



MONTHLY PROJECT RISK ASSESSMENT PROCESS

AKA: Fever Charts

Prepared For:
NASA Risk Management Colloquium III

September 17, 2002

Presented by

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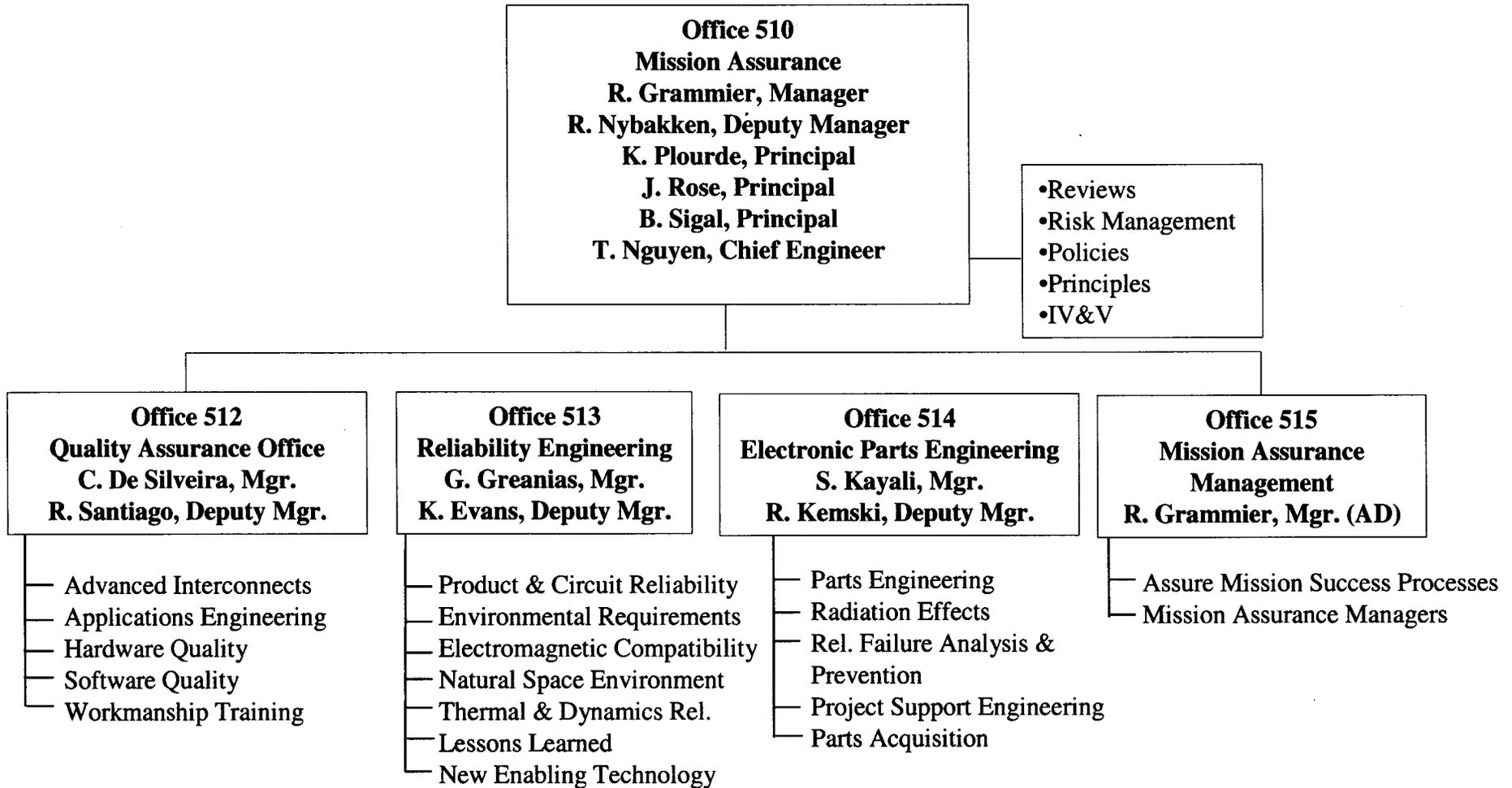


Purpose of Fever Chart Process

- Provide an independent monthly risk assessment of each project (whether in development or flight operations).
- Assess status and issues of each mission assurance program for each project, and ensure issues have a closure plan.
- Communicate significant risk issues for specific projects to the Laboratory Director and Director For OSMS.
- Ensure effective, proactive, communication of mission assurance concerns to project managers and responsible directorates.
- Ensure effective communications between the project Mission Assurance Manager (MAM), mission assurance team disciplines, and line management within OSMS.
- Resolve conflicts, advise and mentor.
- Focus priorities and resources to retire risks.



