

# User Workshop on Utilization Management Concept Development for the International Space Station

11 July, 2002

Doubletree Hotel, Challenger Ballroom  
Cocoa Beach, Florida

## Pink Group Presentation

*These findings are a synopsis of the notes provided by the working group to the NASA Utilization Management Concept Development Team. Its content has been taken from notes provided by the working group and from notes taken during their User Workshop out-briefing.*

# What's Working

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- Science peer review is going well, but commercial review is not well established.
- Payload processing requirements and safety are well substantiated but are encumbered by too much overhead (both too many people and too many organizations).
- Mission management is well understood, though with low efficiency.
- PI research is generally a good experience – getting data, having the freedom to publish and interact – and is in good shape.

# What's "Broke"

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- Excessive duplication of activity.
- Poor overall planning and execution of requirements.
- Ground systems neglected at every level.
- Increasing redundancy of activity - particularly for training and payloads analysis.
- Public outreach is horribly lacking.
- NASA doesn't explain the Station enough.
- Some functions are wholly abandoned, though with still some localized success.

# “Broken” Functions

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- Function 0
  - ✓ Implementation does not work well, planning does not work well.
- Function 3
  - ✓ No consolidated/integrated Agency plan that is consistent with NRC research; national prioritization is lacking.
  - ✓ NASA nurtures start-up research; wouldn't exist otherwise.
  - ✓ Peer review is getting better.
  - ✓ Spacelab maximized utilization well.
  - ✓ Manifesting not well realized.

# “Broken” Functions, continued

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- Function 4
  - ✓ Works fairly well.
  - ✓ But want to define requirements for engineers that increase costs
  - ✓ Scientists should drive requirements and be better integrated together with other requirements.
  - ✓ Wellness depends on the team management structure.
- Function 5
  - ✓ Broken.

# “Broken” Functions, continued

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- Function 6

- ✓ Works but is inefficient and not cost effective.
- ✓ Inconsistencies between Station, Shuttle, and centers.
- ✓ Numerous document hurdles; MDL documentation had to follow the same 27 steps as a double rack.
- ✓ Differing safety standards.
- ✓ Need to redefine “success” to obviate the “fear of failure.”

- Function 7

- ✓ Concern with time, budget, allocation of consumables.
- ✓ Limited environment, no basis for other racks consistent with crew time, upmass, budget for spares.

# “Broken” Functions, continued

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- Function 8
  - ✓ Built TSE on shoestring budget, have concerns for facility class payloads.
- Function 13
  - ✓ Researcher not treated as a customer but as a passenger.
  - ✓ Correct functions performed but not executed efficiently.
- Function 14
  - ✓ Needs to be streamlined; a single responsibility is needed.

# “Broken” Functions, continued

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- Function 16
  - ✓ Disagreement amongst team.
  - ✓ Training inefficient, ineffective: crew doesn't interact with team.
  - ✓ Needs computer based training - need to invest in tools, standards to do this.
  - ✓ Too many steps between PI and crew; PI's should go to KSC to train directly with crew.
  
- Function 17
  - ✓ the system is not very friendly to the PI.

# “Broken” Functions, continued

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- Function 18

- ✓ No outreach; US public doesn't know about ISS research.
- ✓ High priority, need to know how effectively to deal with the media.
- ✓ Education is done better, but its relevance is not communicated effectively with the public.

- Function 19

- ✓ Not done. Commitment is needed.

- Function 20

- ✓ Nothing is systematic or consistent across programs. A long term plan is needed.

## **Functions that could be performed under an alternative management structure**

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- 1) Functions 0 and 2 begin as government responsibilities, but could later on be transferred to an alternative management structure.
- 2) All else can be performed/transferred.

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