

August  
août  
1994

Volume 4  
Number 4



The Royal  
Astronomical Society  
of Canada

# BULLETIN

La Société  
Royale d'Astronomie  
du Canada

Supplement to the Journal of the Royal Astronomical Society of Canada

## Reflections: Learning by Sketching

Randy Pakan  
Edmonton Centre

The Moon is almost always the first object that beginners look at, but how many look at it without really seeing it? Accurate observing or "seeing" takes practice. You have to really concentrate on what you are looking at.

Most of us drive to work taking the same route every day. After years of commuting you think that you know the route in great detail, but try taking the same route by bicycle or better yet try walking it—you will be amazed at the things that you will notice that you would never have seen from your car. As another example, have you ever driven in a car rally? I have lived in Edmonton all my life and when I drove in a city rally last year I could not believe the things that I have driven by for years but never really noticed until I was forced to really concentrate on the route.

Sketching what you observe is quite similar to driving in a rally. It forces you to really concentrate on what you are looking at. You will find yourself spending twenty minutes on an object that you may normally have spent two minutes on. I call it "stopping to sketch the roses."

Now getting back to the Moon—it is a great place to begin sketching, mainly because it is bright and loaded with detail. Start with a comfortable power, say 70x. If you are using a driven scope, use 150x. Begin your sketch with the large obvious features. What phase or "day" is the Moon in? Outline the terminator lightly (you can go back later and add as much detail to it as

you like). Now draw in the largest lava plains and large craters like Tycho. Not sure which craters are which? That is OK, just draw them in and look them up later when you compare your drawing to a photo or map. As you continue adding more and more detail you will start noticing things such as mountains in the bottoms of craters and intricate rilles embedded in the surface. Pay close attention to shadows—the Moon changes hour by hour as the shadows constantly move in relation to the Sun.

You will be surprised at how difficult it is to accurately sketch details that appear so simple in the eyepiece. Keep hopping back and forth from paper to eyepiece; you may have to draw and erase something three or four times before you get it the way you see it. Sketching will go very slowly at first, but with more and more practice you will find that not only does your sketching improve but your observing skills will improve as well—they will both grow proportionately to the number of hours that you spend at the eyepiece.

If you prefer to begin by sketching deep-sky objects, the technique is the same—draw the brightest stars first and once you are happy with the position of them, add the faint stars and finally the main object. When cartographers draw a star atlas they "bin" the stars. That is, they use several sizes of dots to represent ranges of magnitude. If you try this technique it adds real dimension to your drawing even if you only use three bins. Finally, determine which direction is south and add this to your sketch along with some type of scale, either a scale bar, or how many degrees across the field is, or if nothing else the magnification so that the scale can be determined later.

Over the years these sketches will become a very valuable record of what you have observed and how your skills have improved with experience. I have done approximately 600 sketches and on cloudy nights it is great to nestle in to a comfortable chair, revisit all my favourite objects via my sketch books, and plan my next night under the stars. ☼

## Armchair Astronomer's Heaven

Jim Low  
Toronto Centre

Another General Assembly has come and gone. As an armchair astronomer I find G.A.s an ideal time, as I can listen and learn about the latest activities in astronomy from the others who do all the work. However, a General Assembly is much more than that. I attended the first G.A. in 1960 when in Montreal. I missed only one between then and 1975 when family responsibilities prevented me from attending more than one every few years.

I particularly enjoy travelling to distant G.A.s. In fact, a G.A. becomes an excuse to see the country and meet people. When I explained to friends that I was driving to St. John's to attend the G.A., they expressed amazement. "Why don't you fly? It's faster and cheaper that way." I cannot argue with that. My two week holiday for the trip was barely enough time. Others could fly in-and-out for the weekend, but they missed the best part of the G.A.—exploring another part of the country.

(continued on page 8)



## BULLETIN

is a publication of the Royal Astronomical Society of Canada and is distributed together with the society's *Journal*. It contains articles on current activities of the RASC and its centres across Canada, as well as articles from members and non-members which are of general interest to members of the society. Inquiries about the society should be directed to its national office at 136 Dupont Street, Toronto, Ontario, Canada M5R 1V2 (416) 924-7973.

**Cover Picture:** A view from the Queen's Bastion, looking across the narrows at the mouth of St. John's harbour, which can be seen to the right.

**Editor:** Patrick M. Kelly, RR#2 Falmouth, Nova Scotia, Canada B0P 1L0  
E-mail Address: pkelly@tuns.ca  
FAX: (902) 423-6672  
Phone: (902) 420-7604(w), (902) 798-3329(h)

**Editorial Staff:** Diane Brooks  
**Rédacteur pour les centres français:**  
Marc Gélinas, 11 Pierre-Ricard, N-D-Ile-Perrot, Québec, Canada J7V 8M6  
**Printing:** University of Toronto Press

Printed on paper containing 50% pre-consumer recycled paper and at least 5% post-consumer de-inked fibre.

**October issue deadline is September 15th.**

## Letters to the Editor

### Annual or annular?

No wonder Michael Watson is complaining about Nova Scotia receiving more than its fair share of eclipses of late. Halifax must be the only place in the solar system with an annual eclipse! For years my wife Rosemary and I have been discussing the possibility of moving to the great skies of the Okanagan Valley in B.C. when I retire from teaching around the turn of the millennium. However, after seeing the crowds at St. Mary's University for this yearly event in the June **BULLETIN**, we are starting to think that Halifax is a place to strongly consider as well!

