Australia Telescope Users Committee

Report to the Director on the meeting held at the Australia Telescope National Facility, Epping NSW on Friday December 6 1996.

The AT Users Committee meeting commenced at 0845 and ended at 1530.

Members present were Professor P M McCulloch (chair), Dr L Allen, Dr R Clay, B Gaensler, Dr A Green, Dr C Heisler, Dr S Johnston, Dr K Jones, Dr P Jones, Dr N Killeen, Dr M Mazzolini, Dr R P Norris, Dr J Reynolds (secretary), Dr S Ryder, Dr E Sadler, Dr M Wieringa, Dr P Wood, Dr A Wright.

Apologies were received from Dr J Bland-Hawthorn, Dr M Drinkwater, Professor K Freeman.

The Chairman paid tribute to the late Dr Bobbie Vaile, noting her valuable contribution to ATUC throughout her many years of tenure.

After preliminary discussions the meeting was open to any interested users from 0900.

The Chairman welcomed new members Dr L Allen, B Gaensler, Dr P Jones and Dr M Wieringa and thanked retiring members Dr R Clay, Professor K Freeman, Dr R Norris and Dr P Wood for their contributions over many years.

Matters arising from the Director's comments on the previous ATUC report.

1. ATUC stresses the value of remote observing and requests clarification of its status and the role of the duty astronomer in the event of a link failure. Is there any mechanism to alert the DA to a link failure?

A dedicated workstation, largely independent from the local network for increased reliability, has been made available at Marsfield. The long-standing policy is that remote observing is supported on a "shared-risk" basis, particularly in relation to link failures. The DA will assist with recovery of the link but is not obliged to continue observing in the case of long duration link failures. A link monitoring system is under construction at Narrabri and will be available from the April 97 term.

- 2. ATUC notes that the CA archive is working well and would like to see an index of observations made at Parkes with similar aims to that of the CA database.
- A searchable index of Parkes proposals is included in the ATNF projects database on the www. An index of observations will be established but is less well defined than for the ATCA.
- 3. ATUC recommends that we move towards establishing a data archive for Parkes.

Parkes is committed to establishing a data archive. However, because the telescope operates in more diverse modes than Narrabri, this is taking longer to establish than we would like. We shall be archiving all the data from the Multibeam project.

Business matters:

- 4. ATUC endorses the TAC policy for the release of data from major projects after 12 months
- 5. ATUC endorses the revised TAC policy to afford some protection to approved PhD research

TAC agreed to this additional condition.

programmes but requests that steps be taken to ensure that students are making satisfactory progress before they obtain additional observing time.

6. ATUC requests that current students be offered a similar level of protection to that proposed in the new student policy.

Agreed.

7. ATUC suggests that applications for observing time should distinguish between requests which form part of a PhD project and those which merely involve PhD students.

Agreed. This was always the intention so we will try to further clarify the cover sheet.

8. ATUC requests clarification as to what constitutes a long term proposal, and how the 18 month proprietry period on data is to apply to these projects.

A proposal can be designated a continuing by the TAC if it is part of a set of observations with the same scientific justification. The 18 month proprietary period will apply in exactly the same way since it starts at the end of the last observations proposed.

9. ATUC endorses the concept of a user instrumentation policy but requests that it should be extended to apply to software as well as hardware.

This is a question that should be in the hands of the OCC and I will undertake to distribute it to that body for discussion and eventual policy statement.

10. ATUC recommends that the builders of special software and hardware who have had significant support from the ATNF should have sole access to this equipment for one clear observing term after it has been commissioned. After this time interval the equipment should be made available for general use. To facilitate general access to this equipment the developers should be required to co-operate with ATNF staff in the provision of appropriate documentation.

This proposal, together with comments from ATUC and ATAC will be considered by the Steering Committee at its April 1997 meeting.

11. ATUC recommends that the interval between the closing date for observing proposals and the start of the next observing term should be extended by two weeks. ATUC's preferred option was that the closing dates for proposals be on the 15th October, February and June for term commencement on 1st January, May and September.

TAC has agreed to implement this change, commencing in January 1998. The closing date for 98JanT will be 15th October 1997. As this coming term ends on 31st July, it is intended that a FIVE month term will be scheduled from Aug 1 to Dec 31, and the closing date for applications for this term (97AugT) will be 1st June, 1997.

12. ATUC requests clarification as to why a further round of proposals has been sought for Parkes for February 1997 when the original observing term was apparently oversubscribed.

The mix of proposals already submitted but not fully scheduled was inadequate to make an optimum schedule. This is not our normal procedure and we will try to avoid this situation in future.

13. ATUC is concerned at suggestions that some receiver systems may not be available on Parkes during the Galileo project and recommends that the ATNF should adhere to its policy of scheduling the best science.

The particular suggestion discussed by TAC was not made by ATNF management. It remains our policy to schedule "best" science taking into account the overheads involved.

