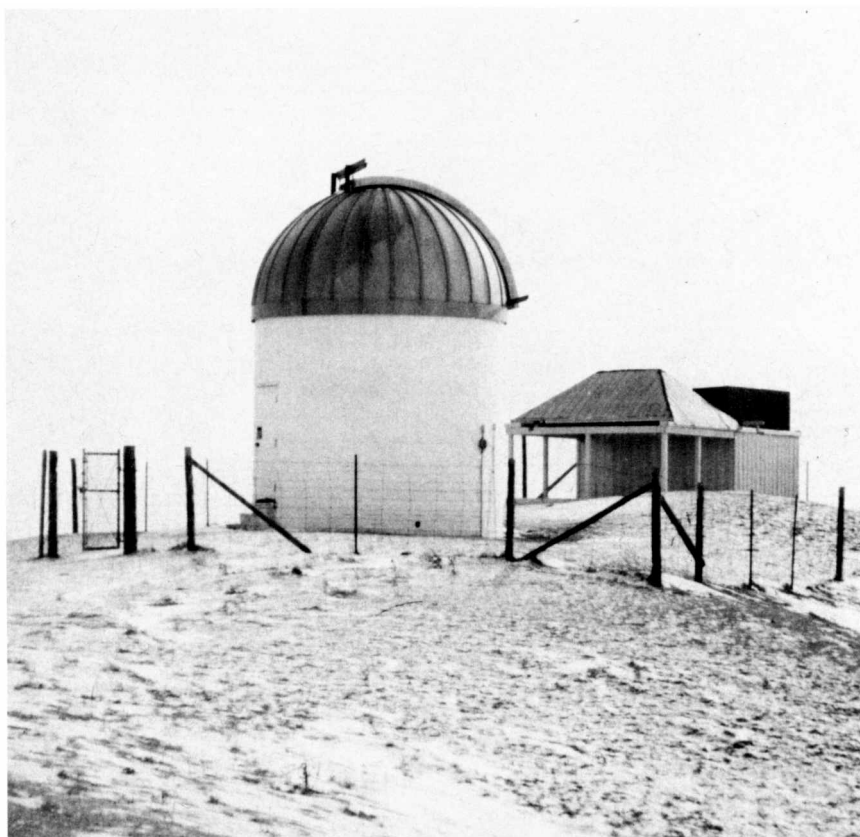


NATIONAL NEWSLETTER

February, 1981

Supplement to the JOURNAL OF THE ROYAL ASTRONOMICAL SOCIETY
OF CANADA

Vol. 75, No. 1



The observatories of the new Kitchener-Waterloo Centre at Ayr, Ontario, seen from the northwest. The smaller building, Dance Hill Observatory, was built by three members for their own instruments. It is shown with the roof rolled off and the wind baffles deployed. A report of the Centre's inaugural meeting is on page L3. (*Photograph by Clifford Cunningham*).

NATIONAL NEWSLETTER

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Editor: RALPH CHOU

Associate Editors: IAN MCGREGOR, B. FRANKLYN SHINN

Assistant Editors: HARLAN CREIGHTON, L. H. HIGGS, P. MARMET

Art Director: BILL IRELAND *Photographic Editor:* RICHARD McDONALD

Press Liason: AL WEIR

Regional News Editors

Centres français: DAMIEN LEMAY, 477, Ouest 15ième rue, Rimouski, P.Q., G5L 5G1

Winnipeg and west:

B. FRANKLYN SHINN, Box 32, Site 55, RR#1, Lantzville, B.C. V0R 2H0

Centre and local items, including Centre newsletter should be sent to the Regional News Editor. With the above exception, please submit all material and communications to:

Dr. B. Ralph Chou,
School of Optometry,
University of Waterloo
Waterloo, Ontario, N2L 3G1.

Deadline is six weeks prior to month of issue.

Welcome to the New Editors!

**by Ian McGregor
Associate Editor**

Some of the major benefits of our Society to its members are the variety of publications which are available. Apart from the Centre newsletters, the *Observer's Handbook*, the *Journal*, and the *National Newsletter* are received by all our members. This past year the unusual has happened as all three editors have stepped down from their positions and three new editors have taken their places.

Dr. Roy Bishop of Acadia University succeeds Dr. John Percy of the University of Toronto as editor of the *Observer's Handbook*. Dr. Percy has been editor of the *Handbook* since 1971. In this period it has increased in size by almost 50% with the addition of many new sections of interest to the amateur. The *Handbook's* popularity speaks for itself as about five times as many were distributed last year as there are members in the Society. Dr. Percy will however continue to be editor for the Sky Month by Month section.

Dr. Alan Batten of the Dominion Astrophysical Observatory succeeds Dr. Lloyd Higgs of the Herzberg Institute of Astrophysics as editor of the *Journal*. In his five years as editor, Dr. Higgs has continued to maintain the high quality of the publication so that its contents would be of interest and value to both amateur and professional astronomers.

And as you will have noticed in the masthead of the last issue Dr. Ralph Chou of the University of Waterloo has succeeded Mr. Franklyn Shinn as editor of the *Newsletter*. In his first editorial three years ago Frank admitted he approached the formidable task of *Newsletter* editor with "considerable trepidation". In his first issue he took the step of separating the *Newsletter* from the *Journal*. I am sure we all agree Frank has done an excellent job in making

the *Newsletter* a publication made up of contributions by amateurs for amateurs. It has been my pleasure to work closely (despite being separated by over 3000 kilometres) with Frank since he assumed the editorship. We can still look forward to his continued contributions as he remains on staff as an Associate Editor and Western Regional Editor.