Since we are unable to travel to this wondrous event each May because of my classes, we are definitely interested in the possibility of an eclipse cruise from Halifax for the August 11th, 1999 eclipse. Just think...two eclipses in three months that year!

*Rick Kelsch*

RR#3 Schomberg, Ontario L0G 1T0

*[Alas! This is what happens when an editor gets the final proof copy moments before leaving for a G.A. and finds the error when he is in the middle of Gros Morne National Park and his computer is in Halifax. I had hoped that no one would spot it...—PMK]*

### Little More than Orange Juice

I am writing in regard to Chris Brown's *Reflections: Can We Afford Space?* in the June **BULLETIN**. I wish to take issue with a few of the responses to that question. Mr. Brown states that we have only to look at "our standard of living to see that the benefits far outweigh the costs" of space exploration. This is a phrase that is too often used and lacks very much real substance. We often here that there are technological spin-offs from space exploration, but besides Tang, Velcro and pens that can write upside-down, I am not aware of that many

others. I also find it hard to believe that anyone's standard of living outside of the industrialized world has greatly improved through advances in space exploration or any modern technology. While we (and I do not exclude myself) may enjoy using our microwaves, VCR's and computers, and lest we forget, our telescopes, the majority of the people on this planet scrape by in envy (or in spite) of those in the rich, industrialized world.

He also likens the modern exploration of space to the European discovery and conquest of the New World. I believe there is real irony in this comparison as it was probably the colonialism of western Europe that has led to the great disparity between the fortunes of people in the western world and the poverty in the rest. Shall we, in our exploration of space, continue to be so blind in our optimism?

In all fairness, I will say that I truly appreciate all the wonderful images provided to us by the Hubble Space Telescope and the planetary probes, Viking, Voyager and Magellan to name a few. I also cannot help but marvel that we have put men on the Moon, and shuttle to and from Earth orbit on a regular basis. I am thankful that I was born here, in one of the richest countries in the world where I can afford the luxury of a telescope and go to libraries that have current material on astronomy. However, how ironic it is that in the same issue there was a letter from a young man in Slovenia who did not have access to those same images of the planets and heavens at which we marvel.

I do not really know if we can afford space exploration right now, but I do not think we are going to stop at any time in the near future. Therefore, I would challenge the members of the RASC to do their best to make the benefits of that exploration as cost worthy as possible by sharing with those on this planet who did not have the fortunate circumstance of being born in Canada or any other part of the industrialized world. I also hope that we do not deceive our-

selves into believing that exploration and research always lead to the greater benefit of society.

*Stephen Biggs*

524 Douglas Avenue, Toronto, Ontario M5M 1H5 ☪

## Event Horizon

### October 29th (10h00)

National Council Meeting  
40 King Street West, Suite 6200  
Toronto, Ontario

### March 24-27, 1995

Violau, Bavaria, Germany  
Meeting of European (and International) Planetary and Cometary Observers (MEPCO '95)  
Contact: Wolfgang Meyer  
Martinstr. 1  
D-12167 Berlin  
Germany ☪

## Annual Report Update

### Ottawa

Effective immediately, the mailing address of the Ottawa Centre is:

P.O. Box 33012  
1974 Baseline Road  
Nepean, Ontario  
K2C 0E0

### Saskatoon

Effective immediately, the mailing address of the Saskatoon Centre is:

P.O. Box 317  
R.P.O. University  
Saskatoon, Saskatchewan  
S7N 4J8

In addition, the centre may be reached by electronic mail at either:

Huziak@SEDSsystems.ca (Richard Huziak)  
GE.Sarty@usask.ca (Gordon Sarty) ☪

## National Council Update

Walter MacDonald  
Kingston Centre

Two national council meetings and the annual meeting were held in St. John's, Newfoundland over the Canada Day weekend. As the numerous (and time consuming) controversies that dominated previous council meetings continue to fade away into the past, council meetings have become shorter and more productive. Thus it would appear that a two-day council meeting will not be a necessity in the foreseeable future! Anyway, here are the highlights from the St. John's meetings.

### Elections

- Peter Ceravolo (Ottawa) was elected as second vice-president.
- Doug George (Ottawa) was elected as first vice-president.
- Doug Hube (Edmonton) succeeded Peter Broughton (Toronto) by acclamation.

### Appointments

- Peter Jedicke (London Centre) was appointed by council for a three-year term as recorder. Peter replaces Mary Anne Harrington (Toronto), who has just completed a similar term.
- Walter MacDonald (Kingston) replaced Garry Woodcock (Hamilton) as librarian, starting a three-year term.
- Rajiv Gupta (Vancouver) was appointed as treasurer for a one-year term, filling the vacancy left by the resignation of Terry Hicks (Kingston).

### Committees

- The centennial, membership survey and *Beginner's Observing Guide* marketing committees were disbanded.
- The solar eclipse 1994 committee will be disbanded in October (after its final report).
- After some debate, the long range planning committee was **not** disbanded.
- Two new committees were formed: "Publications Revitalization" and "Elections Procedures".

### Publications

- Roy Bishop (Halifax) reported that Observer's Handbook sales are down by about 10% this year, so there will be a decrease in next year's press run. 1995 pricing for the handbook will be the same as for this year's edition. An ad may be run in *Astronomy* magazine again, if a sufficiently "sexy" ad can be designed. It was suggested that Franklin Loehde could be of assistance in this regard.

