

NOVA NOTES

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THE NEWSLETTER OF THE HALIFAX CENTRE OF THE RASC
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NOVA NOTES, the newsletter of the *Halifax Centre of the Royal Astronomical Society of Canada*, is published bi-monthly in February, April, June, August, October, and December. The opinions expressed herein are not necessarily those of the *Halifax Centre*. Material for the next issue should reach the editor by **September 23, 1994**. Articles on any aspect of astronomy will be considered for publication. "Letters to the Editor" or to our resident expert: *GAZER*, are also most welcome. Contact the editor at:

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EDITOR/PRESIDENT'S REPORT

Well, I hope you all had a pleasant summer. I sure did — I guess that's one reason why this *Nova Notes* is later than normal.

You will have found this issue of *Nova Notes* in an envelope for the first time. This is because Canada Post has changed its rules (or finally started to enforce them!) regarding "folded" letter-mail.

The June banquet (potluck??) went off well with about 30 in attendance at SMU. The year's awards were given out. I'm still trying to hunt down the National Messier Certificates for Paul Gray and John Reppa. Please bear with me — I haven't forgotten!

Over the summer, Centre

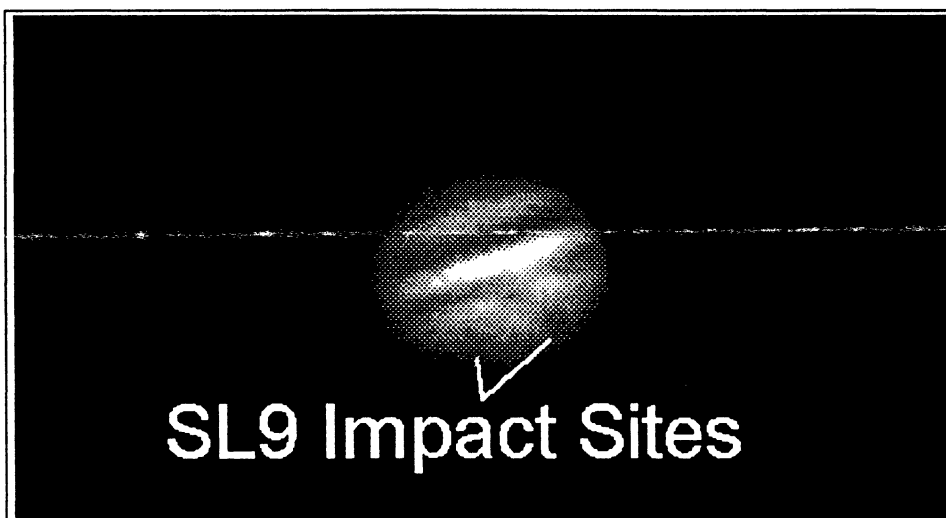
members have been busy with public programs. The decision was made to continue the planetarium shows all summer. I thank those who agreed to do a show. We also had several public nights at Dollar Lake park, but for the most part, these were plagued by lousy weather, but on each night the public who attended were able to see at least the moon or Jupiter. My thanks to all those who came out.

Meteor observing took the stage for the Perseids. Nine members of the club participated in an "official" count on the night of August 11th. Almost 900 meteors were logged. There will be more about this in the next issue.

Four members: Paul Gray, Clint Shannon, Roy Bishop and I traveled to Starfest in Mount Forest, Ontario and had a wonderful time. We're already planning for next year! Ω

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SL9 Impact Sites

ASTROPHOTO OF THE MONTH

This ST-6 CCD image of Jupiter was taken on the evening of July 20th at the Burke-Gaffney Observatory by Shawn Mitchell and David Lane. The exposure time was 0.5 seconds with a Johnson "B" filter. The seeing was not particularly good that night, but two of the impact sites are clearly visible close to the southern limb of the planet. Both sites were moved in a half hour time span when observed visually in the 80mm guide-telescope.

LETTER TO THE EDITOR

Hi Dave:

Saw your interview on ATV for the annular eclipse. Saint Mary's certainly had a huge turnout. We Saint Johners got some notoriety out of the event also, but our crowd wouldn't have topped 50!

I'm writing about a minor error in Bill Lucas' "What's Up" article in the *June Nova Notes*.

In the fourth paragraph, he made a reference to Sigma Ophiuchi and Antares being near IC4604. That photographic nebulosity encompasses Rho Ophiuchi and Sigma Scorpii; Sigma Ophiuchi is actually much farther north. I've made similar mistakes while checking my references for an area that straddled two constellations. It can definitely send one down some interesting dead-end trails.

Irregardless, the article was well done and reminded me that I have never toured the Antares region with my 11x80s! Ω

*Len Larkin
Saint John, NB*

GENERAL ASSEMBLY

REPORT:

by Joseph Yurchesyn, National Representative

This being the second of my two year term as Halifax Centre's National Council Representative, I attended the General Assembly on behalf of *Halifax Centre*, held this year at Memorial University in Newfoundland. The first of the two National Council meetings was a sprint — lasting only a short 7½ hours — including a 1 hour break for lunch and ending with all business being concluded! The highlights of the two National Council meetings and the GA meeting are given below. I have copies of all submitted Committee reports, submitted motions, and draft proposals. If you wish a copy, please contact me or the Centre Secretary.

