

R E G U L U S

THE NEWSLETTER OF THE

ROYAL ASTRONOMICAL SOCIETY OF CANADA - KINGSTON CENTRE

DECEMBER, 1980

ANOTHER 'COMMENT' ON "COSMOS"

In recent months a great deal has been said in popular astronomical literature about Carl Sagan's popular television series, "Cosmos". At a time when only two more of the thirteen programs remain to be aired, we will pass along another comment. Besides the popular literature, the discussions of amateur astronomers also have recently been replete with their impressions of "Cosmos".

What has been discernible all too often in these oral (and occasionally, written) comments is an air of negativism and cynicism. It is frequently the kind of comment that says just below the surface: "Since I or any of my friends have never remotely dreamed of doing anything to stir public interest in the science that intrigues me, I will be as hypercritical as possible about every effort of anyone else within range--especially every effort that appears to be successful." (Note that it is not a matter of criticizing "Cosmos" for its scope and range; certainly none but Sagan has ever attempted anything so ambitious. Even he found he did not have the budget and resources to do all he had originally designed.)

It is very easy to be the armchair quarterback, and to say with hindsight, "I would have done that part of that segment differently." I admit that I find myself occasionally doing the very same thing. It is possible that every viewer of "Cosmos" who has ever presented the far-ranging concepts of astronomy or physics would have a different idea about their effective presentation. What is regrettable is the unmitigated attempt (and I am sure I have seen it) to tear down something that is essentially excellent and highly laudable if understood in terms of what it was intended to be. There is simply no need to look with jaundiced eye on everything possible produced by someone else in one's area of expertise, but there is a definite need to admit, when it occurs, that new ground has been broken and that a vast and, ambitious undertaking has been highly successful in accomplishing what its author wanted to do.

In order to be fair to anything one must look at it in terms of what were the objectives of its author; to judge in any other terms is absurd; to impose one's own objective is something accomplished without an effort to discern the original intent is ludicrous, and unjust. In the case of "Cosmos", the subtitle "A Personal Journey", should give everyone, scientist and layman, the idea that the program is not intended as a scientific treatise and it should not be judged as such. Neither is it a summary of all the theories of astronomy, or all its laws, or all its speculation. (What it is, because of its diversity, may essentially be more difficult to state, but one way of saying it would be to define "Cosmos" as one person's statements, ideas, and speculations presented, sometimes earnestly, sometimes casually, but almost always in a fascinating, or captivating, or even romantic way.)

Using the book "Cosmos" as a guide to the television programs, I found to be a very profitable way to gain an insight into the objectives of the program and I wish that more people had chosen this method. Certain sentences from the introduction to the book are very revealing and should be compulsory reading for all those who become self-appointed critics of an endeavour they may not understand. Here they are:

"He agreed to produce a thirteen-part television series oriented toward astronomy but with a very broad human perspective. It was to be aimed at popular audiences, to be visually and musically stunning, and to engage the heart as well as the mind. ...The "Cosmos" television series and this book represent a hopeful experiment in communicating some of the ideas, methods, and joys of science.

The book and the television series ~~evolved~~ ^{evolved} together. In some sense each is based on the other. But books and television series ...admit differing approaches. ...The book goes more deeply into many topics than does the television series. There are topics discussed in the book which are not treated in the television series and vice versa."¹

As can be seen, the book can be ~~seen to be~~ a great aid to understanding the themes, aims, and objectives of "Cosmos" -- things that may not be appreciated fully, at least by everyone, it seems, who sees the television program.

If one wished to quibble over the book, he could do so by pointing to certain illustrations or captions (such as the one on page 233 which lists the date of the witnessing of the supernova explosion of the Crab Nebula as "the year 1504 and not 1054) but if one is willing to accept the clearly stated objectives of the author, there is little with which one should argue.

For years there have been people who have thought it necessary to sneer at all efforts at what they term 'popularizing'. Yet in the area of widespread public education (which correctly understood is what the honest "popularizer" is trying to do) they have done very little. Surely "Cosmos" by Carl Sagan with a current television audience of over 140,000,000 people is successful enough to make us all reconsider what popularizing and wide public education are all about.