- Rajiv Gupta reported that 1 050 of the 1 400 1994 *RASC Observer's Calendars* had been sold and that a profit had been realized on the project. A production run of 1 000 calendars was approved for 1995.
- A discussion paper, "A New Publication of the Royal Astronomical Society of Canada", was tabled by Dave Lane (Halifax). It is reproduced elsewhere in this issue.
- Bob King (Calgary) proposed the establishment of a "110 Finest NGC Objects Certificate" to be awarded to those who had observed all 110 of the finest NGC objects as listed in the Observer's Handbook. This was approved.

The next national council meeting will be in Toronto on October 29th. ☼

## "Parfocalizing" Your Eyepieces

Robert Roy  
Hamilton Amateur Astronomers  
reprinted from *Event Horizons*

After a thirty year absence, I recently rediscovered amateur astronomy. I also made a giant technological leap from a home-made 6" Newtonian, including home-made tube and mount, to a brand-new computerized 8" SCT.

I had several eyepieces, none of which focused in the same place. I have also rediscovered a law of nature which states: When switching eyepieces, you always start adjusting the focus in the wrong direction! During one evening's viewing session, the solution to this problem came to me. You may find it useful too. Each eyepiece is harmlessly modified with a sleeve of plastic placed around the barrel.

The first step is to find out which eyepieces need modifying. The whole process should be carried out by focusing on a distant, daytime, terrestrial object.

1. Place the first eyepiece in the holder, seating it down as far as it will normally go and focus on the chosen object.

2. Place the second eyepiece in the holder and, without moving the focus knob, slowly pull the eyepiece back, checking to see if it will focus. If it can focus further out than the first one, simply set it aside for now. If it will not focus, leave it fully seated in the holder and refocus on your object.

3. Repeat this procedure with all of your remaining eyepieces. You will eventually have one eyepiece left in the holder, focusing closer to the primary optics of your telescope than any of the others. It will not need any modifications.

The second step is to determine how much each of the other eyepieces has to be positioned out from the holder in order to be in focus.

1. With your "closest focusing eyepiece" in place, focus and remove the eyepiece without changing the focus again.

2. Taking each of the other eyepieces in turn, carefully insert them and slowly slide them in the holder until you get a sharp focus. If you can now lock them in this position, the next operation will be easier.

3. Measure the distance that the seat of the eyepiece is out from the lip of the holder. If you have several to do, a little chart at the scope will help to keep the numbers straight. Also, it may be useful to replace the "closest focusing eyepiece" between each of the others to make sure that the focuser's position has not been altered.

You now have to make a spacer for each eyepiece to hold it the measured distance out from the lip of the holder. I found that the protective caps that cover the barrel end are perfect. A squarely sawed-off dowel or broomstick, held in a vice, helps in both marking and cutting the spacers.

A compass (of the type used for drawing circles) is used for marking a line at the correct distance all around the edge of the cap. Hold the cap over the end of the dowel. Stick the sharp arm of the compass in the dowel and set it so that the lead will mark the correct distance from the "open" end of the cap. Carefully rotate the cap until it is marked all around its perimeter.

Use the same dowel to support the cap as you cut off the spacer with a sharp knife. Slip the spacer over the barrel of the eyepiece. If it is not snug enough, a small piece of margarine tub plastic slipped underneath should hold it tight.

A word of caution. Make sure that each modified eyepiece has enough original barrel left exposed to secure it safely in the holder without falling out. Spend a short time making these spacers for your eyepieces and enjoy more time viewing and less time focusing. ☼

## Items of Interest

### Light-hating Bears

[Reproduced from the July 1994 *International Dark-Sky Association newsletter*.]

A quote from *Airways* magazine, May/June issue: "Apparently fascinated by the light given off, polar bears this past winter went on the rampage at the remote Barter Island Airport, which supports an Arctic radar site on the Beaufort Sea. Smashing red and green threshold runway lights, as well as blue taxi ramp and white runway lights, bear tracks indicated the animals moved from one light to another, bashing each one in turn." There is no truth to the rumour that they were IDA members. ☼

## Le mauvais oeil de l'éclipse du 10 mai.

Marc A. Gélinas

Les éclipses de Soleil ont longtemps eu la réputation d'annoncer des malheurs, ou comme on dit parfois, "de jeter le mauvais oeil". L'éclipse annulaire du 10 mai 1994 s'est avérée funeste pour au moins 14 Québécois dont la plupart avait moins de 18 ans. Ces derniers ont eu la vue détériorée à divers degrés en regardant directement le Soleil lors de l'éclipse. Pour la plupart, ce fut un éblouissement qui a duré de 24h à 48h. Pour quelques-uns le dommage durera toute leur vie.

Pourtant, avant l'éclipse les médias ont bien publicisé les dangers d'observer le soleil à l'oeil nu. Le Planétarium de Montréal s'est associé à une chaîne de magasin pour promouvoir un kit d'observation comprenant des lunettes sécuritaires mais ce ne fut pas suffisant. Bien sur, certaines personnes ont été prudentes, on pourrait citer le cas d'un vieux couple qui a préféré fermer tous les stores et rester chez lui durant l'éclipse, au cas où... Par ailleurs, les jeunes ont été souvent plus téméraires. Le cas le plus pathétique est celui d'une jeune fille de 16 ans qui a été déclaré légalement aveugle après avoir observé l'éclipse pendant 20 minutes. "Au début cela faisait mal aux yeux, mais après un certain temps c'était très beau." a-t-elle déclaré à la télévision. Elle a avoué ne pas avoir cru ses camarades qui la mettaient en garde contre les dangers de regarder le soleil. Heureusement, un traitement rapide avec stéroïdes et son jeune âge ont fait des miracles. L'Association des Ophtalmologistes du Québec révélait en conférence de presse le 29 juin, que 90% de sa capacité visuelle était rétabli et que son cas ferait les annales médicales comme exemple de traitement à succès.

