

# RESPONSIVE SPACE CONFERENCE SCHEDULE

## ■ MONDAY, MARCH 31, 2003

1:00 pm – 5:00 pm      REGISTRATION, CORAL FOYER  
 4:00 pm – 6:00 pm      EXHIBITS OPEN, CORAL FOYER  
 5:00 pm – 7:00 pm      NO HOST BAR AND RECEPTION, SEASCAPE BALLROOM

## ■ TUESDAY, April 1, 2003

7:00 am – 5:00 pm      REGISTRATION, CORAL FOYER  
 7:00 am – 8:30 am      CONTINENTAL BREAKFAST AND NETWORKING SESSION, CORAL FOYER  
 8:00 am – 6:00 pm      EXHIBITS OPEN, CORAL FOYER  
 8:30 am – 9:15 am      WELCOME AND INTRODUCTIONS—James R. Wertz, General Chairman, Peninsula/Pacific Ballroom  
 9:15 am – 10:00 am      OPENING SPEAKER—ROBERT SACKHEIM, ASSISTANT DIRECTOR AND CHIEF ENGINEER, MSFC

10:00 am                      BREAK, PENINSULA/PACIFIC BALLROOM

10:30 am – 12:10 pm      NEEDS AND REQUIREMENTS (Chair—Col. Pamela Stewart, AFSPC), Peninsula/Pacific Ballroom

10:30 am	A) DoD Access to Space for Small Satellites: Current Options & Direction	Maj. Mark Mocio, DoD Space Test Program
10:50 am	B) Operationally Responsive Spacelift for the U.S. Air Force	Maj. Paul Kolodziejski, AFSPC
11:10 am	C) The Strategy of Responsive Space: Assured Access to Space Revisited	Lawrence A. Cooper, Kepler Research
11:30 am	D) Heritage Schmeritage	Chris McCormick, Broad Reach Engineering
11:50 am	E) Building a Cadre of Space Professionals: Hands-On Space Experience at the USAF Academy	Lt. Col. Jerry J. Sellers, USAF Academy

12:10 pm                      LUNCH. Speaker: LTG (RET) EUGENE L. TATTINI-DEPUTY DIRECTOR, JET PROPULSION LABORATORY, SEASCAPE BALLROOM

1:40 pm – 3:20 pm      ORBITS AND MISSION DESIGN (Chair—Pat Patterson, SDL), Peninsula/Pacific Ballroom

1:40 pm	A) A Docking Solution for On-Orbit Satellite Servicing—Part of the Responsive Space Equation	Pete Tchoryk, Michigan Aerospace Corporation
2:00 pm	B) Improving Space-Asset Responsiveness using the SHERPA	2nd Lt. Randall Carlson, AFRL/VS
2:20 pm	C) Developments in Commercial Near-Space Systems	Jerry Knobloch, Space Data Corporation
2:40 pm	D) Operational Concepts and Payoffs for Responsive Space Systems	Mike Borky, Tamarac Technologies

3:20 pm                      BREAK, CORAL FOYER

3:50 pm – 5:30 pm      SPACE SYSTEMS-I (Chair—John Bystroff, Boeing), Peninsula/Pacific Ballroom

3:50 pm	A) Microsatellite Deployment on Demand	Michael Hurley, NRL
4:10 pm	B) Advanced Lightweight Electronically Steered Antennas for Responsive Space Payloads	Wynman L. Williams, EMS
4:30 pm	C) "Launch-On-Demand" A Revolutionary Paradigm for Space Utilization	Jeff Summers, MicroSat Systems, Inc.
4:50 pm	D) Survivability and Resource Management of Ground System Assets	Fred Wynkoop, L-3 Communications Systems-West

