R E G U L U S

THE NEWSLETTER OF THE

ROYAL ASTRONOMICAL SOCIETY OF CANADA - KINGSTON CENTRE

AUGUST, SEPTEMBER, 1981

An Editor's Explanation: There are several reasons that your August issue of 'Requlus" did not reach you in early August or even in that month at all. If you live in Canada, you are well aware that one of them would be the prolonged postal strike that we "enjoyed" this summer.

Secondly, the article on the G.A. in Victoria will be a very short one because, from reports and slide presentations given at our meetings, many members are already informed about the big event that happened in Victoria.

Thirdly, in the event that readers might miss the announcement about the change of meeting dates for the month of October, I want to make it here on the front page. The dates for the two meetings in October have been moved from the 2nd and 4th Fridays to the 3rd and 5th Fridays. They will be held on October 16th and October 30th at the usual place. Please keep those dates in mind.

## THE 1981 VICTORIA GENERAL ASSEMBLY

The 1981 General Assembly of the R.A.S.C. was held on the campus of the University of Victoria from Friday, June 26th to Monday, June 29th. This annual gathering of the 'Clans Astronomical' brought together amateur and professional astronomers from all parts of the land and most centres of our society--even Gary Dymond from the St. John's Centre.

Many of the events of the assembly made it a memorable occasion and even the weather, which had been less than pleasant for over a month before the big event, was very cooperative. Partaking in the program were no fewer than four members of our centre: Tim Gladwin, Warren Morrison, David Levy, and Leo Enright. In fact, the first two presentations of the papers session were Leo's which was entitled An Observatory Building Project and David's which was called The Orion Nebular Variable Stars: A Symphony of Delicacy and Brilliance. The bus tours, the trip to the Dominion Astrophysical Observatory, and the cruise in the Gulf Islands were enjoyable events shared by members of our centre.

Among the presentations made at the banquet were the award to David for his display relating to variable star observations and to Mr. Arthur Covington--a Service Award of the society--for his many years of dedication to astronomy.

From all of us who attended, a sincere "Thank You!" should be passed along to the hard-working organizers of the Victoria Centre. It was another excellent G.A.

## A REPORT FROM RIK HILL IN TUCSON

Editor's Note: One of our members in the sunny south is Rik Hill who works for Case Western Reserve University at the Warner and Swasey Observatory on Kitt Peak in Arizona. It was through his kind generosity that I received the "royal tour" on the occasion of my visit to Tucson last spring and I was able to see almost all of the great telescopes at that incredible place which is Kitt Peak.

..2

Rik has sent us several reports of what has been happening at the "astronomy capital of the world" and I wish to include part of one of them here. I must make apologies to him for the delay in printing this; it was actually received a good while ago.

Here is his report from Tucson:

I have been using the Kitt Peak blink comparitor on some fields I have been monitoring for new variables. So far I have no results but then it has only been two or three months. The original intent of the program was to detect novae, but unless one can immediately blink the plates there is little value in such a program. Probably the best method for detecting novae is visually in fields well known to the searcher. This enables rapid identification. That is extremely important in that the astronomers want very much to catch more novae on the rise.

Now that I have been at Kitt Peak for a year now I have had a lot of opportunity to talk to professional astronomers about the amateur astronomer and the relationship of the two. There seems to be quite a dichotomy on this issue. There is one group that says the amateur is incapable of good data gathering and that anything he does is worthless. Fortunately these types are in the distinct minority. The majority feel that the two major amateur observing organizations, AAVSO and ALPO, are providing an indispensable service to the science. They find the data to be, for the most part, reliable and solid. So, VSOers and LPOers, keep observing! The system really works and works well. I have seen all sorts of data being used: dwarf novae, long period variables, cepheids, nebular variables, and have heard many astronomers say that in many cases the histories of these objects are only maintained by the amateur. Recently, a planetary astronomer told me that in light of the demise of the U.S. space program and NASA the history of the weather on other planets is now completely left to the amateur. If the amateur astronomer does not monitor the planets it will simply be left undone as a void in their observational history. The same is true for the variable stars.

---

## FOR YOUR COMPENDIUM OF ESOTERIC FACTS

Did you know that James Lick, the millionaire whose donation of funds made possible the building of the famous Lick Observatory on Mount Hamilton near San Francisco, originally had a far different project in mind? In fact, Mr. Lick had to be dissuaded from his original design of building a great monument of one sort to building a far more useful monument in the form of a mountaintop observatory. What was his originally intended monument to be? It was to be a pyramid, larger than the Great Pyramid of Cheops of ancient Egypt and located in downtown San Francisco!