This GA had 70 - 80 delegates and was very well attended by Halifax

Centre members, including: yours truly (Joe Yurchesyn), David Lane, Mary Lou Whitehorne, Roy Bishop, Patrick Kelly, Bill Thurlow, Clint Shannon, and John Wojtowicz (Sorry if I missed anyone else!). In addition, Mary Lou and I, each presented a paper on various aspects of NSPAC's progress over the last year. Also, Bill Thurlow, at the next Halifax meeting that he attends, will be explaining his absence from the actual GA meeting, why he held up the group photo, which was snapped during a break in the GA meeting proceedings, and why he still played hooky from the GA meeting after the group photo! (Shame on you Bill!... Does this mean that you BUY, the next time at Hoggies?)

Bill Thurlow ... will be explaining his absence from the actual GA meeting ...

All social activities were well attended and a good time was had by all, especially during the "Screeching In" ceremony, which had Pat Kelly, representing eastern Canadian delegates, Peter Ceravolo representing central Canadian delegates, and Jack Newton, representing western Canadian delegates as the sacrificial victims!... errrr... participants. Sorry, no details can be publicly divulged. You'll have to go Newfoundland and find out for yourself. Besides, where you have to kiss that Puffin isn't really that bad! In addition, most if not all the mainlanders flunked the Newfoundland IQ test!

The Helen Sawyer Hogg lecture was most enjoyable, the speaker being Dr. George Efstathiou who travelled from Oxford, England. He occupies the civilian chair of astronomy at Oxford — a post once held by Isaac Newton himself. His talk was on the formation of galaxies and the large scale structure of the universe.

Dr. Grant Hill, this year's Plaskett Medal winner, provided a wonderful lecture following the banquet about

his research on rapidly rotating type A stars. The random door prizes were awarded. I was fortunate (or unfortunate?) enough to win one, and thanks to Joan Hube, acquired the nickname - Joe "Oh Boy" - in the process! (Please ask someone else how!...)

A great 1994 GA! Well done, St. John's Centre. When are you organising the next one?

Ahh, the last period on the last wise crack! Now I can rest. Another GREAT GA! ...

National Council Meeting #1

July 1st, 1994.

Rajiv Gupta has agreed to act as National Treasurer for the one year remaining in Terry Hicks' three year term, following Terry's resignation for personal reasons. This became effective at the end of the GA meeting (prior to the 2nd National Council meeting).

The RASC auditors will now also provide basic monthly accounting reports for the RASC National Treasurer. This will reduce the cost of the year end audit and the total accounting fees will be only about \$2,000 more than the auditing fee has been in the past.

Clarification is still needed on the details associated with the National Liability Insurance.

Several Messier Certificates were awarded and a new Messier Application form was approved.

Numerous old special committees were not re-constituted.

It was announced that asteroids were named for three Canadian astronomers: Art Covington, Terrance Dickinson, and Paul Chodas.

A motion to rescind the link between the CPI and fee increases was tabled until the second National Council meeting.

It was announced that changes to Canadian postal rates (i.e. increases) were imminent. By March 1st, 1996, all government subsidies would be removed. This will mean a major cost increase for the mailing of the National publications.

A Simon Newcomb Award discussion paper was distributed. In addition, Michael Watson was awarded the Simon Newcomb award this year for an article (to appear in the August Journal) on double planetary occultations by the moon.

A suggested combination Bulletin/Journal discussion paper, authored by David Lane, was distributed. A new committee, called the "Publication Re-Vitalization Committee" was created to oversee the creation of a detailed revised publication proposal for review by National Council within 1 - 2 years. A monumental task to say the least. Good luck! Please give Dave your input.

the "Publication Re-Vitalization Committee" was created to oversee the creation of a detailed revised publication proposal ...

The RASC presently uses the Society's Seal as its logo. A suggestion to create a modern looking RASC logo was passed.

The next General Assemblies will be held as follows: Windsor - 1995, Edmonton - 1996, and Kingston - 1997.

**National Council Meeting #2
July 3rd, 1994.**

All standing and special committees were staffed. I remain on the Finance Committee. David Lane will chair the new "Publication Re-Vitalisation Committee" and its other members include: Doug George, Pat Kelly, Terry Dickinson, and possibly Alan Dyer and Randy Pakan.

The next National Council meeting was scheduled for October 29th, subject to finding a location.

The deferred motion to rescind the CPI to fee increase was not dealt with, probably owing to some confusing discussion regarding committee staffing and the lateness of the hour.

**National General Assembly Meeting
July 3rd, 1994.**

The President's report, drew attention to the lack of publicity of work occurring in some Centres. Examples cited included Saskatoon's "Messier Observing Album" and Winnipeg's "Introduction to Building a Dobsonian Telescope".

Peter Jedicke (London) replaces Mary Anne Harrington (Toronto) as Recorder.

Walter MacDonald (Hamilton) replaces Garry Woodcock (Toronto) as Librarian.

The appointment of Rajiv Gupta (Vancouver) to Treasurer was announced.

Handbook sales for 1993 were down 10%. Therefore, 10% fewer 1995 Handbooks would be printed. The reason is unknown. A tear out order form, to be included in the 1995 Handbook meant setting the 1996 Handbook price earlier than is usual. The 1995 Handbook will have no price change and the 1996 Handbook will be \$1.00 more.

Vote on By-laws amendments:

Clause 6.08 — Passed by >2/3's majority.

Clause 7.09 2(c) — Passed by >2/3's majority...