5:30 pm – 7:00 pm      RECEPTION, CORAL FOYER

■ **WEDNESDAY, April 2, 2003**

<b>7:00 am – 1:00 pm</b>	<b>REGISTRATION, CORAL FOYER</b>	
<b>7:00 am – 8:30 am</b>	<b>CONTINENTAL BREAKFAST AND NETWORKING SESSION, CORAL FOYER</b>	
<b>8:00 am – 6:00 pm</b>	<b>EXHIBITS OPEN, CORAL FOYER</b>	
<b>8:30 am – 10:10 am</b>	<b>SPACE SYSTEMS-II (Chair—Terry Jagers, SMC/XR) , Peninsula/Pacific Ballroom</b>	
8:30 am	A) Modular Micro-Satellite Bus	<b>John Hodak, Starhunter Corporation</b>
8:50 am	B) The Trailblazer Class of Low Cost Space Vehicle	<b>Dennis Laurie, Transorbital, Inc.</b>
9:10 am	C) Implementing Standard Microsatellites for Responsive Space	<b>Jeff Janicik, Space De v</b>
9:30 am	D) University Collaborations: Jumpstarting Industry Responsiveness to Space	<b>Ray M. Haynes, Northrop Grumman Space Technology</b>
9:50 am	E) Affordable, Reponsive Space Asset Delivery by Electro Dynamic Delivery Express (EDDE)	<b>Joseph Carroll, Tether Applications, Inc.</b>
<b>10:10 am</b>	<b>BREAK—CORAL BALLROOM</b>	
<b>10:40 am – 11:40 am</b>	<b>BREAKING THE BARRIERS (Chair—La werence Cooper, Kepler Research), Peninsula/Pacific Ballroom</b>	
10:40 am	A) Lessons Learned From Past Reusable Launch System Designs	<b>Greg Peralta, Lockheed Martin Technical Operations</b>
11:00 am	B) Responsive Launch with the Scorpius® Family of Low-Cost, Expendable Launch Vehicles	<b>James R. Wertz, Microcosm, Inc.</b>
11:20 am	C) NAI Study Outbrief	<b>Babu Singaraju, AFRL/VS</b>
<b>11:40 pm</b>	<b>LUNCH. Speaker: MGEN (RET) ROBERT S. DICKMAN, SAF/US–MILITARY SP ACE Plus Presentation of AIAA Space Systems Award, SEASCAPE BALLROOM</b>	
<b>1:10 pm – 3:10 pm</b>	<b>TECHNOLOGY FOR IMPROVED RESPONSIVENESS (Chair—Todd Mosher, USU), Peninsula/Pacific Ballroom</b>	
1:10 pm	A) Technology for Responsive Space Capability	<b>Janet S. Fender, AFRL/VS</b>
1:30 pm	B) Fast Responsive Experiment Flight Opportunities using SSPC	<b>Gerald Murphy, Design-Net Engineering</b>
1:50 pm	C) On-Demand Wavelength Tuning of Detector Responsivity for Multi-Mission Scenarios	<b>Dave Cardimona, AFRL/VS</b>
2:10 pm	D) Pistonless Dual Chamber Rocket Fuel Pump	<b>Steve Harrington, Flometrics</b>
2:30 pm	E) A Low-Cost Flight Computer using GPS	<b>Michael Castle, SiRF Technology, Inc.</b>
2:50 pm	F) Near Space Maneuvering Vehicle	<b>Maj. Robert Blackington, AF Space Battlelab</b>
<b>3:10 pm</b>	<b>BREAK, CORAL FOYER</b>	
<b>3:40 pm – 5:20 pm</b>	<b>BUSINESS ISSUES (Chair—Russ Joyner, Pratt-Whitney), Peninsula/Pacific Ballroom</b>	
3:40 pm	A) Achieving Responsive Access to Space—Market, Money, Mechanics and Management Lessons from X-33	<b>Carl J. Meade, Lockheed Martin Aeronautics, Palmdale</b>
4:00 pm	B) Rapid Financing: The Ultimate Oxymoron	<b>Mark R. Oderman, CSP Associates Inc.</b>
4:20 pm	C) Decision Support Tools to Enable Affordability For Reponsive Space	<b>Sam Boykin, Frontier Technology Inc</b>
4:40 pm	D) Benefits of Commercial Spaceports	<b>Maj. Gen. Jay T. Edwards (Ret., USAF), Oklahoma Space Industry De velopment Authority</b>
5:00 pm	E) Responsive Space Systems and Consumer Markets: The Celestis Case	<b>Charlie Chafer, Celestis</b>
<b>5:20 pm</b>	<b>BREAK, CORAL FOYER</b>	
<b>6:30 pm – 7:00 pm</b>	<b>RECEPTION, CORAL FOYER</b>	
<b>7:00 pm – 9:00 pm</b>	<b>CONFERENCE BANQUET. Speaker: BGEN SIMON P. (PETE) WORDEN—DIRECTOR, OFFICE OF TRANSFORMATION, AF SPACE AND MISSILE COMMAND , SEASCAPE BALLROOM</b>	