Ailleurs, Un jeune garçon de 14 ans, qui savait que c'était dangereux d'observer le soleil, a juste regardé d'un oeil à travers un oeillet de sa casquette. Résultat: il a une brûlure permanente qui crée un trou dans son champ de vision. Cela l'embête un peu parce qu'il ne voit pas constamment la balle quand il joue au baseball.

On peut se réjouir que de nombreux nuages soient venues empêcher l'éclipse d'être observée dans plus de région ce jour là. Dans la vallée du St-Laurent toutefois, on a pu assister à un spectacle météorologie. Ce matin du 10 mai, les nuages de type cumulus étaient en formation sous l'effet du réchauffement diurne. Sur les photos satellitaires et les images radars du Centre Météorologique du Québec à Mon-

## RASCals

Meet Ted Bronson, president of the Thunder Bay Centre. He is seen here beside his home computer and behind the portable power supply which drives his scope and auxiliary equipment when he is observing away from home. Ted's work with the Ontario Ministry of the Environment takes him to many remote locations in the northern part of the province and he never misses an opportunity to get in some observing. As Ted says, "There's not much else to do overnight in places like Red Lake."

His neat, little, wheeled cart houses a 12 volt, 24 amp per hour gel cell and has a convenient drop-leaf desk with a foldable lamp. The battery runs the telescope



drive, operates the red reading lamp and supplies power for both the anti-dew heater system and the illuminated reticles for the guiding and spotting scopes. During the day, the built-in recharging circuit replenishes the battery for another observing session. Normally he gets five nights observing between recharges.

Ted has been interested in astronomy for about thirty years and enjoys sharing his enthusiasm with others. He often gives slide talks to community and school groups. One recent presentation at Sleeping Giant Provincial Park was enjoyed by about 250 Scouts and Guides.

[Editor's Note: This is the first article in a new

feature which will highlight the activities of members from around the country. Submissions, preferably accompanied by a photograph, are welcome.]

tréal, le phénomène était net. Puis, à compter de 11h et au fur et à mesure que l'éclipse progressait, on a vu les nuages se dissiper et les échos radars des averse diminuer. C'est ainsi qu'entre 13h et 14h, au maximum de l'éclipse, le ciel était bien dégagé. C'était tout de même étrange de voir le soleil dispenser une lumière faible et jaunâtre rendant le ciel du midi plus verdâtre que bleu. Après 14h, les nuages se sont reformés et il y a eu des averse en fin de journée. Quant à la température, elle a connu un petit creux durant l'éclipse au lieu de continuer à monter comme à l'habitude.

## Grant Money Available

The Fund for Astrophysical Research invites applications for the ninth annual award of small research grants to assist in the support of current research endeavors. Grants are used primarily for the acquisition of astronomical equipment, computer time and computer hardware or software. They normally range from \$500 to \$2,500. For more information contact:

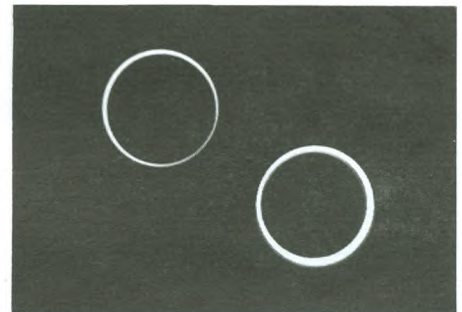
Wolcott B. Dunham, Jr.

Fund for Astrophysical Research  
875 Third Avenue, 23rd Floor  
New York, New York 10022  
(212) 909-6595

Application for 1995 grants must be received by October 3rd, 1994

## Murphy's Annular Eclipse

Halifax Centre member Clint Shannon took these images of the recent "double" annular eclipse using his Meade 8" CAT. These photos are not double exposures, putting him at a loss to explain them. It may be due to not having the solar filter perpendicular to the light path, however, several other images on the roll came out normally.



## How I Discovered Astronomy

Bert Huneault  
Windsor Centre

As a child I did not have an opportunity to join the Boy Scouts, so I did not learn to recognize stars and constellations at an early age. Neither my parents nor my teachers clued me in to the wonders of astronomy. So how did I become interested in this fascinating hobby?

To answer this, let us move back the clock to the summer of 1944 when I was a teenager having just finished my first year in high school. It was wartime and Canadian, British and American armies had just invaded Normandy.

Having witnessed for years the daily ritual of countless military training flights above my home town (Montreal), as well as over the Ottawa Valley countryside where I used to spend my summers, I became keenly interested in airplanes. One day, while reading an aviation magazine, I noticed an ad by the Macmillan Company of New York announcing the availability of an aeronautical chart of southeast England and northwest Europe—perfect for following the invasion and progress of the Allied armies on the continent. I did not have any money back then, but since the map was free I did not hesitate and sent away for it pronto.