The results of the elections: 1st VP: Doug George, 2nd VP: Peter Ceravolo

**The results of the
elections: 1st VP: Doug
George, 2nd VP: Peter
Ceravolo**

All ballots were to be destroyed after all losing candidates had an opportunity to request a recount. The actual election results were not disclosed, it being known only to the candidates, two ballot counting scrutineers, and the National Secretary.

Meeting adjourned. Ω

Once again, the Halifax Centre of the R.A.S.C. and the Saint John Astronomy Club will be jointly hosting NOVA EAST. I have included below a schedule of events and a map which shows the Park layout and how to get to Fundy National Park in New Brunswick. More detailed maps of the park are available at the information centre which is just over the bridge from the village of Alma.

There is an optional registration fee for this event of \$10. If you register, you'll be in on the door prize draw. There is the usual Park entrance fee of a few dollars. Those who choose to camp at the group campsite will not have to pay camping fees, as these are waived in lieu of our Public Talks and Observing Sessions.

**The later date this year will
hopefully assure us good
clear skies ...**

There are two kinds of accommodations available. For those who prefer camping, we have a large site in the Micmac Group Campground. Please note that the later date this year will mean cooler weather than usual. If you plan to camp, please bring warm bedding. For those who prefer to be a bit more civilized, there are two inns in the park. One is **Fundy Park Chalets** which has 29 housekeeping units. It features a licensed dining room and lounge, coffee shop, shower, B&W TV and heated pool. Rates are about \$70 per night (1990 prices) Phone: (506) 887-2808 or (506) 433-2084. The other is **Caledonia Highlands Inn and Chalets** which has 44 units, showers and color TV. Rates are about \$70 (1989 prices). Phone: (506) 887-2930. In addition, there are several motels in the small village of Alma, right beside the park.

Nova East '94 Schedule

Fundy National Park (October 7th-10th, 1994)

Date	Time	Event	Location
Friday October 7th	All day	Arrival and camp setup	Various locations
	19:30 - 21:00	Public talks (see list below)	Assembly hall
	21:00 - 22:00	Public observing (3 or 4 volunteers)	Assembly Hall
	22:00 -	Private observing or if cloudy, there will be informal talks	Cook-house Micmac Campsite
Saturday October 8th.	Morning	Free time	Anywhere
	12:00 - 14:00	Community Lunch BYO food	Micmac Campsite
	14:00 - 15:30	Scope setup Group photo session Swap shop & gab session	Micmac Campsite
	15:30 - 17:00	Assembly, Club Reports, Prizes, and Announcements	
	17:00 - 19:00	Private suppers	Wherever
	19:30 - 21:00	Public talks (see list below)	Assembly hall
	21:00 - 22:00	Public observing (3 or 4 volunteers)	In front of the Assembly Hall
	22:00 -	Private observing or if cloudy, there will be informal talks	Cook-house Micmac Campsite
Sunday October 9th	All day	Free time	Anywhere
	21:00 - ??	Private observing	Micmac campsite
Monday October 10th.	All day	Departures and farewells	Various

Public talk titles (to date) for 1994

Man's Place in the Cosmos	Doug. Pitcairn (RASC Halifax Centre)
Stories in the Stars	Mary Lou Whitehome (RASC Halifax Centre)
Bump & Grind in the Solar System	Pat Kelly (RASC Halifax Centre)
Telescopes and Binoculars (in case of clouds)	Doug. Pitcairn (RASC Halifax Centre)

Doug Pitcairn lectures in astronomy from time to time. His talk will review some of the latest discoveries in astronomy, and how they might alter our perspectives of ourselves, and the universe around us.

