R E G U L U S

THE NEWSLETTER OF THE

ROYAL ASTRONOMICAL SOCIETY OF CANADA - KINGSTON CENTRE

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THE 1980 HALIFAX GENERAL ASSEMBLY - A 'LANDMARK' GATHERING

The 1980 General Assembly of the Royal Astronomical Society of Canada was held in Halifax, Nova Scotia during the last week of June and this event was a 'landmark' occasion for our society. The annual gathering of our 'Clans Astronomical' brought together amateur and professional astronomers from many parts of the land and most of the centres of our society, but it was also the first occasion on which there has been a joint meeting of the R.A.S.C. and C.A.S.C.A. (the Canadian Astronomical Society). If the outcome of this joint venture is any indication, it can be expected that there will be many more of them in the future.

Halifax in late June was an ideal setting for meeting, for sharing, and for discussing a favorite pursuit and for taking part in a well-organized program arranged for us by the Halifax Centre. Only a tremendous amount of planning made possible all of the smoothly-run events of the "1980 G.A.". St. Mary's University and its Astronomy Department were good hosts, providing us with facilities, accomodation, and excellent food.

Many of the events of the assembly made it a memorable occasion. The papers presented were excellent and the two joint paper sessions (shared by the two groups) were a special treat. Invited lectures dealt with "The Canadian Very Long Baseline Array - A Proposal For A New National Astronomy Facility" and "A Candid Glimpse of the Canada-France-Hawaii Telescope By Its Director-To-Be". The first of these gave us some ideas about an array of radio telescopes stretching from one end of Canada to the other which could provide our astronomers with instrumentation unique in the world -- something we hope can be realized in the coming decade. The second was a delightful, fascinating, and insightful presentation by Dr. R1n1 Racine about our country's recently completed telescope in Hawaii. Other papers included Dr. Helen Sawyer Hogg's "Ninety Years of Variable Stars in Globular Clusters", Roy Bishop's "Castle Frederick Observatory: Location and Design", and David Levy's "An Amateur Observing Program in Southern Arizona". In addition, films, slides, shows, and displays gave us a chance to see projects undertaken over the past year, and as one person said, "The displays keep getting better and better every year." The song contest was an hilarious event with some remarkably interesting and clever lyrics presented. (Parenthetically, I can add that you may understand the spirit of the occasion when I mention that the M.C. almost succeeded in having the Kingston Centre nominated for a song contest prize.
- Five points for not having a song; three points for not singing it; total: eight points." Ultimately the effort failed, however.

One of the very important moments of this General Assembly came at the Banquet when the Society's awards were presented. Mr. Mott of Ottawa was the recipient of a Service Award. Then came the long awaited moment -- the awarding of the Chant Medal, highest award of the Society, to David Levy of the Kingston Centre, for his outstanding observing programs. There was a thundering and prolonged ovation. For me it was a special event being the only other member of our centre present and having the chance to record on film David's expression on receiving this very special award.

There are details and parts of the "'80 G.A." that many of us will likely think about as we recall its unique events. There was Dr. Percy's talk entitled, "In Praise Of Smaller Telescopes", the dinner at the yacht club with its seaside scenery, and the tour fo the impressive Bedford Institute of Oceanography with its added bonus being the opportunity to photograph Jacques Cousteau's ship and see the crew that mans the Calypso. There was the chance to see the citadel and the clock tower overlooking Halifax Harbour, for some the chance to ride the schooner, the Bluenose, and even the occasion to visit the university's observatory, the Rev. M. W. Burke-Gaffney Observatory, with its 16" reflector.

From all those who attended, a sincere "Thank you!" should be passed along to the Astronomy Department of St. Mary's University, and especially to the hard-working organizers of the Halifax Centre. We can remember this as "the G.A. of 1980, when David Levy won the Chant Medal."

THE CHANT MEDAL CITATION FOR DAVID H. LEVY

(With his winning of the Chant Medal, David Levy joins a select group. To my knowledge only two other members of the Kingston Centre have won major awards of the R.A.S.C. In 1963, Dr. Douglas was the winner of the Service Award, and in 1979 Warren Morrison was awarded the Ken Chilton Prize.

In recognition of David's truly significant achievement, I wish to reprint here the citation which I prepared for the occasion and which Dr. Percy read when the award was presented at the Soceity Banquet on Saturday, June 28, 1980.)

