Jet Propulsion Laboratory **INTEROFFICE MEMORANDUM**

930-04-006-AEA/ESB: lc

May 6, 2004

TO: J. A. Wackley

FROM: E. S. Burke

SUBJECT: Minutes for the DSS-43 Downtime Readiness Review (DTRR) held on May 6, 2004.

DSS-43 Downtime Readiness Review

The DSS-43 Downtime Readiness Review (DTRR) was held on May 6, 2004 at JPL in building 303-209 with Canberra staff participating via teleconference link. William Dobie and Peter Gagel presented the Antenna Rebalancing Task presentation. The DTRR was conducted to review and assess the readiness for all activities planned for the Antenna Rebalancing Task at DSS-43 scheduled to begin May 22 through June 6, 2004.

Review Board

Gene Burke, Chairman.....DSMS Operations, DSN RAPSO Manager
Wayne Sible.....DSMS Implementation Engineering
Jim Buckley .....DSMS Operations Representative
Mark Hayes.....ITT, O&M Contractor Engineering Manager
Fred Battle.....DSMS Safety Engineer
Tim Sink.....Antenna Maintenance Specialist, Div 33 Technical Representative
Tony Ross .....CDSCC Representative
Art Andujo .....Board Secretary

Attendees

Andujo, Art
Baines, Graham
Battle, Fred
Bitter, Kirk
Buckley, Jim
Burke, Gene
Cucchissi, John
Dobie, Bill
Feria, Alfonso
Gagel, Peter
Gillette, Ron
Hames, Peter
Hayes, Mark
McNicholas, Des
Osman, Jeff
Ross, Tony
Saldua, Ben
Sible, Wayne
Sink, Tim
Smee, Garry
Weenink, John
Welch, Susan

Introduction – *G. Burke*

Mr. Burke introduced the Downtime Readiness Review Board and reviewed the Downtime Readiness Review Process Definition.

DSS-Antenna Rebalancing Task Review: - *W. Dobie*

- **Task Summary**
- **Task Status**
- **Success Criteria Checklist**

Task Summary **–** The following is a listing of work to be completed during the DSS-43 Rebalancing downtime:

- Relocate Antenna Counter weight plates. As per ECR 4.0005.
- Add Strengthening Plates to identified locations as per ECO #93.0084. Following the instillation procedure DSMS Doc No 868-000192.
- Gussets currently fitted at hoop 10 to be removed to permit proper fit up of P2 plates.
- Priority to be given to areas not previously reinforced.
- Maximum strengthening achieved as per prioritised agreement. Hoop 10, 6, & 8.
- Strengthening Task is to be performed on a Non Interference Basis during the Antenna Re-Balance down time DOY 143-158.
- Pointing models are verified.
- Post plate movement data collected.

Task Status **–** Mr. Dobie discussed the preparations that have been completed so far, as well as the plans for work up to and during the downtime. A detailed schedule has been developed and was discussed. A detailed Safety Plan and Work Method Statements have been developed and reviewed. Balancing data has been verified by JPL. Contracts are in place with a welding firm K&R, Rovera Scaffolding, Coates Hire Service and Pacific Formwork Cranes. Mr. Dobie explained in detail the hardware, manpower and equipment that will be used during the downtime. Tools and personnel have been scheduled to be available during the task. Contractor orientation, site inductions, contractor familiarization and training on Swing Stage Scaffolding is scheduled for DOY 142 May 21, 2004. All required hardware is on site and complete. Hardware from JPL arrived on DOY 111 (April, 20, 2004).

There are several NIB tasks scheduled to be completed during the downtime that will not interfere with work performed for the rebalancing. Among them are the strengthening task, a Maser swap in the SPD cone and the installation of a new fire suppression system platform.

Success Criteria Checklist**:**

At this time there are no outstanding issues with the primary task as planned, therefore it is being recommended to the Board to proceed with the task:

- The task manager believes that the work schedule is credible. The schedule includes all work to be completed. Contingencies are in place if the task is unable to be completed due to weather or hardware problems within the downtime period. Facility personnel are confident that all outstanding NIB tasks such as painting can be completed during subsequent maintenance periods.
- A detailed safety plan has been developed and reviewed by all participants. There are safety and work organization meetings planned for each morning of the downtime.
- The planned plate movements to balance the antenna have been reviewed by JPL Engineers.
- All hardware is onsite including balance plates and strapping equipment. Most of the minor work not involving the antenna such as the assembly of the scaffolding and the chain link fence will be completed before the downtime begins.
- The documentation has been filed and completed with JPL through the ECR/ECO process for all tasks requiring it, with the exception of the fire suppression system platform installation task. Documentation will be completed before the downtime begins, otherwise it has been agreed that the work will not be done.
- No spares are required for this task.
- Supporting personnel, tools and equipment required will be available for these tasks, including contracted labor and rented equipment.
- Testing will be conducted as soon as modifications are completed. Star Tracks will be conducted to gauge the quality of pointing models for Pointing Calibration. A balance run and analysis will be conducted to verify improvements in antenna balance. Data will be submitted to JPL for review.

Mr. Dobie discussed the detailed schedule and explained the different aspects involved in the tasks. The work has been broken down into several sections of the antenna. As noted in the success criteria much of the minor work is scheduled to be completed prior to the downtime period.

Mr. Dobie will provide the Review Board daily status reports on work progress until the completion of all tasks. Jeff Osman will provide a distribution list to Bill Dobie.

Board Summary:

The Board reviewed each of the success criteria following the presentation and recommended that DSS-43 begin its downtime as planned. Comments provided by each of the Board Members are as follows:

Wayne Sible – Mr. Sible feels that the success criteria has been met and agreed to proceed with the downtime.

Jim Buckley – Mr. Buckley agreed to proceed with the downtime. Mr. Buckley stated that he will put together an OCR to review the antenna status before it is returned to service

around June 3rd or 4th.

Mark Hayes – Mr. Hayes agreed to proceed with the downtime.

Fred Battle – Mr. Battle agreed to proceed with the downtime.

Tim Sink – Mr. Sink agreed to proceed with the downtime. He would like whatever strengthening task items that are not completed to be scheduled in the next downtime.

Tony Ross – Mr. Ross agreed to proceed with the downtime and stated that the team is well prepared.

Ron Gillette – Mr. Gillette agreed to proceed with the downtime and would like to be on the daily status distribution list.

Gene Burke – Mr. Burke agreed to proceed with the downtime, but would like to have the outstanding ECO/ECR for the fire suppression system platform taken care of as soon as possible.

Action Items (AI's):

1. Jeff Osman will compile a distribution list for those that would like to receive the Daily status reports from Bill Dobie.
   The following persons are to be included in the distribution list:
   - Art Andujo
   - Fred Battle
   - Jim Buckley
   - Gene Burke
   - Mark Hayes
   - Tony Ross
   - Wayne Sible
   - Time Sink
   - Joe Wackley
   - Jeff Osman
   - John Cucchissi
   - Jim Hodder
   - Ron Gillette

2. John Cucchissi will ensure that the ECO/ECR documentation for the fire suppression system platform is to be completed as soon as possible prior to the beginning of the downtime.