Thank you John Percy, Lloyd Higgs, and Franklyn Shinn.
Best wishes to all of our new editors!

Kitchener-Waterloo Centre Inaugurated

B. R. Chou

The RASC's nineteenth Centre, Kitchener-Waterloo, held its inaugural meeting in the Frank Peters Building at Wilfred Laurier University, Waterloo Ontario on 12 September 1980. The new Centre consists of members of the Grand Valley Astronomers (GVA), a group of amateur astronomers in the Kitchener-Waterloo area which was founded a number of years ago. The officers are Dr. Raymond Koenig, President, Clifford Cunningham, Vice President, and Murray Kaitting, Secretary.

In spite of the inclement weather, the meeting was attended by over 100 persons, including



Fig. 1—Murray Kaitting, Gerald Kennedy and Clifford Cunningham of Kitchener-Waterloo Centre in front of Dance Hill Observatory. (Photograph by C. Cunningham)

Dr. Ian Halliday, President of the Society, members of the new Centre, the general public and representatives from the Hamilton, London, Niagara, Ottawa and Toronto Centres. Dr. Helen Hogg, Past President of the RASC and Professor Emeritus of Astronomy at the University of Toronto, delivered the inaugural lecture on the history of research on globular clusters. At the conclusion of her talk, she was presented with a plaque commemorating the meeting.

A brief slide presentation on the Centre Observatory followed. The observatory, located southwest of Kitchener near Ayr, consists of two buildings erected by the members of the GVA (see photo, p. L1). The two-storey domed structure has an insulated meeting room below the observing level which houses a 12½-inch f/5 reflector. The roll-off observatory to the south (see fig. 1) houses a 14½-inch Newtonian telescope as well as a pier which mounts a Celestron 8 or 8-inch Schmidt camera. These instruments belong to individual members of the new Centre.

The meeting ended with a brief reception outside the lecture room. By this time the heavy rain had ceased, and about 30 of those present travelled to Ayr to inspect the observatory facilities at first hand.

Kitchener-Waterloo Centre has a number of very active observers and excellent observatories. It is a most welcome addition to the RASC and we wish it well in its new affiliation.

Nouvelles des Centres Québécois

de Damien Lemay

QUEBEC

La Semaine des Sciences qui s'est déroulée du 19 au 26 octobre 1980 fut le prétexte pour sensibiliser le public à l'astronomie.

Le Centre de Québec avait monté un kiosque à la Place Laurier. La curiosité du public fut très encourageante pour les promoteurs du projet.

Le mercredi, une invitation générale était faite pour assister à la conférence mensuelle du Centre. Le conférencier était le professeur J. D. Carette de l'Université Laval et le sujet de sa causerie s'intitulait: "Les Pierres qui Tombent du Ciel".

Dans la même semaine se tenait à Rimouski la réunion annuelle de l'Association des Professeurs de Sciences du Québec. Un de nos membres a alors participé à l'animation d'un atelier intitulé: "L'Astronomie un Loisir Scientifique".

Pour l'année prochaine, certains ont suggéré qu'on y ajoute une soirée d'observation populaire.

MONTRÉAL

La Société d'Astronomie de Montréal est heureuse de faire part qu'elle présentera la troisième édition de CAFTA (Concours annuel des Fabricants de Télescopes d'Amateurs). Cette activité aura lieu la fin de semaine du 5 juillet 1981. CAFTA est entièrement révisée et devrait satisfaire tous ceux qui y prendront part. Vous pourrez obtenir toutes les informations nécessaires en écrivant à:

La Société d'Astronomie de Montréal,
3860 est, rue Rachel, app. 1,
Montréal, P.Q., H1X 1Y9.

DIVERS

Encore une fois, Stellafane a vu quelques-uns de nos membres se distinguer. M. Adélar Rousseau et Lionel Beaudoin de la S.A.M. se sont mérités un 4ième prix pour la qualité mécanique de leur Cassegrain de 6 pouces f/14.

D'autre part, Real Manseau qui est un membre indépendant demeurant à Drummondville s'est mérité un 3ième prix dans la catégorie spéciale, avec sa très belle sphère armillaire en laiton (brass).

A Visit to Herschel House

by Phil Mozel and Debbie Tonge
Toronto Centre

While in Bath, England this past May, it was decided that a look at Sir William Herschel's house at No. 19, New King Street would be in order. He lived here from 1777 to 1782 and in 1781 discovered the planet Uranus from his back yard with a telescope of his own construction. A visit to the local tourist information office got us the location of the house but we were informed that it was not open to the public. We of course still wanted to go! The house was easily found, there being a plaque on the wall identifying it. While admiring the house, a lady approached and asked if we were interested in Herschel. She then explained that she was a member of the William Herschel Society which was trying to restore the house to the way it was 200 years ago. She had a key and we were invited inside for a personal tour! This was almost too good to be true! Our new-found guide, Doris Ziskind, escorted us throughout the house and into the yard in back where Caroline Herschel kept a garden. The highlight was seeing the second floor balcony from which William is supposed to have discovered Uranus.



Fig. 1 – Doris Ziskind & Phil Mozel outside William Herschel's house.

