position.* (Ron Berard, Gerry Smerchanski, Jennifer West)
8. **Recruitment of new members and volunteers:** Ties in with outreach and member service activities: (Gail Wise, Nicole Choptain, Ron Berard).
9. **Planning Annual Awards/Celebration Banquet:** (Nicole Choptain, Jennifer West)
10. **Developing Public and special interest lecture series:** *(needs work group to be established, Jennifer West, Kevin Black, )*
11. **Developing improved public observing series:** *(needs working group. Marlene Wallace, Ron Berard)*
12. **Reviewing feasibility of family/youth programming:** *includes investigating and establishing potential partnerships with schools, planetarium, scouts/guides etc... (Marlene Wallace., Scott Young)*