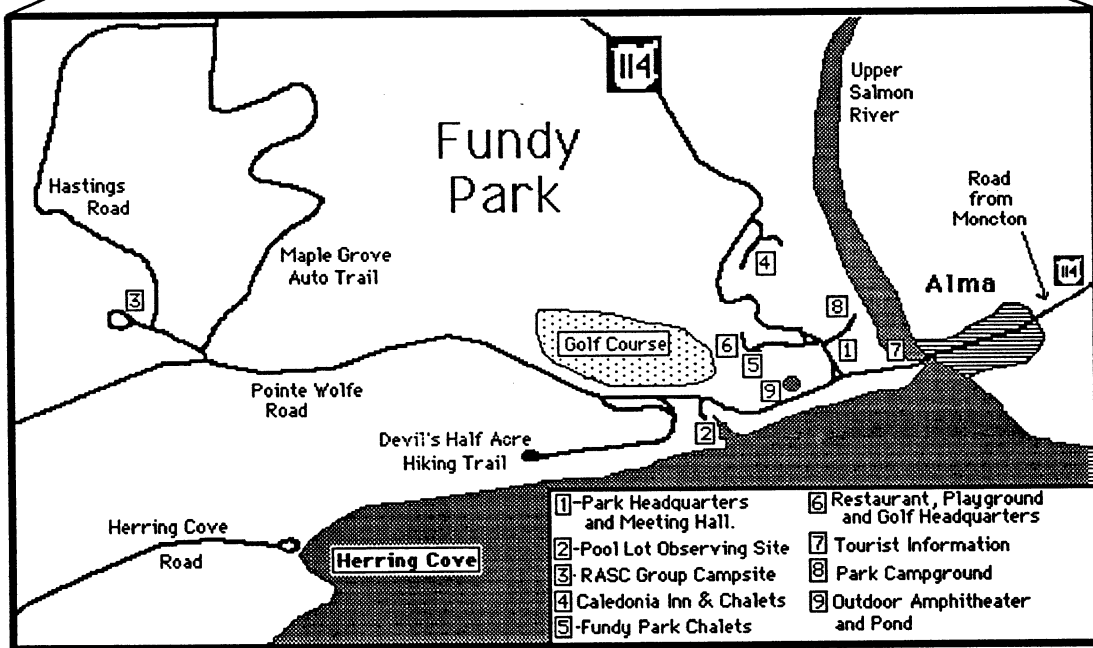
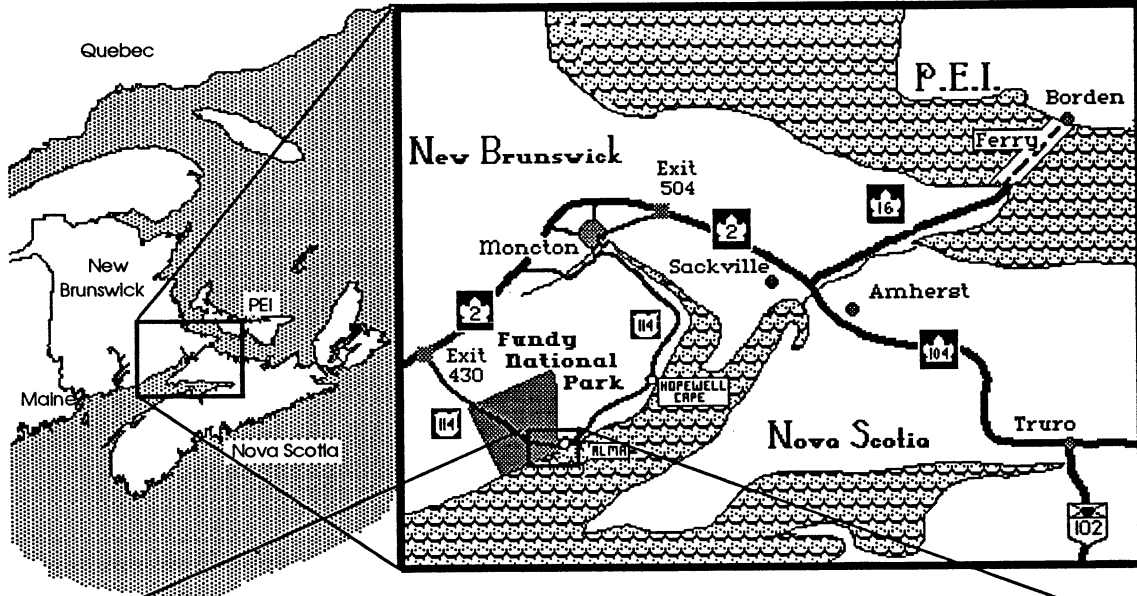
Pat Kelly is currently editor of the RASC's national newsletter, a popular lecturer, and an active amateur astronomer. He often lectures to various groups and clubs and enjoys sharing his hobby with others. Pat will discuss some of the many violent collisions which have shaped both the Earth and the rest of the planets in our solar system.

Mary Lou Whitehome has served the RASC for many years, and also lectures in astronomy. She is an active amateur and contributes occasionally to professional astronomy. Mary Lou will relate some interesting tall tales about the constellations and their associated myths.

The Public are invited afterwards to the open space in front of the Assembly Hall for a look through some impressive telescopes at some of the things up there in the night sky. (This unfortunately is quite dependent upon the weather. If the skies do not cooperate, there will be an additional talk about **Telescopes and Binoculars**, both Astronomical and of the Bird watching variety.

There will also be private talks for the astronomers. Including "The Burke-Gaffney Observatory: Atlantic Canada's Largest (professional) Observatory" by David Lane, the observatory's technician. These are used to fill in cloudy evenings, of which there is usually at least one.

Fundy Park



As this event is listed in both *Sky & Telescope* and *Astronomy* magazines, we are starting to draw people from all over. In addition, the park publicizes the public star shows and talks, so we hope to have a good turnout for all of the events. The later date this year will hopefully assure us good clear skies, as this is the best observing "window" our weather allows. Last year, there were dozens of 8 inch and larger telescopes, as well as various homemade gizmos and scopes. Don't be shy if you have no scope, there is always an eyepiece to look through. I never met an owner of a large scope who didn't like to show off views. Anyone will find lots to do at night and during daylight hours. The Park is one of the oldest in Canada, and is well established with dozens of walking trails and entertainment facilities for all ages, including an excellent golf course, restaurant, lounge, swimming pool, and playground right in the park.