When the anxiously awaited chart arrived in the mail, I noticed an advertisement on the back of it: the Macmillan Company had just published a new book titled *Aircraft Navigation* which cost \$2.00—to me, an astronomical sum! Somehow, I managed to scrape up the two bucks and ordered the textbook.

The book turned out to be most interesting. In addition to covering basic aircraft navigation concepts, it introduced me to the fascinating science of meteorology. It also dealt with star identification and this provided my introduction to astronomy. I studied the book from cover to cover and, in the process, became acquainted with the major constellations used in celestial navigation. To this day, one special moment stands out clearly in my mind. On one of the pages there was a chart showing Polaris and the Big Dipper, and I decided to use it as a guide to help me find this constellation in the night sky. So, I stepped outside on a clear, dark night and scanned the northern half of the sky. I looked and looked, but to my disappointment I could not identify the Big Dipper.

The star chart was quite small, the seven stars of the Big Dipper covering an area hardly larger than three centimetres across. Thus, I

was expecting to see a small group of stars in the sky. However, I persisted in my search for Ursa Major and, all of a sudden, I found it. It was a **huge** constellation covering a great big chunk of the sky. Was I ever pleasantly surprised! I soon learned to recognize other constellations and some of the major stars used by navigators. That was my first step in discovering astronomy.

The second step resulted from a letter I wrote. The chapter on star identification had only served to whet my appetite. Unfortunately, the book did not explain **how** flyers used these stars to navigate and I wanted to know! Curiosity was killing me, so I wrote to the Macmillan Company and asked them to explain just how flyers navigated by the stars. In retrospect, I guess it was a pretty tall order, but I did not know any better then.

Enter a new player into my budding love affair with astronomy; a wonderful man by the name of Charles L. Skelley. As an editor at Macmillan, he answered my letter. He regretted that he himself had no knowledge of the subject but he had gone through the trouble of contacting an officer in the U.S. Army Air Corps and had asked him to answer my query. Mr. Skelley had enclosed the officer's three-page-long succinct explanation and informed me that if I wanted further information on the subject, a brand new comprehensive textbook titled *An Introduction to Navigation and Nautical Astronomy* was available from Macmillan for \$8.75.

The U.S. airman's technical explanation only served to sharpen my interest in celestial navigation and made me wish I could purchase that new book. However, it was out of the question as I did not have that kind of money. I was quite impressed by the fact that Mr. Skelley had shown so much interest in my request, and I wrote him a thank you letter in which I explained that I would dearly love to get my hands on that new book, but pointed out that unfortunately, as a student, I did not have \$8.75 to spare.

You can imagine my surprise when, a few days later, Mr. Skelley sent me a complimentary copy of the book. Wow... was I ever pleased! The book really got into the nitty-gritty of celestial navigation, the measure of time, Mercator charts, the concept of latitude and longitude, the use of a sextant for determining position at sea and all sorts of mathematics and astronomy. It was fascinating stuff and as I studied the book's pages, I fell more and more in love with astronomy and navigation. However, I was already hooked on meteorology and had decided that after high school I would go to university to study math and physics and specialize in weather forecasting.

Throughout my school years, I kept in touch with Mr. Skelley. He encouraged me towards a

career in meteorology and kindly sent me books on weather. However, by the time I reached Grade 12, I realized that family finances would not allow me to go to college. Upon learning this, Mr. Skelley astounded me by trying to arrange a university scholarship for me through his friends. My parents and I were flabbergasted by this man's kindness and generosity—after all he was in a different country and I only knew him by correspondence! Unfortunately, it turned out that his friends had not yet returned from military service and he was not able to access the funds for a scholarship.

Basic electronics, which I had studied in Grade 12 physics had begun to fascinate me, and with my interest in navigation, the lure of the high seas and the thought of becoming a radio officer in the merchant marine presented quite an appeal. So, after high school, I enrolled in a marine radio course. Mr. Skelley then started sending me books on electronics—there was no end to this man's kindness!

After obtaining my licence from the federal government, I became a commercial radio operator, but not upon a cargo ship like I had envisioned. Instead, I ended up working for an airline up in the Labrador bush country! I was stationed hundreds of miles away from the nearest town, so you can imagine how dark the skies were up there on clear nights! I thus became even more interested in astronomy and during the two years I spent in the auroral zone of the that sub-arctic region we were frequently treated to fantastic displays of northern lights and often had to contend with geomagnetic storms which adversely affected shortwave radio communications. This kindled a special interest in solar astronomy, the ionosphere, sunspots, etc., so that by the time I returned to civilization I was ripe for further involvement in astronomy.

After studying radio and television technology in Toronto, I came to Windsor late in 1950 and began a technical career in electronics. I discovered the Windsor Centre of the RASC and soon joined the society. This was the third step in my discovery of astronomy. The monthly meetings greatly enriched my knowledge of astronomy and deepened my interest in cosmology. As well, observing sessions provided opportunities to actually use telescope—I was hooked! The rest is history, and as I contemplate the fifty years that have elapsed since that fateful day in 1944 when I ordered the aeronautical chart, the following though crosses my mind: little did I realize then that it would turn out to be a milestone which led to an interesting forty-year career in electronics and provided me

(continued on page 7)

# A New Publication for the RASC

David J. Lane  
Halifax Centre  
Chair, Publication Revitalization Committee

## Forward

At the St. John's General Assembly in July, a national "publication revitalization committee" was formed by the national council with the following duties:

- Develop a proposal and a professionally produced mock-up for a new national publication which will be proposed to replace the current *Journal* and **BULLETIN**;
- seek input from members of the society when performing (a);
- investigate and document the potential pros and cons of implementing this publication proposal;
- present the proposed publication to council for approval. If approved, further develop the publication so that it can be produced by the publications committee;
- maintain close communication with the publications committee and keep the general membership informed of progress, and;
- have other such duties as may be prescribed by the council.

