

Saskatoon Skies

The Newsletter of the Saskatoon Centre of the Royal Astronomical Society of Canada

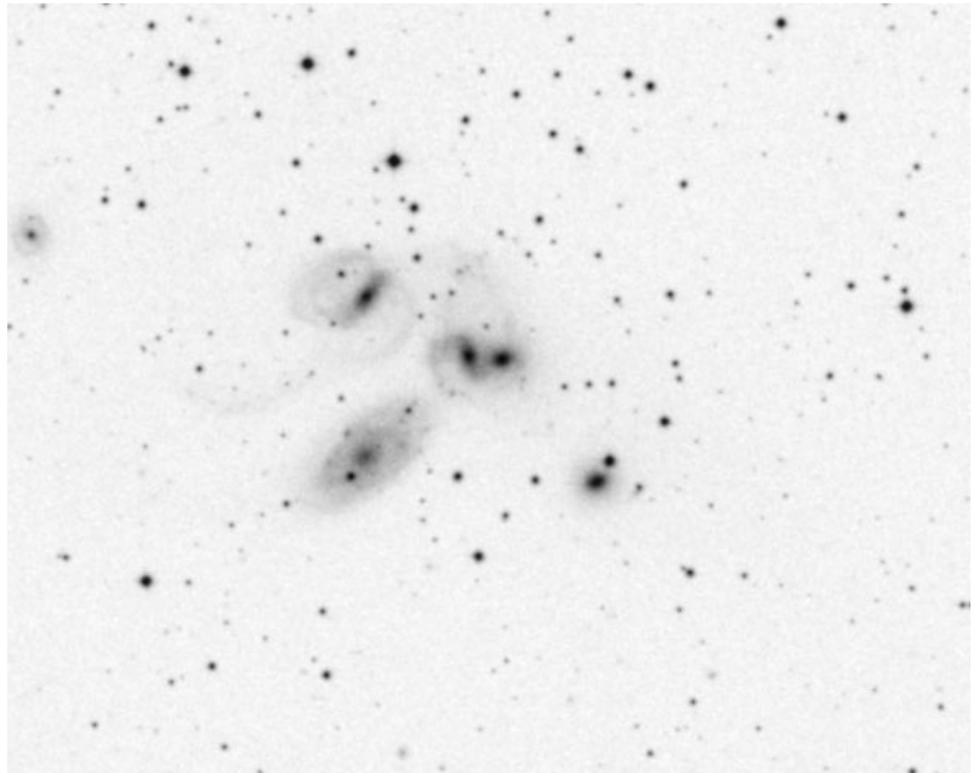
Vol. 34, No. 9

September 2003

Stephan's Quintet

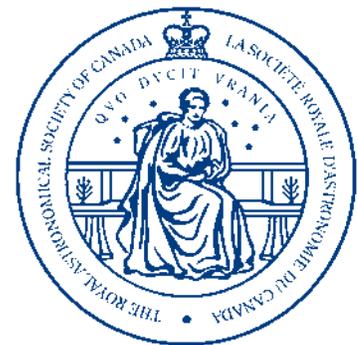
Pegasus is now rising, and a favourite challenge object, Stephan's Quintet, rises with it. It is located to the upper right of the Great Square, near NGC 7331. The brightest galaxy is about 14th magnitude, so this group is a real challenge for an 8-inch scope and the dark skies of Sleaford.

THE IMAGE IS AN 8" X 10" SNIPPET FROM
THE DIGITAL SKY SURVEY (DSS).



In this issue...

Membership, Bottle Drive & U of S Observatory Hours	2
Calendar of Events, General Meeting Notice	3
Sky Buys and Mirror Cells	3
Member Renewal News	3
SSSP 2003	4
The Future of the SSSP	5
Sandy Ferguson is Finally Settled	5
Variable Star Notes:	
A New Nova in Scutum & How to Report Observations to the AAVSO	6
The Planets this Month, September 2003	7
Free 8" Telescope – Serious inquiries only, please	8
Saskatoon's Telescope Rental Program	8
Sketching Jupiter Events and the GC Observing Challenge	9
The Messier, H-400 & H-400-II, FNGC, Binoc & EtU Club	10
Notes from the Editor	10



Saskatoon Centre
The Royal Astronomical
Society of Canada

P.O. Box 317, RPO University
Saskatoon, SK S7N 4J8

URL: <http://prana.usask.ca/~rasc/>

E-mail: dicksonl@sasktel.net

Telephone: (306) 249-1091

Membership?

It's never too late to join!