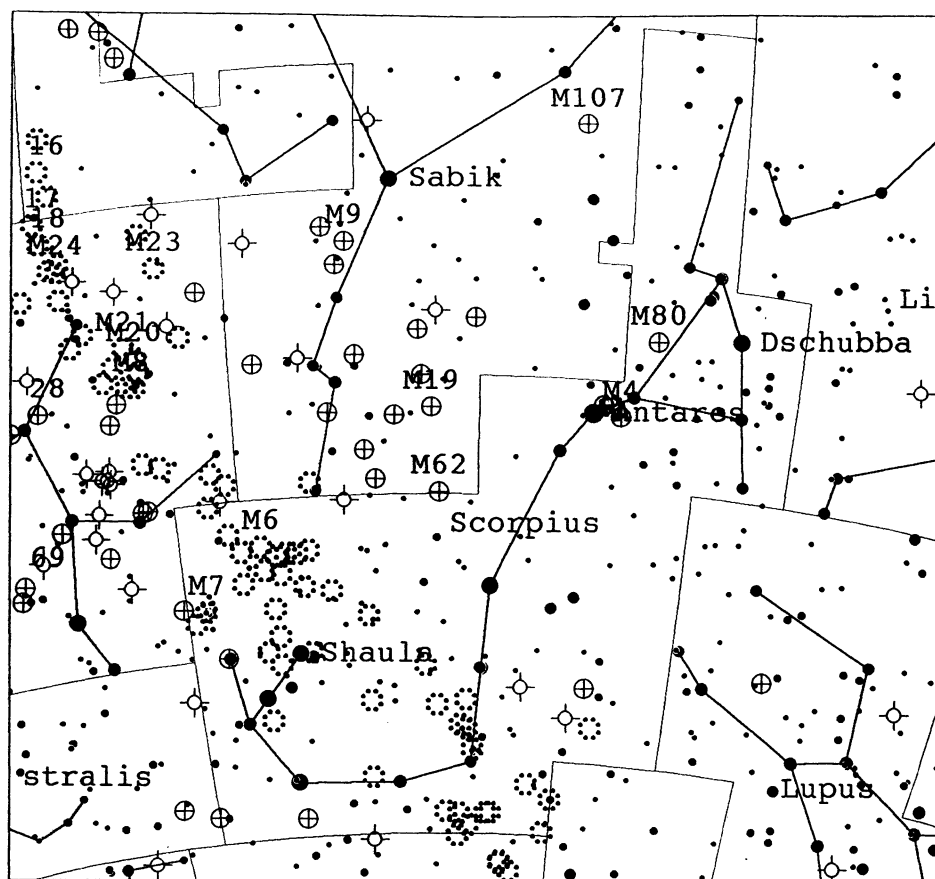
We have a slide projector, so if any of you have slides that you would like to show, bring them along!

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As with any star party, the more who attend, the better it is. We are having some new NOVA EAST '94 T-shirts made up and will have them for sale again this year. I hope to see you there. If you have any questions, please give me a call (463-7196). Ω

CONSTELLATION OF THE MONTH: SCORPIUS
by Joseph Yurchesyn

Scorpius is a medium sized constellation dominated by one 1st, and numerous 2nd magnitude stars in the form of an upright fish hook asterism. It is surrounded by glorious Sagittarius to the east, Ophiuchus to the north, Libra and



Lupus to the west and to the south, the — obscure to northern observers — southern hemisphere constellations of Corona Australis, Ara and Norma. Located on the western edge of the summer Milky Way, Scorpius skims the southern horizon on early summer evenings for middle latitude northern hemisphere locations and has Deep Sky objects associated with the plane of the Milky Way, such as star clusters, globulars, nebulae, and planetaries, including five Messier objects: M-4, M-6, M-7, M-62 and M-80. The southern declination of Scorpius means that, for northern observers, the time it spends above the horizon is short; and as such, the period of evening visibility is short.

Scorpius, one of the most prominent and striking of the summer constellations, has been known by its present name throughout recorded history. In very ancient times, the constellation also included the part of the sky that is now the constellation Libra. In fact, the names of α & β Librae mean "Southern Claw" and "Northern Claw".

According to Persian tradition Antares is called *Kazhdum*, which

refers to a scorpion or scorpion-monster. The ancient Akkadian name *Girtab* for it has been translated "The Stinger". In Mesopotamian lands and on Phoenician cylinder seals, the constellation is portrayed as a half-human "scorpion-man"; and amulets engraved with this figure were probably intended to protect the wearer from scorpion stings. In Greek and Roman times, the constellation represented the Scorpion whose sting caused the death of Orion. In another legend, it is the monster that frightened the horses of Phaeton when that bold youth attempted to drive the Chariot of the Sun. In addition, the symbol of the scorpion is one of the oldest Egyptian hieroglyphics, and it appears in inscriptions older than the 3rd millennium BC.

The name of the constellation's brightest star, Antares, is derived from the Greek $\alpha\upsilon\tau\iota\ \alpha\rho\eta\varsigma$, "Rival of Mars", while the Roman name was *Cor Scorpionis*, "The Heart of the Scorpion". It is the 15th brightest star in the sky and one of only two 1st magnitude M-type stars; the other being Betelgeuse.

Antares is a supergiant star of incredible dimensions. From an interferometer-determined apparent diameter of 0.041" and a distance estimated from parallax measurements of 520 ly's, the diameter is believed to be 960 million kilometres, greater than the diameter of the orbit of Mars. Since the star has a total mass of not more than 10 - 15 solar masses, the average density is much less than one millionth that of the sun. Irregularities in the light curve measured during times of lunar occultation suggests that the star may not be spherical in shape, presenting an oval disk of dimensions 0.041" by 0.026". In addition, the centre of brightness is not the centre of the ellipsoid, so the star may, in fact, be egg-shaped.

Antares is a supergiant star ... the diameter is believed to be 960 million kilometres, greater than the diameter of the orbit of Mars.

Antares also has a greenish companion that is an actual physically association. The pair can be observed separately when the moon periodically occults the pair. The actual separation is about 500 AU, or about 6 times the Sun-Pluto distance. In addition, the Antares system is enveloped in a vast faint reddish nebula, about 5 ly's in diameter.