14. ATUC supports the efforts of those involved in spectrum management to negotiate an acceptable agreement with the cloud radar project at 94GHz so as to minimise its impact on mmwave observations. We suggest that these negotiations be made in close cooperation with other observatories.

John Whiteoak is chairman of the International Telecommunication Union Working Party 7D which is discussing this issue. A brief report is attached. John notes that ther is adequate representation from severla major radio astronomy groups.

15. ATUC recommends that the Mopra 22 GHz receiver be given a priority ranking of 1 in the ATNF development program.

A simplified 22 GHz receiver is being built for Mopra for VLBI observations in conjunction with the VSOP satellite. It will have a switched noise calibration system so the system temperature can be monitored, but there will be no other monitor or control. The receiver should be installed in the Mopra antenna before May 1997.

16. ATUC requests that an effort be made to remove known bugs from the Mopra spectral line software.

This receiver is being built as a prototype for the final 22GHz VLBI system and is funded by the MNRF program.

The decision was taken last year to phase out the spectral-line program (spectra), replacing it with the package developed to support the multibeam operations.

The antenna control portion of the code was installed at Mopra last year without any serious difficulty. The correlator software will be upgraded next month to conform with the Parkes (multibeam) code, so the correlator control component should operate without difficulty. However the entire Mopra system is still only offered offered on a shared risk basis due to limited ATNF resources.

17. ATUC endorses the proposed project scientists for the MNRF projects.

18. ATUC is concerned at delays in the signing of the MNRF agreement.

After 11 months the contract was signed by all parties on 19 February 1997.

19. ATUC recognises the importance of Hydrogen masers at all observing sites for the space VLBI program and recommends that the suitability of the Russian masers be investigated as a matter of priority so that orders can be placed as soon as the MNRF agreement is signed.

Specifications for a request for tender are being prepared and has been sent to a short list of suppliers (including Vreyma and Quartzlock). Key selection criteria (apart from meeting technical specifications) will be price, delivery time and maintenance contract details.

20. ATUC is concerned that the call for International Research Facility proposals has not been as widely circulated as we would like. Several committee members were not aware of it till this meeting. We suggest that the proposal deadline be extended and that the wording of the document be clarified as to whether these funds can be used for individual travel to conference.

This comment has been referred to the NCA Chairman. Since the first round the MNRF International Collaboration Committee has been set up (Ekers, Mould, Sadler) and the revised procedures will be distributed. Some funding will be reserved for future proposals.

21. ATUC supports the ATNF negotiations

Now waiting for formal response from Sweden.

concerning involvement with SEST and encourages all forms of collaboration. ATUC believes this collaboration should take the form of technical support and the development of equipment and software.

22. ATUC thanks Jim Caswell for his proposal for a North-South spur for the CA and endorses the concept and encourages further investigation of the best configuration for this extension. ATUC believes this development would be a very valuable addition to the compact array.

23. ATUC requests that the ATNF reconsider and/or clarify its new Duty Astronomer requirements as applied to non-ATNF personnel in the light of concerns from non-ATNF members. ATUC requests that the Director discuss the matter with the chairman of the User Committee.

A new proposal has been distributed to ATUC for comments.

24. ATUC is concerned that new users of the CA can fall into traps such as placing sources at the phase centre and using frequencies that are not multiples of 8 MHz. ATUC requests that a check list be produced so that users can avoid these problems.

Catching all such traps is a demanding request! For the particular case noted we will; modify the scheduling program SCHED to warn users about the 8MHz multiple, include statements about the 8MHz increment and the phase centre offset the observers guide and the guide to observations with the compact array.

We will amend the Duty Astronomer checklist to include confirmation that novice observers are aware of these things.

The ATNF is also considering another synthesis imaging workshop in late '97.

25. ATUC requests the Director to investigate the operating costs of the multibeam system and take appropriate action.

An operating budget for the multibeam system will be established. Note that our standard policy that users pay for consumables (in this case CD ROMS that leave the ATNF) still applies. Unanticipated capital costs (eg inadequate projection of computing needs) have to be handled separately. The the next ATUC meeting we will include the request for priorities for such items.

26. ATUC commends the provision of the ATCA live page but suggests that some means be found to make the observations more understandable to the general public. ATUC notes that users are very willing to contribute this information if a convenient mechanism can provided.

We appreciate the positive comments and constructive suggestions made by ATUC and the ATCA Live Page. The software that generates the Live Page contents does have access to the project id (Cxxx number) currently on the telescope. Therefore a mechanism could be constructed for automatically including a project description generated by each project team. We will investigate this and, if feasible, solicit such descriptions from Principal Investigators of each project.

27. The Committee thanked the retiring Chairman Professor P M McCulloch for his diligent service to ATUC and the user community over the last several years.

The ATNF also thank Peter for his efforts and cooperation.

P M McCulloch Chairman R D Ekers Director, ATNF