

WEDNESDAY, April 24, 2013

- 7:30 AM Registration & Breakfast
9:00 AM Opening Comments – Dr. Jordi Puig-Suari, CubeSat
9:20 AM Event Sponsor Welcome – Gregory Kehrl, Athena/
Lockheed Martin
9:25 AM Keynote Presentation – Jason Crusan, Director, Advanced
Exploration Systems Division, NASA Human Exploration
and Operations Directorate

Session 1: Education and Design Philosophy

- 9:45 AM OPEN and OpenOrbiter: a Needs-Responsive Solution for
the Small Satellite Community, Jeremy Straub and Atif
Mohammad, University of North Dakota
10:00 AM A Proposed Method for CubeSat Mission Risk Analysis,
Katharine Brumbaugh, UT Austin
10:15 AM --Break--
11:00 AM Implementation of SDM-Lite for Space Plug and Play
Avionics (SPA) CubeSats, Zachary Jacobs, Max Bezold,
Chris Mitchell, James Lump, University of Kentucky
Space Systems Lab
11:15 AM CubeSat Thermal Testbed (CTTB), Andrew Kalman,
Pumpkin, Inc.
11:30 AM Improving CubeSat Communications, Nestor Voronka,
Tethers Unlimited Inc.
11:45 AM Design of an Asymmetric CubeSat Ground System, Quinn
McGehan, Vignesh Muralidharan, Michael Trowbridge,
Colorado Space Grant Consortium
12:00 PM Valley Christian High School STEM Outreach Program,
Dan Saldana, Valley Christian High School of San Jose,
California
12:15 PM --Lunch--

Session 2: University Missions

- 1:45 PM The CzechTechSat - A Space-Friendly CubeSat-Class
Picosatellite, Jaroslav Laifr, Czech Technical University in
Prague, Astronomical Institute of Czech Academy of
Sciences
2:00 PM CubeSat to CubeSat Laser Ranging for Geodesy, Formation
Flying, and Fundamental Physics Experiments in Space,
Karthik Balakrishnan, Stanford University
2:15 PM High Reliability CubeSat Software with SPARK/Ada, Dr.
Carl S. Brandon, Vermont Technical College
2:30 PM CubeSat Deformable Mirror Demonstration, Kerri Cahoy,
MIT
2:45 PM DragonSat-1 Ready for Launch, Jin Kang, U.S. Naval
Academy
3:00 PM --Break--
3:30 PM A Model for the Development of the C&DH of the Mission
Libertad 2, Claudio Marcel Hernández Calderón, Sergio
Arboleda University
3:45 PM SNAPS -- A Novel Imaging Nanosatellite, Andrew Kalman,
Stanford University
4:00 PM Lessons Learned through Operations with a Federated
Ground Station Network, John C. Springmann and James
W. Cutler, University of Michigan
4:15 PM CP9 and StangSat Mission Overview, Adam Darley and Jeff
Weaver, PolySat
4:30 PM Dynamics and Control Design for the Drag-free CubeSat,
Anh Nguyen, University of Florida
4:45 PM Closing Remarks
6:30 PM Banquet at the Madonna Inn Expo Center

THURSDAY, April 25, 2013

- 8:00 AM Registration & Breakfast
9:00 AM Keynote Presentation – Therese Moretto Jorgensen,
Program Director, Division of Geospace and Atmospheric
Sciences, National Science Foundation

Session 3: Science Missions

- 9:20 AM SENSE: The Space Environmental NanoSatellite
Experiment, Alejandro Levi, Developmental Planning
Directorate, USAF Space and Missile Systems Center
9:35 AM JPL Does CubeSats, Anthony Freeman, Jet Propulsion
Laboratory, California Institute of Technology
9:50 AM Dual-spinning CubeSat: Building the Microsized
Microwave Atmospheric Satellite, Kerri Cahoy, MIT
10:05 AM NASA Warming up to CubeSats for Science and
Technology, David M. Klumpp, NASA Science Mission
Directorate, Heliophysics Division
10:20 AM Proximity Operations Nano-Satellite Flight Demonstration
Overview, Scott MacGillivray, Tyvak Nano-Satellite
Systems LLC
10:35 AM --Break--
11:00 AM NASA GSFC CubeSat Activities, Tom Flatley, NASA
Goddard Space Flight Center
11:15 AM ELFIN: Electron Losses and Fields Investigation, Ryan
Caron, UCLA
11:30 AM The KECK Institute Study Program on Small Satellites: A
Revolution in Space Science, Charles D. Norton, Jet
Propulsion Laboratory, California Institute of Technology
11:45 AM M-PACE: 1U CubeSat Using Advanced Manufacturing,
Elwood Agasid, NASA Ames Research Center
12:00 PM CYGNSS: The Cyclone Global Navigation Satellite System,
John Dickinson, Southwest Research Institute
12:15 PM --Lunch/Poster Session--