Functional Org. Chart

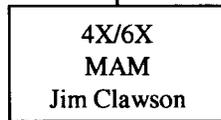
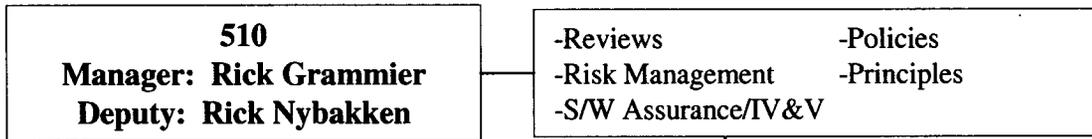




JPL Office of Safety and Mission Success (OSMS)



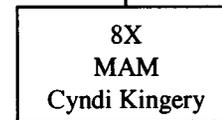
Project Org. Chart



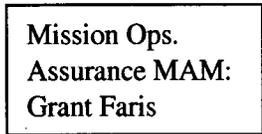
- Deep Impact – Guarino
- G. Marconi Orbiter – Nguyen
- ST-6 - Miseroy
- Mars Expl. Rover – Boyles, Facto, Newell
- Mars Netlander – Romo
- Mars Reconnaissance Orbiter – Barela
- Mars 05 CNES Orbiter - Romo
- Mars 2009 Smart Lander – TBD
- MARSIS (Mars Exp.) – Erickson
- MIRO - Dobkowski
- X2000 – Nguyen



- Galex – Noone
- Herschel/Planck – Larson
- LCAPE – Taylor
- LTMPF – Taylor
- SIRTF – Arnett
- SIM – Doran
- ST-5 – Taylor
- ST-7 - Gross



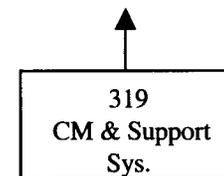
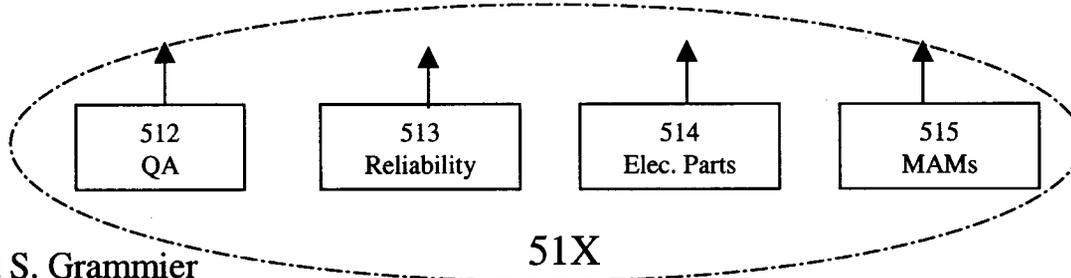
- AIRS – Noone
- CloudSAT – TBD
- MLS – Forgrave
- TES – Newell
- Seawinds – Danesh
- OSTM - Noone



- 2001 Mars Odyssey – Woodall
- Cassini – Witkowski
- Galileo – Woodall
- Genesis – Axsom
- MGS – Faris
- Stardust – Faris

