

## NATIONAL NEWSLETTER

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### R.A.S.C. General Assembly—Ottawa, May 1973

As announced previously, the 1973 General Assembly will be held in Ottawa, at Carleton University, where members of the Ottawa Centre will act as hosts to the Society. The dates of the meeting are May 25 to 27, one week *after* the holiday weekend but a pleasant time to visit the capital city. A special welcome is extended to student members. Some accommodation in private homes can probably be arranged for students and requests for such accommodation must be sent by the executive of the local Centre on behalf of the student, addressed to Mr. L. R. McNarry as shown below. Events on the program may be selected either as a "package deal" or item by item for those who are able to participate in only some of the activities planned.

The Program Committee is arranging a separate program for wives or other guests who may not wish to attend the Session for Papers on Saturday morning and a tour of the National Museum of Science and Technology is scheduled for Saturday afternoon. Negotiations are under way for visits on Sunday to the Communications Research Centre of the Department of Communications, to the Ottawa River Solar Observatory of the National Research Council and to the Research Laboratory of Bell-Northern Research.

The Displays Committee announces that prizes will be awarded for the Best Individual Display and the Best Centre Display. Government and commercial displays will be welcome and all displays may be assembled Friday evening and dismantled Sunday morning. Requests for wallspace, etc. should be sent a week or more in advance to Mr. Tom Tothill, 22 Delong Drive, Ottawa, Ontario K1J 7E6.

The Papers Committee invites members to submit papers describing observational programs, astronomical instrumentation, topics of historical interest, etc. for the Saturday morning session. Authors should plan on a presentation time of 10 to 15 minutes and must submit the title and an abstract of the paper to the executive of their Centre for approval. Centres and all unattached members should forward abstracts of about 150 words not later than April 15 to Dr. Ian Halliday, Astrophysics Branch, National Research Council, Ottawa, Ontario K1A 0R8.

*In order to facilitate the planning of this year's General Assembly, members who hope to attend are asked to complete the form on page L-3 or L-4 of this issue and send it to the address indicated immediately.*

1973 General Assembly Committee,  
Ottawa Centre.

### The Tenth Planet—A Search and a Problem

As was to be expected, the prediction of the tenth planet by Joseph L. Brady (Publications of the Astronomical Society of the Pacific, Vol. 84, page 314) has brought a response from other astronomers. Two short papers are found in Publications of the *Astronomical Society of the Pacific*, Vol. 84, page 736, and page 737.

A. R. Klemola and E. A. Harlan of Lick Observatory report on a photographic search conducted on May 12/13, 1972 with the Lick 20-inch double astrograph. The plates were centred on the predicted position of the planet and taken 24 hours apart. The magnitude limit over most of the plate was 17–18 but only 15–16 in one corner where images were badly elongated. Although Brady predicted an apparent magnitude of 13–14, no images showing the expected relative displacement were found. The planet, if it exists, must be very dense, compact and dark or far from its predicted position.

Peter Goidreich and William R. Ward of California Institute of Technology argue that such a planet would produce a notable disturbance in the solar system. Because of its large mass and high inclination, Brady's planet should cause the plane of the

orbits of the other planets to precess about an axis lying close to the plane. Over a few tens of millions of years the angle between the rotation axis of the sun and the vertical to the ecliptic plane would change markedly. As seen from the ecliptic plane the axis of the Sun would appear to tumble slowly. As well over a time scale of a million years the individual orbital planes of planets would change relative to one another. Soon the planets would no longer move in an approximately common plane. Since at the present time, the solar system is relatively co-planar, and the axis of rotation of the Sun is inclined only seven degrees to the vertical to that plane, one is forced to conclude that either at the present epoch the appearance of the solar system results from a number of remarkable accidents or that Brady's planet does not exist. Goldreich and Ward suggest that the latter is more probable and that the unexplained residuals in the orbit of Halley's comet, upon which Brady based his prediction, are the results of non-gravitational forces.

Such discrepancies in short period comets are explained quite well by back pressure produced by the observed loss of material as the comet nears the Sun. The authors argue that the effect would be greater for a long period comet such as Comet Halley.

Both papers cast considerable doubt on the existence of a planet with the characteristics predicted by Brady. However the idea of the existence of other planets seems to be a permanent feature of astronomy of the solar system.

THOMAS CLARKE,  
McLaughlin Planetarium.

### Robert L. Aikens

B.Sc., M.D., CM., F.R.C.P.Can.

Dr. Aikens was secretary of the Halifax Centre of the Royal Astronomical Society of Canada from 1960 to 1964. During much of this time he was also acting as treasurer of the Centre. Before, during and after holding office, Dr. Aikens' presence at meetings added warmth and friendliness. It was with regret that his resignation as secretary was received, but his reason for resigning was valid. His medical practice had so grown that to attend meetings of the Centre was becoming increasingly difficult. He refused the office of president as well as any other office which he deemed he could not conscientiously fill.

Dr. Aikens participated in group observations of meteor showers and lunar eclipses, and in demonstrations in the grinding of lenses and the making of telescopes. In early 1964, five years before man landed on the moon. Dr. Aikens gave a timely and much appreciated lecture to the Centre on "Some Medical Problems of Space Travel".

It was with great sorrow that we learned of the death of Dr. Aikens on September 20th. To his widow, sons and daughter we tender our sincere sympathy.

M. W. BURKE-GAFFNEY,  
Halifax Centre.

### Were There Any Other Observers?

On Friday October 28 in the morning about 8:00 I looked toward the east at the Sun through a heavy mist and noticed a huge sunspot approximately two-thirds (60 deg.) toward the lower limb from the solar equator. To verify my sighting I have a witness.

The purpose of this letter is two-fold. One to report the spot and the other to ask you for information concerning the phenomenon. Since I was on the way to school I did not have any time to make a detailed inspection of the spot. My estimate of the spot diameter roughly using proportions was that it was 9000-12,000 or more miles in diameter.

I would appreciate it if you would send some information concerning it to me. Thank you.

TED BRONSON,  
Madoc, Ont.

# OTTAWA CENTRE

Invites you to come to the  
1973 GENERAL ASSEMBLY  
CARLETON UNIVERSITY  
MAY 25, 26, 27, 1973

To assist in planning for accommodation and events, please complete this  
“tear out” and send to

L. R. McNarry  
Registration, 1973 General Assembly  
National Research Council  
Montreal Road  
Ottawa, Ontario  
K1A 0R8

- I plan to attend the 1973 General Assembly
- I may attend  
Number in my party \_\_\_\_\_
- I wish accommodation  on campus  
 hotel  
 motel
- I will make my own arrangements

NAME .....

ADDRESS .....

.....

Note: Pre-registration forms will be sent to those who reply.

(Français au verso)

# Le Centre d'Ottawa

vous invite à  
L'Assemblée Générale 1973  
Université Carleton  
25, 26, 27 mai 1973

Pour nous aider à organiser les logements et le programme, veuillez remplir cette formule et la retourner à:

L. R. McNarry  
Inscription, Assemblée Générale 1973  
Conseil National de Recherches  
Chemin de Montréal  
Ottawa, Ontario  
K1A 0R8

- J'assisterai à l'Assemblée Générale 1973
- Il est possible que j'assiste à l'Assemblée
- Nombre de personnes qui m'accompagneront
- Veillez me réserver un logement dans  les résidences d'étudiant
- un hôtel
- un motel
- Je m'occuperai moi-même du logement

NOM .....

ADRESSE .....

Note: Une formule d'inscription à l'avance sera envoyée à ceux qui répondront.

(English overleaf)