



IMPORTANT NOTE TO SUPERVISORS:

This is not a “plug ‘n play” package for presenting to your employees. It’s extremely important that you review the charts prior to your meeting, and then pick and choose what, if any, charts you want to present. There are several charts containing detailed material that may not be applicable to several orgs here at MSFC.

The following material is provided as an aid to supervisors/managers, but you are under no obligation to use it. You may prefer just to have an open-ended discussion based on comments received from employees who have read the report, as opposed to using the guidance provided in the attachment.

If you have any questions or comments, please contact your organization’s Safety and Mission Success (SMS) Week point of contact (identified on the last chart in this package).



Safety and Mission Success (SMS) Week

11/17/03 – 11/21/03

Discussion Points for Supervisors and
Managers



SMS Week Message



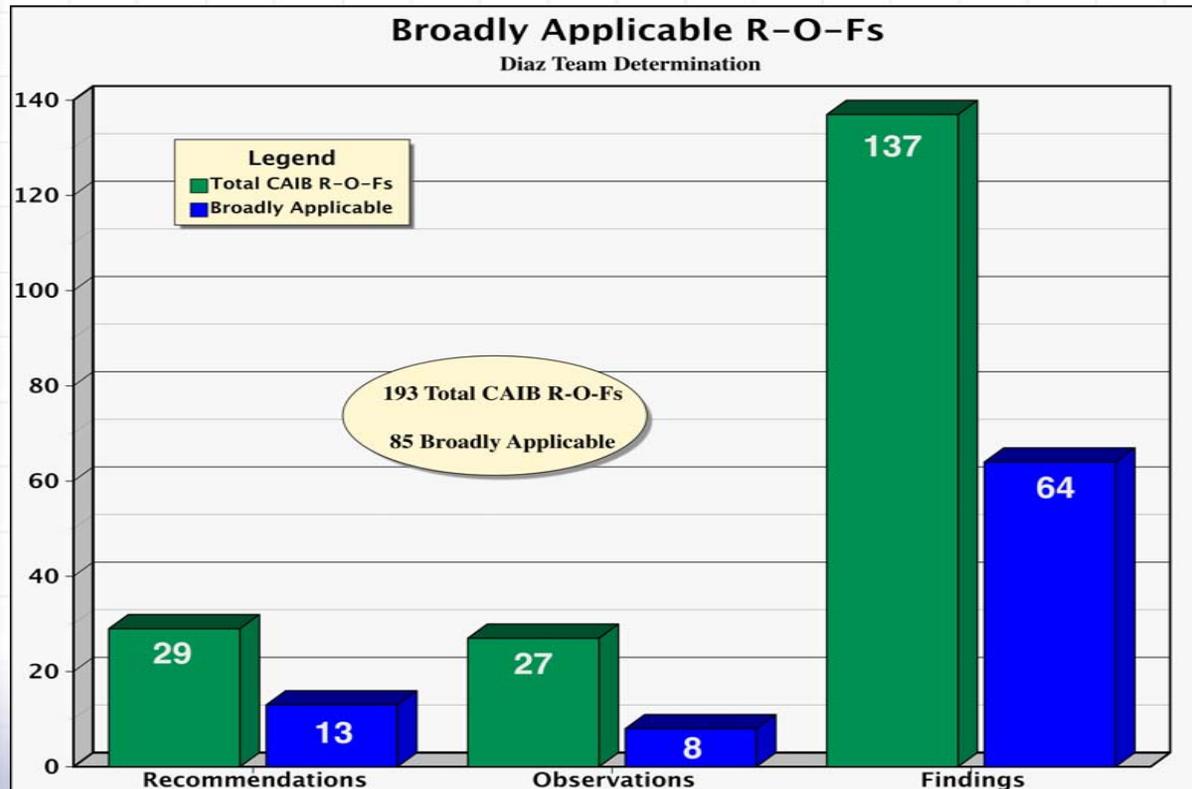
- It is important for every employee to read the Columbia Accident Investigation Board (CAIB) Report
- The CAIB Report is relevant to **all** of us, not just the Human Space Flight Program



MSFC Employees Should Read...



- CAIB Report
- Matrix generated by CAIB Agency Wide Action Team (CAWAT), also known as Diaz Team





CAIB Report Organizational Cause Statement

Volume 1, page 177



“The organizational causes of this accident are rooted in the Space Shuttle Program’s history and culture, including the original compromises that were required to gain approval for the Shuttle Program, subsequent years of resource constraints, fluctuating priorities, schedule pressures, mischaracterizations of the Shuttle as operational rather than developmental, and lack of an agreed national vision. Cultural traits and organizational practices detrimental to safety and reliability were allowed to develop, including: reliance on past success as a substitute for sound engineering practices (such as testing to understand why systems were not performing in accordance with requirements / specifications); organizational barriers which prevented effective communication of critical safety information and stifled professional differences of opinion; lack of integrated management across program elements; and the evolution of an informal chain of command and decision-making processes that operated outside the organization’s rules.”