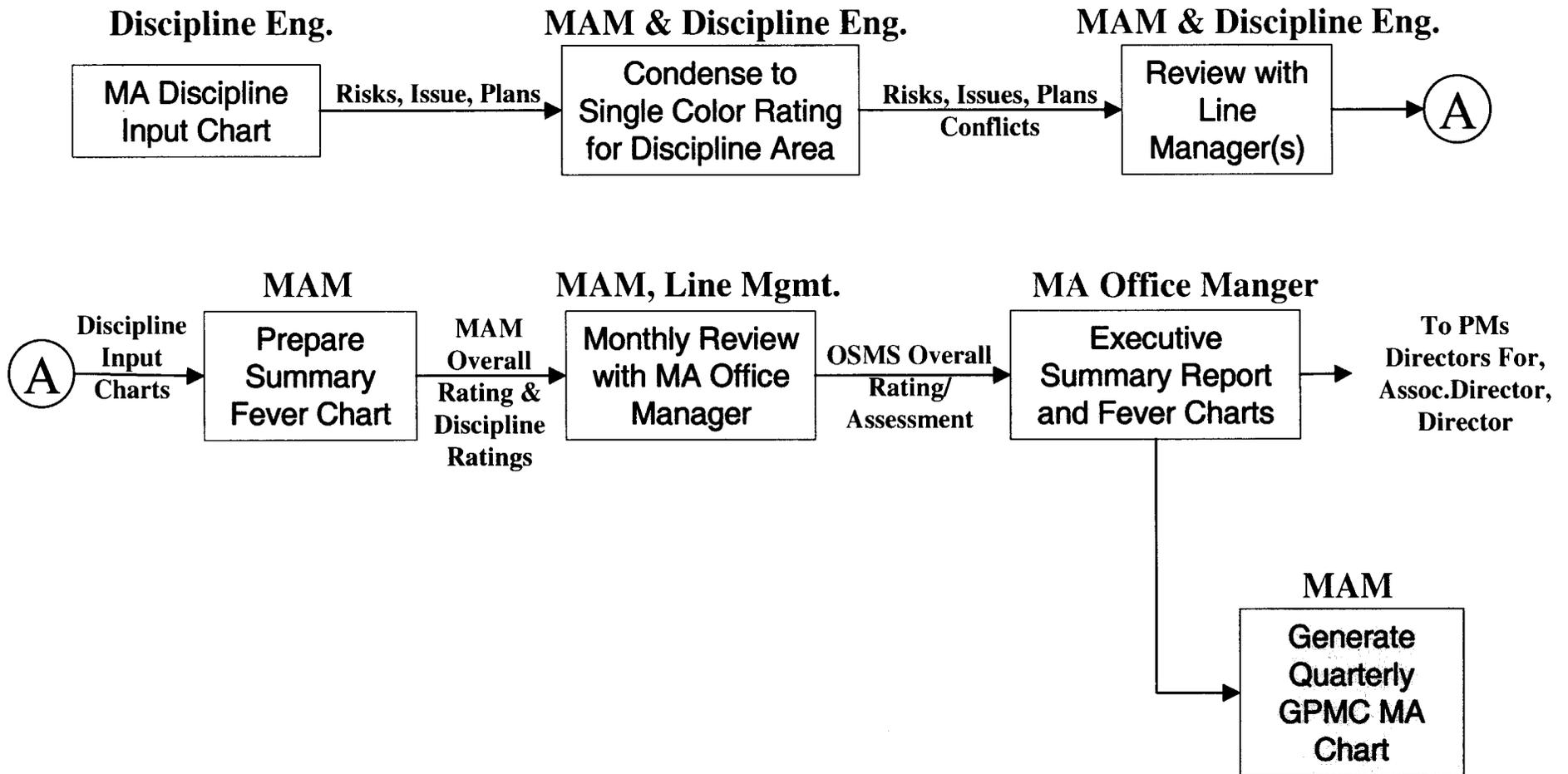
- Ulysses – Woodall
- Voyager - Woodall

- ACRIMSAT – Shaw
- JASON – Hyman/Shaw
- MISR – Hyman
- QUIKSCAT – Danesh
- Topex – Hyman
- GRACE – Shaw





The Mechanics





51X Discipline Input Chart

Project Name	Technical	Schedule	Cost	Staffing
	G, Y, or R			

FOR YELLOW OR RED RISK RATING:

Issue Description:

Resolution Plan:

-
-
-

Issue Description:

Resolution Plan:

-
-
-



JPL Office of Safety and Mission Success (OSMS)



Area	Risk Rating	Criteria
Technical:	Green	No Significant technical issues or risk areas.
	Yellow	Significant technical issues (in the applicable discipline) that may impact mission success or risk posture if not corrected.
	Red	Major technical issues that will definitely jeopardize mission success or risk if not corrected.
Schedule:	Green	Consistently performing within baseline schedule or meeting receivable/deliverable dates and sufficient margin exists to accomplish tasks.
	Yellow	Not consistently meeting schedule and/or receivable/deliverable Dates. Margin is insufficient to meet commitments given current performance. Some replanning required.
	Red	Performance is consistently behind schedule. Negative margin and major replan required to get back on track.
Cost:	Green	Performing within allocated budget $\pm 5\%$.
	Yellow	Performing at $\pm 10\%$ to allocated budget. Options may be available to rectify situation within confines of task budget.
	Red	Performing at $> \pm 10\%$ to allocated budget. Additional project reserves will be required to correct.
Staff:	Green	Sufficient staff on-board to accomplish tasks and meet commitments.
	Yellow	Staff shortfall resulting in some slips. Not meeting commitments. Short-term trend and recovery expected.
	Red	Significant shortfall requiring major effort to correct. Not a short-term problem. Alternate approach required.



Development Fever Chart

Project Name- Mission Assurance Manager – MAM Name

OSMS (51X)	MAM	SAFETY	QA	SQA	Config. Mgmt.	Reliability/En v.	Elect. Parts	Mat'ls/	Fight Ops	Other
			Y			Y				

Operations Fever Chart

Project Name- Mission Assurance Manager – MOAM Name

OSMS (51X)	MAM	Satellite Health & Safety	Problem Reporting Tracking	CM	Reviews	Risk Mgmt.	Pre-Launch Readiness	Fight Ops Status	Other
	Y					Y			Y



Executive Summary for Monthly Fever Chart Review (Cont.)

Project/Directorate	Risk Rating	Risk Concerns
	Yellow tending towards Red	<p>Risk amplifying due to increasing schedule pressure, resulting in modifications to product development/delivery flow, test program and standard monitoring processes. The situation is further exacerbated by budget pressures and work-force fatigue/overload.</p> <p>Significant development issues continue to arise, while the Project is pressing ahead with system integration, leading to system environmental test.</p> <p>Leading issues include environmental test failures (and resolution of same), FSW development and test bowwave, remaining electronic parts issues and the continued increase in open paperwork (PFRs, Action Items, etc) which may be a significant risk threat.</p>
	Yellow	<p>Continued test failures associated with the Attitude & Power Electronics (APE) redesign/rework effort (FPGA redesign/replacement). Unknown impact and risk associated with the recent GIDEP alert on Tecstar solar arrays.</p>