The committee members are currently: myself, Douglas George, Terence Dickinson, and Patrick Kelly. Two other members will be appointed by the committee shortly.

In late 1993, I was asked by the publications committee to produce a "mock-up" of a proposed new publication of the society. This paper resulted (after comments on a draft version were received from the publications committee and others) and will be used as a starting point for the work of the new committee.

You are encouraged to contact me or the other committee members with your suggestions, comments, and criticisms regarding this paper. I can be reached at:

4-26 Randall Avenue  
Halifax, Nova Scotia  
B3M 1E2  
phone: (902) 443-5989  
E-Mail: dlane@hercules.stmarys.ca

## Introduction

This paper is intended to form a basis for discussion of the development of a new national publication of the Royal Astronomical Society of Canada. This new publication is intended to replace the current *Journal* and **BULLETIN**.

The format and content of this new publication, however, will not simply be a re-formatting of the existing publications, but rather will represent a significant change in both content and physical layout. It will present a new more "popular" format that will invite the rank and file membership to read it and contribute to it.

The focus of the publication shall be to highlight astronomy in Canada, both amateur and professional. The name of the publication will be changed in order to reflect the significant change in content. I suggest the name be *Astronomy in Canada* (subtitled *The Journal of the Royal Astronomical Society of Canada*).

The cost of production shall be kept at or below the current level of about \$60,000-\$70,000 per year, which provides approximately 3 300 copies of both current publications six times per year. If possible, the annual report should be published separately.

The mailing schedule shall be timely. Lack of material in any one section should not hold back the entire publication. This is a problem that plagues the current publications. A more flexible format should help alleviate this problem.

## Physical Layout

The new publication will be in 21x28 cm (8.5" x 11") format (the same size as the current **BULLETIN**), to be more in keeping with most other astronomical publications. The larger size also allows greater flexibility of layout.

The publication will be saddle-stitched and have a cover that is slightly rigid (as in the current *Journal*). The publication will be printed using recycled materials if cost effective (and if it is determined that these recycled materials will last). The paper used will be white and of a quality similar to or better than that used in the current **BULLETIN**. The size of the publication will be nominally about 24 to 40 pages per issue.

The entire publication will be prepared with modern desktop publishing techniques and provided on disk to a competitive commercial printer experienced in the printing of similar publications. The entry into the world of desktop publishing may require some up front hardware and/or software costs and a learning curve period for the editor(s).

The graphic design (layout, colour, fonts, columns, etc.) of the publication will not be provided in this paper, since it is the author's intent that the publication's proposed contents be critiqued first, which is much more important at this time. Once the content has been approved by council, a "mock-up" will be prepared. After council approval, funds will need to be acquired to hire a professional design consultant to establish a proposed publication layout and page templates.

These are upfront, but mandatory, entry fees to the world of desktop publishing in the 1990s. Once done, the publication will look good, will be cost effective, and can be produced to a deadline just days ahead of its printing. There will be an immediate payoff in production savings, some of which could be provided to the major editor(s) in the form of an honorarium. If not, editor burnout may be a recurring problem.

## Content

Loosely stated, the new publication will include all of the sections and topics contained in the current publications and will continue to publish material in English and French.

However, in order for the new publication to present a more "popular" format, the current emphasis on "professional" peer-reviewed papers will have to be changed. This "popular" format will be heavily illustrated with photographs and figures—at least one per page in the popular section.

I suggest that the contents be similar to that listed below.

## Covers

The front cover, done in two or more colours of ink, could contain the publication's name; the RASC logo; "The Royal Astronomical Society of Canada" identity (English and French); a standard statement like "Dedicated to the Advancement of Astronomy and Allied Sciences"; and a photograph or figure related to a current or past astronomical event, or pertaining to a feature article or paper.

The inside front cover could contain information about the publication, the cover photo caption, and the table of contents for the issue.

The inside back cover could contain information for authors, how to contact the editors, etc., and a notice about the society and its centres.

The back cover could contain a paid advertisement.

## Popular Section

This section will contain fully edited non-peer reviewed material from many sources and on a wide variety of topics. Material determined inappropriate by the editor will be subject to major revision or even rejection. Page charges would not be levied for material published in this section. Possible topics include (not necessarily in the order in which they would appear):

- Editorial
- Letters to the Editor
- Report of the National President (each issue)
- Late-breaking astronomical news
- Commentary on a current issue in Canadian astronomy

- Articles (invited and unsolicited)
- Amateur papers
- Book reviews
- Education notes
- Regular columns (by columnists on several contemporary amateur topics)
- Astronomical software reviews
- Astronomical hardware reviews
- Articles about current happenings in Canadian professional astronomy
- Reports from Canadian professional observatories
- Profiles of Canadian observatories (professional and amateur) and facilities
- Profiles of professional and amateur Canadian astronomers
- Canadian usage of the Hubble Space Telescope
- Selected articles from centre newsletters
- Discussion relating to co-operative national observing projects
- Brief summaries of national council business, highlighting decisions made
- An expanded "Across the RASC"
- "Periodical Picks" highlighting articles published by Canadians in other publications
- Observing reports/information about significant amateur astronomy projects
- Reports from Canadian astronomy conventions and star parties
- Commercial astronomical advertising (not near the beginning of the publication as used to be the case with *Sky & Telescope*)
- RASC promotional item advertising
- Astronomical event calendar
- "75 Years Ago"
- Notes about the authors
- Humour and cartoons

### Peer Reviewed Section

This section would contain fully edited peer-reviewed scientific papers as are currently published in the *Journal*. Page charges will be levied for this section according to established *Journal* rates after they are adjusted for the change in page size.