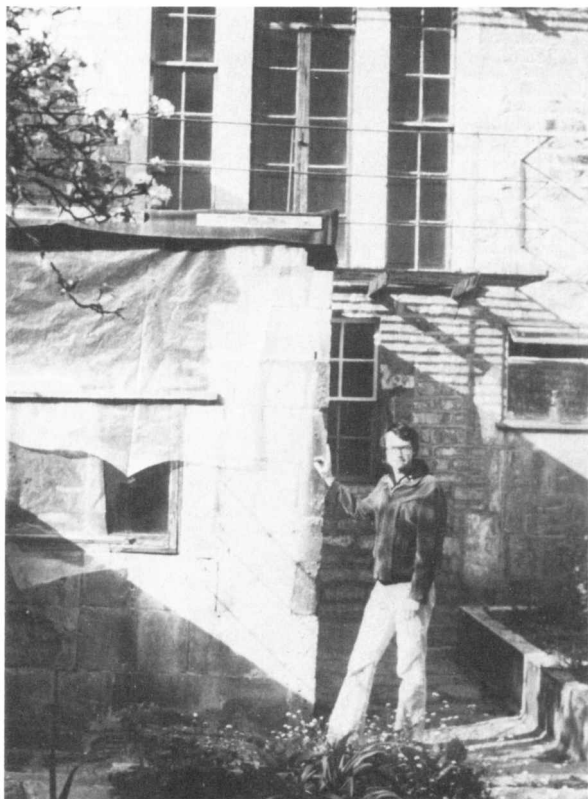


Fig. 2.—Phil Mozel beneath the balcony from which Uranus was discovered (hand is on base of balcony).

While there are few furnishings in the house at present, it is hoped that enough money will soon be raised to correct this situation. It is also intended that displays of some of Herschel's actual instruments will be set up. These may be obtained from places such as the old Greenwich Observatory. In the meantime, the house is used for meetings of the WHS.

Even today, it is hard to believe our extremely good luck. We are very much indebted to Doris Ziskind for showing us through the house and inviting us into her own home. She provided us with a very great thrill indeed.

The patron of the WHS is the modern day Caroline Herschel, a descendent of William, and the chairman is the well known amateur astronomer, Patrick Moore.

Anyone wishing information on the WHS and its work may write to

The Hon. Treasurer,
The William Herschel Society,
290 High Street,
Batheaston,
Bath BA1 7RA
England.

NFCAAA Meets at Niagara Falls

by Robert Jedicke
Niagara Centre

On November 8, 1980, the Niagara Centre hosted the Autumn meeting of the Niagara Frontier Council of Amateur Astronomical Associations. The NFCAAA consists of astronomy clubs from all over Southern Ontario and Northern New York: A semi-annual gathering is held in the city of the member club that wishes to host a meeting. Since the city of Niagara Falls is virtually at the centre of the eastern and western limits of the NFCAAA, it was only natural that this would be a very large meeting. Fortunately, the room at Brock University in St. Catharines was capable of holding the 100 people who decided to attend the function.

The afternoon started with Charles Fassel, the Niagara Centre President, handing the chair over to Peter Jedicke who is the current Chairman of the NFCAAA. First on the list of proceedings was the business of the NFCAAA which, as Peter reminded us, is very informal due to the fact that the NFCAAA has absolutely no set by-laws or constitution. In this section of the meeting a representative from each member club indicates that club is in fact represented at the meeting, informs the chairman of any changes in the list of exchange speakers, and then gives a short talk about the activities of the club. This meeting was very special in that it was the first time in recent NFCAAA history that a new club was admitted into its ranks. The Kitchener-Waterloo Centre of the RASC was happily accepted into the organization.

A coffee and doughnut break traditionally follows the business affairs, after which everybody once more retires to the seminar room for the paper session. At this NFCAAA meeting the participants were treated to a group of very informative and interesting talks by well known people in the RASC. Dr. Ralph Chou gave a talk on the effects of radiation on the eye through different types of solar filters, while Peter Jedicke, Gerald Schieven, and Clifford Cunningham also gave interesting talks.

The meeting was adjourned after the talks and all drove to the Skylon tower in Niagara Falls where we were treated to a delicious smorgasbord meal in the Summit Suite.

After the dinner we were all whisked down to the main floor of the Skylon to a large hall where we listened to the guest speaker. Dr. Ernest Seaquist from the University of Toronto spoke about the latest developments in the search for an explanation of the enigmatic object SS433.

Al Kindy of the Niagara Centre gave an interesting history of the Niagara Centre, especially appropriate since it turned out that November 1980 was the 20th anniversary of the foundation of the Niagara Centre. Mr. Kindy is the only founder who is still a member of the RASC.

Shortly after, the meeting was adjourned, and everybody parted happily anticipating the next meeting of the NFCAAA.

Space Shuttle Launch Visit

by Peter Jedicke

As many of you have no doubt read, delays continue to plague the development of the space shuttle. As of June 5, 1980 two of the three Main Engines for the Columbia were flight-rated, but progress in installing the thermal tiles is still slow. Officially the date for the first Orbital Flight Test is currently set for March, 1981, but no one ought to be surprised if it does not take place before the summer. In any case, the RASC is still pursuing the idea of sending a group of members to Cape Kennedy, and we still hope to obtain permission to view the launch from the closest possible vantage point. Those who are interested in participating should remain in touch with me at 519-433-2992, or by writing to:

RASC Space Shuttle Launch Visit
P.O. Box 842, Station B
London, Ontario N6A 4Z3.

