# A S T R O N O M I C A L  S O C I E T Y

# O F  F R A N K S T O N

## NEWSLETTER - MAY, 1983

### Meeting, Wednesday May 25th

The Society's May meeting will take the form of a visit to the Planetarium located at the Chisholm Institute of Technology, Dandenong Rd., Caulfield. This planetarium has been constructed by staff and students at the Institute and a demonstration will be presented by our President, Peter Norman, so there will be no entry fee. Members are advised to meet before 8 p.m. at the Science Wing, Chisholm Institute, Frankston where car-sharing arrangements can be made, and it is expected that arrival at Caulfield Institute will be around 8.45 p.m. Members unable to meet initially at Frankston may proceed to Caulfield Institute independently, where the Planetarium will be found on the 3rd floor of 'E' block as shown in plan.

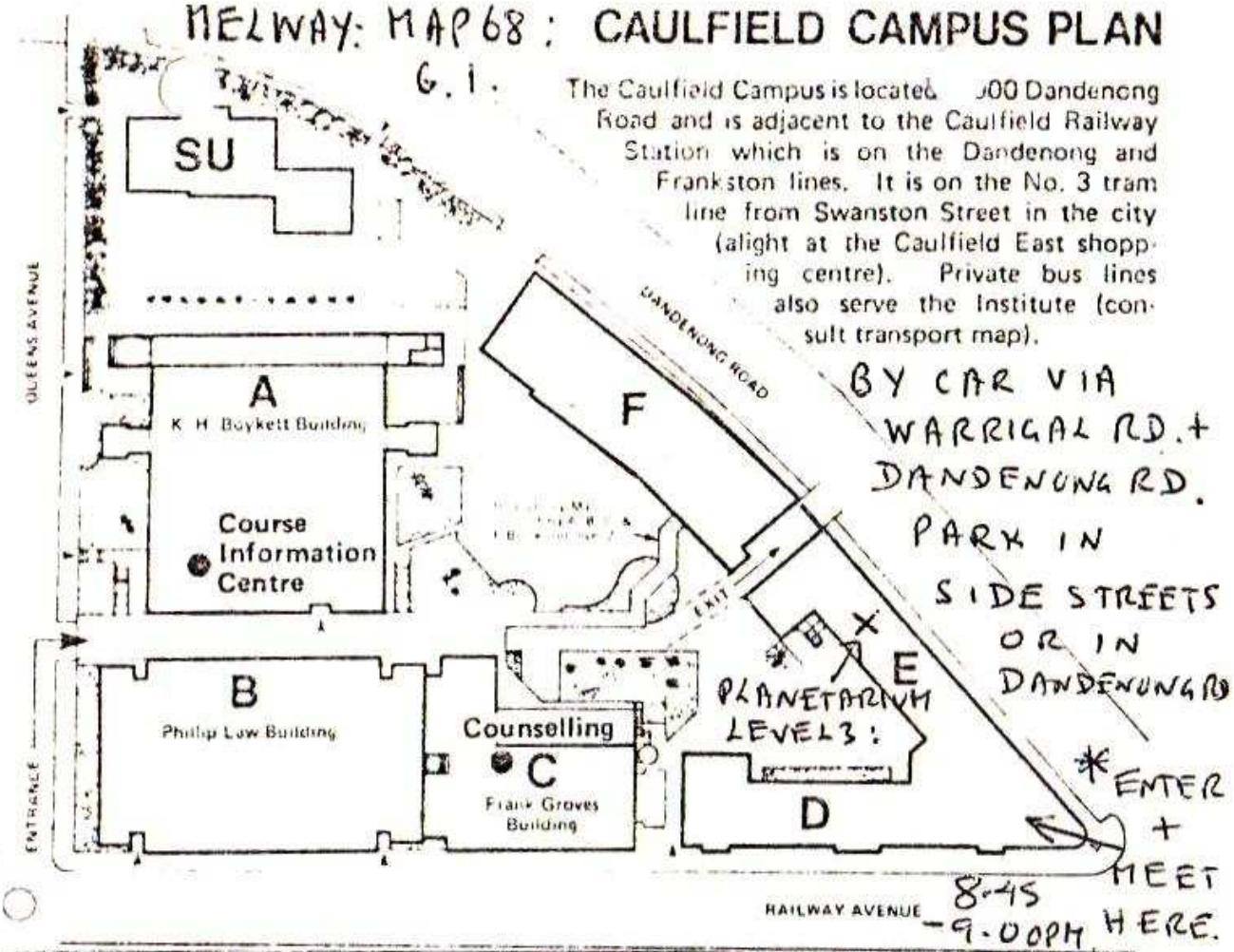
For members not completely familiar with the constellation figures, a planisphere and torch will help in relating the display to direct observations, and a pencil and paper will allow them to record star identifications made. An additional audio-visual display about the Solar System will be included, so come and explore the heavens from a comfortable armchair! (See plan overleaf).

