

**SPACE STATION EVOLUTION  
AND  
ADVANCED TECHNOLOGY INSERTION  
PANEL 1**

**SPACE STATION ADVISORY COMMITTEE**

## **PANEL 1 MEMBERS**

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\* **Rad Byerly**

**Ed Crawley**

**Ron Greenwood**

\* **Jack Kerrebrock**

**John McElroy**

\* **Robert Moser**

\* **Stan Weiss (Chairman)**

\* **Attended Meeting January 6, 1989 at NASA Headquarters**

# **PROPOSED DISCUSSION TOPICS FOR SSAC, PANEL 1 MEETING, JANUARY 6, 1989**

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**Current Evolution Planning Status - NASA**

**Mission Drivers**

**Example: Attached Payloads**

**Subsystem Requirements - Current  
- Planned**

**Technology Needs**

**Scar Requirements & Planning**

**Schedule for Advanced System Needs**

**Acceptance & Planning by Work Packages, Centers**

**Use of Advanced Development Programs**

# MEETING AGENDA CHART

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<b>9:30 am</b>	<b>Preliminaries</b>	<b>J. Odom</b>
<b>9:45</b>	<b>Current Evolution Planning Status</b>	<b>E. Huckins</b>
<b>10:30</b>	<b>Evolutionary Mission System Studies</b>	<b>B. Pritchard</b>
<b>LUNCH</b>		
<b>1:30 pm</b>	<b>Mission Requirements Data Base Status</b>	<b>S. Friesma</b>
<b>2:00</b>	<b>Advanced Development Program</b>	<b>G. Swietek</b>
<b>3:00</b>	<b>General Discussion</b>	
<b>ADJOURN</b>		

# ISSUES

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- **Is Evolution Planning driven by future NASA mission plans or defined space station uses?**
  - **Space Station part of a grand infrastructure**
    - **Mars/Lunar assemblies**
  - **A research facility in space for materials processing, life sciences, earth resources, etc.**
- **"The space station should be thought of as an institution with a research facility in orbit, not as a physical artifact"**
- **How is this schedule for evolutionary changes established via priority needs for habitability, service and assembly support, technologies to enable mission requirements?**
- **Where should advanced technology development be focused - at an R&D Center or at the using Work Package Center?**

# ACCOMPLISHMENTS

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- **Level 1 Office for Evolution established (Mgr. E. Huckins)**
- **Langley Research Center assigned Evolution Planning responsibility**
- **Evolution working group established; membership from all space station related centers**
- **Advanced Development Program for automation and robotics in process**

# PLANS

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- **Evolution Planning Working Group Meeting: End of January**
- **Agenda Item for International Participants Meeting:  
Summer 1989**

# CONCERNS

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- **Integration of International Partners in Evolution Planning**
- **Acceptance of Evolution Planning from LaRC by Work Package Centers**
  - **Level and influence of working group membership**
- **Current emphasis on Evolution through additional lab modules vs internal configuration**
- **Concentration of Advanced Development Program solely on automation and robotics (except for solar dynamics) ? DMS, flexible structure control. . .**