NIST
National Institute of Standards and Technology
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ASTM INTERNATIONAL
Standards Worldwide
http://www.astm.org/

VERSION **2**

ASTM International Committee on Homeland Security Applications; Operational Equipment; Robots (E54.08.01)

Marriott Waterfront Hotel
Baltimore, MD

Jan. 31-Feb. 2, 2011 (Mon-Wed)
9:00 am – 6:00 pm

The goal of the upcoming meeting of the ASTM International standards committee on Homeland Security Applications; Operational Equipment; Robots (E54.08.01) is to provide an update on each working group's efforts with an emphasis on getting the bulk of the existing test methods to ballot. Draft standard texts and apparatus design specifications will be reviewed, along with results and feedback captured at recent testing events such as the March 2010 Response Robot Evaluation Exercise at Disaster City, TX. A subset of our emergency responder advisory panel will attend to provide guidance while robot developers and test administrators press ahead with detailed discussions of apparatus designs, procedures, metrics and comments gathered since the last committee meeting.

As always we will be briefing the entire standards committee on our progress. But the real work at these events gets done in the "breakout meetings" of each working group. These breakout meetings will focus on accomplishments that each working group is ready to discuss and allow us to dig deeper into issues and ideas. The balloting status of each test method will be discussed and future directions will be defined. Everyone is welcome to attend ALL the breakout meetings to contribute or simply to watch. There are often good lessons to learn from other groups further along the standards process. Since many players are involved in multiple working groups, we do these meetings sequentially as show below in the agenda.

Dress Code: Business casual, but responders please wear your insignias if possible.

AGENDA:

MONDAY, JANUARY 31 LOCATION

Mon 1:00 – 2:00 DOVER B

TOPIC: INTRODUCTION/ANNOUNCEMENTS (Adam Jacoff)

- Outcomes of the last standards committee meeting.
- Status of current ballots (4 Mobility/Obstacles, 4 Mobility/Terrains, 1 Mobility/Towing)
- Scheduled openings of new test facilities in U.S., Japan, and Germany
- Call for small robots to collect performance data for procurements
- New initiative for vehicle borne improvised explosive device (VBIED) applications
- Update on the FAA's progress toward allowing use small unmanned aerial systems (sUAS) in the national air space (< 2.2 kg/5 lb, < 30 knots horizontal flight, < 300 ft AGL line of sight).

Mon 2:00 – 2:30 DOVER B

TOPIC: TERMINOLOGY (Hui-Min Huang)

New term definitions, proposed naming conventions, etc.

Mon 2:30 – 3:00 DOVER B

TOPIC: LOGISTICS (Ann Virts)

Discuss recent changes to the Cache Packaging form, robot configuration identification including new center of gravity balance, targeted video captures (battery changes, manipulator removal, etc), and photo station results from Disaster City exercise.

Mon 3:00 – 4:00 DOVER B

TOPIC: RADIO COMMS (Dennis Camell)

Discuss results from Disaster City regarding new test method stations using figure-8 path with video/audio targets. Discuss status of repeatability data captured for balloting.

Mon 4:00 – 6:00 DOVER B

TOPIC: SENSORS (Hui-Min Huang)

Discuss results from Disaster City regarding new Directed Search test method apparatuses. Discuss new Two-Way Audio test method, and new Audio Spectrum test method. Validate robot test plan for repeatability data capture.

Mon 7:00 pm (*rally for dinner*) LOBBY BAR

TUESDAY, FEBRUARY 1 LOCATION

Tue 8:00 – 9:00 DOVER B

TOPIC: E54.08 Committee Meeting – Operational Equipment

Adam will represent us. Others are welcome but not required to attend.

Tue 9:00 – 10:00 DOVER B

TOPIC: MOBILIY (Andy Moore, Hui-Min Huang)

Introduce newly approved standard test methods for Terrains (continuous ramps, crossing ramps, symmetric stepfields), Inclined Plane, Gap, Pipe Step, Stairs (wood/metal/wet). Discuss change in procedure/fabrication for tether routing issues for figure-8 test procedures. Validate robot test plan for reproducibility data capture (SwRI, Japan, Germany).