Regular: \$52.00/year

Youth: \$27.50/year

The Saskatoon Centre operates on a one-year revolving membership. You will be a member for the next 12 months no matter when in the year you join. If you do not want to join at this time, ask to get onto our FREE 3-month Temporary Membership list. You will receive regular mailings of our *Saskatoon Skies* newsletter and will be invited to participate in Centre activities. Members are encouraged to renew early to avoid disruption in publications. Renew through the membership coordinator, Bob Christie, or renew through the National Office and let Bob know that you did!

Benefits of Membership in the Saskatoon Centre

- knowledgeable & friendly amateur astronomers
- use of the Sleaford Observatory
- use of the U of S Observatory (after training)
- *Saskatoon Skies* Newsletter
- **Observer's Handbook 2004**
- **The Journal of the RASC** (bimonthly)
- **SkyNews Magazine** (bimonthly)
- use of the Centre library
- discounts to **Sky & Telescope Magazine**
- discounts of Sky Publishing merchandise
- discounts to Firefly Books
- free, no-cost, no-obligation, 3-month temporary membership if you don't want to join right now!

The U of S Observatory is open to the general public every Saturday of the year. Admission is free. The observatory is located on campus, one block north of the Wiggins Avenue and College Drive entrance. On clear nights, visitors may look through the vintage 6-inch and tour several displays. Current events are recorded on the Astronomy Information Line at 966-6429.

Observatory Hours:

January-February	7:30-9:30 pm
March	8:30-10:30 pm
April	9:30-11:30 pm
May-July	10:00-11:30 pm
August	9:30-11:30 pm
September	8:30-10:30 pm
October-December	7:30-9:30 pm

U OF S OBSERVATORY



Bottle Drive & Canadian Tire \$

by Darrell Chatfield

Please remember our on-going bottle and now Canadian Tire money drive to fundraise for the Centre. Bring them to General meetings. I will collect them after the meeting concludes. If you cannot make it to the meeting but would like to contribute, please call me at 374-9278.

About this Newsletter...

Newsletter Editor – *Richard Huziak*
Production & Layout – *Linda Janzen*
Copy – *Brian Friesen & WBM*
Collate – *Brian Friesen, Walter Essar*
Les & Ellen Dickson, Yannis Pahatouroglou
Labels & Temps – *Mike Clancy*
PDF & Web Posting – *Gord Sarty*

Printing of this Newsletter is courtesy of

 **WBM OFFICE SYSTEMS**
601 2nd Avenue North
Saskatoon, SK S7K 2C7

Copying is provided on a Risograph copier for a nominal fee.

Saskatoon Skies is published monthly by the Saskatoon Centre of the RASC. Distribution is approximately 100 copies per issue. *Saskatoon Skies* welcomes unsolicited articles, sketches, photographs, cartoons, and other astronomy or space science articles. Articles can be sent by mail in any format to the Centre's mailbox. Submitted materials can be returned upon request. Submissions may also be sent by e-mail – preferred as **plain unformatted ASCII text files without line breaks**. Images sent by e-mail should be attached .EPSs, .TIFs or .JPGs (.GIFs also accepted). Send e-mail submissions to the editor at <huziak@SEDSysystems.ca>. Please send articles in "generic" formats with simple formatting – one tab at the beginning of paragraphs, one space after commas and periods. A separate by-mail subscription to *Saskatoon Skies* is available for **\$15.00** per year. *Saskatoon Skies* is also posted on our Saskatoon Centre homepage as a .pdf file and can be downloaded free-of-charge. Members may choose to receive the newsletter by regular mail or via the Internet. Articles may be reprinted from *Saskatoon Skies* without expressed permission (unless otherwise stated), but source credit is requested. **DEADLINE for submissions is the 26th of each month.** *Saskatoon Skies* accepts commercial advertising. Please call the editor for rates. Members can advertise non-commercial items free of charge.

RASC Calendar of Events

DATE (2003)	EVENT	CONTACT	TELEPHONE
Sept. 15	Executive Meeting – Room 8313, City Hospital, 6:30 p.m.	Les Dickson	249-1091
Sept. 15	General Meeting – “What I Did This Summer” – SSSP & More – Room 8313, City Hospital, 7:30 p.m.	Les Dickson	249-1091
Sept. 25-28	Alberta Star Party	Richard Huziak	665-3392
Oct. 20	Executive Meeting – Room 8313, City Hospital, 6:30 p.m.	Les Dickson	249-1091
Oct. 20	General Meeting – Annual Elections – Room 8313, City Hospital, 7:30 p.m.	Les Dickson	249-1091
Nov. 8	Total Eclipse of the Moon – 5:00 p.m. to 10:22 p.m.	Richard Huziak	665-3392

MEETING!!

Monday, Sept. 15/03
at 7:30 pm
Room 8313 City Hospital



Presenting:

**Adventures with
Garry & Tenho
– A Solstice Visit**
Mike Clancy

The club goes visiting our southern members!