Une opinion personnelle suite au sondage des membres (Canadiens) indépendants

par Raymond Auclair

(M. Auclair nous a livré les résultats de son sondage mené en 1979. Il veut maintenant nous faire part de certains problèmes mis à jour par les réponses de ce sondage. Nous encourageons aussi tout autre membre, qui aurait une opinion différente, à nous la faire parvenir.)

58 membres ont accepté de répondre au questionnaire et la plupart de ces réponses sont venues confirmer ce dont je me doutais déjà. Quelques unes, cependant, me forcent (et peuvent en forcer d'autres) à revoir la façon dont la société pourra atteindre les buts qu'elle s'est fixés.

Commençons par ce dont je me doutais déjà: l'appartenance à la SRAC doit certainement rencontrer certains besoins de nos membres car, en moyenne, ceux qui ont répondu au questionnaire sont membres depuis près de sept ans. Ils, se rendent bien compte qu'ils ne retirent peut-être pas les mêmes bénéfices qu'un membre qui est rattaché à un centre, mais ils sont quand même satisfaits, jusqu'à un certain point, des services que leur rend la société. Ils aimeraient pouvoir se joindre à un centre si jamais cela leur était possible. De plus, ces membres aimeraient bien connaître les autres membres ainsi que leurs intérêts particulier dans le domaine de l'astronomie. C'est pourquoi ils favorisent, dans l'ensemble, la formation d'une association quelconque au sein des membres indépendants, dont une des tâches importantes serait la préparation d'une liste qui indiquerait les domaines par lesquels les membres sont intéressés. Rares sont ceux qui ont assistés à une assemblée générale de la société et ils n'ont pas l'impression d'être adéquatement représentés lors de ces assemblées. Cependant, ils croient que les décisions qui y sont prises leur sont favorables.

Ce qui précède, je le crois, correspond à ce que nous pensions tous. C'est ce qui suit qui m'a surpris!

La majorité des réponses indiquent un besoin accru de communication afin de mieux informer les membres indépendants des activités en cours au sein de la SRAC. Jusqu'à récemment, je croyais que la publication du National Newsletter (NNL) constituait un véhicule parfait pour faire parvenir les nouvelles des différents centres à tous les membres de la société. Il faut donc se rendre à l'évidence que, pour l'instant, ce rôle du NNL n'est pas rempli de façon satisfaisante. Ceux qui ont répondu au questionnaire disent qu'il faudrait une publication à l'usage des membres indépendants et, surprise supplémentaire, 66% seraient même prêts à payer une cotisation supplémentaire pour un tel service. A quoi servirait alors le NNL? Sans compter que, dernièrement, certains d'entre nous pensaient qu'il serait peut être préférable de réduire le nombres de services assurés par la société afin de maintenir les cotisations à un niveau minimum. Par ce sondage, le 'client' nous dit: "Je veux bien payer, mais donnez-m'en pour mon argent!" J'ai donc, depuis, changé d'idée concernant la réduction des services et je pense qu'au contraire, il faudra travailler davantage afin de donner au client, en retour pour son argent, les services auxquels il s'attend. J'ai aussi l'impression que la communication des activités de la société aux membres indépendants est une chose pour laquelle ils payent déjà. Donc, le client paye pour savoir ce qui se passe dans la société, le NNL est là pour faire connaître à tous ce qui se passe dans la société, conclusion: pourquoi ne pas demander aux centres qu'ils nous fassent connaître A TEMPS ce qui se passent chez eux.

Pourquoi faire tout cela? Beaucoup de personnes sejoignent à une société telle que la nôtre pour en retirer, entre autre, un sentiment d'appartenance et la possibilité d'échanger leurs idées avec d'autres personnes qui s'intéressent aux mêmes domaines qu'elles. La possibilité de participer dans certains projets peut vraiment donner au membre l'impression d'appartenir une société nationale plutôt que de n'être abonné simplement à une publication qui sort six fois par an. Malheureusement, la plupart des membres ne sont avertis que trop tard (lorsqu'ils le sont) d'un projet auquel ils auraient pu contribuer et à l'aide duquel ils auraient pu établir des liens d'amitiés avec d'autres qui partagent les mêmes intérêts qu'eux. Les membres indépendants sont ceux qui souffrent le plus de ce manque de communication, mais ils ne sont pas les seuls. ...

Je ne veux pas imposer la participation, mais j'aimerais qu'une participation soit au moms possible. Si vous ne mettez pas les autres membres au courant de vos activités, vous fermez la porte à la communication et aux échanges amicaux qui forment les vrais liens d'une société qui se veut national. Ouvrez cette porte et vous offrez à tous les moyen de se sentir membre d'une grande famille.

Le but premier de ce sondage était de déterminer si les membres indépendants sentaient le besoin d'une association spéciale qui verrait à répondre à leurs besoins spécifiques. Le faible taux de réponse (30%) ainsi que la nature même des réponses reçues me font croire qu'une telle association n'est pas nécessaire pour le moment. Il me semble que la société possède déjà les outils nécessaires pour répondre aux besoins de ces membres et tout me porte à croire aussi que la publication du National Newsletter peut être le plus utile de ces outils. Bien que l'utilisation du NNL à cette fin demandera la coopération de tous, ce moyen devrait quand même être plus efficace que la formation d'une association des membres indépendants.