Tue 10:00 – 12:00 DOVER B

TOPIC: MANIPULATION (Adam Jacoff)

Discuss results from Disaster City regarding the weighted pick and place cylinders (wood, aluminum, and steel), and reach obstacles (open, reach-over, reach-under). Validate robot test plan for repeatability data capture and solicit robots to help gather performance data.

Tue 12:00 – 1:00 (*lunch*) TBD
LUNCH

Tue 1:00 – 2:00 DOVER B
TOPIC: ENERGY (Karl Reichard)
Discuss Disaster City results capturing the first 20 laps of several robots with the data logger and results of desktop cycling tests. Discuss modifications to procedure/fabrication resulting from Disaster City 2010. Validate robot test plan for repeatability data capture.

Tue 2:00 – 3:00 DOVER B
TOPIC: MAPPING (Chris Scrapper, Soeren Schwertfeger, Johannes Pellenz)
Discuss maps generated with new map fiducials inserted into indoor (RoboCupRescue Robot Competition) and outdoor environments (MAGIC2010 Competition). Also, introduce the new Hallway Labyrinth, and new Feature Maze apparatuses . Validate robot test plan for repeatability data capture.

Tue 3:00 – 4:00 DOVER B
TOPIC: HRI (Adam Jacoff)
Discuss Random Maze Search test method procedure and recent results. Discuss new Navigation test method, Confined Space Search apparatus, and checklist items for interface and other system capabilities. Validate robot test plan for repeatability data capture.

Tue 4:00 – 6:00 DOVER B
TOPIC: UNDERWATER ROVs (Sean Newsome)
Discuss Disaster City results for underwater test methods. Clarify 3-5 of the test method apparatuses and procedures and push forward. Package the set for collaboration and/or balloting with the ASTM F41 Unmanned Maritime Systems Committee.

Tue 7:00 pm (*rally for dinner*) LOBBY BAR
TOPIC: Discussion: anything but standards!

WEDNESDAY, FEBRUARY 2 LOCATION

Wed 9:00 - 10:00 DOVER C
TOPIC: SMALL UNMANNED AERIAL SYSTEMS (sUAS) (Adam Jacoff)
Discuss status of FAA policy regarding sUAS Group 1 systems (< 2 kg/5 lb, <30 knots, <300ft AGL). Introduce initial test methods on Frangibility, Station Keeping, and Endurance. Package the set for collaboration and/or balloting with the ASTM F38 Unmanned Air Vehicle Systems Committee.

Wed 10:00 - 11:00 DOVER C
TOPIC: NEW REGIONAL TEST FACILITIES
Present the scheduled openings of new regional test facilities based on the suite of DHS/NIST/ASTM Test Methods for Response Robots.

