

Risk Profile for NASA's Crew Exploration Vehicle



Presented by:
Dr. Paul Mahata,
President,
University
Consultants Inc

Wednesday, 19 May 2010 (6:00 – 8:00 pm)

Applied Physics Laboratory, Johns Hopkins University
11100 Johns Hopkins Rd Laurel MD 20723 (Main Entrance – Lobby 1)

Presentation: On January 14, 2004, the President of the United States of America announced a new vision for the civil space program based upon exploration of Moon, Mars, and beyond (Vision for Space Exploration – VSE). Following that, the President's Commission on Implementation of US Space Exploration Policy released a report, A Journey to Inspire, Innovate, and Discover, on June 4, 2004. This presentation provides the process used to develop the risk profile and the results for the Crew Exploration Vehicle (CEV), NASA's replacement for the Space Shuttle with capability to travel beyond low-Earth orbit and the Moon. Since many major systems must interact successfully for a launch and exploration, the CEV is considered a System of Systems (SoS) by NASA. The work was performed through the Center for Systems Management, and sponsored by: The Academy of Program/Project and Engineering Leadership (APPEL), and The Office of Chief Engineer, NASA HQ.

Speaker: Dr. Mahata is a seasoned instructor in systems engineering and project management. He has taught Systems Engineering and Program Management courses at NASA, Lockheed Martin, Northrop Grumman (TASC), Booz Allen Hamilton, and Rolls Royce. Dr. Mahata has been a keynote speaker, presenter, expert witness, and an author of over 30 papers and reports and a book on space exploration (in progress). Dr. Mahata has over thirty years of experience in engineering, management and business development with industry and U.S. Government agencies. He has a demonstrated record of satisfying U.S. Government customers and increasing contract awards each year by delivering program excellence with agencies such as NASA, DoD, DoE, DoT and EPA. Dr. Mahata has a Doctorate in Mechanical/Aerospace Engineering from the University of Missouri-Rolla, and MBA from Boston University and a BS with Honors in Mechanical Engineering from the Indian Institute of Technology.

Note: Dinner will be held in the Howard County Room #3 (Enter the Main Laboratory Entrance, Lobby 1, and take a right at the guard station into the main cafeteria. We're down at the end of the hallway in the very last dining room.) Topic discussion will follow dinner.

Delicious friendly networking buffet dinner: Pan Seared Tilapia Filet; Mango avocado Salsa and Cilantro rice with garden salad dressing, rolls and butter, dessert, coffee and iced tea..

Dinner Reservations: To register for dinner, contact Don York at donald.york@tasc.com

Dinner Cost: Guests: **\$20**; INCOSE members: **\$15** if payment is received by May 14th, 2010, **\$20** afterwards. To pay by credit card or PayPal, visit our website: <http://www.incose.org/chesapek>; or to pay by USPS, mail checks (payable to INCOSE-CC) to:

INCOSE-CC, PO Box 142, Linthicum, MD 21090-0142.

Dinner Cancellation Policy: If you make a dinner reservation and then find that you will be unable to attend, please notify Don York by Monday, May 17th, 2010. There will be no refunds after Monday, May 17th, 2010.

Presentation ONLY: FREE (no reservations necessary)

Corporate Sponsor: We wish to thank the Applied Physics Laboratory for supporting the systems engineering profession through use of their facilities.

Our Evening's Agenda

5:45 – 6:00 pm	Arrival and Socializing
6:00 – 6:45 pm	Dinner
6:45 – 6:50 pm	Member Introductions
6:50 – 6:55 pm	Chapter Business Items
7:00 – 8:00 pm	Presentation

Directions: **JHU APL**, 11100 Johns Hopkins Road, Laurel, Maryland 20723, Phone (443) 778-5000
See APL's Visitor Guide for more: <http://www.jhuapl.edu/newscenter/visitor/default.asp>

From Washington DC and Capital Beltway (I-495):

Take I-95 North toward Baltimore, 10 miles to Columbia exit (MD Route 32 West),
Go 2.5 miles to the Washington DC exit (US Route 29 South).
Go 1.5 miles south and take Johns Hopkins Road exit (bear right at the top of the hill).

Or from the Capital Beltway (I-495):

Take US Route 29 North (Colesville Road) 10 miles and follow signs for the turn onto Johns Hopkins Road.

From Baltimore and Baltimore Beltway (I-695):

Take I-95 South toward Washington DC.
Go 13 miles and take Columbia exit (MD Route 32 West).
Go 2.5 miles and take Washington DC exit (US Route 29 South).
Go 1.5 miles south and take Johns Hopkins Road exit (bear right at the top of the hill).

Once you're on Johns Hopkins Road:

APL is a half-mile west of US Route 29 on your right side. Go past the first entrance, continuing past the pond and take the next right turn onto a tree-lined lane. Park in the visitor's lot on your left side. Enter at the main entrance marked **Building 1** (flagpoles and traffic circle in front).

Dinner is held in the Howard County Room #3 located at the end of the cafeteria hallway to the right of the entryway just before the Guard's desk.

