

Minutes of the First Meeting
of the
HIPPARCOS SCIENCE TEAM
ESTEC, 28-29th April 1981

Attendance

HST: Dr. M.A.C. Perryman (ESA), Chairman
Dr. C. Coleman
Dr. E. Høg
Prof. J. Kovalevsky
Mr. L. Lindegren
Mr. C.A. Murray
Mr. R.S. Le Poole
Dr. M. Saïsse
Dr. H.G. Walter
Prof. C.G. Wynne
(Dr. C. Jaschek was unable to attend)

ESA: Dr. D.E. Page (part time)
Mr. L. Emiliani "
Mr. R. Bonnefoy "
Dr. H. Hassan "
Mr. O. Pace "
Mr. M. Schuyer "

1. Adoption of the Agenda

The Agenda as shown in Annex I was adopted.

2. Introduction

Dr. D. E. Page, Head of the Space Science Department welcomed the members of the HST to ESTEC and to the Project.

Mr. L. Emiliani, Hipparcos Project Manager, introduced the Project Team to the HST and outlined their responsibilities. The concept of Phases B1, B2, and C/D was outlined, and the foreseen timeline for these phases presented (Annex II).

3. Composition of the Science Team

Kovalevsky proposed that Prof. F. Donati, Torino, be invited to join the HST. The proposal was accepted unanimously.

Wynne commented on his potential dichotomy with respect to the HST and a

possible U.K. hardware team. Emiliani said that he saw no immediate conflict of interests, but asked that HST members keep the Project informed of any industrial involvements. Membership of the HST would have to be reviewed in the light of any such involvement.

4. Presentation of the Phase B1 ITT

Emiliani summarised the philosophy and aims of the ITT.

Schuyer presented an overview of the chapters on 'Scientific Objectives' and 'Launch and Mission Requirements', and invited detailed comments on the section covering 'Overall System Requirements'.

Bonnefoy invited detailed comments on the 'Payload Performance Requirements' and on the 'Optics Subsystem' and 'Detector Subsystem'.

The Project Team will incorporate the HST's comments into a revised draft to be distributed before the next HST meeting.

The HST will formulate their calibration requirements, and will forward these comments to the Project by 15 May.

5. Exploitation of the Star Mapper

Høg distributed two working papers (Høg 1981 April 10, Høg 1981 April 24) on a proposed exploitation of the Star Mappers. From the subsequent discussion, the following points arose:

- the scientific impacts of such an exploitation are immense; the value of the resulting mission would be enhanced considerably.
- the necessary technical modifications appear to be small.
- the HST strongly supported the proposal and urged the Project to award it the highest priority consistent with their ITT commitments.

Emiliani would start a preliminary examination of the proposal and its impacts on Phase B before the next HST meeting, if ITT activities within the Project permit.

6. Bertotti Proposal

Kovalevsky presented the outline of the recent proposal from Dr. Bertotti. It was generally agreed that:

- the proposal overlooked some of the finer details of the measurement

procedure, the resulting accuracy estimates being consequently rather optimistic.

- measurements could only provide a one-dimensional celestial location.
- the sparseness of the possible observations would not allow detailed investigation of the earth rotation.
- more accurate methods of linking the Hipparcos system to an inertial system are foreseen, requiring no satellite modifications.
- the technical requirements (especially on the baffle system) are very demanding.

Kovalevsky will reply to Dr. Bertotti. The HST showed no enthusiasm in pursuing the study. Perryman would inform Dr. Bertotti of this decision.

7. HIP81/01-02

These Announcements of Opportunity, prepared by an Ad Hoc group had been released on 20 March 1981. A letter drawing attention to these AO's was circulated widely throughout ESA member states. Over 100 copies of each AO have already been distributed.

8. HIP81/03 (Invitation for Proposals)

The draft prepared by the Ad Hoc group, including a detailed Appendix on the required data format drawn up by Profs Fricke & Wielen and Mme Turon, was circulated. The HST agreed that:

- some sort of 'Letter of Intent' was indeed required in order to avoid enormous redundancy of effort on the part of proposers. It was felt that November 1981 was too early for such a deadline.
- nevertheless, the Input Catalogue Consortium (ICC) should receive the necessary inputs as soon as possible after their selection, and the current deadline of May 1 1982 was considered satisfactory.
- some detailed work still remains to be done on the required data format. It would be desirable to let the ICC, when selected, comment on the format already drawn up.
- with the above points in mind, Perryman would prepare a final draft, for release after AWG approval, stating that proposals should be received before 1 May 1982, and should contain (in machine-readable form) a list of proposed star positions and magnitudes.

It is foreseen that accepted proposals will be forwarded to the ICC who can then start work immediately. Successful proposers would be expected (and

warned in the Invitation for Proposals to this effect) to supply further detailed information on each star proposed, at the request of the ICC. Data rights would be assigned conditionally on this request being fulfilled within the specified time.

Perryman proposed that the Invitation for Proposals should be released, if possible, to scientists in Member and non-Member States alike. The HST fully supported this view, and the attached note (Annex III) would be forwarded to the AWG for endorsement.

Perryman proposed that the Selection Committee should be a separate (although not necessarily independent) group from the HST. HST agreed to provide names of suitable members of such a Selection Committee, which should cover a broad range of astrometric and astrophysical interests.

9. Next Meeting of the HST

This was arranged for June 1-2 1981, to be held at ESTEC.