---

## REPORTS AND OTHER ITEMS

1. In general the month of August was a big disappointment for observers in the Kingston area because of the unfavourable weather. The last couple of nights of the month of July, right at the time of new moon, however, provided excellent conditions and gave your editor a chance to observer a good many deep sky objects.
2. On page four of the last issue of the newsletter there was a mistake that most of you should have been able to spot. The date for the peak of the Perseid Meteor Shower was given twice, the second time being given as July 12th and not August 12th as it should have been (in the fourth List line of the last paragraph on page 4). Sorry about that!

..3

This very famous shower seemed to me to have a great many very bright members this year. I saw a few very bright ones on the night of August 11th-12th very near the peak and others much earlier--even in July, about two weeks before the peak. Others were seen quite a few days after August 12th.

3. Several other kinds of observations were made recently. Mr. Stokes has reported seeing a faint aurora and I have recently noticed a very large number of sunspots. Now that Saturn and Jupiter are low in the west at sunset, I have found it interesting to direct my attention to Uranus and Neptune. They both could be found relatively easily in good binoculars and using a good star atlas.

I strongly recommend that observers who have not yet done so this summer try to locate both Uranus and Neptune in binoculars or a telescope. At magnitudes 5.9 and 7.7 respectively, they are not difficult, and contrary to what I have read somewhere in the past year, Neptune is not hidden amid hundreds of milky-way stars of similar magnitude. In fact, it is currently in an area between the stars $\xi$ Ophiuchi and 52 Ophiuchi, in an area that has relatively few stars of seventh and eighth magnitude. Uranus has recently been just slightly west of the star 41 Librae. It is moving eastward and will pass very close to that star on September 12th. At 20 hours U.T. on that date the planet and the star will be only 7" apart, thus forming a very interesting pair -- and of very similar magnitudes, since the star is at 5.5 and the planet at 5.9.

4. Any observer who has a very good western horizon is in for a continued planetary show this month (Sept.) if the weather cooperates. At mid-month Mercury may possibly be spotted very close to Jupiter and Saturn--extremely low in the west after sunset--though this month's elongation of Mercury is not a favorable one because of the inclination of the ecliptic in the western evening sky. Further above these three planets are two more--Venus and for those with large 'scopes, Pluto. Further to the southwest are Uranus and Neptune, as mentioned earlier. In all then there are seven planets low in the west or in the south-west.

5. We thank Jeff Fret, our former treasurer, for all the work he has done for our centre over the past few years and wish him the best of luck at the University of Toronto. Our new Treasurer and Librarian will be John Hansen- for the remainder of the year.

5. Our meeting of August 14th was a very special one at which David levy, our vice-president talked about his observing and work in Tucson. It was my privilege to have David as a guest for a couple of days also.

7. On my return from the G.A. I had the opportunity of visiting with Paul and Elwyn Brown in Calgary. Their hospitality was superb and I had a most enjoyable visit. Paul who was on our centre's executive for a number of years while he was in Kingston, continues to be very interested in "the Kingston scene", and we hope that "our Calgary member" soon has a chance to visit Kingston.

8. On Sunday, August 30th, over a dozen people spent a couple of hours exploring the Holleford Meteorite Crater. I was delighted to show off our half-billion-year-old meteorite impact site to seven people from the Syracuse Astronomical Society and several from our own centre. A vote of appreciation should go to Sue Rugelis for bringing along the interested group from Syracuse. We hope they enjoyed the trip as much as we enjoyed showing them the crater.

..4

9. In addition to the evening observations which may be made in September (and referred to above), there are two interesting early morning events for the observer. They both involve Mars. By mid-September, the red planet is very close to the Praesepe or the Beehive cluster of stars. In fact, on the 13th at $9^{hr}$U.T. it is seen within the cluster being only 13.6' south of the centre of the cluster. Be sure to try to observe Mars before sunrise on the morning of September 13th. Even though it is near full moon, Mars is bright at magnitude 1.8.
The second event is a lunar occultation of Mars occuring one hour after mid-night on September 23-24. The event occurs before the rising of these two celestial bodies in the western hemisphere and so it will be visible only in the eastern hemisphere. However, several hours later when they do rise they will be still relatively close together and will make a spectacular pair in the morning sky. The crescent moon will be only about four days before new and will be between the red planet and the bright star, Regulus.

10. The new Sky Atlas 2000.0 by Wil Tirion is a superb atlas. I have had the chance to see it and use it and find it to be excellent. The distortion is minimal and it has many features not found in several other atlases. It is to be highly reconmended for the serious observer.

11. Our regular meetings take place on the following dates:

| | |
|---|---|
| September 11th, | September 25th, |
| October 16th, | October 30th, |
| November 13th, | November 27th (the annual meeting), |
| December 11th. | |

Please note that there has been a change of dates for the two meetings in October.

The place as usual is Ellis Hall, Room 222 and the time is 8:00 p.m. See you there! Please come and bring a friend.

CLEAR SKIES!

GOOD OBSERVING!

Leo Enright