TECHNOLOGY COORDINATION

STEVEN HARTMAN

TECHNOLOGY COORDINATION PROCESS TO DATE

- ANNUAL TECHNOLOGY PRIORITIZATION SINCE 1987
- OAST LONG RANGE PLAN -- THRUSTS TIED TO OSSA STRATEGIC PLAN
- LIAISON ASSIGNED FROM OAST TO OSSA
- AUGUSTINE REPORT -- INTEGRATED TECHNOLOGY PLAN
- OSSA GRASS ROOTS TECHNOLOGY NEEDS PRIORITIZATION
- EXTERNAL REVIEW (OSSA PARTICIPATION) OF ITP
- OSSA/SSAAC WOODS HOLE 1991 RETREAT TO REVIEW OSSA MISSIONS
- INCREASED EFFECTIVENESS IN TECHNOLOGY INFORMATION EXCHANGE
- SSB/ASEB SPRING REVIEW OF OSSA TECHNOLOGY NEEDS CHART
TECHNOLOGY COORDINATION GOALS

• INJECT NEW TECHNOLOGY INTO OSSA NEXT-GENERATION OF MISSIONS

• MODIFY CURRENT OAST PROGRAM TO BE MORE RESPONSIVE TO OSSA NEAR-TERM NEEDS

• INSTITUTIONALIZE THE PROCESS FROM WHICH TECHNOLOGY REQUIREMENTS ARE INITIATED— VIA THE INTEGRATED TECHNOLOGY PLAN

• INCREASE THE INTERCHANGE OF SCIENCE AND ENGINEERING PERSONNEL ON OSSA SCIENCE WORKING GROUPS AND OAST TECHNOLOGY WORKING GROUPS

How OAST Can Support OSSA

• FOCUSED TECHNOLOGY DEVELOPMENT AIMED AT SPECIFIC MISSIONS IN THE OSSA STRATEGIC PLAN

• LONG-TERM, CORE TECHNOLOGY DEVELOPMENT TO ENABLE SMALL AND MODERATE MISSIONS

• INTEGRATED TECHNOLOGY GROUND & FLIGHT DEMONSTRATIONS

• BROADEN PARTICIPATION IN NEW INSTRUMENT TECHNOLOGY PROGRAMS TO INCLUDE A PEER SELECTED UNIVERSITY SCIENCE COMMUNITY

• STRONGER FEEDBACK OF OAST TECHNOLOGY PROGRESS AND MILESTONE ACCOMPLISHMENTS
How OSSA Can Support OAST

- ADHERE TO AN ANNUAL GRASSROOTS TECHNOLOGY NEEDS PROCESS
- ASSIST OAST TO SECURE RESOURCES THAT ARE DIRECTED TOWARD THE HIGHEST PRIORITY OSSA TECHNOLOGY NEEDS
- FORECAST START DATES FOR THE >1998 MISSION QUE
- HELP IDENTIFY FLIGHT EXPERIMENTS AND OPPORTUNITIES TO TEST CRITICAL INSTRUMENT TECHNOLOGIES

STEPS TO TECHNOLOGY TRANSFER

- SELECT A DISCRETE SET OF TECHNOLOGIES THAT ARE OF HIGH PRIORITY TO OSSA
- AA CONCURRENCE ON A TECHNOLOGY TRANSFER PLAN FOR EACH
- GROUND AND/OR FLIGHT DEMONSTRATION TECHNOLOGY PROJECTS FOR EACH
- DEVELOP A CO-FUNDING WEDGE BETWEEN THE PROGRAM OFFICES
- JOINT ASSOCIATE ADMINISTRATOR SEMI-ANNUAL REVIEW OF PROGRESS
- INSTITUTE A TECHNOLOGY TRANSFER TEAM OR PERSON RESPONSIBLE FOR:
  - PUSHING THE TECHNOLOGY TO THE APPROPRIATE READINESS LEVEL
  - MARKETING THE TECHNOLOGY FOR MISSION APPLICATIONS
SSAAC RECOMMENDATIONS

Recommended Decision Rules

In Priority Order:

- Complete the Ongoing Program

- Provide Frequent Access to Space for Each Discipline Through New and Expanded Programs of "Small Innovative Missions"

- Initiate Mix of "Intermediate/Moderate Profile" Missions to Ensure a Continuous and Balanced Stream of Scientific Results

- Initiate "Flagship" Missions that Provide Scientific Leadership and have Broad Public Appeal

- Invest in the Future by Increasing the Research Base to Improve Program Vitality and by Developing Needed Future Technologies

- Build and Utilize Scientific Instrumentation for Space Station Freedom and Conduct a Spacelab Flight Program in a Manner Consistent with the SSF Development Schedule