**The Alberta Star-BQ &
A Visit to Regina's Davin
Observatory**
Rick Huziak

It rained again, but we had a good time anyway.
Ate a pig, too! And Regina is fine.

Sask. Summer Star Party 2003
by the group

We will show you how it went and
why you should have been there!

SKY BUYS & MIRROR CELLS

The Saskatoon Centre's Swap and Sale Page!

For Sale: *Sky Catalog 2000 - Vol.2*, by Sinnott – \$30.00. *Astronomy*, 2002, by Robert Burnham – Color sky charts, planet information, etc., – \$15.00. *Guide to Stars and Planets*, by Patrick Moore, 256pp, softbound, 1995. Color photos and star charts – \$12.50. **35mm Bausch and Lomb Plossl eyepiece**, fully coated. Excellent shape; in original box with dust caps – \$80.00. Call Darrell at 374-9278.

For Sale: **RASC Royal Centenary coffee mugs**. Pick yours up at the next General Meeting – \$9 each

For Sale: *Millennium Star Atlas*, 3-volume set – \$200; **REALSKY CD's** – \$200. Call Dale Jeffrey at (306) 223-4447 or dalejeffrey@sk.sympatico.ca

REMEMBER...

YOU CAN SIGN UP TO GET THIS
NEWSLETTER ON THE INTERNET
instead of waiting for snail-mail.
Current electronic subscribers
save us over \$320/year in mailing costs.

Member Renewal News

With the retirement of Bob Christie and his subsequent move to an RV as his permanent place of residence (lucky guy), coordination of memberships has been taken over by Mike Clancy. Those who are renewing should send their membership form and payment to Mike, or bring it to the next General Meeting. Mike's appointment is temporary, and may change with the upcoming

October elections meeting. Stay tuned.

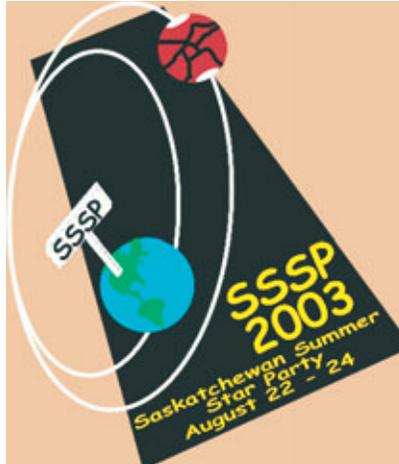
Mike Clancy, Membership Coordinator
122 Smallwood Crescent
Saskatoon, SK S7L 4Z6
Tel: (306) 384-2643
Email: mclancy@sasktel.net

SSSP 2003

by Mike Clancy <mclancy@sasktel.net>

Although simply getting to the Cypress Hills involved several adventures of the family kind, none of that bears any real resemblance to anything astronomical so I'll simply ignore it for now. We arrived late at the Cypress Hills resort, checked into our cabin, and went for a long walk to stretch our legs. As sheer luck would have it, we stumbled across a small patch of Chanterelle mushrooms as we walked hand in hand amid the Lodgepole pines. They would feature prominently in supper Saturday night as part of a braised fillet mignon with wild mushrooms in red wine hunter's gravy. We had chosen to miss out on the banquet for personal reasons, and we could only wonder if the attendees were doing any better than we! But I digress. We wandered up to the Meadows campground Friday night, hoping to begin observing the southern Messier objects I had on my wish list, but the clouds and smoke haze made observing nearly impossible. A brief moment of clarity allowed for a viewing of the Summer Triangle almost directly overhead about 2230 hours or so but that was the extent of it until about 0300 hours the next morning. Mind you, Jim Young took full advantage of the opportunity to act as an impromptu Master of Ceremonies to the large numbers of tourists who came along hoping to see the telescopes and sights of Mars. Well done, Jim; you almost never repeated yourself in the two hours we listened to you talk!

Saturday's afternoon talks were well received, particularly Alan Dyer's "Transit of Venus" topic. I'd never heard it explained as well, and the historical perspective was spellbinding. His multi-media presentation went almost 20 minutes over his allotted time and I don't think there was a single peep from the audience throughout. Pity some of my college professors didn't speak as effectively! Again, the Rider loss doesn't qualify as astronomical news so we lament long over it; their play wasn't stellar anyway. As the final door prize was awarded we poured out of the salon and



up the hill to begin what was to be a phenomenal night of observing. I set up our scope while Anna looked in the grass for the view-finder battery which had fallen out during the wind gusts of the early afternoon. I managed to liberate a spare from one of the guy line "blinky-lights" beside us, and we began. I had planned a series of observations through Scorpius and Sagittarius, but got sidelined into looking through Ursa Major and Pisces as well. Al Hartridge was working beside me with CCD images of Mars (a magnet for passersby; the

images he captured were remarkable). I managed to record another 15 Messier objects for my list although some were duplicates to verify previous sightings, while Anna lay on the picnic table with the binoculars. The skies were so dark one felt you could reach out and scoop up the Milky Way with a coffee cup, and Anna was enthralled with the majesty of it all. After 4 hours the clouds appeared to be rolling back in to the southwest and the aurora display to the north and northeast (and sky glow) meant that my time was done.