10. AOB

Emiliani, on behalf of the Project, thanked the HST for their valuable comments on the ITT.

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AGENDA

Introduction - Dr D.E. Page, Head of Space Science Department
- Mr L. Emiliani, Hipparcos Project Manager

Composition of the Science Team

Presentation of the 'Overall System Requirements' to be included in
the Phase B Invitation to Tender

Exploitation of the Star Mapper

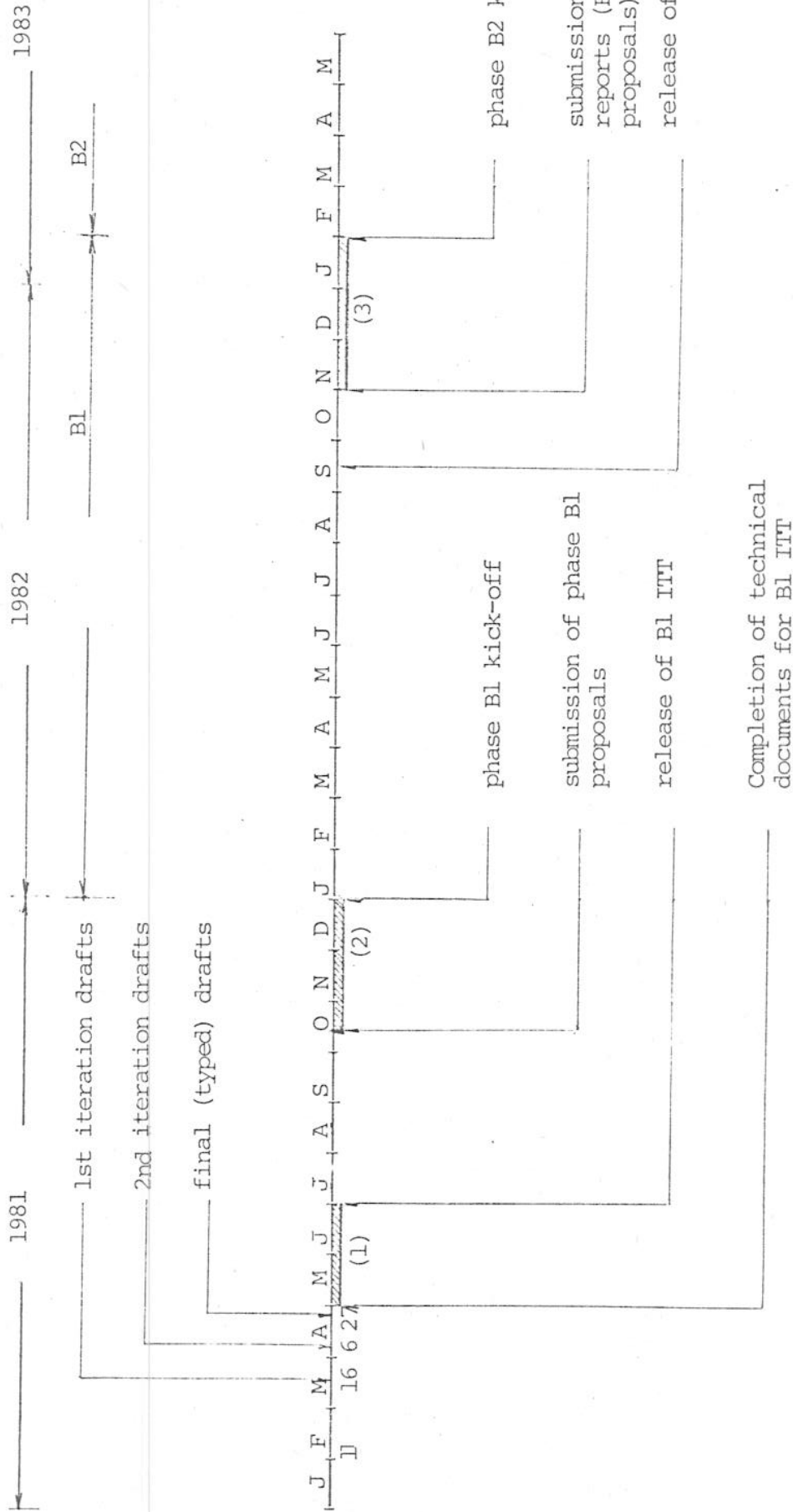
Bertotti Proposal

Comments arising from the released AO's II & III (HIP81/01-02)

Invitation for Proposals (HIP81/03)

Any other business

HIPPARCOS FRONT SCHEDULE



EUROPEAN SPACE AGENCY
ASTRONOMY WORKING GROUP

HIPPARCOS: Observing Proposals
from non-Member States

The Astrometry Satellite HIPPARCOS is a purely ESA observatory with an observing strategy that will be centred around accepted proposals submitted by the scientific community. Due to the adopted observing strategy, and unlike all previous astronomical observatories however, observing time will not be competitive in the normal sense. Nevertheless, in order to guarantee the maximum scientific return from this powerful instrument, consideration of as broad a selection of scientific proposals as possible is required.

Furthermore, some close collaboration with various non-Member organisations is desirable - for example, in the determination of a rotation-free proper-motion system for the HIPPARCOS observations by means of the Fine Guidance System of the Space Telescope.

It is therefore proposed to open the 'Invitation for Proposals contributing to the Observing List' to Member and non-Member States alike.

The AWG is invited to endorse this proposal.