CAIB Report Organizational Cause Statement



- Organizational factors were a critical part of the CAIB Report
- The Organizational Cause Statement (preceding chart) in the CAIB Report may help provide the context for work unit discussions
- Three primary questions to ask are on next chart
- Additional list of optional discussion topics (which were derived from the Organizational Cause Statement), are found on subsequent charts – these additional topics may or may not be applicable to your particular organization



Three Primary Questions to Ask:

1. How is the CAIB Report/Diaz team matrix relevant to your work unit?
2. What are some of the organizational causes that impact you, the Center and NASA the most?
3. What needs to be done to help your organization, MSFC and NASA move forward?



CAIB Report Organizational Cause Statement



- List of Optional Discussion Topics
 - Engineering and safety compromises in the face of programmatic (schedule or budget) pressures or constraints
 - How “mischaracterization” of unexpected performance shapes decision making
 - Relying on past success instead of sound engineering
 - Organizational barriers to effective communication
 - Lack of opportunity to express minority opinions
 - Lack of integrated management across program elements
 - Informal chain of command



CAIB Report Organizational Cause Statement



- *Engineering and Safety Compromises*
 - Discuss a specific example in which programmatic constraints compromised engineering and safety issues. Why did that happen? How were the programmatic versus engineering/safety risks perceived? What could we have done instead?
 - Consider an organizational structure change, the “ITEA” recommended by the CAIB, that might insulate sound safety and engineering practices from programmatic constraints.



CAIB Report Organizational Cause Statement



- *How “mischaracterization” of unexpected performance shapes decision making*
 - The CAIB report cites specific instances of how definitions (for example, accepted risk, no safety of flight issue, etc.) could lead to communication and decision problems. For example, what was considered a serious threat during initial design, testing and operation could overtime be treated as acceptable. Do you have an example of a program where potentially serious incidents have occurred that did not result in expected damage even though they were outside the design guidelines? Have these incidents over time become accepted?



CAIB Report Organizational Cause Statement



- *Relying on Past Success Instead of Sound Engineering*
 - Do we have any examples in our work unit of hasty technical decisions without due diligence for thorough engineering analysis? Does this happen because of schedule pressure, budget constraints, lack of people, or inadequate tools to do the job? How can we do better on this in the future?
 - Do we have any examples in our work unit of technical decisions that were based on intuition and not sound engineering practices?



CAIB Report Organizational Cause Statement



- *Organizational Barriers to Effective Communication*
 - In the CAIB report the distinction between the “line” and the “program” was viewed as an obstacle to effective communications. The two organizational elements appeared to create an “us versus them” environment. What are the relative roles of the line organizations and the programs or projects? Do we see any communications problems among these different groups?
 - As described in the CAIB report in numerous places, the way in which contracts are written and enforced between NASA and its contractor workforce has an enormous effect on how that relationship is framed, and thus on how collaboration, information sharing, and joint problem solving occurs. Do we see any issues in how contracts are written within our work unit? Are there unnecessary barriers between civil servants and contractors? If it’s a performance-based contract are the metrics aligned properly to the organization’s goals and objectives?



CAIB Report Organizational Cause Statement



- ***Lack of Opportunity to Express Minority Opinions***
 - Choose an important regular meeting that we have in our work unit. Do we do a good job of asking for minority dissenting opinions? Does everybody have a voice? Can you voice your opinion, even if it's not a popular opinion, without fear of retribution? If not, what changes do you think would make a difference?



CAIB Report Organizational Cause Statement



- ***Lack of Integrated Management Across Program Elements***
 - Identify a specific example in our organization where we see a lack of integration of management processes. For example, are you given the accountability and responsibility without the authority to do your job due to organizational barriers? Are people not clear on what the management processes and chains of command are? Or, if we think in a total systems perspective, if a major emergency just occurred in your program, would you know what your role is ?



CAIB Report Organizational Cause Statement



- *Informal Chain of Command*
 - Identify a specific example in our organization where we see an informal chain of command. Is that always a problem? Or is a “back door” necessary because we have a broken process? If the formal process is broken, how can we fix it?
 - Does a formal process and chain of command exist for emergency or contingency situations? Are they followed?



Individual Feedback



For those employees who cannot be part of the SMS activities, or feel their input was not heard, there is a direct feedback mechanism to the CAWAT Team available via the web to provide individual comments:

www.smscomments.nasa.gov



ORGANIZATIONAL POINTS-OF-CONTACT



ORG	NAME	MAILCODE	PHONE
AD	ANDERSON, Bruce	AD01	4-1901
CD	WALKER, Greg	CD01	4-7558
ED	ASKINS, Bruce	ED38	4-1003
FD	CRUMBLEY, Bob	FD01	4-2464
LS	McGROARY, Jim	LS01	4-0013
MP	HARRIS, Yolanda	MP71	4-3001
OS	ORDONEZ, Elia	OS01	4-6658
PS	HAMNER, Elaine	PS01	4-0308
QS	LAYNE, Keith	QS40	4-4801
RS	VEMMER, Cynthia	RS01	4-3250
SD	DOLLMAN, Tom	SD01	4-6568
TD	DUARTE, Alberto	TD02	4-2944
UP	CHESSER, Charlie	UP01	4-0107
UP40	METCALFE, Ola	UP40	4-7093
VS	EDDLEMAN, Helen	VS01	4-4130
	SPACEK, Dave SMS Lead	QS50	4-2686