Session 4: Launch Capabilities, Testing, and Simulation

- 1:30 PM ELaN - Education Launch of NanoSatellite, Still Moving
Forward!, Garrett Skrobot, NASA Launch Services
Program
1:45 PM The Spaceflight Secondary Payload System and SHERPA -
Infrastructure for the Deployment of CubeSat
Constellations, Adam Hadaller, Spaceflight, Inc.
2:00 PM NROL-36 OUTSat, Gordon Barnhill, NRO/OSL
2:15 PM Launch Vehicle Mission Design Challenges for Multi-
Manifest Missions, Gregory Kehrl, Athena/Lockheed
Martin
2:30 PM CubeSat Attitude Determination and Control Study and
Realization, William D. McGinnis, Auburn University
2:45 PM Interorbital's NEPTUNE Dedicated SmallSat
Launcher: 2013 Test Milestones and Launch Manifest
Update, Randa Milliron, Interorbital Systems
3:00 PM --Break--
3:30 PM High Altitude Launch Services for Demonstration Nano-
Satellites – John Garvey – Garvey Spacecraft Corporation
3:45 PM Force Limited Vibration Testing on NPSCuL – What to
Expect When You're Expecting to Fly, Wenschel Lan,
Vidur Kaushish, Dan Sakoda, Jim Newman, Naval
Postgraduate School
4:00 PM CubeSat Launch from ISS - Richard Pournelle, NanoRacks
4:15 PM ESPA CubeSat Accommodations and Qualification of the 6U
Mount (SUM), Joseph Maly, Moog CSA Engineering
4:30 PM Achievements in Advanced Standards for CubeSats, Ryan
Williams, Planetary Systems Corporation
4:45 PM CubeSat Standard Updates, Justin Carnahan, Cal Poly
CubeSat Program
5:00 PM Closing Remarks

FRIDAY, April 26, 2013

- 8:00 AM Registration & Breakfast

Session 5: Subsystems/Payloads/Deployables

- 9:00 AM Innovative Solutions for a Low Cost CubeSat
Development, N. Bellini, N. Benini, A. Curti, A. Locarini, S.
Naldi, D. Rastelli, M. Valdatta, University of Bologna -
Spacemind
9:15 AM Unix Space Server (USS), Samuel Noah Sipe, United States
Naval Academy
9:30 AM A Fault-Tolerant On-Board Computer For CubeSat Based-
On Hybrid Architecture, Jérémy Delaporte, Florent
Swingedouw, Cyrille Dromas, Thierry Capitaine, Institut
Supérieur des Sciences Et Techniques (INSSET)
University
9:45 AM Spacecraft-on-Demand POP443: a Prepositioned Orbiting
Spacecraft Printer CubeSat/NanoLab, Michael Johnson, JA
The Aerodynamic End Of Life Deorbit System (AEOLDOS)
Module - Robin Sampson, Clyde Space Ltd
10:15 AM --Break--
10:45 AM INSPIRE, Andrew Klesh, Jet Propulsion Laboratory,
California Institute of Technology
11:00 AM Computational Design of a Miniaturized Microstrip
Antenna Focused on Cube Satellites, Damián Andrés
Campo Caicedo, EAFIT University
11:15 AM Use of a Commercial Product for an SSTV Camera
Development, Cyrille Dromas, Florent Swingedouw,
Jérémy Delaporte, Thierry Capitaine, Institut Supérieur
des Sciences Et Techniques (INSSET) University
11:30 AM A Distributed Command and Data Handling Architecture
for KYSat-2, Jason Rexroat, Chris Mitchell, Max Bezold,
Marc Higginson-Rollins, Steve Alvarado, Zachary Jacobs,
Samir Rawashdeh, James Lump, University of Kentucky
Space Systems Lab
11:45 AM Useful Earth Observation with Nanosatellite Platforms,
Joost Elstak, ISIS - Innovative Solutions In Space
12:00 PM --Lunch--

Session 6: Communication & Power

- 1:30 PM ITU Radio Regulations Related to Small Satellites, Atila
Matas, International Telecommunications Union
2:00 PM Design Optimization on the CADRE CubeSat, Dae Young
Lee, Daniel Meinzer, Aaron Ridley and James W. Cutler,
University of Michigan
2:15 PM CubeSat and SmallSat FCC Licensing Process and
Considerations, Jim White, Colorado Satellite Services,
LLC
2:30 PM --Break--
3:00 PM Do We Have an ITAR Problem: A Review of the
Implications of ITAR and Title VII on Small Satellite
Programs, Jeremy Straub & Joe Vacek, University of North
Dakota
3:15 PM Using the Allen Telescope Array for CubeSat
Communications, Kyle Leveque, Cecile Mackay, Dan
Ceperley, SRI International
3:30 PM CubeSat Communications Survey Update, Bryan Klofas,
SRI International
3:45 PM Closing Remarks