Final impressions? I met some wonderful people, some of whom I would never have bumped into otherwise. I thoroughly enjoyed the presentations, the skies on Saturday night were fantastic, the organization generally exemplary, and a real sense of fun pervaded the days. From a somewhat selfish perspective, I also enjoyed the walk in the woods with my good lady as this was also a holiday for the two of us. Will we be back next year? You bet!

Make sure you don't miss the meeting on Monday, September 15. Share your SSSP'03 adventures and/or hear how others enjoyed their Star Party experience!

THE FUTURE OF THE SSSP

by Richard Huziak, <Huziak@SEDSystems.ca>

Rumour at the SSSP this year was that we would eventually lose the Meadows campground in the Cypress Hills Inter-provincial Park (CHIP) as the location of the SSSP. In reality, this is not a rumour, but a fact that we first heard about last year. Brad Mason, the Park Administrator, explained to us that the Meadows is being redeveloped into a pull-through RV campground, with full power and water hook-ups over a 5-year plan. Unfortunately, the Meadows is the only site in the park that is suitable for this type of development due to its flat, open landscape. There is now a larger demand to accommodate larger and larger RVs, and the park currently does not have much capacity in this area. Besides, a few of the traditional campgrounds in the park have deteriorated due to overuse, and the park needs to close these campgrounds to allow them to naturally regenerate, reducing available camping spots in the park.

However, does this spell the end of the SSSP in the Meadows? We can't say for certain. Brad Mason and the CHIP organization are very understanding about the need for a space like the Meadows (open, un-treed and dark) and assures us that the development will proceed with our use in mind. Brad's second in command, Rick Goett, gave us a reassuring presentation on the park's future at the Friday night talks and answered questions from the floor. At least for the next few years, even as serviced sites begin to appear in the Meadows (32 new sites and a grid of access roads are planned to be put in before next year's SSSP), Brad and Rick insist that the development will not impede the star party. Any lights that are installed in the campground will be on a master switch that will be turned off for the duration of the event, and any non-star party campers will be relocated before the event starts (as the park currently does for us). In effect, the star party will run as it always has, but with the addition of some better serviced sites, and maybe even better washrooms and local shower facilities.

What this means for the long-term is really unknown. Likely, long-term development will eventually become incompatible with SSSP requirements, once planted trees grow higher and partitioned sites reduce the open field space of the Meadows. But we will not know for certain until the plan can be scrutinized in detail. This

will be the job of the SSSP Committee over the coming fall and winter. At least for the next few years, the SSSP will continue at its current location in the Meadows after which time, it may have to move to a different area in the park, if a different area is available. Right now, a second adequate location in the park equivalent to the Meadows does not exist.

However, CHIP really appreciates the SSSP being held at the park, since we bring in 250 well-behaved guests every August, at a time when park use is declining for the season. We also fill three dozen rooms, cabins and condos, and rent meeting facilities at the Resort. This is good business and a great relationship that the park does not want to see lost. We're confident that the SSSP Committee and the CHIP planners can come to a long-term agreement and have a long, secure future for the SSSP.

On the bright side, (or should I say "dark side"), Calgary member, Bob King, has been in discussion with the

...even as serviced sites begin to appear in the Meadows... Brad and Rick insist that the development will not impede the star party.

CHIP West Block (Alberta side) administrators with discussions working toward making the area a provincial Dark Sky Preserve. With this in mind, James Edgar and Darcy Kozoriz of the Regina Centre have also made initial

approaches to the CHIP Centre Block (where the SSSP is held) with the same idea in mind. If this could become a reality, and everyone is quite positive about the possibility, this would be an excellent reason to keep the SSSP permanently in the area.

Sandy Ferguson is Finally Settled!

OK, everyone, as of September 2nd, the new address, etc. is:

Sandy Ferguson
Box 343

Apt. 1 – 30 West Front Street

Stirling, Ontario K0K 3E0

Phone: (613) 395-4070

Same email address: <ferguson15@hotmail.com>

Hope you can visit sometime!