A large scattered aggregation of early-type B stars extends over about 90° of sky, including the constellations of Crux, Centaurus, Lupus and Scorpius. It is called the Scorpio-Centaurus Association. Although Antares is the only non type B star in the association, it is in the brightest member. Other prominent members include β Crucis, σ Scorpii, ϵ Centauri, α Lupi and γ Scorpii, as well as the peculiar "shell star" 48 Librae and several β Canis Majoris type variable stars. The association appears to be gradually expanding

and the age is estimated at about 20 million years. Antares, which has already reached the red giant stage, may be the most massive star in the association, as well as the most evolved.

For the double star enthusiast, β Scorpii is one of the finest stars in the sky for a small telescope. The two components are magnitudes 2.63 and 4.92, with a separation of 13.7" at PA 23° and are described as white and lilac. There has been no apparent change in the pair, but they do share the same proper motion. In addition, a third star of magnitude 6.5 is currently 0.5" distant at PA 150°, with an orbital period estimated at 1,000 years and a spectroscopic companion also orbits the brightest component with a period of 6.828 days. On May 13, 1971, Jupiter occulted β Scorpii and Jupiter's moon Io also occulted the 5th magnitude component. From light curve observations, that star is probably a pair with a 0.10" separation at PA 308° and a brightness difference of about 2 magnitudes. This makes β Scorpii a quintuple star system.

Similar to the 208" separation of the double double star ϵ Lyrae, ν Scorpii is also a double double. The two pairs are 41.4" at 336°. The brightest pair is magnitude 4.0 & 6.2, by 1.2" at 2°. The fainter pair is magnitude 7.0 & 7.3, by 2.3" at 45°.

Lying 5° north of Scorpio's tail is the star cluster M-6. Discovered in 1746 by P. L. de Cheseaux, the cluster is definitely a naked eye object; and appears to be mentioned in the catalogue of Ptolemy. The object is 15' in diameter and has stars of magnitude 7 - 10 arranged in three starry avenues leading to a large square. The cluster is estimated to be 120 million years old and lies at a distance of 1300 - 1600 ly's.

Lying 3½° SE of M-6 is the naked eye object M-7, also mentioned in the catalogue of Ptolemy and included in a list published in 1690 by Hevelius. While the brightest members are nearly of naked-eye brightness, the cluster is projected onto a background of faint distant Milky

Way stars. The estimated distance is 820 ly's, with an age of 260 million years. First noticed by John Herschel in June 1837, a faint globular star cluster (NGC-6453) lies in the field of M-7, appearing as a 1' diameter 11th magnitude fuzzy spot. In addition, some 45' SE of M-7 lies the dim galactic cluster H18, with about 80 faint stars.

Discovered in June 1771 by Messier (and rediscovered him in 1779), the globular star cluster M-62 lies squarely on the Ophiuchus-Scorpius border. In some catalogues, M-62 is categorised as lying in Ophiuchus. The diameter is 6.3' with an integrated magnitude of 8.16. Imbedded against a rich Milky Way Field, the absorption is estimated to be 2.4 magnitudes. M-62 is markedly unsymmetrical, the asymmetry being displayed both in the distribution of all its cluster stars as well as just its variable stars. As of 1973, 89 variables were known, virtually all being RR Lyrae type variable stars.

The large bright globular M-4 is the easiest of all bright globulars to locate

The large bright globular M-4 is the easiest of all bright globulars to locate, lying 1.3° west of Antares. Discovered in 1746 by P. L. de Cheseaux, it can be seen naked-eye under dark conditions and in the southern hemisphere it rivals M-13. The stars of M-4 are magnitude 13, with an integrated cluster magnitude of 7.4 over a 23' in diameter. M-4 is a rather loose cluster with no central condensation. The degree of obscuration is difficult to estimate, but M-4 is believed to be 5,700 ly's distant, making it the nearest known globular.

The small, but bright globular M-80 is located about midway between Antares and Beta Scorpii and was located by Messier in January 1781. It lies near a heavily obscured region and Herschel had the whimsical suspicion that the stars of which it was composed were collected from

that place. The stars of M-80 are magnitude 14 - 15 and the cluster is magnitude 8.39 and 5.1' in diameter. At an estimated distance of 36,000 ly's the cluster is 50 ly's across.

Located just $\frac{1}{2}^\circ$ north of ζ Scorpii is the striking open cluster NGC-6231, which may be naked-eye under good conditions. In a small telescope, it resembles a miniature Pleiades with a central knot of 7 - 8 bright stars. It is composed of high luminosity type O and B supergiants, the brightest of which rivals Rigel in luminosity (60,000 suns). The distance is believed to be 5,700 ly's, making the cluster 8 ly's in diameter (the same as the Pleiades). If it were as near as the Pleiades, it would be the same size, but the members of NGC-6231 would out shine the stars of the Pleiades by 50 times ($5\frac{1}{4}$ magnitudes!) and the brightest members would shine with the brilliance of Sirius! NGC-6231 appears to be the nucleus of an association of type O and B stars, called the "I Scorpii Association", the richest part of which lies 1° NNE of NGC-6231 and is designated H12. This association marks the course of one of the spiral arms of our galaxy, which lies 5,000 - 6,000 ly's nearer the galactic centre than the arm that contains our Sun.

but the members of NGC-6231 would out shine the stars of the Pleiades by 50 times

Also located another 1° NNE of H12 lies the attractive cluster NGC-6242.

