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From: Jim Roberts, Chairman, Parkes Time Assignment Committee

Date: 16 March 1987

MODIFICATIONS TO THE PARKES PROGRAMME SHOULD
SN 1987A FLARE IN THE RADIO

Attachment #1 sets out the principles to be followed by the Observatory in scheduling observations of SN 1987a.

As indicated in the cover note attached to the second quarter programme (attachment #2), the Time Assignment Committee intends to revise these guidelines as matters become better defined, new or revised applications are received, changes occur in the equipment available, etc. Observers allocated time in the standby programme are invited to comment - in writing with appropriate justification - should these allocations seem inappropriate. Particularly note the urgent need for clarification of the proposal for single-dish total flux density and polarization measurements so that time for these observations can be allocated.

Attachment #1

PARKES TIME ASSIGNMENT COMMITTEE

MODIFICATIONS TO PARKES PROGRAMME SHOULD SN 1987A
FLARE IN THE RADIO: VERSION 16 MARCH 1987

A. OBSERVATIONS BEFORE A LARGE RADIO FLARE COMMENCES

See the cover note attached to the second quarter programme, reproduced here as attachment #2.

B. IMMEDIATE CHANGES TO THE PROGRAMME SHOULD SN 1987A FLARE

1. Until the monitoring A. (above) makes a significant detection at 8.4 or 2.3 GHz the provisions of A. are adequate.

2. Once there is a significant detection of a source at either 8.4 or 2.3 GHz then:

(a) Provided a Tidbinbilla antenna is available, the 12 hour block of LMC time, plus time needed to set-up and dismantle, should be used for:

- o Post-flare Parkes-Tidbinbilla Interferometer observations proposed by Norris, Kesteven, Manchester, Jauncey, White, Roberts & Komesaroff (CSIRO RP) and Reynolds (MSSSO)

and

- o VLBI observations proposed by Jauncey, Norris & White (CSIRO) Hamilton & McCulloch (UTAS), Cram (SU) & Nicolson (SA).

These two programs can use the same telescope time.

These observations should continue on a daily basis until an assessment of the results can be made and agreement reached on a less frequent rate of monitoring. However note item (b) below.

- (b) Within the first three days a block of 6 hours of LMC time, plus time needed to set-up and dismantle, should be used for the pulsar search proposed by Ables, Hall & Jacka (CSIRO RP), Hamilton, McCulloch & McConnell (UTAS) & possible further CSIRO associates. Until a pulsating source is detected a block of 6 hours each week should be allocated to the search. If a detection is made the situation should be reassessed.

Attachment #1

2.

(c) As much as possible of the non-LMC time should be made available to the previously scheduled observers. It is understood that other commitments of the Tidbinbilla antennas will mean that they will not be available for the PKS-TBB interferometer or VLBI work outside of LMC time. Needed calibrations will have to take place within LMC time.

C. SINGLE DISH MEASUREMENTS OF CONTINUUM AND POLARIZED EMISSION FROM SN 1987A

These observations will be included under B. above as soon as the proposers - Milne, Haynes & Caswell (CSIRO RP), Turtle (SU Phys) & Bunton (SU EE) have clarified with the TAC the methods of making the observations with the available equipment.

D. AFTER THE FLARE REACHES 5 JY AT 5 GHZ

One block of 4 hours of LMC time, plus time needed to set-up and dismantle, should be allocated to the 6 cm H₂CO search proposed by Gardner & Whiteoak (CSIRO RP) & others.

E. AFTER THE FLARE REACHES 5 JY AT 1.4 GHZ

One block of 4 hours of LMC time, plus time needed to set-up and dismantle, should be allocated to the search for HI absorption proposed by Caswell, Gardner, Norris & Whiteoak (CSIRO RP). If feasible, this time should be centred on transit. The situation should be reassessed in the light of these results.

These observers are encouraged to liaise with observers already scheduled to make other HI observations to see whether pre-flare observations can be obtained on a collaborative basis.

F. AFTER THE FLARE REACHES 10 JY AT 1.6 GHZ

One block of 6 hours of LMC time, plus time needed to set-up and dismantle, should be allocated to the search for OH absorption proposed by Caswell, Gardner, Norris & Whiteoak (CSIRO RP).