Sandy

VARIABLE STAR NOTES:

A New Nova in Scutum & How to Report Observations to the AAVSO

by Richard Huziak, <Huziak@SEDSsystems.ca>

Stop the press! A new and strange variable has just been discovered in Scutum, and before it disappears for the season, there needs to be some big-time monitoring of this star. Preliminary indication is that this star is not a classical nova, which involves a red giant and a white dwarf with an accretion disk burning off excess gas. The new star appears to be an old giant star, which is undergoing some bright eruptions, similar to last year's exciting "nova," V838 Monocerotis, maybe on the way to becoming a supernova! To determine exactly what the future behavior of this star will be will require around the clock monitoring by the variable star people. At the time of this writing, the new nova is about 9th magnitude, and may brighten, or may dim. If the star following the route of V838 Mon, it maybe go through a series of bright oscillations over many months before it fades, behavior that is a lot of fun to follow. If it ends up as a classical nova, the star will fade fairly constantly over the next new months, likely with little oscillation. If oscillations begin, observe the star every hour through each night.

Charts for the new star are now up on the AAVSO website at www.aavso.org under "charts." Look for the chart called "N Sct 03." As is common with novae, the General Catalogue of Variable Star (GCVS) people will assign a permanent name to this star quickly, so watch the News Notes on the AAVSO website the see what this new name will become.

Making and reporting observations of this star meet the criteria for the Great Canadian Observing Challenge. Reporting observations to the AAVSO is not difficult, but does require a bit of understanding on how the AAVSO needs their data. You can read the website, but I will also summarize the important bits below. The process in not hard.

First, pick a star that interests you, then make an observation using a standard or preliminary AAVSO chart, which contains standard comparison stars that need to be used. Once done, e-mail the AAVSO at

aavso@aavso.org and state that you have observations to report and that you need an Observer ID assigned. They will send you a 3-digit code in a day or two. Include your middle name and mailing address and phone number so they can get their files in order right away.

Then go to the AAVSO website and download whatever data entry software you'd prefer to use. Usually, observers use Webobs, but read the information and see what is best for your application. Main site is: www.aavso.org. The direct link to submission software is: <http://www.aavso.org/observing/submit/>. You may be asked to submit an "I've downloaded" form that's on the site.

Then you enter the data (along with your observer code) and e-mail the records in. This can be done nightly,

weekly or monthly, as you want. Learn your software – there are Help files that can aid you. You can set the entry software to use either local time (I find this most convenient) or UT. It automatically calculates the JD from the date/time you enter, so you don't have to do the extra

step of the JD calculator. If entering the JD, 4 decimals is normal, since that gets you to the minute. The data entry software allows you to enter up to 3 comparison stars, so pick the 2 or 3 that you used to made your estimate. You enter only the magnitudes of the comparison stars, so you'd enter "84" and "86" for example.

The chart you are using needs to be noted, since charts may change over time. Record if it is a "Standard" or "Preliminary" chart, its scale, and what year the chart was last revised. You might code a chart as "SA1986." Charts are only standard or preliminary, come in scales a, b, c g. This scale is found at the top of the chart next to the designation – the letter immediately to the right (in brackets). The year is the latest year you can find anywhere on the chart.

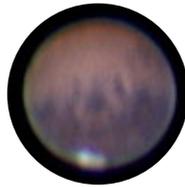
If you have any entry problems, give me a call or e-mail.

Reporting observations to the AAVSO is not difficult, but does require a bit of understanding on how the AAVSO needs their data.

The Planets this Month, September 2003

by Murray D. Paulson, Edmonton Centre <mpaulson@ecn.ab.ca>

Wow, look at Mars! It only takes a few words to sum up the planets this summer. This isn't to imply that there weren't other planets worth observing, just that Mars has been quite spectacular. We did observe the disk of Venus only 4 or so degrees from the sun on July 31. I also imaged Pluto every day for a week at the Mt. Kobau Star Party. But Mars stole the show. The high point observing it came when Rick Kepler lent me his bino-viewer with a pair of 8mm Radians. Darn, another "I must have" accessory! The images through the bino-viewer must be seen to be believed. It brought out subtle details and shadings that were not visible in the single eyepiece view. Another interesting feature was that I didn't notice my usual floaters at all while observing with it. Famous last words "How much is this ... anyway?" I will save my pennies and maybe I will have enough before the next opposition.



White light webcam image of many added frames shows Lacus Solas, the "Eye of Mars". Taken through a 4-inch Takahashi apochromat from Mt. Kobau.

PHOTO BY MURRAY PAULSON

atmosphere. The blue end of the spectrum seldom shows any surface features and the red filter shows the surface, but only shows the most obscuring of the atmospheric features. So if you suspect clouds, use the blue, for sandstorms, use green or yellow, and surface fogs frosts or hazes – the yellow filter.