### Viewing night, Friday June 3rd

A further viewing night will be held in the grounds of the Chisholm Institute, Frankston on June 3rd. Please bring along your portable telescopes and binoculars for this night, which, weather permitting, will allow observations of Jupiter and Saturn and the galactic centre constellations of Scorpius and Sagittarius.

### Society News

At the April meeting of the Society members enjoyed a talk by our Geelong member, Peter Lowe, on "Quasars".




These enormously powerful sources of radio emission have been the subject of much controversy as to their distance and energy source over the past two decades. However, it now seems fairly certain that they are at distances of thousands of millions of light years, with their probable energy source a central Black Hole, and it is now thought they may represent an early stage in the evolution of galaxies and the Universe.

An agreement has now been reached with Peninsula School, Mt. Eliza for the re-erection of the Society Observatory in the School grounds, subject to the obtaining of a building permit from Mornington Shire. The site is away from major sources of light pollution and should offer much better observing conditions than those at the Chisholm Institute.

## Library Books and Publications

A number of books and publications have not been returned to the Library by members borrowing them. Members are requested to return outstanding publications at their earliest convenience.

Members with items suitable for inclusion in the

Library, and excess to their requirements, are invited to donate such items to the Library for other members' use.

Questionnaires

A number of questionnaires are still to be completed by members and returned for assessment. Members are requested to complete and return to the next meeting.

Sky Notes

New Comet. A comet has been discovered recently which may prove to be a naked eye object, during May. The comet's designation is IRAS/Araki/Alcock and is forecast at magnitude + 2 for 11th May. From a position well below the northern horizon on 10th May it should move into the southern sky later in the month, passing through Cancer and Hydra into Puppis. An ephemeris, approximate only at this stage, follows:-

| Date | R.A. | Dec. | Mag. |
|---|---|---|---|
| May 12 | 8h.47m. | + 20° | |
| 13 | 8h.15m. | - 7° 16' | |
| 14 | 8h.00m. | - 19° 55' | + 4 |
| 15 | 7h.51m. | - 26° 27' | |
| 16 | 7h.45m. | - 30° 00' | |
| 17 | 7h.41m. | - 32° 53' | |
| 18 | 7h.38m. | - 34° 41' | + 5 |
| 22 | 7h.30m. | - 38° 28' | + 7 |

The comet should be both large and diffuse.

The months of May and June see the appearance in the eastern evening sky of the consellations of Scornius and Sagittarius, the Scorpion and the Archer (a half man, half beast "Centaur") in mythology. These constellations are located in the direction of the centre of the Galaxy and although the principal stars of the constellations are of the order of some hundreds of light years distance, or less, the faint sprinkling of innumerable points of light in the Milky Way in this region represents stars at much greater distances, extending towards the galactic centre some 30,000 light years away.

Conspicuous in the northern sky at this time of year is the bright orange-yellow star Arcturus in the constellation Boötes, the Herdsman. Arcturus is some 37 light years and is one of our closer stellar neighbours, but is remarkable in that it has an extremely high "proper motion" or motion relative to the background stars. Arcturus is, in fact, moving at around 90 miles per second toward the constellation Virgo and it's speed is such that it must have been below naked eye visibility some half million years ago and will again sink below naked eye visibility in another half million years. Its high speed of movement, relative to our Solar System results from the fact that it is a "Population II" star, a member of the spherical halo of stars and globular clusters around the Milky Way, rather than a star in the plane of the Milky Way, such as our own Sun.

Amongs the planets, Venus can now be seen shining brilliantly in the western sky for some 2 hours after sunset and Jupiter and Saturn are well placed in Scorpius and Virgo. Uranus and Neptune are in Ophiuchus and Sagittarius respectively and can be identified with binoculars or telescope using the chart in A.S.V. Yearbook 1983.