



Welcome to
MEPAG Virtual Meeting (VM) #1

Jeffrey R. Johnson, MEPAG Chair
February 20, 2018



Introduction (1 of 2)

- Past virtual meetings: Background
 - At **MEPAG #33 face-to-face meeting (Feb. 2017)** we discussed ideas for more frequent, shorter, focused topical discussions held as webcasts to augment face-to-face meetings
 - (S. Diniega proposal: https://mepag.jpl.nasa.gov/meeting/2017-03/16.%20Proposal_Quarterly_2.pptx)
 - MEPAG #34 (July, 2017)
 - 2-hour virtual meeting included feedback on draft presentation that was given by R. Zurek at the July 13 Mid-Term Decadal Survey review committee meeting
 - <https://mepag.jpl.nasa.gov/meetings.cfm?expand=m34>
 - MEPAG #35 (Sept., 2017)
 - 3-hour virtual meeting included NASA remarks on Mars architecture planning (J. Watzin for T. Zurbuchen), and presentations on Mars system *Planetary Science Deep Space SmallSat Studies* (PSDS3) projects
 - <https://mepag.jpl.nasa.gov/meetings.cfm?expand=m35>

Introduction (2 of 2)

- Topics for today's virtual meeting (VM #1):
 - 1) NASA Mars Exploration Program (MEP) and MEPAG Updates
 - 2) Mars Sample Return (MSR) Technology Studies:
 - The 2011 "Vision and Voyages" Decadal Survey recommended "major investment" in MSR technologies
 - MEPAG would like to hear about ongoing funded work at JPL regarding Mars Ascent Vehicle (MAV) thermal control, autonomous launch operations, ascent/guidance in Mars conditions, etc.
 - 3) Preparation/discussion on face-to-face MEPAG #36 meeting/forum (April 3-5)
 - Identifying mission objectives and concepts that address high-priority Mars science questions, with an emphasis on preparation for the next Decadal Survey (2023-2032) during the era of MSR
- Today's 2-hour agenda includes:
 - MEPAG activities since MEPAG #35 meeting (9/2017)
 - Brief NASA Update, including budget first-look (J. Watzin)
 - Overview and discussion regarding the structure and scope of the 36th MEPAG Meeting forum in April
 - Presentation on Progress on MSR technology studies (Chad Edwards, JPL)
 - Previously presented to Mid-Term Decadal Survey Review Panel in November
 - **Walk-On: Update on SpaceX Mars exploration plans from P. Wooster**

Agenda

MEPAG Virtual Meeting #1 (VM1): February 20, 2018

Electronic meeting (JPL WebEx): 1:00 pm-3:00 pm EST

Final Amended Agenda

Times shown are PDT, all presenters should include time for discussion

<u>Start</u>	<u>Duration</u>	<u>Title/topic</u>	<u>Presenter</u>
13:00	0:10	Past and ongoing MEPAG activities	J. Johnson, MEPAG Chair
13:10	0:20	Mars HQ Updates	J. Watzin
13:30	0:15	Discussion of MEPAG #36 Meeting and Forum	J. Johnson, S. Diniega
13:45	0:45	Progress on MSR Technologies	C. Edwards
14:30	0:10	SpaceX and Mars exploration	P. Wooster
14:40	0:15	Discussion	All
14:55	0:05	Wrap-up	J. Johnson
15:00		Adjourn	

- Please mute your phone
- Use chat box on WebEx; moderators will track questions
- Feedback/questions during and after meeting? → MEPAGmeetingqs@jpl.nasa.gov 4

MEPAG Activities since 9/25/17 meeting #35

- MEPAG #35 virtual meeting attended by ~165 members
 - Positive feedback on J. Watzin's presentation of T. Zurbuchen's Mars talk to Mid-Term Decadal Survey Review Panel (August, 2017)
 - PSDS3 program selectee presentations were well received
 - Also note presentations to be held at LPSC: <https://www.hou.usra.edu/meetings/smallsat2018/>
- Goals Committee work revisiting mapping of polar science questions to MEPAG goals
 - D. Banfield (Goals Chair) and Goals Committee working with I. Smith et al.
 - Recommended changes to Goals Document submitted to Goals Committee (Feb.) and discussions are proceeding
 - Expect status report at April meeting
- New Mars discoveries updated on MEPAG web page (Nov. 2017):
 - [https://mepag.jpl.nasa.gov/rdp/Recent Discoveries v10.pdf](https://mepag.jpl.nasa.gov/rdp/Recent_Discoveries_v10.pdf)
 - Received input from missions, Goals Committee, “science nuggets” compiled by J. Ashley
 - Will continue to update regularly

MEPAG Activities since 9/25/17 meeting #35

- Past and upcoming conferences/workshops
 - Dec. 8, 2017: *Architecting Mars V* attended by D. Beaty and M. Meyer
 - Achievability/sustainability of architectures for human exploration of Mars in the 2030s
 - Report will be given at April meeting
 - Feb. 23, 2018: MEPAG presentation to the new Planetary Science Advisory Council (PAC) at NASA HQ @10:20 EST
 - March 22 (12:00-1:15pm): LPSC “meet and greet” scheduled
 - Not a “town hall”, more an informal opportunity to meet MEPAG members, ask questions, provide feedback
 - To be accompanied by poster presented Tuesday night (Abstract #2403)
 - July: COSPAR meeting
 - MEPAG abstract/presentation on “Forward planning for Mars scientific exploration”
 - Participate in panel on “International Coordination of Space Exploration Activities”



MEPAG Activities since September meeting #35

- October, 2017: Sent request to community for indications of interest for MEPAG service activities
 - Received > 30+ indications of interest. Thanks!
- Executive Committee (ExCom) rotations:
 - Drs. Phil Christensen (Arizona State University) and Gian Ori (IRSPS) rotating off after ~ decade of service (!)
 - Drs. Wendy Calvin (Univ. Nevada Reno) and Jen Eigenbrode (GSFC) rotating on

Thanks Phil and Gian!



Welcome Wendy and Jen!



MEPAG Activities since July meeting #35

Goals Committee Changes

- Rotation into Goal I position: Dr. Jen Stern (GSFC)



Welcome Jen!



Executive Committee



Jeff Johnson, Chair, JHU-APL



Lisa Pratt, Past Chair,
IU/NASA HQ



Wendy Calvin, UNR



Don Banfield, Goals
Committee Chair,
Cornell



Scott Hubbard,
Stanford



Jen Eigenbrode, GSFC



Dave Beaty, JPL



Michael Meyer, NASA HQ



Ben Bussey,
NASA HQ



Rich Zurek, JPL

Goals Committee



Jen Stern
NASA GSFC, Goal 1



Sarah Stewart Johnson
Georgetown, Goal 1



Paul Withers,
Boston University, Goal 2



David Brain
Univ. Colorado, Boulder
Goal 2



Robin Wordsworth
Harvard University, Goal 2



Steve Ruff, ASU, Goal 3



R. Aileen Yingst, PSI, Goal 3



Don Banfield, Goals
Committee Chair,
Cornell



Ryan Whitley,
NASA JSC, Goal 4



Jacob Bleacher,
NASA GSFC, Goal 4

Mars Program Office associates

(Jet Propulsion Laboratory)



Serina Diniega



James Ashley
(Moving to InSight)



Brandi Carrier



Barbara Saltzberg