A long-time member of the R.A.S.C. and currently a Life Member of the Kingston Centre, Mr. David H. Levy has been nominated for the Chant Medal of the Royal Astronomical Society of Canada.

for a considerable time, David has been an avid observer of variable stars and his current rate of observations makes him one of the most remarkable variable star observers anywhere. His regular consistent program of variable star observing has increased to the point where since last August he has been observing and recording variables at the rate of over 2000 per month. This is the continuation of a personal program that has extended over decades. David's observations have been submitted to the A.A.V.S.O., whose director, Janet Mattei, has paid tribute to both the number and the quality of his observations. His variable observing program spanning many years has covered many kinds of variable stars and one of his particular current interests is the very rapidly fluctuating Orion variables which few amateurs have observed as carefully as he has.

David is now known to many astronomers throughout the continent as a regular contributor to Star and Sky magazine. His column on variable stars is sure to encourage many more amateurs to become involved in this special field. In the near future we can look forward to the publication of a book by David on these stars which many people regard as the most interesting of all.

An observer par excellence, David has spent countless hours in comet hunting, nova searching, sunspot observing and recording. He has, as well, passed along to many others his enthusiasm for these programs. He has also observed all the Messier objects, and also all the planets of the solar system in a single night. Few lovers of astronomy can claim such an acquaintance with the night sky. It is little wonder that he very narrowly missed in the discovery of at least one nova.

Even though at present the aim is to mention the massive contribution to observational astronomy which David has made by his variable programs, those who know him can scarcely mention his work without thinking of his telescopes, that collection of "tools of the trade," which he has assembled over the years and which he so much enjoys using. It is a collection of well over 50 working tele-

scopes including many that he made himself and some that are rare antiques. One of his homemade instruments was a prize winner at Stellafane last summer.

Whether he is observing the stars of the endless night sky, accurately recording an observed variation of a tenth of a magnitude, presenting his ideas for a new telescope design, teaching a course in Basic Astronomy, or sharing his enthusiasm with a group of small children, David Levy presents a picture of an astronomer we are proud of and one to whom we are thrilled to award the Chant Medal.

THE JUPITER NON-EFFECT

A recently published magazine article may be of interest to those who have read my article entitled, "What About The "Superconjunction of 1982"?", the article that apeared in this newsletter last November and was subsequently published in the National Newsletter of February, 1980 (Vol. 74 No. 1).

My article of last November talked about a long argument put forward in the 1974 book, The Jupiter Effect, by John Gribbon and Stephen Plageman -- a bizarre argument presuming to make a connection between a superconjunction of the planets (which does not exist in the first place in 1982) and geological activity including earthquakes. Many scientific articles have been written against the statements made in that book and I know of at least two centre newsletters which, subsequent to ours, printed articles on the topic.

The recently published magazine article to which I refer is significant because it is by one of the original authors of the book, The Jupiter Effect. In fact, the article, as I shall point out, is "a kind of retraction", and a "sort of an apology" for the whole book. It is to be found in the June issue of the magazine, Omni, beginning on page 20, and it is entitled Jupiter's Noneffect.

Here are some sentences from the first three paragraphs:

> "Six years ago a book written by two scientists [!] forecast the date of the next major California earthquake. ...I have bad news for the doomsayers. The book has now been proved wrong. The whole basis of the 1982 prediction is gone. I should know. I was coauthor with Dr. Stephen Plagemann, of The Jupiter Effect. ...I want to make it clear that there is no reason now to expect any unusual seismic disturbance in 1982 from the causes given in the book. This does not, of course, rule out the possibility of big earthquakes then. But if you want an astrological prediction, I am afraid you are going to have to ask someone else."

Gribbon then goes on to try to explain how he and Plagemann came to use the arguments they did. A few more sentences which I would like to quote from the latter part of the article will, I think, show why I have called if a "sort of an apology" for the whole book:

> "What has changed my mind? The sun refuses to fit in with our neat extrapolation of the tidal curve into the 1980's or with our assumption that the 1982 planetary alignment would narrow the choice to just one year. In 1979 the sun's activity increased rapidly.... By the end of the 1980's we could be seeing a decline in solar activity.
>
> Plagemann and I definitely got the year wrong. On this evidence there is every prospect that 1982 will be quieter in seismic terms than 1979 and 1980."

As can readily be seen, it appears that Gribbin still holds to some kind of interdependence between solar activity and geoseismic acitivity--this, in spite of studies involving over 20,000 earthquakes and the work of Jean Meeus and others. (See the November newsletter article.)