Just a little something to ponder, when you next gaze in the direction of Scorpius. Now!... If I could figure out how to get a view of H12 from the north galactic hemisphere? Ω

HEARD IN THE DARK

by GAZER

So Doug, what's up with Nova East '94? Using 1 June as a benchmark it's only 129 days until the big event kicks off. Are there going to be any T-shirts this year? The collectors among us are *very* anxious about being properly attired! I heard that you won the most prestigious award at the June banquet (pot-luck??) meeting, that is, the "most active non-member". And, as expected, you were not there to receive it!

And, Roy Bishop, I'll gladly lend you my 1993 Observers Handbook for your observatory. In the dark, no one will know. Geesh, with this kind of pre-planing don't forget to bring your own eyepieces if invited to his digs. Yes, yes...his 44 cm DOB *does* have mirrors!

Rumours are flying that Clint Shannon is contemplating chartering an aircraft for the 1999 total solar eclipse off the coast of Nova Scotia. It's a 24 seater. The first twelve tickets are half price! I wonder why? This is all up in the air (no pun intended!), since Clint may be serving time for "keeping the lights out" near his home in Musquodoboit Harbour. It seems his friendly neighbour recently installed a high pressure sodium street light which shines on Clint's yard!

Dare we complain about the sometimes late arrival of *our Nova Notes*? Just look what happened to the latest BULLETIN. That was a great article on photographing the annular solar eclipse ... too bad it came 10 days late! Poor Mike Watson ... he just don't get any respect around here.

The delay may have been rooted in those abominably slow MAC's Pat Kelly uses to produce each issue.

You may have noticed that Nova Scotia had clear skies for the eclipse. There happens to be a scientific explanation for our marvelous good fortune in the face of the weather forecast for the fateful day. Reliable sources have revealed the reason: Roy Bishop brought his black umbrella to the eclipse centerline to

ward off the clouds. It would behoove us all to face in the direction of Avonport and bow low in acknowledgment of his superior influence over the weather gods. Ω

ASK GAZER:

by GAZER

Dear GAZER:

After returning home from a short astronomy-related trip to the USA, I noticed that I was missing my shaving brush. It has been several weeks and it hasn't shown up, plus I am sure that I didn't leave it in the hotel in Portland. Unfortunately, it's one of those natural fibre ones. They're rather expensive (as shaving brushes go!) and are somewhat hard to come by now, for some reason. Not popular, I guess, plus the synthetic fibre ones, although really cheap, are stiff and rough and I have sensitive skin!

Now, I know you are wondering what a shaving brush has to do with astronomy. Well, I am a refractor man. Refractors are, without exception, the only type of telescope worth looking through! Therefore whenever I go to an astronomical meeting or observing session, I make the rounds of the always inferior reflecting-type instruments, and make use of their mirrors to shave in the mornings.

Now, I want to know (as I am sure that you, GAZER, are in possession of the pertinent information), which one of those cheap reflector bums stole my very expensive, high class shaving brush??? What a low class stunt — to attempt "revenge" by stealing my favorite shaving brush! Why can't they just admit that their reflectors are no good and be done with it?

Quo Ducit Urania, indeed!

Anthony Amateur

Dear Anthony Astronomer:

Yes, indeed, I do know which righteously indignant reflector man is in possession of the fuzzy thing of which you are so fond. Unfortunately, his new Brittany puppy dog did her best to dismember

the bristles from the handle ... but, luckily for you! - was stopped before nary a natural fibre was plucked. You must have had quite a bit of beer to drink during that "business" trip to overlook which astronomer would be most likely to have done the evil (?) deed. I would hate to hear that your face was turned into a hamburger like mass of fleshy pulp because your favorite shaving brush spent the summer vacationing in Maine.

I have given you enough information to solve the mystery of your missing toiletry article. Have you figured out the culprit yet? When you get the blasted brush back, allow me to suggest that you profess to despise, to clean your precious doublet.

May all your star points suffer forever from a severe case of the "Blue and Purple fringes!"

GAZER

Dear GAZER,

Regarding a letter to you from "A-Wished-I-Were-Anonymous-Meeting-Reporter" (published Nova Notes Vol. 25, No. 2, April 1994, pp8-9), I draw your attention to the last sentence of the first paragraph.

You mean that it isn't?!

Well, at least it is for me! ... And since I have been told that the original agreement was for only the first one, I suspect that the Nova Notes editor will need to be coughing up a lot of back pay 13.333 years from now (as indicated in your reply). Remember, you get what you pay for. And I, for one, think that it will have been worth every penny!

"Voice of the Silent Membership"

Dear "Voice of the Silent Membership":

I, for one, have always thoroughly enjoyed the "Constellation of the Month" feature. It is full of factoids gamerable nowhere else. To imply that it is the highlight of each issue is beyond even the realm of this humble but nonetheless mighty GAZER. Suffice to say that the feature is rising in popularity, currently residing somewhere between the Eastern horizon of abject rejection by membership and zenithal splendor. Are you inviting a pole of the membership as to its popularity? Ah, we might be better off reaching our own coccon-clusions. The public buzz saw can really bite!

As for back pay from our illustrious editor is concerned, if you are waiting for "a lot" for your effort then I should expect to become a millionaire for mine. The key word here is *WAITING*. I can sympathize with your supposed one time appearance. We've both been snookered.