Wed 11:00 – 12:30 DOVER C

TOPIC: E54 Main Committee Meeting

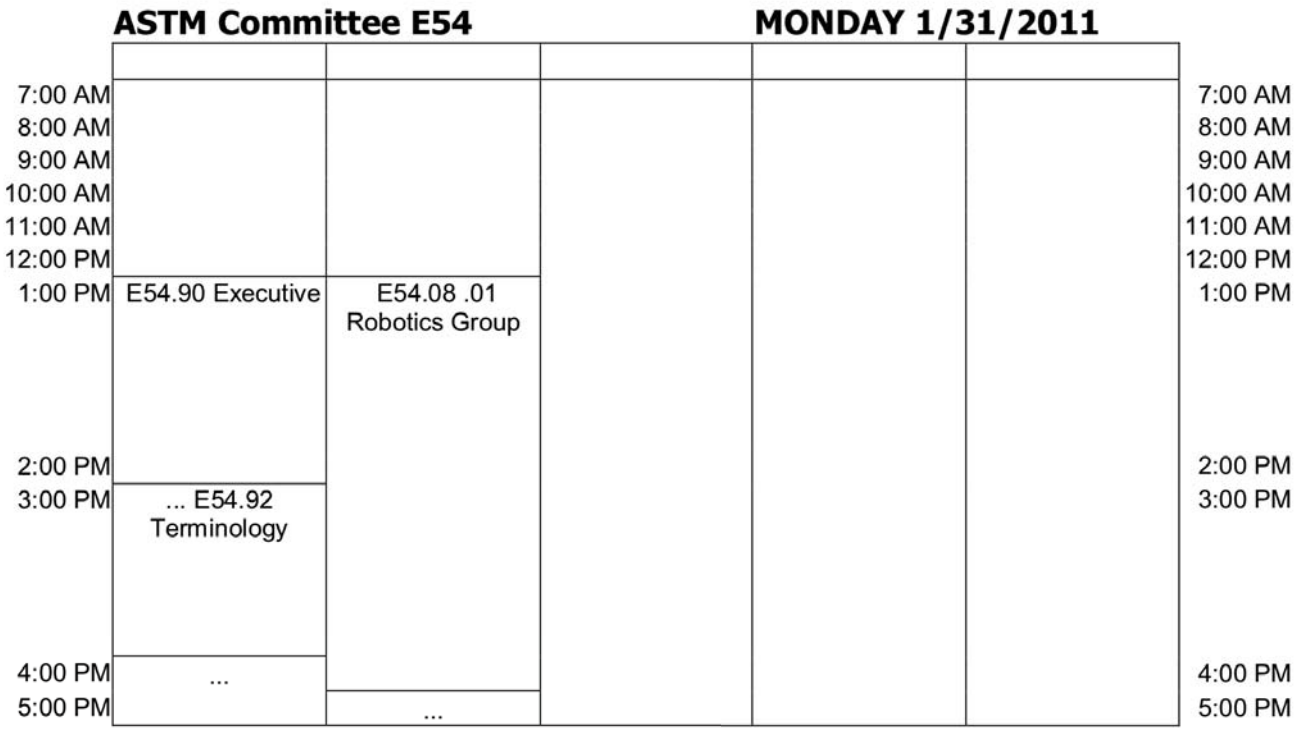
- Phil represents us, Adam is a backup. All the rest can go to lunch.

Wed 2:00 – 3:00 DOVER C

TOPIC: ADDRESS COMMENTS, PLAN NEXT STEPS

Discuss unresolved issues from previous meetings and make plans to address them.
(*Done!*)

OVERVIEW OF GENERAL E54 COMMITTEE WEEK



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ASTM Committee E54 — TUESDAY 2/1/2011

7:00 AM						7:00 AM
8:00 AM	E54.08 Operational Equipment	E54.03 Decontamination		E54.08 .01 Robotics Group **(con't)**		8:00 AM
9:00 AM	...				E54.08 TG on Blast Resistant Trash Receptacles	9:00 AM
10:00 AM						10:00 AM
11:00 AM						11:00 AM
12:00 PM			E54 Members are invited to an ASTM Training Session on Developing and Revising an ASTM Standard			12:00 PM
1:00 PM	E54.01 CBRNE Sensors & Detectors	E54.02 Private Sector TG	...			1:00 PM
2:00 PM		... E54.02 Emergency Preparedness, Training, & Procedures				2:00 PM
3:00 PM	... E54.04 Personal Protective Equipment (PPE) **(meeting ends at 4:00 PM)**				...	3:00 PM
3:30 PM		...				3:30 PM

4:00 PM	... E54.04 TG on High-Strength Materials used in Ballistic-Resistant Applications			**(con't)** E54.08 .01 Robotics Group	4:00 PM
5:00 PM				...	5:00 PM
6:00 PM	...				6:00 PM

ASTM Committee E54 — WEDNESDAY 2/2/2011

7:00 AM					7:00 AM
8:00 AM	E54.08 .01 Robotics Group				8:00 AM
9:00 AM					9:00 AM
10:00 AM					10:00 AM
11:00 AM			E54 Main Committee		11:00 AM
12:00 PM		E54 Members are invited to an ASTM Training Session on Enhancements to ASTM Member Support Rools			12:00 PM
12:30 PM			...		12:30 PM
1:00 PM		...			1:00 PM
2:00 PM					2:00 PM
3:00 PM					3:00 PM
4:00 PM					4:00 PM
5:00 PM	...				5:00 PM