A real understanding of the aims of "Cosmos" is most important and it could probably lead to a feeling that in this endeavour by Sagan and his associates there is a presentation that is exciting, successful and even is an inspiration to others.

FOR YOUR COMPENDIUM OF ESOTERIC FACTS

Did you know that this month of December should bring reminders of several of the great names in astronomy and science in general. The birthdays of Brahe, Newton and Kepler are all in December. The world's greatest observer in the long period before the telescope, Tycho Brahe was born on the 14th in 1546. Newton was born on the 25th in 1642, and Kepler was born on the 27th in 1571.

ANOTHER REPORT FROM OUR CENTRE'S TUSCON BRANCH

(Editor's Note : I am very pleased that David Levy has sent along the following report from Tuscon.)

I was delighted when Leo called me last Thursday with the news that I had been elected Vice-President of the Kingston Centre. The strange thing is that until last week I never served on any executive of any RASC Centre, although at one time I was a lowly member without portfolio of the Montreal Centre's Board of Directors. So, I am deeply honoured and touched by your act of kindness to one of your members who lives so far away.

What should be the role of a Vice-President who lives so far from the Locus of his group? Normally his duty is to preside over meetings in the absence of the President but in my case this would be a far-fetched expectation. Instead, I want to act as a link between the Kingston based members and what has been commonly called the "astronomical capital of the world". So to this end, I shall try to provide Leo--himself, an amateur observer of the first rank--with regular reports for Regulus. These reports will contain some ideas and thoughts that might be relevant to those of us interested in developing our familiarity with amateur astronomy. I hope to be helpful in other ways too. Some of these ways might be more far-fetched than others. I know that airfare is expensive, but perhaps a Centre meeting or two could, sometime in the coming years, be held here! With at least two members permanently residing in Tucson, we almost have a quorum!

¹Carl Sagan: Cosmos (Random House, New York, 1980), Introduction p. xiii.

Just one final thought: never feel inferior due to our status as amateurs. When he discovered Uranus 200 years ago, William Herchel, with no formal training, was an amateur astronomer. So was Barnard during his early comet discovery years. So was Tombaugh. Not to mention Brooks, Rosse, and Peltier. But perhaps our most exciting compliment might have come about six weeks ago when Bart Bok concluded a lecture on star formation in the Milky Way with this comment: "I'm happy to be retired. I enjoy getting up at 6 a.m. to watch the planets in the morning sky. It's good, once again, to be an amateur."

A REPORT FROM MR. GUS JOHNSON

As mentioned in the last newsletter we are extremely proud that Mr. Gus Johnson, discoverer of the supernova in M100, is now a member of our centre. He has sent me a number of letters and some very fine photographs - both astrophotos and pictures of his observing site and telescopes of the local observatory. Here is an excerpt from one of his letters last month.

R.D. 2. Box 67
Swanton, MD 21561
November 6, 1980

Dear Mr. Enright:

Thank you for sending me the copies of your newsletter "Regulus". If convenient, I would like to receive them monthly and be affiliated with your centre. I also received a letter from Angelika on Oct. 9th. I had hopes that I might get up to a meeting ere it got cold, but this did not come to pass.

I have not been to Canada for about six years. I used to have relatives in the London area. The Muskoka area especially appeals to me with its hills and lakes, reminding me of western Maryland.

As a member of the AAVSO I attended the 1979 autumn meeting in Cambridge, Massachusetts and met your former president and other RASC members, Doug Welch, Rolf Meier and Warren Morrison. Warren and I both received our awards at that meeting. I was not aware that he was of the Kingston Centre.

My first observations for the AAVSO started in December 1973 and I have made over 2,000 since. I am not a fast observer and seem to average about 13-15 minutes apiece. Slow star-hopping is usually necessary when I go to each variable. My most-watched variable is SS Cygni (up in late October) and is one of the very few that I can go to almost immediately. I think I observed it the night Warren found his nova. I wonder if I had had to star-hop I would have noticed the new star. I am glad for him, though for being so aware of the stars.