Le sondage laisse aussi sentir un besoin de communications directes entre les membres eux-mêmes et, à cette fin, une liste de tous les membres qui indiquerait les intérêts particuliers de chacun pourrait s'avérer fort utile. Si vous pouvez m'indiquer comment une telle liste pourrait être préparée, compilée ou distribuée de façon efficace, n'hésitez pas à m'écrire. TOUTES les idées seront bienvenues.

1527 Champagne,
Cornwall, Ont., K6J 4W7.

Note de l'éditeur pour les centres français: Au 3ième paragraphe, nous lisons que les membres indépendants souhaitent connaître les "autres membres". Selon mon interprétation, "autres membres" englobe tous les membres de la SRAC et non seulement les indépendants. Ces derniers peuvent être assurés que la plupart des membres de n'importe lequel centre réagiront positivement à toute prise de contact par un membre indépendant, que ce soit par correspondance ou autrement. Egalement, les membres indépendants de langue française sont invités à me faire parvenir leur contribution (article de fond ou rapport d'observation), je m'occuperai des les faire parvenir à l'éditeur du NNL pour fin de publication. De cette façon, vous nous aiderez à vous aider. Après tout, le NNL est pour le bénéfice de tous les membres.

Damien Lemay
477 Ouest, 15^e rue
Rimouski Quebec G51 SG1

Chasing Asteroids

by Alan Dyer
Edmonton Centre

October and November were "asteroid occultation" months for observers in Alberta. On Nov. 23, the asteroid 134 Sophrosyne passed in front of the 8th magnitude star SAO 74963 in Triangulum. While the main occultation path was predicted to pass through the southern U.S., astronomers all across North America were asked to observe the event, in case any unexpected secondary occultations occurred due to unknown satellites orbiting Sophrosyne. As of this writing, observers in Edmonton were planning to take part in this event and a complete report will appear in the next issue.

Earlier, in the wee hours of Sunday, October 26, the asteroid 12 Victoria occulted the 9.8 mag. star BD + 1°2457. This event should have been visible from central Alberta. Observers both in Edmonton and Calgary were ready to fan out across the province for that event, but clouds made short work of everyone's plans.

Better luck was had on the night of Oct. 9/10, when 216 Kleopatra occulted the 8.8 mag. star SAO 128066 in Pegasus. Calgary Centre observers were at their posts at the predicted time, but missed seeing the occultation as the path passed well to the west of all their observing groups.

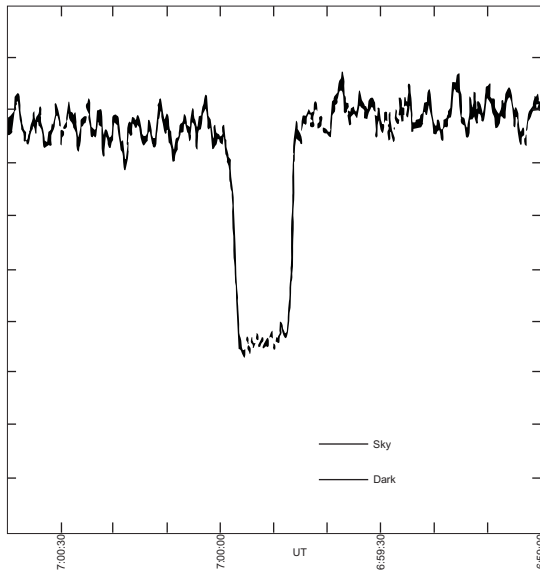


Fig. 1.—A photometric tracing of the light drop during the Keopatra occultation Oct. 10 obtained by Dr. Doug Hube at the Devon Observatory.

In Edmonton, we were more fortunate. 5 observing teams were hastily arranged and stationed roughly on an east-west line around Edmonton. We say “hastily”, since the word that the occultation path had shifted to pass over us reached Centre members only a few days prior to the event. Originally, we were thought to be too far east to see anything, and no amateur observations had been planned.

Of the 5 groups, only two acquired useful data. People at 2 of the stations missed seeing the event entirely for reasons too embarrassing to publicize. A third group saw the event but failed to properly record the pertinent data.

Nevertheless, Dr. Doug Hube at the U. of A. Devon Observatory, acquired a superb photometric tracing of the 11-second disappearance of the star. (See Figure 1) The undersigned, along with Stew Krysko, stationed just west of Tolfield on Hwy. 14, observed a 6-second disappearance, with some unusual flickering at the end of the event. If this was real, then we may have observed some sort of “grazing occultation”, it is thought that we were near the east edge of the asteroid’s shadow path.

A full report has been submitted to David Dunham of the International Occultation Timing Association. If there are others interested in participating in more asteroid chases in 1981, please let us know. It’s great fun!

reprinted from *Stardust*

Tucson Report

by David Levy
Kingston Centre

I've just received a letter from Glenn Chaple, a contributing editor for Star and Sky Magazine. Noting the good feeling I have had for Canadian amateur astronomers and the RASC, he asked if I didn't feel a bit uneasy about leaving them and setting up shop in Tucson. My answer was a definite yes; I have made many friends in Canada, especially in Kingston, and I do miss all of them. On the other hand, Tucson is where the clear skies – and the astronomers – are, and my astronomical life is very full here.

The day I returned, I got a call from the planetarium. "Did you know that March 1981 marks the 200th anniversary of the discovery of Uranus?" "Oh, yes," I answered, "That will be quite an event."

"Well, we're planning a major lecture on Herschel, his life, his astronomy, his music – to be given as part of our Eyes on the Universe series."

"Hey, that sounds really interesting! I think I'd want to attend that lecture!"