I have compiled a list of major features that will be facing Earth at 11 pm local time on the Saturday of each week for the next month. If you have a Newtonian, South will be up in the image, and if you have a refractor or Cassegrain, south will be down, but the image will be mirror reversed. The Handbook has a features map, p. 189, or you can use your favorite software to generate a features image. I highly

recommend *Mars Previewer* by Leandro Rios. I believe a link to it is available on Edmonton RASC's web site and on Sky News's web site.

Mars was at opposition on August 27-28, when it shone at magnitude -2.9 and showed a 25.12" disk. Mars will stay above the 20" size till the beginning of October, and I usually observe it until the disk hits under 10". This will happen around December 10th. By the time of your meeting, September 15th, Mars will show a 24.5" disk, and will have dropped to magnitude -2.7. On this same night you can watch the nearly full moon as it approaches Mars. At midnight, it is 6 degrees west of Mars. Farther west, at 13 UT, the moon passes just over a degree below Mars, and well below our horizon. One lunar month later, October 5-6 you will see the repeat of this event, with Mars 4-1/2 degrees from the moon at moonset. Moonset is 3:00 am local time on Oct. 6.



Same surface, but in red light.

PHOTO BY MURRAY PAULSON

Guide to Mars Features:

During the next month, the major feature(s) facing Earth at 11 p.m. local time are...

	Sept. 10th	Syrtus Major on Central Meridian
	Sept. 13th	Syrtus Major will be on the morning side* of the planet
Sept. 20th	Mare Sirenum and Cimmerium straddle the Central Meridian	
Sept. 27th	Solis Lacus and Mare Sirenum straddle the Central Meridian	
Oct. 4th	Chryse and Aurorea Sinus sit on the Central Meridian	
Oct. 11th	Sinus Meridiani sits on the Central Meridian	

* Morning side is the right hand side of the image in an SCT or refractor with a diagonal, or Newtonian. Cool, huh?

In the eyepiece, the disk displays a bright south polar cap and a few fairly obvious gray-blue features. The rest of the details are subtle, and require some persistence in observing them to draw out the details. Color filters can enhance the contrast of the planetary features, with a red filter being the most drastic of the lot. Here the gray blue features of Maria are enhanced. The red filter dims the image a lot, so an orange filter may be better for smaller telescopes. Color filters also act as a probe that shows where features are sitting in Mars' atmosphere. From Violet, Blue, Yellow, Orange to Red, you penetrate farther and farther into Mars's

Mercury will sit at dichotomy on Sept. 26 where it will show a 7.15" half disk and it will shine at magnitude -0.3. It sits at greatest western elongation at this time, 18 degrees from the sun, and it rises an hour and 45 minutes before the sun. This morning apparition is one of the better ones and

we get another not so good one later this year. Look for Mercury a week before and after this date. Jupiter sits about 8 degrees above Mercury and shines at magnitude -1.8 compared to Mercury's -2.2. The pair is joined by the moon on the morning of September 24, when it forms the right angle of a 45 degree triangle. The moon will be 28 days old and very thin at this time. This will be a bit of a challenge because the moon will be 38 hrs before it's conjunction with the sun. It sounds like a good photo opportunity to me.



Mars from a single frame from video using a Canon A40 Digital Camera mounted on a 10" SCT, and processed using MGI Videoware and Point Shop Pro software.

PHOTO BY GEORGE CHARPENTIER,
AUGUST 31, 2003, 12:13 A.M.

Jupiter crossed into the morning sky on August 21, and will be visible in the morning twilight at the end of September. It was joined briefly by the planet Venus in mid-August when Venus passed in its superior conjunction with the sun. It is interesting to note that Jupiter was moving into the morning sky while Venus was moving into the evening sky. Venus will take somewhat longer to reappear in the evening twilight because of the poor inclination of the evening ecliptic in the fall sky.

Saturn has returned to the morning sky and you can see it if you wait up long enough. At the beginning of the month it

rises at 1 a.m., and by the Alberta Star Party in late September it rises at midnight. It shines at magnitude +1.9 and shows a 18" disk. I imagine with all the recent interest in web cams, that Saturn images will be a feature in the next meeting.

Moving on to the outer planets, I did manage to see Uranus naked eye from the Mt. Kobau Star Party and it did show a disk in the eyepiece, but little else. Alas I was unable to image it with the web cam. It is too dim for a 1/25th second exposure to show up as more than a ghost. Neptune

was fainter and smaller, but obviously blue-green. Last on my list of planets is Pluto, which has moved from the spring sky to the summer sky. I have managed to hunt it down at the summer star parties for the last 4 years, and I have missed the last two spring time windows but I did see and image Pluto on 6 successive nights at Kobau. It is real cool to see the proper motion of this dim planet over a period of days. I tried to use the finder chart in the *Observer's Handbook*, but I find it useless. Use either a chart from *Guide*, or your favorite software. You also can get a chart from *Sky and Telescope* or RASC Edmonton's web site. Does anyone catch Pluto at the ASP this year? Please send me a note if you do.