### Conclusions

Reform of the society's publications is essential to the revitalization of the society. The recent membership survey showed a measure of dissatisfaction with much of the material currently published in the *Journal*, while the **BULLETIN**, with its more popular and inviting format received, generally, more favourable statistics. There was some puzzling inconsistency in the survey results which are difficult to explain. The survey did, however, also show wide spread acceptance of proposals to make changes to the publications.

The *Journal* always seems to be a topic of conversation whenever RASC members gather,

with often heated debate due to the significantly opposing views on the subject. It is felt that if the publications are reformed in the manner described in this discussion paper:

- the majority of the membership will read the new publication, and find it current, relevant and interesting;
- its inviting format will attract more authors to submit material;
- amateur authors who find the peer review process intimidating (or who do not want to invest the time and effort) can choose to share their work in the "popular" section. Of course, those who prefer the formal peer reviewed paper format can continue to do so;
- even if the net cost per member is higher than the current publications (see pitfalls below), the membership will accept this extra cost (through higher or redistributed membership fees, or through other fund raising), because they will perceive more value per membership dollar is being received; and,
- an increase in membership may be realized by a publication that is more relevant to the novice astronomy enthusiast. More astronomy clubs may be enticed to become centres.

There are, however, a number of pitfalls which may be encountered if the *Journal* and **BULLETIN** are replaced with a new publication. A few possibilities are listed below:

- Since the proportion of peer reviewed scientific material will be reduced, the grant (currently \$3,000) from NSERC may be reduced or eliminated. This grant, however, has been reduced over the last several years and may eventually be eliminated in any event.
- The change in publication content may cause the number of library subscriptions to be reduced resulting in a loss of revenue.
- Due to the increase in material which does not attract page charges, a significant increase in printing costs will be realized. However, this may be offset by the potential savings that will be possible as a result of not having to have the publication manually typeset.
- The editor(s) will have to become knowledgeable in desktop publishing techniques and there will be some start-up costs.
- Currently, the bulk of the volunteer effort is provided by four editors (Dr. Roy Bishop (Education Notes); Patrick Kelly (**BULLETIN**); Dr. John Percy (book reviews); and Dr. David Turner (*Journal*). In order for the new publication to be successful, this will have to change. The creation of an editorial board is proposed. There will have to be more volunteers involved. Luckily, there are many qualified writers and editors in the society quite willing to support a new publication. ☼

## How I Discovered Astronomy

(continued from page 5)

with a half-century of enjoyment from the science of astronomy.

In the 1950s I unfortunately lost track of Mr. Skelley. My preoccupation with career, marriage, raising a family, etc. brought an end to our correspondence. However, in the 1980s, as I reflected on the strong influence that this kind gentleman had on my career and hobbies, I found myself wishing I could rediscover him again. I made enquiries and was able to re-establish contact. In 1988, during a visit to New York City, I finally met that wonderful friend. He was 98 years young! We spent a few pleasant hours visiting with he and his wife, and recalled many highlights of our correspondence from the 1940s. Characteristically, he even insisted on giving me a few books from his bookshelf! Sadly, Mrs. Skelley informed me the following winter that her husband had passed away.

What about that aeronautical chart and navigation textbook acquired fifty years ago? I still have them on my bookshelves—they are lasting mementos of how I discovered astronomy and gained an amazing friend in New York City. ☼

## The Ten Most Common Annular Eclipse Misconceptions

reprinted from *Regulus*—Kingston Centre

10. What eclipse? It didn't even get dark!
9. Watch the eclipse? Why?
8. The only safe way to see the eclipse is on TV.
7. If No.14 welder's glass is OK, why not No.12?
6. Keep pets and children indoors during the eclipse.
5. Being outside during an eclipse is dangerous for your eyes.
4. Hey, you'll ruin your eyesight looking at those pinhole images!
3. What's the date of that **annual** eclipse?
2. Looking directly at the Sun is dangerous, so I'm going to look at the reflection in a pail of water.
1. What time tonight is the eclipse? ☼

*A science is any discipline in which the fool of this generation can go beyond the point reached by the genius of the last generation.*

Max Gluckman  
American anthropologist (1911- )

## A New Society Logo

Patrick Kelly  
Halifax Centre

I am sure that all RASC members are familiar with the society's logo, which appears in the masthead of each issue of this publication as well as in the society's journal and handbook. Two recent events prompted me to conclude that it is time that it be retired and replaced with a logo that will better serve the RASC as we head into the third millennium.