"Uh, well, David, we're sort of hoping that you'd do a bit more than just attend the lecture..."

Anyway, you're all invited to the Flandrau on March 13, 1981 (or thereabouts) to hear my lecture on Herschel!

The sky this September has been very good and dark, although we had one very bad thunderstorm. I did observe the recent and very unusual slow rise of SS Cygni to slightly below maximum. For the first time I saw the star actually decline a bit during its general rise.

And writing about variables brings this announcement to mind: we have been very fortunate in being able to land the AAVSO spring meeting in Tucson! There will be Kitt Peak and MMT tours, hopefully a lecture at the Planetarium, business meetings, and scientific sessions. In addition, there will be a night of observing – the whole group is being invited to David Levy's Home for Wayward Telescopes for what we hope will be the best AAVSO group observing session in quite some time.

After all this excitement, I shall end with this thought: since Tucson boasts such fine weather, why are more comet and nova discoveries (or any such discoveries) not made by amateurs here? England, with its terrible weather, boasts a better record. The answer lies not in the weather. If they have the guts and perseverance to use every available good night, they can find a comet anywhere.

Mars Information Packet Available

An information packet on Mars, including unique 3-D views of the red planet, is now available from the Astronomical Society of the Pacific. The packet includes a complete map of Mars assembled by the U.S. Geological Survey from Mariner 9 photographs; a set of 3-D views (together with 3-D glasses) of the Martian surface, taken by the Viking landers; an information sheet on what we have learned about our planetary neighbour and a bibliography of further non-technical readings and information sources.

These materials are part of a series of information packets being made available by the Society. Other topics in the series have included black holes, debunking pseudo-science and an introduction to astronomy.

Copies of the Mars packet can be obtained by sending \$1 (for postage and handling) to:

Astronomical Society of the Pacific
Attn: Mars Packet
1290 – 24th Avenue
San Francisco, California 94122

The Gert Herb Report

by Chris Rutkowski
Winnipeg Centre

In his book, "The Promise of Space", Arthur C. Clarke makes a statement to the effect that amateur astronomers have not reported seeing UFO's. An amateur astronomer named Gert Herb read this and decided to determine if the statement was indeed true.

The effort was encouraged by the fact that in January of 1977, Peter Sturrock published his report of a survey of professional astronomers on the subject of UFO's. Now known as the Sturrock Report (published as the Stanford University Institute for Plasma Research Report Number 681), it received a 52% response rate from 2,611 astronomers surveyed. Only 20% of the respondents thought that UFO's were not worthy of scientific attention. However, this included a bias whereby individuals who were strongly opposed to the notion of UFO's would be inclined to not respond to the survey. (It is obvious, though, that some strongly opponent individuals might be impelled to respond with their negative opinion.) A startling 4½% of the respondents indicated that they had seen UFO's.

But a great many professional astronomers are not observational astronomers, and do not examine the sky as much as ardent amateurs like comet watchers and Messier photographers. Many amateurs begin observing at twilight and continue through the night, observing and photographing "interesting" objects. A reasonable question is, then: How many amateurs have seen UFO's?

Mr. Herb sent a questionnaire to 8,526 amateurs in the Astronomical League, the Association of Lunar and Planetary Observers (ALPO) and the International Occultation Timing Association (IOTA). The AAVSO was also asked to participate, but it declined. A total of only 1,805 individuals responded to the survey. Of that group, 67% felt that UFO's "certainly, probably or possibly exist". Asked whether they had ever seen an object which they could not identify, despite their efforts to do so, 427 of the 1,805 answered to the affirmative. That is 23.7% of the responding group, and 5.2% of the entire sample polled.

Mr. Herb also asked the amateurs about their observing experience, in terms of whether they kept a regular observing log, followed a structured observing program, worked in conjunction with a group like IOTA or ALPO, and their length of active amateur observing. On this basis, he selected 261 "senior" amateurs whom he felt possessed higher-than-average abilities. These were considered as being most familiar with objects in the night sky. Of the 261 selected, 74 had seen objects which "resisted most exhaustive efforts of identification."

While most sightings were of point- or slightly-extended sources, 24 were of objects observed "at short enough distance as to leave no doubt in the observer's mind that something strange was reported." Sixty-six were observed through a telescope, and forty objects were observed through binoculars.

Seven objects were reported photographed. However, these are curious, but can be of no practical use for the purpose of "proof". They are merely unusual objects recorded on film, and offer nothing to suggest their origin and source.

Again, a certain bias is evident. Amateurs who had seen a UFO were more likely to have returned the questionnaire, having more motivation. As is usual in surveys of this nature, peer pressure might have served to suppress many sightings, so that these results therefore reflect only the *reported* sightings, rather than the actual number of sightings made.

Mr Herb's report is not yet publicly available, and has so far been only summarized in the Center for UFO Studies Bulletin (Fall, 1980, pp. 1-5).

UFO's, of course, are a very touchy subject. They have been associated with astronomy automatically by many people, despite the fact that astronomers are just as prone to mis-identifications as several other groups of individuals. It is felt by this writer, in fact, that the UFO phenomenon may be more psychological and/or sociological in nature than astronomical, if it is physical at all. It is interesting to observe, for example, that two astronomers of high calibre, Dr. J. Allen Hynek and the late Dr. Donald Menzel can hold two diametrically opposite views on the subject of UFO's, despite their essentially equivalent expertise. Dr.