FREE 8" TELESCOPE – *Serious inquiries only, please*

Doug Beck, a former RASC member from many years ago recently donated an 8-inch f/5 telescope to the University. After checking all the parts received, we decided that the work, time and expense required to refurbish the telescope is beyond our interest. We have therefore decided to proceed in one of the following ways, either (a) give it to a member of the RASC who is serious about refurbishing it, or (b) use it for parts.

The telescope is 30 years old. It is a Newtonian with a removable attachment for converting it into a f/15 Cassegrain. The mirror has been ground by Doug and it needs to be cleaned and aluminized. The electronics were built with the help of Gordon Patterson. The control pad is missing. There is no pier but all else is in place for mounting it on one. The mount is a heavy-duty fork and the back of the optical tube is loaded with lead for balancing.

This telescope is not for portable use; it is best suited as a backyard observatory type scope. It spent many years in Doug's observatory until he moved away from Saskatoon.

If anyone is interested, contact Stan at 966-6434 (email: shadick@usask.ca) or Yannis at 966-6383 (email: yannis@sask.usask.ca).

Saskatoon's Telescope Rental Program



The Centre has a few loaner scopes that we can rent to members for a nominal monthly (fund-raising) fee, negotiable with Gord Sarty, the scopes' curator. If you do not have a scope, you may want to use one of these for a while. Currently, there are three scopes available, each with their own set of eyepieces. These are:

3.1" f/12 Tasco refractor on Equatorial mount – excellent on planets since the long focal length lends itself to the use of very high powers. 3" refractors show planet detail wonderfully and have very sharp images!

6" f/5 Rich-field scope – on a home-made rickety but passable equatorial mount. Excellent for wide-field viewing of the Milky Way and large star clusters.

4.5" f/3.3 Astroscan reflector – a very nice wide-field scope that can be cradled in the lap or used on its table-top mount. Excellent for wide-field Milky Way views, but not so hot for planetary detail. It is, however, extremely portable.

If you are interested, visit our Centre website for more details, or call Gord Sarty at 665-6448.

Sketching Jupiter Events and the GC Observing Challenge

by Richard Huziak, <Huziak@SEDSYSTEMS.ca>

At the end of this article is a list of the sketches currently up on the Saskatoon Centre website at http://prana.usask.ca/~rasc/The_Great_Canadian_Observing_Challenge.htm

Sooner or later I will get around to the articles or data I need to do to satisfy my part of the GC Observing Challenge commitment (some articles are written but not posted, some data is submitted, some is not). There just does not seem to be a whole lot of hours in the day anymore, at my advanced age of somewhere between 40 and 50. I will even eventually update the observer statistics to inform everyone that I am still about 11 variable star observers short of reaching the goal of 100 Canadian varstar observers REPORTING to the AAVSO before Sept. 30/03 (though not all of the 76 others have yet reported – but a great many have!) Thanks a bunch to everyone who has committed so far!! (We already have a 200% increase from the past year.)

However, back to the sketches. The sketches are up on the site due to two factors. One is the Challenge, but the other is my great belief that if you call yourself a visual observer, then you should be sketching at least some of the stuff you are observing, or as a minimum, keep a detailed log book of what you are observing and what you see. Indeed, the logbook is essential if you are doing an amateur science program. However, sketching, even for fun, has great personal benefits – and you do not have to be Michaelangelo to try it. The bottom line is that if you have to commit the drawing of the object to paper, you have to decide exactly where everything is in the image you are seeing, and decide what details are ‘real’ and which are likely not. This really helps you develop your observing skills, and those who are regularly sketching often see far more at the eyepiece than those who don’t. If you have to sit on one object for 15 or 20 minutes to finish your sketch, then you are spending a good sum of time looking at the finest details in the eyepiece. This is observing! Trust what you see – sketch it, then compare to photos later. You will be surprised at how good your eyes really are.

...and those who are regularly sketching often see far more at the eyepiece than those who don't.

Way too many ‘list-chasers’ immediately slew to the next object within seconds of finding their goal, and do not spend the time to really observe what can be seen (one of my pet peeves for inexperienced go-to users). Take time to observe and enjoy each object for all that it is worth – there is so much detail that is simply glanced over.

