Minutes of the 15th SOHO SWT Meeting

Goddard Space Flight Center, Greenbelt, MD

9–10 August 1995

Contents

1 Action Items and Resolutions SWT 15

Action 15.1 on PIs to comment on present commissioning plan. In particular check:

i) Duration of Activities
ii) Scheduling Requirements on Activities
iii) Check for shared (NRT-s) versus dedicated (NRT-d) link requirements, in particular for calibrations and later activities
iv) Reorganize blocks when needed, in particular use not more than 3-5 blocks

E-mail corrected block sheets to Piet Martens before August 15. Please contact Piet if he needs to resend your block sheets.

Action 15.2 on PIs to provide manning plan for EOF/EAF *including names*. Input to PS before August 31.

Action 15.3 on PIs to ensure that the relevant steps (software changes etc.) are taken to comply with the adoption of UTC at the Earth as the time reference for data.

Action 15.4 on PS to organize meeting of US and European archive representatives to arrange schedules and details for archive development.

Resolution on Reaction Wheel Repair

1. ESA project should send bi-weekly reports to the PIs on the progress and revised schedule for wheel repair. This can be sent to the project scientists who will forward it electronically to the PIs.
2. A PI representative should be invited to be a member of the reaction wheel investigation team. This person should be a member of a PI team, and expert in mechanisms of this type. Klaus Wilhelm has suggested Hermann Hartwig of his laboratory. The PIs agree with this suggestion.
3. Approximately one week before the repaired wheels are to be installed on the spacecraft ESA project should have a review meeting with the PIs. The topics to be covered at the review meeting are:
   - What was wrong.
   - What was done to fix the problem.
   - How were the repaired wheels tested and what are the test results.

The PIs will provide a formal statement to ESA and NASA project on their satisfaction or dissatisfaction with what has been presented.

2 Agree Agenda and Actions Revision

Agenda — annex 1

The presentation on "Mission Simulations" by the FOT was dropped since neither C. Cazeau nor C. White were able to attend.

List of Participants — annex 2

Actions revision

Action 14.1 on Project open
to send information about SOHO model to PIs.

Action 14.2 on Project closed
to send memo to PIs about accreditation at KSC.

Action 14.3 on PIs open (except CDS)
to provide ideas/"stories" for big SOHO media event. Input to PS before May 15.

Action 14.4 on PIs closed
to comment on PR plan (draft 0.3 from 18 April 1995). Input to PS before May 15.

3 Project status and future plans for launch campaign

F. Vandenbussche presented the status of the project and explained the concerns about the reaction wheels and the thrusters (see annex 3). On Thursday afternoon, he gave a delta-report on the outcome of the Stevenhage meeting which took place the day before. RW 2 and 4 were opened the week before. The lubrification was found "a bit dry". The PTT lifetest wheel has also been opened. Its lubrification is good, no sign of a problem visible, cage also o.k.. This lifetest wheel is fully representative for the SOHO wheels. It run 2 1/2 years at constant speed.

After some discussion, the SWT agreed on a resolution on the reaction wheel repair (see Sect. 1).

The PIs requested that the KSC schedule also be sent by e-mail.

4 GSCT#3

F. Vandebussche presented the plans for GSCT#3 (see annex 4). 9 days with double shifts with a S/C availability of 14 hours per day are envisaged. Day 6: Inter-instrument data exchange. Day 7: UVCS. Day 8: 6/8 h pass + MDI, CDS, and CELIAS. Day 9: 6/8 h pass + LASCO, CDS and CEPAC. GSCT#3 is planned to start in early September; exact date to be circulated in due time.

A. Poland announced that any updated/changed TSTOL procedure to be run during GSCT#3 must be provided to the FOT before August 11.

5 Status of Experiments

1. **GOLF** (A. Gabriel)
   fully functional on S/C and ready to fly; fully functional FS available; analysis software in advanced stage, work on-going

2. **VIRGO** (C. Fröhlich)
   ready to fly; spare ready by end of August (see annex 5)

3. **SOI/MDI** (P. Scherrer)
   "believes" that MDI is ready for launch, but cannot be shure due to inadequate test time during the last 9 months; requests microvribation tests with UVCS and SUMER flight hardware during MDI SFT/SPT (which would add only a couple of hours)

4. **SUMER** (K. Wilhelm)
   FM on S/C, ready for flight; electronics spare available, but none for spectrometer; good photometric calibration (10% 1σ); software simulator available; ground system advanced, but still to be improved

5. **CDS** (R. Harrison)
   ready to fly; no HW/SW changes since October 94 (see annex 5)

6. **EIT** (F. Clette)
   Al entrance filters retested at 120° under vacuum for 13 days; no degradation seen; long duration test at 120° for 1.5 months running; results by early September (see annex 5)

7. **UVCS** (K. Kohl)
   UVCS arrived at the Cape on July 26; now on flight standard and all problems solved; preformance checked and extensive end-to-end tests performed (see annex 5); UVCS Science Team meeting on October 9-11 in Florence.