In conclusion here are several sentences taken from the last four paragraphs of the article, sentences which show that, in spite of what was quoted above, there is a genuine attempt at a retraction of the main ideas of the book:

> "In retrospect some of the accusations that our book was alarmist seem justified. I am older now and, I hope, wiser. I would certainly not present the same material in the same way if the idea had just occurred to me. ...
>
> Don't believe anything you hear about "scientific" forecasts of doom without reading the original. If anyone tries to warn you about the Apocalypse coming in 1982, just tell him that the old theory has long since been disproved."

We may regret that this article by Gribbin in Omni magazine may not reach all those who most avidly accept or promote the theories of the original book, or that the article had appeared sooner, or that, at certain points within it, it may be less than the perfect retraction which we might desire. However, it has been published, and we should know where it can be located, if we need to make use of it--especially if concerned friends approach us on the topic within the coming years.

The Jupiter Effect has become the Jupiter Non-Effect.

FOR YOUR COMPENDIUM OF ESOTERIC FACTS

Do you know which constellation contains the largest number of known variable stars?

It is the constellation Sagittarius which according to the latest supplement of the General Catalogue of Variable Stars contains 3891 variables. Imagine the time that could be spent locating the variables in this one constellation alone!

REPORTS AND OTHER ITEMS

1. One of the more interesting projects in which I have been involved recently was one in which I tried to see on how many evenings I could observe the planet Mercury before and after its elongation on June 14th. I certainly was not the first person in our centre to observe it with my not spotting it until May 26th but I did manage to see it ten times before maximum eastern elongation from the sun and three times after. For places with generally clear skies such as southern Arizona, it would not have been an important total whatever, but considering the changeable weather of southern Ontario in recent weeks, I was fortunate to see the fleeting planet so many times. I might also have seen it on June 12th except for my attendance at our centre's meeting, but it is unlikely that attendance at the G.A. kept me from observing it since by late June, the planet had become considerably fainter and was very close to the sun in the western evening twilight. It would have been extremely difficult or perhaps impossible to detect. For anyone who might be interested, I would suggest keeping a chart such as the one below to record the date and type of observation. Perhaps the precise time the planet was detected and its altitude could also be added (Mercury's next favorable elongation is a western one seen in the morning sky in November.)

OBSERVATION OF MERCURY AT THE MAY-JUNE 1980 ELONGATION

	DATES	HOW OBSERVED			
		Visually	Binoculars	Telescope	Photographed
1	May 26		X		
2	May 27			X	
3	May 28	X		X	
4	May 31	X			
5	June 3	X	X		
6	" 4			X	X
7	" 5	X	X	X	
8	" 8		X	X	
9	" 9	X	X	X	
10	" 11	X	X	X	
11	" 16	X	X	X	X
12	" 17	?	X		
13	" 18	?	X	X	

2. On the evening of July 3rd I saw three bright, slow meteors emanating from the area of Hercules. It is possible they could have been remnants of the Tau Herculids or of the June Draconids. I would like to hear if anyone else saw such a display at that time.

3. The Perseid Meteor Shower in August this year should be a good one to watch. Its peak occurring on August 11th is very close to the time of New Moon. Let's see if we can photograph a Perseid.

4. The second eclipse season of 1980 occurs in July and August and it brings along three eclipses over the next two months. However, of these only one presents even a small possibility of being viewed from Canada. At about mid-day on July 27 the full moon crosses the northern outermost edge of the earth's penumbra. Even if one were in India which would be one country facing toward the moon at that time, the lunar darkening would be much too faint to detect visually and even at maximum the faint outer penumbra barely reaches a quarter of the distance across the lunar disk. On August 10th there is an annular solar eclipse visible as such in the Pacific Ocean, southern Perus, and central Bolivia and as a partial eclipse as far north as southern California and Arizona and the southern tip of Florida. The third is the one that may interest us, weather permitting. On the night of August 25-26th, the Full Moon skims through the southern part of the earth's penumbra. The earth's penumbra will reach almost three-quarters of the distance across the lunar disk from north to south at maximum (73.3% to be exact.). The change in the moon will be slight but some ver perceptive observers may perceive a darkening of the moon's northern regions between

3^{hr}. and 4^{hr}.U.T. on August 26 (11:00 p.m. and 12:00 p.m. E.D.T. on Aug. 25th) since mid eclipse is at 3:30 U.T. on Aug. 26 (11:30 p.m. E.D.T. Aug. 25th) Remember those times and try to look at the moon to see if you are able to detect any change in brightness.

5. Remember the summer meeting dates: July 24th, August 7th, August 21st, September 4th, September 18th. We hope to have a couple of special guests at one of our meetings--possibly that of July 24th and it may be David Levy, our recent Chant Medal winner.

CLEAR SKIES AND GOOD OBSERVING!

Les Enright