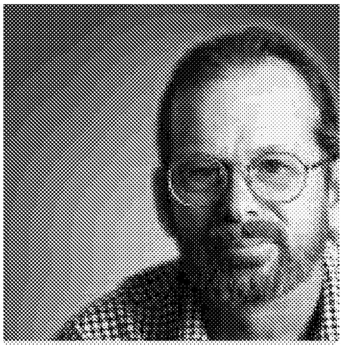
ASK Magazine By practitioners for practitioners

Issue 8 PRACTICES



ABOUT THE AUTHOR

Phil Sabelhaus is the Deputy Director of Flight Programs and Projects for Earth Sciences. He has also served as Project Manager for several Goddard projects, including TOMS, Landsat-7, EOS Aura, ESSP VCL and EOS Aqua.

Continuous Risk Management

by Phil Sabelhaus

Background

Risk identification is an ongoing activity that takes place during the routine project workflow. Project activities such as programmatic and technical meetings, telecons, reviews, and other forms of communication often bring to light project risks. When this occurs, we record and analyze the risk on a Risk Information Sheet. The process outlined below helps the project team identify and cope with project risks throughout the life of the project.

Procedure

1. Team identifies list of potential risk items. Not all items identified are accepted. Risks can be current problems or potential future problems.

2. Risk Mitigation plan with action items and due dates is developed for each accepted risk item.

3. Team meets regularly (every 2 weeks for us) to assess risks and add new risk items, if necessary. See Status section on Risk Information Sheet below.

4. Risks are closed when all the actions to close the risk have been taken. Some risk items are closed quickly; others are open for a long time. Some are considered watch items and the action plan doesn't kick in until certain negative events happen.

5. Action plans include second sources of some items, requirements redirection, different technologies, etc.

6. Closed risks remain in the base for future learning.

Example of a Risk Information Sheet

see opposite page

Example of a Risk Information Sheet

ID TS 001	**Risk Title** Chemistry DRAM		**Identified** 4/19/99
Priority	**Statement** Since there are a limited number of DRAM spares between the Aqua and Aura spacecraft and Aqua is given first priority; there may be inadequate DRAM to meet the two-orbit data storage requirements for the Aura Solid State Recorder (SSR).		
Probability Medium			
Impact High			
Timeframe Near Term	**Submitter Name**	**Class**	**Assigned to** Andrea Razzaghi
Context TRW plans to meet the current two-orbit data storage requirements by augmenting the DRAM units reserved for Chemistry with DRAM units currently being reserved as PM spares. There are no more DRAM units available beyond those currently allocated for PM and Chemistry. The Common Bus SSR design is based on these 5.4V DRAM units (current technology is 3V).			
Mitigation Strategy A. Track the Usage and Attrition of DRAM B. Enable OMI Data Compression C. Challenge Data Storage Requirements D. Redesign SSR			
Contingency Plan and Trigger • Spacecraft trigger point for using mitigation B is when the amount of DRAM available for the Chemistry SSR is less than the amount required to meet the two-orbit data storage requirements without OMI data compression implemented (less than 104 Gbits). IAM trigger point is TBD. Ground system trigger point is TBS. • Spacecraft trigger point for using mitigation strategy C is when the amount of DRAM available for the Chemistry SSR is less than the amount required to meet the two-orbit data storage requirements with OMI data compression implemented (100 Gbits). • TRW indicates that there would be an impact to the launch date for using mitigation strategy D due to the immaturity (not flight qualified) or the alternative high-density technology.			