I actually enjoy resolving double stars and viewing galaxies more than "variabing". As I may have mentioned in my first letter to Angelika, my area occasionally has very clear nights but is not blessed with stable seeing conditions. There is almost no hope of trying for Dawe's limit with my larger telescopes, but it is fun resolving difficult doubles with less aperture and/or less magnification than usually recommended, like getting Delta Cygni with 98x on my 6 in. reflector. But I happened to be out on one very steady night and with only 145x got a clear elongation of the companion of Gamma Andromedae, my best resolution so far. Sirius still eludes me; probably a dawn sky of autumn often my best chance. I like comparing double star results with others. In the area of galaxies, I have seen several of the distant (about 1/3 billion L.Y.) Coma Cluster and wrote up an article about it for "Sky and Telescope", about which I have heard nothing for months, which suggests that either it met their standard of quality or was not even fit to return. I have also seen two or three of the Stephen's Quintet with my 8 inch.

REPORTS AND OTHER ITEMS

1. PLEASE NOTE: Our meeting dates have changed. It was decided on Nov. 27 that our meeting dates would be the 2nd and 4th FRIDAY of each month. That means for

January it will be January 9th and January 23rd. For February it will be the 13th and the 27th. For March it will be also the 13th and the 27th. It is to be hoped that this major change will encourage more people from out-of-town to attend and will allow longer and more frequent observing sessions after the meetings.

The time and the place remain the same--8:00 p.m. and Room 222 In Ellis Hall on University Avenue, Kingston.

2. Your 1981 Executive as elected at the annual meeting is as follows:

President:	Angelika Kahrkling
Vice President:	David Levy
Secretary:	James Knox
Treasurer:	Jeff Fret
National Council Rep:	Leo Enright
Newsletter Editor:	Leo Enright

3. It was a thrill to hear Dr. Covington's talk on Radio Astronomy and his involvement in that field over many years. It is not often that we have as interesting or wonderful a talk as we had on November ~~27th~~ **13th**.
4. Andrew Ager stimulated a very interesting discussion on NASA at our December 11th meeting. There were many aspects of the space program that were dealt with and most or all of those present participated very well in an excellent exchange of ideas.
5. Once in a long while in the generally cloudy nights of December, there is an excellent occasion for observing. Such was the evening of December 4th. Both Leslie Roberts and I had a chance to observe that night. We both had the thrill of seeing Comet Stephan-Oterma very close to the Crab Nebula. In fact they were in the same telescopic field of view. This comet is well worth observing as it moves north through Taurus.
6. A few things are worth making special efforts to observe in the coming month:
- (1) Besides the meteor showers mentioned last month try to observe some members of the Quadrantid Shower of January 3rd.
 - (2) The asteroid Ceres is near opposition in January. The precise date of opposition is the 10th and magnitude is about 6.6. Look for it in Gemini south of Castor.
 - (3) Venus on Jan. 11th is extremely close to the centre of M20, the Trifid Nebula.
 - (4) There is a penumbral eclipse of the moon on January 20th (7:24 U.T.). Remember our Interesting observations of the one last August. (David?)

CLEAR SKIES AND GOOD OBSERVING!

HAPPY HOLIDAYS!



7. At our meeting of November 27, we were very proud to be able to present Leo Enright with the Membership Certificate, in appreciation of all he has done and continues to do for our Centre.
"Congratulations, Leo! You really deserve it!"

Here are two more items:

1) A letter arrived from Jim Gall (Gall Publications, Toronto) with information about another eclipse expedition. Here it is:

December 11, 1980

Dear Eclipse Chaser,

Jack Newton, astrophotographer and president of the Victoria Centre of the Royal Astronomical Society of Canada, and myself have planned a trip to Siberia.

We have kept our costs down to the absolute minimum for this excursion to the other side of the globe. Fares have not been confirmed, but the cost will be a little over \$2000 Canadian.

Please mention our tour in your newsletter and pass out the extra brochure or have it posted where others might see it.

We will send out a free copy of our Astronomical Directory to anyone who will check our listings and send in updated information.

If you have any questions concerning the tour, please give me a call direct at home (416) 469-4171.

Call Harmony Travel at (416) 537-2165 for details about travel from your city.

I have some brochures and registration forms which Jim sent along. Let me know if you would like one and I shall send one to you.

2) A Change of Name Notice:

Former name: Angelika Kahrkling

New name: Angelika Hackett

Reason for change: Marriage to Robert Hackett

Date effective: Thursday, December 18, 1980

*Season's Greetings
and clear skies!*

Angelika.