



# ***Enhancing Distributed Team Performance in Exploration Missions***

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**IAASS Conference**  
**Rome, October 21-23, 2008**

# Teams Observed

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TEAMS	*Team Composition	Yrs. Observed
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- Military Flight Crews (2-4 / varies) 10
- Fire/Rescue Teams (5-15 / varies) 2
- Nuclear Power Control Teams (6-8 / 0) 2
- Shuttle Flight Crews (5-7 / 20+) 8
- Shuttle Control Teams (20 / 60+) 6
  
- Mission Management Team (16-29/100-300+) 2  
**Comprised of senior management personnel distributed throughout myriad of entities across the United States and internationally**

\*(avg. team/supporting team size)

# Safety Culture as a Means of Overcoming Organizational Pressures

PRODUCTION/OPERATIONS  
SCHEDULE

ORGANIZATIONAL  
STRUCTURE



CHANGE/WAVERING  
VISION

FUNDING SOURCE  
& BUDGET

# Critical Team Leadership Skills

Observations from large/small highly distributed teams show that strong leadership skills have the most positive affect on performance and both task and social cohesion

- **Positive Atmosphere** - Open & honest
- **Learning Mentality** - Learn from shared experiences
- **Mentors/Coaches** - Engaged/proactive in knowledge transfer
- **Professional Maturity** - Accountability: improvement above egos

# Primary Impediment to Distributed Team Performance

**LEADERSHIP...When present, leads teams to success  
... when absent, leads teams to failure**

Seems obvious, but many do not fully appreciate its importance.

Not simply understood best practices...it is a team's life blood.

A team's climate will quickly deteriorate with a leader that does not subscribe to this notion.

Ideally, an extremely strong team (one with established daily norms) could realign the leader.

However, in 23 years of being part of and observing operational teams, I have yet to see this happen (it takes a long time to get to that point and is even more difficult in teams imbedded in highly bureaucratic organizations and perhaps nearly impossible in some cultures).

Leadership therefore represents distributed teams' greatest vulnerability and when problematic also its greatest impediment to performance goals (both technical and psychosocial).

[next panelist/moderator]

# Leadership Skill Transfer

Team-Centered debriefs that include team and individual member self-assessments offer one of the most effective ways to model and therefore transfer critical leadership skills

- Maintaining a Positive Atmosphere
- Fostering a Learning Mentality
- Mentorship/Coaching
- Demonstrating Professional Maturity