Well, it's getting dark outside and I desperately want to find Takamizawa-Levy... Ω

GAZER

Editor's Note:

*It is recommended that future authors committing to long contracts obtain payment in advance, since this editor will not be able to guarantee back pay in 13.3333 years!
(I won't be editor then!)*

ASTRO-ADS

Criterion 4000 Bausch & Lomb telescope with finderscope, clock drive, tabletop equatorial mount, surveyor's tripod, 3 eyepieces, and carrying case
All this for just \$450!

Contact

Allen Ingarfield 443-1864
18 Marlwood Drive, Halifax

Meade 8" 2080 LX3 Telescope Package with wedge, tripod, digital setting circles, 8x50 illuminated finder, Telrad finder, 26mm Meade Plossl, 16.3mm B&L Erfle, 12.7mm B&L spectrum dispersion eyepiece (very rare), 10mm B&L Plossl, diagonal, dec motor, paddle, A/C adapter, car adapter, compass, battery, counter-weight, and camera bracket.

All this for just \$2000!

Accessories

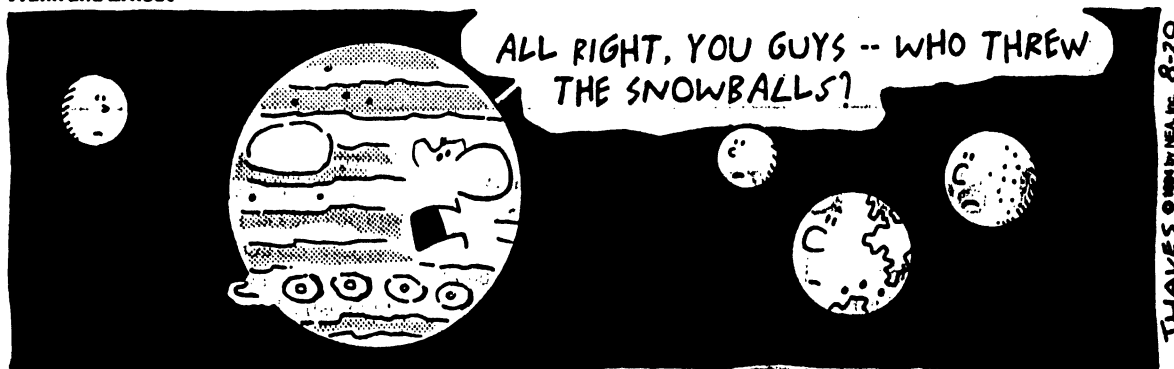
8" Thousand Oaks glass solar filter - \$100, LPB filter 28mm fits eyepiece - \$75, Deep Sky Filter 48mm photographic use - \$75, F/5 and F/7 focal reducers with diagonal - \$120, Meade off-axis guider with shutter - \$100, Parks illuminated reticle eyepiece - \$80, 2 projection tubes - \$50, and 12.7mm B&L measuring eyepiece - \$90.

Price for telescope and all accessories - \$2500

Contact

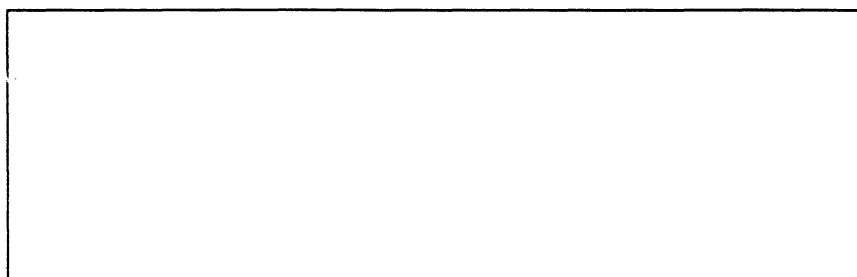
Nat Cohen 434-3103
32 Roblea Drive, Dartmouth

Frank and Ernest





NOVA NOTES EDITOR, HALIFAX CENTRE
 ROYAL ASTRONOMICAL SOCIETY OF CANADA
 C/O 4-26 RANDALL AVENUE
 HALIFAX, NOVA SCOTIA
 B3M 1E2



NOTICE OF MEETINGS AND EVENTS

Date: Regular Meeting - Friday, Sept. 16th at 8pm;
 7pm for the council meeting (all welcome)

Place: Lower Theatre, Nova Scotia Museum of Natural History, Summer Street, Halifax. Access from the parking lot.

Topic: **The Current State of Engineering for Interstellar Travel** by Patrick Kelly. We will also be showing some slides from the "Great Comet Crash" and be doing the regular Handbook Talk.

Date: Regular Meeting - Friday, October 21st at 8pm; 7pm for the council meeting (all welcome)

Place: Lower Theatre, Nova Scotia Museum of Natural History, Summer Street, Halifax. Access from the parking lot.

Topic: **The International Astronomical Union's General Assembly** by Mary Lou Whitehorne. Mary Lou recently traveled to "The Hague, The Netherlands" to attend this assembly. She will be telling us all about here trip across "the pond". We will also be doing the regular Handbook Talk.

Event: Nova East 94 - October 7th to 10th. See the article in this issue for details

PUBLIC HALIFAX PLANETARIUM SHOWS

The Halifax Planetarium, located in the Dunn Building at Dalhousie University, provides shows each week on Thursday evenings at 7pm. Contact the *Nova Scotia Museum of Natural History* at 424-7353 for show information.

1994 HALIFAX CENTRE EXECUTIVE

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