

In-Space Non-Destructive Inspection Technology Workshop Agenda
Feb 29 - Mar 1 at JSC Gilruth Center Alamo Ballroom

http://www.nasa.gov/offices/nesc/workshops/in_space_non_destructive.html

Feb 29th: 7:00-8:00am **Check-in**

Session 1: Alamo Ballroom

- 1-1: 8:00-8:05am: Welcome/Logistics: NASA/NESC/JSC/Scott West, NESC/NDE/Bill Prosser
- 1-2: 8:05-8:30am: NESC NDE TDT & Future Human Spaceflight Missions - NASA/NDE TDT/Bill Prosser
- 1-3: 8:30-9:15am: In-Space Inspection Technology Needs/Vision - NASA/JSC/George Studor
- 1-4: 9:15-9:30am: SBIR/STTR Relevant Subtopics and Award Summaries - NASA/LaRC Eric Burke
- 1-5: 9:30-10:00am: MMOD Risk/Ext Inspection Needs for Re-entry TPS - NASA/JSC/Rollins/Christiansen

Break: 10:00-10:15am

Session 2: Alamo Ballroom - End User Needs Presentations

- 2-1: 10:15-10:40am: Oil & Gas Inspection Needs - BP Technology/NDE - David Lafferty
- 2-2: 10:40-11:00am: Oil & Gas Inspection Needs - Shell Technologies/NDE - Sergio Kapusta
- 2-3: 11:00-11:30am: Phoenix Mission Inspection Needs - BAA highlights - DARPA/Peter Will
- 2-4: 11:30-12:00am: Security Inspection Needs - DTRA/Robert Woods & TSA/Nicholas Santoro

Lunch 12:15pm - 12:45pm: Surgical Snake Robots & Tech - Carnegie Mellon/Howie Choset

Session 3:

	3A	3B	3C
	<u>Alamo Ballroom East end</u>	<u>San Jacinto Room</u>	<u>Alamo Ballroom West end</u>
	Miniature 3D Penetrating Imagers	Misc Inspection Technologies	Technologies for Flexible, Controllable Inspection
3-1: 12:45-1:10pm	mm wave SAF Video MO S&T/Reza Zoughi	Direct Stress of Windows Stress Photonics/Lesniak	Stereo Videoscope Xigen/Jason Geng
3-2: 1:10-1:35pm	24-60 GHz Walleye/Dave Hollbrook	Sensing w/Magnetic Waves Gen Magnetic Sci/John Menner	Carbon NT Wire/Applications MinnesotaWire/T. Kukowski
3-3: 1:35-2:00pm	Hand-held T-Hz Picometrix/Dave Zimdars	M-Wave Inspection Exel Orbital/Kevin McGushion	Biomemetic/Ionic Polymer Tech for Snake Robots UMaine/Moshen Shahinpoor

3-4: 2:00-2:25pm Backscatter Xray Gecko-foot Inspection Robots Tendril/Continuous Robots
 Aribex/Arturo Reyes NASA/JPL/Aaron Parness Clemson/ Ian Walker

3-5: 2:25-2:55pm Imagery Noise Reduction Micro-Robotic Inspectors Highspeed F.O. Strain for Shape
 VJ Tech/ N. Shashishekar SRI/Ron Pelrine NASA/DFRC/Patrick Chan

Break: 2:55-3:05pm

Session 4:

	4A	4B	4C
	<u>Alamo Ballroom East end</u>	<u>San Jacinto Room</u>	<u>Alamo Ballroom West end</u>
	Miniature 3D Penetrating Imagers	Mini Free-Flying Inspection Satellites	Controllable Snake-arm Inspection Systems
4-1: 3:05-3:30pm	Backscatter Xray AS&E/Lou Wainwright	Mini-Aercam JSC/ER/Steven Fredrickson	Snake-robots/following S/W OCRobotics/Rob Buckingham
4-2: 3:30-4:00pm	Backscatter X-Ray NuSAFE/Dan Shedlock	SPHERES ARC/Mark Micire	3D Videoscope - next steps Olympus/Frank LeFleur
4-3: 4:00-4:30pm	3D Backscatter Xray POC/Victor Grubsky	Aerocube4 Aerospace Corp/Dave Hinkley	Snake Robot Inspection SRI/Ron Pelrine
4-4: 4:30-5:00pm	3D BX-ray & Adv DR GE/Rebecca Rudolph	ISS/Spacecraft Insp F.Flyer JSC/ES/George Studor	Art. Borescopes in Power Gen. GE/M&C/Joshua Scott

Dinner - Encourage small groups to meet together - End Users and Technology Providers

March 1:

Session 5: Alamo Ball Room End-User Needs Presentations

- 5-1: 8:00-8:30am Aircraft Inspection needs - Boeing Mfg/Assembly Technology/Jim Buttrick
- 5-2: 8:30-9:00am Backscatter Xray for Aircraft - Boeing/NDE/Gary Georgeson
- 5-3: 9:00-9:30am USAF Aircraft Inspection Needs - AFRL/ WPAFB /NDE/Stephan Russ
- 5-4: 9:30-10:00am Inflatable Habitat Inspection needs - JSC/Inflatable Tech/Gerard Valle

Break: 10:00-10:15am

Session 6: Alamo Ball Room End-User Needs Presentations

- 6-1: 10:15-10:40am Comp Pressure Vessel/Rocket Propulsion Inspections -WSTF/ Regor Saulsberry
- 6-2: 10:40-11:05am Under-water Inspection Mini-ROV Tech Needs - Astrotechnology/Dave Brower
- 6-3: 11:05-11:30am Spacecraft Prelaunch/Turnaround NDE Needs - KSC/NEL - Rick Russell

6-4: 11:30-12:00am Satellite Servicing Mission - Inspection Needs - GSFC/SSCO -Ben Reed

Lunch: 12:15-1:00pm Automotive Manufacturing NDE Inspection Needs - USCAR/NDE - Leo Lev

Session 7:

1:00pm - 3:15pm Scheduled One-On-Ones with End Users at their tables - sign up during workshop

(approximately 15 minutes per session)

Break 3:15-3:30pm

Session 8:

8-1: 3:30-4:30pm Forward Planning Discussion Groups - Sign up beforehand please

8-2: 4:30-5:00pm Reports from Forward Planning Groups by designated lead

Closing: 5:00pm Closing Remarks - Comments from Participants