The first event was the arrival of the annular eclipse brochure which was sent to all centres for distribution. (If you kept one of these as a souvenir, now might be a good time to get it out again.) This brochure was produced by a number of organizations and all of them had their logos reproduced along one edge. Can you find (and make out) the RASC logo? If you cannot, try tacking the brochure to a wall and looking at it with your telescope!

I then started to examine the logo from a graphic designer's point of view. Who is the woman sitting in the middle? Did you know it was Urania, the Greek Muse of astronomy. I would bet that most of the general public would not see the connection. The same applies to having a motto which is written in a dead language. Should one take the time to tilt one's head to read the lettering, the connection between the word "Royal" and the crown is fairly straight-forward.

The second event, which occurred about the same time, was a conversation with several of the youth members of the Halifax Centre. The unanimous consensus was that when young people see something that looks like it dates from the reign of Queen Victoria, they avoid it like the proverbial plague.

Thus, I came to several conclusions about our current logo. It cannot be reduced to small sizes and stay either legible or clearly visible, making it very difficult to reproduce on items like pins and crests. It does not give any visual indication to the general public (and most likely most members) that it belongs to a Canadian organization devoted to astronomy. Lastly, when one of the society's greatest current challenges is to gain more youth members, it appears that our logo actively discourages this.

I felt strongly enough about this to bring it up at one of the council meetings at the G.A. and suggested that we should hold a contest to design a new one. This idea was met with enthusiasm, so I stated that I would get some feedback on how to proceed, in time for the next council meeting. I have come up with some design guidelines and would appreciate com-

ments from any interested members before making a more formal proposal.

1. The new logo should clearly indicate that the society is an organization of Canadian amateur astronomers.

2. The logo must be distinct when reproduced at a small scale.

3. The society's full name would not be part of the logo, although one of more suggested typefaces, which would complement the design, may be submitted with the design.

4. The design may incorporate either the society's two acronyms (RASC and SRAC) or two versions of the logo may be submitted, one with each acronym.

5. To minimize the costs of reproduction, the design should be limited to no more than three(?) colors, including black, if used. Colors should contrast well, so that they appear distinct when photocopied.

As far as the method of choosing a design, I can think of three different approaches. In all of these, the final design is selected by either the national council or a referendum.

1. All members may submit designs, a committee selects the semifinalists.

2. All members may submit designs, which would be forwarded to a professional graphics designer. They would use these as the basis for developing several semifinalists.

3. A professional graphics designer would be given sufficient background material to develop several semifinalists.

It is worth pointing out that should we have an election next year, it would be a perfect opportunity to use a referendum to make the selection. If a professional graphics designer were used, it would seem reasonable to pay them an honorarium for the work.

Interested members may contact me via any of the methods listed in the masthead. Hopefully, should a new combined publication be launched in 1996, a new logo, better reflecting the society's current aims and ambitions, will grace its cover. ☪

### Armchair Astronomer's Heaven

(continued from page 1)

For years I would say, "I've explored every province but Newfoundland." so I was looking forward to this trip. My exploration started off better than expected; I met up with three members of the Ottawa and Kingston Centres on the North Sydney to Port-aux-Basques ferry. I knew one, since we met while travelling to the 1973 solar eclipse. Although we did not plan to travel together, as we had different schedules, for some reason we kept running into each other as we explored the west coast of Newfoundland

and travelled up the Viking Trail to St. Anthony. Astronomers seem to follow similar interests outside of astronomy and keep running into each other wherever they go.

There was a sense of awe travelling through Gros Morne National Park and taking a boat cruise among the fjords that rival those of Norway. There I stood, at L'Anse aux Meadows at the northern tip of Newfoundland, on the same spot as Leif Ericsson, a millennium in the past. I felt as though travelling through time, just as I do when I look at the distant stars and galaxies. This was a Norse settlement for three years around 1000 A.D., and the spot where the first European was born in North America—before the birth of the Crab Nebula. Was this Vinland? Were the partridgeberries mistaken for small grapes—thus the name?

In spite of difficult economic times I discovered, while travelling through numerous fishing coves, proud people with high spirits who were keeping their homes in excellent shape. There always seems to be enough money for a can of paint and a few nails in Newfoundland. Of course, a visit to Newfoundland would not be complete without tours to see the puffins, caribou, and whales. I was not disappointed.

During the 1960s and early 1970s, I made several trips to the west coast by train. A western General Assembly, be it Winnipeg, Vancouver, or other centres, was an excuse to take "The Canadian" or "Super Continental" across the continent with a stopover for the G.A. One could not spend three days and nights on a train without meeting and making friends with fellow travelling companions. It was a joyous learning experience to meet people from all parts of Canada and the rest of the world, and learn more about other people and cultures.

What has this to do about astronomy? Everything. We astronomers are a curious lot. We explore the heavens and all that is there. We cannot forget to explore the one body that we live on, for it contains a wealth of beauty and life that is unique in the universe. Explore the forests of B.C. Walk on a glacier in the Rockies. Camp in the Alberta Badlands. Feel the mist of Niagara Falls. Climb the hills of Cape Breton. Stand in a Viking home in Newfoundland.

Enjoy our people, our society, and our country. Try that roast buffalo, the baked beaver, beavertails, and lobster at the banquets and other meals of our society. Put on your Calgary hat and become a cowboy, join the Order of Good Cheer, and go for the Screech-in. Finally, an added bonus is the interesting astronomy display and series of lectures at the General Assembly. The RASC is truly a national society. If you do not believe me, just take a leisurely trip to the next General Assembly. ☪