■ **THURSDAY, April 3, 2003**

<b>7:00 am – 8:00 am</b>	<b>CONTINENTAL BREAKFAST AND NETWORKING SESSION, CORAL BALLROOM</b>	
<b>8:00 am – 9:00 am</b>	<b>PANEL—THE NEED FOR RESPONSIVE SPACE, Peninsula/Pacific Ballroom</b>	
	<b>BGEN STEPHEN FERRELL, OSD-ATL</b>	
	<b>PETER G. WILHELM, DIRECTOR, NAVAL CENTER FOR SPACE TECHNOLOGY</b>	
	<b>GARY MARTIN, NASA SPACE ARCHITECT</b>	
	<b>PAUL PISCOPO, DDR&amp;E</b>	
<b>9:00 am – 4:30 pm</b>	<b>EXHIBITS OPEN, CORAL FOYER</b>	
<b>9:00 am – 10:40 am</b>	<b>LAUNCH VEHICLES &amp; OPERATIONS-I (Chair—Tony Williams, Booz Allen Hamilton)</b>	
9:00 am	A) Responsive Space: Near-Term Options for the Military	<b>Matt Bille, Booz Allen Hamilton</b>
9:20 am	B) I-Cone for Rapid Response and Low Cost Access to Space	<b>Mike Cully, Swales Aerospace</b>
9:40 am	C) DNEPR Program: Prospects and Advantages for Responsive Space	<b>Vladislav Solovey, International Space Company Kosmotras</b>
10:00 am	D) Rapid Access Small Cargo Affordable Launch (RASCAL)	<b>Preston Carter, Program Mgr., DARP A</b>
10:20 am	E) Low-Cost, Flexible Spacelift for Research and Development Satellites using Peacekeeper ICBM Derived Space Launch Vehicle	<b>Tim D. Luddeke, Product Development Division, Rocket Systems Launch Program</b>
<b>10:40 am</b>	<b>BREAK, CORAL FOYER</b>	
<b>11:00 am – 12:40 pm</b>	<b>LAUNCH VEHICLES &amp; OPERATIONS-II (Chair—Larry Davidoff, Boeing)</b>	
11:00 am	A) Air Force Space Operations Vehicle: Operability Driven	<b>Keith McIver, The Boeing Company</b>
11:20 am	B) Responsive Space Launch the F-15 Microsatellite Launch Vehicle	<b>Lt. Julia Rothman, AFRL/VS, Space Vehicles</b>
11:40 am	C) Atlas V Evolved Expendable Launch Vehicle: Spiral Development of Responsive Space	<b>Stuart B. Wiens, Lockheed Martin Spacecraft Astronautics</b>
12:00 pm	D) Demonstrating Low Cost Access to Space for Small Satellites	<b>Maj. Timothy Sumrall, Space and Missile Systems, Kirtland AFB</b>
12:20 pm	E) The Scorpius® Expendable Launch Vehicle Family and Status of the Sprite Small Launch Vehicle	<b>Shyama Chakroborty, Microcosm, Inc.</b>
<b>12:40 pm</b>	<b>LUNCH. Speaker: DR. ANTONIO L. ELIAS—VP/GM ADVANCED PROGRAMS, ORBITAL SCIENCES CORP., SEASCAPE BALLROOM</b>	
<b>2:20 pm – 3:30 pm</b>	<b>WRAP-UP PANEL WITH SUMMARIES BY SESSION CHAIRS, PENINSULA/PACIFIC BALLROOM</b>	
<b>2:20 pm</b>	<b>CD-ROM OF ALL PAPERS AVAILABLE TO PARTICIPANTS</b>	
<b>3:30 pm – 6:30 pm</b>	<b>TOWN MEETING REGISTRATION (Separate Registration Fee Required)</b>	
<b>4:30 pm – 6:30 pm</b>	<b>TOWN MEETING NETWORKING SESSION</b>	
<b>6:30 pm – 9:00 pm</b>	<b>NASA TOWN MEETING DINNER AND PANEL</b>	