One of my inspirations for checking out every inch of detail is the old Rev. T. Webb 2-volume books (1 – *Planets*, 2 - *The Stars*) Dover Publishers – pink and blue paperback covers. When I read the descriptions of the objects that the astronomers were seeing in the 17th thru 19th centuries, I am awestruck by their skills and talents with far inferior scopes than our worst of today! They were just good observers! (And of course, skies were black at night). But the point is that there is so much to see – don’t just skim over it.

And yes – the file names ARE the page numbers in my observing journals. I take a lot of notes and sketch everything in the universe. Good observing, and clear skies!

- | | |
|----------------|---|
| RH_p6363.pdf | How I keep variable star notes – sample page. |
| RH_p6366.pdf | Drawing of NGC 7708 – in response to Ken Lemke’s challenge |
| RH_p6367.pdf | Drawing of Cr 463 – in response to Ken Lemke’s challenge |
| RH_p6503-4.pdf | Sketches of the Apr. 10/03 Callisto/Io event on Jupiter (not a challenge response, but there is a timing included per G. Gaherty’s challenge) |
| RH_p6453.pdf | Sketches of Jupiter features from Jan. 15/03 (will become data for G. Gaherty’s Jupiter timings challenge) |
| RH_p6444.pdf | Sunspots sketch – to satisfy (part of) Paul Campbell’s challenge |

The Messier, H-400 & H-400-II, FNGC, Binoc & EtU Club

Join the Club! Observe all 110 Messier, 110 Finest NGC, 400 Herschel I or 400 Herschel II, Explore the Universe, or 35 Binocular objects and earn great OBSERVING CERTIFICATES!

MESSIER CLUB

Certified at 110 Objects:

R. Huziak, G. Sarty, S. Alexander, S. Ferguson, D. Jeffrey, D. Chatfield, B. Christie, K. Noesgaard, M. Stephens, B. Hydomako

Tenho Tuomi	Applied	110
Larry Scott	New	106
Mike Oosterlaken		93
George Charpentier		90
Lorne Jensen		84
Mike Clancy		78
Wade Selvig		75
Brent Burlingham		58
Brent Gratijs		39
Stan Noble		28
Tyrone Klassen		26
Les Dickson		20
Kathleen Houston		20
Ellen Dickson		17
Brian Friesen		15

FINEST NGC CLUB

Certified at 110 Objects:

R. Huziak, D. Jeffrey, G. Sarty, D. Chatfield

Scott Alexander	97
Ken Noesgaard	24
Sandy Ferguson	23
Mike Oosterlaken	20
Bill Hydomako	20
Mike Clancy	4

Chatfield BINOCULAR CERTIFICATE

Certified at 35 Objects:

M. Stephens

Tenho Tuomi	Applied	36
Mike Clancy	Applying	36
Mike Oosterlaken		32

EXPLORE the UNIVERSE

Certified for Certificate:

M. Clancy

Tenho Tuomi	Applied	Dun
-------------	---------	-----

HERSCHEL 400 CLUB

Certified at 400 Objects:

D. Jeffrey, R. Huziak, D. Chatfield

Gord Sarty	251
Scott Alexander	102
Mike Oosterlaken	68
Ken Noesgaard	44
Sandy Ferguson	18

HERSCHEL 400-II CLUB

Certified at 400 Objects:

Richard Huziak	196
Darrell Chatfield	117

The Messier & Finest NGC lists can be found in the *Observer's Handbook*. The Explore the Universe list is available on the National web site. The Binocular list & Herschel 400 lists will be available at each general meeting or can be mailed out on request to distant members. Each month I'll be posting updates.



Summer turns out to be good for the Observing Lists, with many members increasing their object counts. Kathleen Houston mcintosh.houston@sasktel.net writes:

"...It all began with bringing my telescope east this summer. I wanted to do some stargazing with my brother in Montreal. And finally use my new right angle, right-way-up finderscope for what it was originally intended: to find the RING NEBULA! So there we were in a semi-illuminated park 30 minutes out of St. Lambert, and to my surprise, I actually found the 8.4 magnitude gem in the sky!! I was thrilled! I find that what gets in the way of stargazing is all the excuses: work, fatigue etc. Now that I've broken my "no" spree, I know I can say "yes" and get

my behind out there and have some fun! My confidence builds the more I do, and since using the O'Meara book on Messiers, I am having a blast!! It's a terrific resource from an author who really takes the time to look and draw the objects."

On-line Messier and Finest NGC Lists

For those who'd like electronic Messier or FNGC lists, check out the Edmonton Centre's version at: <http://www.edmontonrasc.com/catalog.html>

If you promise to look at M31 (Andromeda Galaxy) sometime in the next few months with eyeballs or binocs, I'll enter you onto the Messier Club as '1' object, and you can go from there! Eyeballing the fuzz that becomes the Double Cluster nets you TWO Finest NGC objects!