



NRL Pathfinder Planning Meeting

Dynamics Testing Update

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Dynamics Test Plan and Sine Vibration Test Update

- **Dynamics Test Plan Update**
 - Dynamics Test Plan in release cycle – comment from NRL implemented, nothing holding up release except signatures
- **Sine Vibration Test Progress**
 - Test Plan has been agreed upon for some time now, and is well understood
 - Incorporated minor comments arising from the draft review – the test plan is currently in signature cycle
 - Strain gauge locations defined to allow calculation of interface loads – the gauge locations were determined by analysis but will be verified at the TIP proof test and Grid Static Load Test
- **Sine Vibration Test Issues**
 - Need to ensure accelerometer interface to NRL – this has been examined many times in the past, but a final accounting needs to be done for all accelerometers, their cables and associated lengths, and strain gauges → Approx need date = mid-Oct, '05
 - Potential long lead items (6 weeks for accel or cable delivery)
 - Need to lay out contingency plan for modal test → Approx need date = Nov, '05
- **Sine Vibration Test Additional Work**
 - Complete Pre-test Analysis, which comprises frequency-response analysis, load extraction and margin calculations → Approx need date = mid-Nov, '05
 - Work with NRL to write Test Procedure → ECD = Jan, '06



Acoustic Test and Weight/CG Test Update

- **Acoustic Test Progress**
 - Test Plan has been agreed upon for some time now, and is well understood
 - Initial layout of SC top deck simulator in-work
- **Acoustic Test Issues**
 - SC Top deck simulator large enough?
 - Some concern that the area is significantly less than the SC Top Deck...is this acceptable?
 - Radiator lower support strut stiffness
 - Subsystem test may not have been conservative for the RMBs
 - How well does the test stand have to simulate the SC?
- **Acoustic Test Additional Work**
 - Complete SC top deck simulator trade and design → Approx need date = Jan, '06
 - Complete trade study on radiator lower support struts → Approx decision date = mid-Sept, '05
 - Potential impact to test stand design, i.e. may need to change 4x4x0.25 angle to something stiffer
 - Need to arrive at the answer soon to not hold up test stand weldment mfg
 - Work with NRL to write Test Procedure → ECD = Jan, '06
- **Weight/CG Test Progress**
 - Basic method agreed upon and shown in current test plan
 - Load cells identified
- **Weight/CG Test Issues**
 - Load spreader plate not designed yet
- **Weight/CG Test Additional Work**
 - Design Load spreader plate → ECD = Dec, '05
 - Make spreadsheet to calculate Weight and CG from load cell output → ECD = Feb, '06
 - Work with NRL to write Test procedure → ECD = Jan, '06