Hynek is a well-established proponent of UFO's, while Dr. Menzel was a strong opponent to the question.

But UFO's are not extraterrestrial spacecraft, as many people assume. They are merely unidentified objects, and nothing can realistically be said beyond that. No one is able to identify everything he or she sees. This writer has two reports of UFO's from members of the RASC Winnipeg Centre on record, and neither suggest anything resembling an interstellar spaceship. They are just unidentified, and it is even possible that with enough information, they could be explained as mundane objects. Just as easily, however, they can remain unidentified.

The Sturrock and Herb reports show that both professional and amateur astronomers have seen UFO's, bearing out the statement often quoted that all kinds of people have seen UFO's. A large percentage of both groups believe that UFO's deserve attention from the scientific community. This writer also shares that belief. If "UFO's do not exist", then a very unusual sociological mechanism is at work, affecting large numbers of people by causing them to report UFO's. This would indicate that a study of this phenomenon is definitely warranted. If "UFO's do exist", then they deserve serious study in that regard as well. Note that this has no bearing whatsoever on the question of extraterrestrial life. Although ET life may or may not be involved, UFO's are, at present, a terrestrial human problem.

Kew Observatory Closed

Another chapter in the history of British science ended on 31 December 1980 with the closing of the old Royal Observatory at Kew in west London. The observatory was built by George III, an avid amateur astronomer, for his observation of the transit of Venus in 1769. It is said that the King was anxious to compare his records with those of Captain James Cook, who had been dispatched to the Pacific to observe the same event.

Although designed as an astronomical observatory, Kew in more recent times was used as a meteorological observatory. The unbroken 200 years of meteorological records for the London area are an important information base for modern weather analysts.

The observatory building is a protected historical landmark, and being Crown property, will be used for government office space as needed.

A New Film on the Market

**by Leo Enright
Kingston Centre**

At our Centre's meeting of January 9th I was able to show some of my recent astrophotography – taken with the latest of the fast colour slide films to come on the market. Even though I have used this film, Fujichrome R400, for only a limited time, I think I can make a couple of comments on it. In general I was quite happy with the results and those who saw them at the meeting seemed to be quite pleased also. The film "speed" seemed to me to be very impressive for the large area: guided photos of the Orion region of the sky (taken with a 135 mm lens) easily showed a great deal of detail in M42 and M43, NGC 2024, NGC 1977, Barnard's Loop, IC434 and the Horsehead Nebula on exposures of under five minutes. The "graininess" was not a problem; it seemed to be less than would be expected. The colours appeared quite good and the background sky was dark and even.

It remains to be seen whether this new film will be adaptable to many kinds of astrophotography and I do not know what the effects would be of "push-processing". Some people may find that the colour tone of the slides may tend toward the brown or red and less toward the green or blue of the standard "400-slide film" that they have been using for the past couple of

years. In summary, I think this new film will be used a great deal by amateur astrophotographers and over the next few months you may look for some results of its use in the pages of your favorite astronomy magazine.

Why not give it a try and compare your own results? See for yourself how the film in the green box compares with what is in the yellow box. Set up your own experiments and be your own judge. If your photographic supplier does not yet have this film, ask him to order it. It should be in most major camera stores before too long. Best of luck in using it! I hope you are pleased with the results and that they teach you a little more about how to become a good astrophotographer.

Reprinted from *Regulus*

The Moon's Better Half

**by Clive Gibbons
Hamilton Centre**

BZZZZZZZZZZ ... the irritating noise slowly intrudes into my somnolent mind. A dream is suddenly halted and I wonder, groggily, why my alarm clock is waking me up. What? 3 a.m.!! Then it hits me, it's time for my appointment with the last quarter Moon.

A debate rages in my head; part of me screams for sleep (I've only had 3 hours and have to go to work at 6 a.m.). The other part warns that I'll be sorry if the opportunity is missed.

Why should any normal human being with an ounce (28.3 grams) of sanity rise at such an hour to observe an object so familiar as the Moon? I'll reply with another question. When was the last time YOU observed the last quarter Moon? Perhaps one dark winter morning on the way to work or maybe in the bright daytime sky before noon. In neither of these cases is it practical or worthwhile to pull out your telescope and scrutinize its beauty at magnification.

Indeed, the last quarter Moon is a seldom observed object, but to me, it is one of the most beautiful phases of our neighbouring world. Many of the craters visible at first quarter are again visible, but a multitude of other interesting features also come into view. Craters along the terminator take on a whole new look as sunset shadows completely different to those of sunrise cross their floors. The broad grey expanse of Oceanus Procellarum with its many complex rilles, small shadow-filled craters and isolated mountain peaks is a feast for the eye. Prominent impact craters Copernicus, Kepler and brilliant Aristarchus only add to the visual splendor. Clavius, Tycho, Plato, Archimedes, Pico and Piton, Straight Wall, Alpine Valley, the list goes on and on.

That's why I find myself arising at this ungodly hour, dragging out my telescope and directing a bleary eye to the ocular. One look and I realize it was all worthwhile.

En 1981, Victoria

Le Centre de Victoria se prépare à accueillir tous les membres de la SRAC à travers le pays à l'occasion de notre première assemblée générale à Victoria (mentionnons que nous avons participé à la réalisation de l'assemblée générale tenue à Vancouver en 1972). Cette réunion se tiendra du 26 au 29 juin 1981 au campus de l'Université de Victoria, où les résidences universitaires seront disponibles à nous, et où auront lieu également les sessions scientifiques. Le campus de l'UVIC, bâti depuis environ une quinzaine d'années, est relativement nouveau et est situé près de la mer dans la partie nord-est de la ville. Également, un service d'autobus rend accessible le transport au centre-ville.