8. **LASCO** (G. Brueckner)
   electronics box repaired and in flight condition; already delivered to the Cape; another 3 shifts of tests needed before instrument can be declared ready for flight; LASCO/EIT science team meeting on September 10 to 13; AO for science investigations to be issued after first data are available.

9. **SWAN** (M. Berthe)
   H cell failure not clarified; refurbished cell delivered (see annex 5); subject to successful test of S/C harness modification SWAN ready for flight; spare electronics and spare sensor available

10. **CELIAS** D. Hovestadt)
    all anomalies on MTOF and STOF solved; all flight units at the Cape ready for integration

11. **COSTEP** (H. Kunow)
    refurbished EPHIN unit at the Cape (see annex 5); severe disturbances due to straylight from MDI cover (to be discussed separately after meeting)

12. **ERNE** (J. Torsti)
    FM on S/C, ready for flight; no changes recently (see annex 5)

6 Commissioning and Early Operations Plan

P. Martens presented the integrated S/C – payload commissioning plan for the first 35 days of the SOHO commissioning operations after launch (annex 6). There is an action on the PIs to comment on present commissioning plan (Action 15.1). It was mentioned that the plan should be changed to UTC. V. Domingo proposed to increase the time of commanding from 8 hours to 12 hours in order to start earlier with science. Everybody agreed. V. Domingo will submit a formal request.

7 Time Reporting

C. Fröhlich gave a short presentation on the time reporting in SOHO data (annex 7). There is an action on the PIs to ensure that the relevant steps (software changes etc.) are taken to comply with the adoption of UTC at the Earth as the time reference for data (Action 15.3).

8 PR Plan

B. Fleck presented a new version of the SOHO PR plan (Vers. 1.1 from 3 August 1995; see annex 8). Section 2 will be amended to clarify the opportunities of local press releases.

Concerning scientific papers, it was agreed to mention the involved instruments and SOHO in the abstract, and include a statement in the acknowledgements that SOHO is a cooperative ESA/NASA programme. The project scientists will formulate a standard sentence for the acknowlegements.

9 Future Workshops and Colloquia

V. Domingo announced the plans of ESA to hold the 1997 ESLAB Symposium on results from the STSP cornerstone missions SOHO and Cluster. Location: ESTEC or any other suitable (practical and relevant) location in an ESA member state. Target time: early summer 1997.

10 AOB

V. Domingo asked the PIs to provide a manning plan for their team for the EOF and EAF (*including names*) (Action 15.2).

K. Wilhelm asked if other experimenters encountered problems negotiating with the Project test time after red/green tag item exchange. Since according to project no verification period is available later in the launch campaign, SUMER decided to exchange their red tag items before the SFT. CELIAS and UVCS expressed same concerns. To be discussed with Project.

B. Fleck presented the status of the SOHO Special in Solar Physics (see annex 9). The complete volume including advance orders for hardcover reprints will be sent to Kluwer on September 1. The SOHO Special will appear in the December issue of Solar Physics.

R. Harrison expressed some concerns relating to the progress of the implementation of the European SOHO archives. There is an action on the Project Scientist to organize a meeting of the US and European archive representatives to arrange schedules and details for the archive development (Action 15.4).

Annex 1: Agenda

Annex 2: List of Participants

Annex 3: SOHO Status

Annex 4: GSCT#3

Annex 5: Status of Experiments

VIRGO (C. Fröhlich)

SOI-MDI (P. Scherrer)

CDS (R. Harrison)

EIT (F. Clette)

UVCS (J. Kohl)

SWAN (M. Berthe)

COSTEP (H. Kunow)

ERNE (J. Torsti)

Annex 6: Commissioning and Early Operations Plan

Annex 7: SOHO Time Reporting

Annex 8: SOHO PR Plan (Vers. 1.1)

Annex 9: Status of Solar Physics Special