



# Update from NASA HQ

LISA International Science Team Meeting  
Potsdam, December 16, 2006

Michael Salamon/NASA HQ



# Summary

- US LIST membership update
- BEPAC (Beyond Einstein Program Assessment Committee) update
- Federal budget status
- Lunar exploration update



# US LIST membership update

- Bill Folkner has resigned from the US LIST.
- Curt Cutler has been appointed to fill the vacancy. Curt thereby ceases to be an ESA LIST member, and is now a NASA LIST member.



# BEPAC Update

- Review of history:
  - Original BE mission ordering: LISA, Con-X, BE Probes
  - Decision by NASA, DOE, OSTP to conduct joint dark energy mission
  - Congressional, DOE pressure to fly JDEM soon
  - SMD decision to have the NRC choose, by beginning of FY09, which BE mission goes first:
    - Current NASA JDEM concept studies will be completed by FY09, could act as input to NRC study
    - NRC is the most authoritative scientific body in eyes of Congress
    - FY09 decision matches timing of BE funding ramp that begins FY09
  - Meeting with Griffin, Orbach (DOE/Office of Science), Marburger (OSTP, Science Advisor to President) concludes with decision to accelerate study: due date in September, 2007.
  - All BE missions (not just JDEM, LISA, Con-X) to be assessed: this ensures that NRC report confirms the importance of the *entire* BE Program.



## BEPAC Update (cont.)

- **Charge to the BEPAC:** Assess all BE missions based on
  - potential scientific impact within the context of other existing and planned space-based and ground-based missions;
  - realism of preliminary technology and management plans, and cost estimates.
- **First NRC/BEPAC meeting in Washington, Nov. 6, 2006:**
  - 20 members: ~2/3 scientists, 1/3 technologists/managers
  - Public sessions: talks from LISA, Con-X, all Probe teams which had been selected for concept studies; little time for extended Q&A.
- **Remaining BEPAC meetings:**
  - 2nd meeting in Newport Beach, CA, Jan. 30-Feb.1; no agenda yet.
  - First of five “town hall” meetings on Feb. 1; remaining 4 to occur by end of April, 2007.
  - Third and fourth (final) meetings in April, June 2007.
  - Written report due Sept. 7, 2007.



# BEPAC Update (cont.)

- Meeting with NASA, DOE, NRC on protocols (Dec. 5):
  - Concern about how Q&A between projects and BEPAC is conducted:
    - Format of initial set of Q's received by projects will NOT be repeated.
    - Individual BEPAC members shall NOT directly contact projects; all future questions will be codified by BEPAC co-chairs and directed through the NRC. Projects shall not reply directly to the BEPAC; all responses shall be channeled through the NRC.
    - Communications from the NRC to the projects will NOT be cc'ed to NASA or DOE HQs; this preserves "independence" from the agencies.
    - Questions of a programmatic nature shall not be sent to the projects; these go NASA and DOE HQs.
    - Proprietary information must be labeled and will be reviewed by NRC legal office before given to the BEPAC.
  - The NRC will conduct independent cost estimates:
    - Cost analysis should not be too detailed; only cost "realism" is goal.
    - NRC understands that existing industrial costs may be proprietary.
  - The BEPAC will be hearing from ground-based projects as well, as required by original NASA/DOE charge.



# Federal Budget Status

- FY07 Senate appropriations:
  - Only 2 bills passed: DOD and Dept. of Homeland Security
  - Remaining 10 bills not to be completed by the present Congress, must wait for next Congress (Democratic, not Republican)--> NASA continues under a Continuing Resolution until mid-Feb, 2007.
  - “The Senate should be ashamed of themselves.”\*\*
- Continuing Resolution likely for remainder of FY07:
  - “There is no good way out of the fiscal chaos left behind by the outgoing (Republican) Congress...we (the new Democratic Congress) are now responsible for finding a way out of this fiscal mayhem.”\*
  - Byrd and Obey intend to extend continuing resolution through all of FY07, meaning flat funding to agencies. (American Competitiveness Initiative increases to DOE, NSF, NIST therefore put on hold.)
  - No obvious direct impact to LISA.
  - Fate of \$1B “emergency” appropriation to NASA?
  - No earmarks will be allowed in FY07! Positive effect on SMD R&A?

\* Senator Byrd and Representative Obey, incoming chairs of Senate and House Appropriations Committees

\*\* Rep. Bill Young (R-FL)



# NASA Lunar Exploration Update

- Space Telescope Science Institute Workshop on Lunar Science (Nov. '06):
  - Many ideas for scientific exploitation of the Moon were discussed:
    - Radio interferometry on dark side of Moon
    - Detectors for rare cosmic rays (e.g. ultra-heavy nuclei)
    - Lunar laser transponders for GR and lunar studies
    - UV/optical/IR telescopes/interferometers? AND OTHERS...
    - “Debate” on importance of Moon relative to deep space for telescope observatories
  - General consensus that Earth-Moon L1 point should be considered to be part of the “lunar astrophysics” opportunities; no  $\Delta v$  for lunar landing required; shallow potential hill to Earth-Sun L2.
- Second Space Exploration Conference (Dec. '06):
  - Announced goal: Establish permanent lunar base by 2024
  - Deputy Administrator Shana Dale’s introductory talk on the six themes of the Global Exploration Strategy’s initial focus on the Moon:
    - “The Moon is a foothold to further exploration...”
    - “The Moon is a unique laboratory where we can pursue scientific activities...”
    - “The Moon is an opportunity to extend sustained human presence on the Moon.”
    - “We will expand the Earth’s economic sphere to encompass the Moon....”
    - “International collaboration...will enhance collective security...(via) peaceful global activity.”
    - “A vibrant exploration program will engage, inspire, and educate the public...”