L'ouverture de l'assemblée se fera vendredi soir, débutant par une réception amicale avec vin et fromage, une séance de diapositives, et observations avec le télescope de 50 cm de l'Université. Un autre soir sera consacré à une visite de l'Observatoire fédéral d'astrophysique sur la "Petite Montagne Saanich" où nous aurons l'occasion d'observer les merveilles du ciel avec le télescope de 1.85 mètres. En addition de ces observatoires bien établis, plusieurs membres disposent d'observatoires privés sur leur propre terrain et inviteront possiblement les autres membres à y en faire une visite. Aussi, nous espérons que le projet réalisé par le Centre, c'est-à-dire la construction d'un télescope mobile de 50 cm monté sur une remorque sera prêt d'être achevé.

Ce programme scientifique inclura des temps libres pour visiter d'autres attractions de Victoria: les jardins de Butchart avec sa beauté florale, l'Institut de Sciences Océanographiques et le Centre des Sciences géologiques du Pacifique à Patricia Bay, et le Musée Provincial. Victoria, dont l'industrie première est le tourisme, a beaucoup à offrir au visiteur en matière de jardins, routes pittoresques, musées, parcs, restaurants, etc.

Nous invitons les astronomes amateurs et professionnels à présenter des essais de dix minutes (durée maximum) au cours des sessions scientifiques. Les intéressés peuvent écrire à:

B. Franklyn Shinn,
Box 32, Site 55, R.R. #1,
Lantzville, B.C., V0R 2H0.

avec un sommaire de 150 mots ou moins, avant le 15 mai 1981.

Rappelons que les membres se la SRAC pourront appliquer à notre Quartier Général à Toronto à travers votre centre local pour des frais d'assistance en ce qui concerne leur transport à Victoria.

Volez, conduisez, prenez le bateau qui vous conduira à travers les îles du Golfe de Georgia, nagez ou pagayez – mais suivez les étoiles de l'Ouest qui vous mèneront à l'Île de Vancouver pour l'Assemblée générale de 1981!

FORMULAIRE DE REPONSE

OUI, je projette de venir à l'assemblée générale à Victoria, le 26–29 juin, 1981.

Nom:

Adresse:

Nombres de personnes:

Accommodation universitaire: Dates requises:

Autre accommodation: Oui Non

(Nous ferons parvenir une copie de l'Annuaire provincial des accommodations en Colombie Britannique aux personnes qui répondront affirmativement.)

PRIERE de retourner ce formulaire avant le 1 mai 1981 si possible à:

Victoria Centre of the R.A.S.C.,
Observatoire fédéral d'astrophysique,
5071 Chemin Saanich W., R.R. #5,
Victoria, C.B.
V8X 4M6.

Victoria is the ONE in '81

The Victoria Centre is looking forward to welcoming RASC members from across the land to our fair island for our first ever General Assembly in Victoria (although we did co-sponsor the 1972 G.A. jointly with the Vancouver Centre). 1981 June 26–29 are the dates of our gathering, at the campus of the University of Victoria, where residence accommodation will be available and where the scientific sessions will take place. The UVIC campus is relatively new, being about a decade and a half old, and is located not far from the sea in the north-east part of town, and has easy bus service to the downtown area. Friday evening will open the assembly with a wine-and-cheese reception, a slide party, and viewing that the university's 50 cm reflector. Another evening will be spent touring the Dominion Astrophysical Observatory facilities on Little Saanich Mountain, with viewing of the heavens with the 1.85 metre telescope. In addition to these well established observatories, many members have their own backyard observatories which may invite private inspection, and we hope that the centre's trailer-mounted mobile 50 cm telescope may be close to realization by this time.

Time will be spared from the astronomical program for visits to the floral beauty of Butchart's Gardens, the new Institute of Ocean Sciences and Pacific Geoscience Centre at Patricia Bay, and the Provincial Museum. Victoria, which claims tourism as its first industry, has much to offer the visitor by way of gardens, scenic drives, museums, parks, restaurants and so on.

We welcome ten minute papers for the scientific sessions from amateur and professional astronomers alike. Members interested in presenting a paper should write to:

B. Franklyn Shinn,
 Box 32, Site 55, R.R. #1,
 Lantzville, B.C.,
 V0R 2H0.

with an abstract of 150 words or less, no later than May 15, 1981.

R.A.S.C. members are reminded that travel assistance to Victoria may be available from our National Headquarters in Toronto through your local centre.

Fly, drive, cruise by ferry through the scenic Gulf Islands, swim or paddle – but follow the stars westward to Vancouver Island for G.A. '81!

RETURN FORM

YES, I plan to attend the R.A.S.C. General Assembly in Victoria, June 26–29, 1981.

Name:

Address:

.....

Number in your party:

University Accommodation: Dates needed:

Other accommodation: Yes No

(We will supply a copy of the 1981 B.C. Government Accommodation Directory to persons responding affirmatively.)

Preregistration by May 1, 1981 would be appreciated. Please return this form to:

Victoria Centre of the R.A.S.C.,
 c/o Dominion Astrophysical Observatory,
 5071 West Saanich Road, R.R. #5,
 Victoria, B.C.,
 V8X 4M6.