



Welding Technology Panel & PPPF Panel

Meeting Minutes
April 13-14, 2011

Opening

Chair Lee Kvidahl called the summer/fall meeting of the NSRP Welding Technology Panel (& PPPF Panel) to order at 8:45am on April 13, 2011 in Ann Arbor, MI.

Members and Guests Present:

See Attachment A (SP7-A11-1)

Approval of Minutes

The minutes of the previous meeting were approved.

NSRP Panel SP-7 Membership Report

No changes in membership noted.

Welding Panel Chair Report

Lee Kvidahl gave a brief report on the following items:

1. ECB Meeting
 - a. Presented three projects to the ECB and all three were funded
2. Panel Chair Teleconference
 - a. The panel chairs are working on Value Statements for past projects in order to help quantify the projects
3. Current Solicitation of Projects. Must follow objectives to achieve to have a chance to funded:
 - Reduction in Total Ownership Costs
 - Improve Quality
 - Increase energy efficiency of ship or shipyard operations

Key deadlines for the submission of Panel Projects are:

- | | |
|--|----------|
| a. Submittal of Project Proposals to Lee | June 17 |
| b. Review, rank, prioritize projects | July |
| c. Lee to submit Top 3 to ATI/ECB | August 1 |



4. SNAME Ship Production Symposium
 - a. Houston, November 16-18
5. AWS Shipbuilding Conference
 - a. Seattle, May 10-11
6. All Panel Meeting
 - a. Newport News, October 4-6, 2011

Planning, Production Processes and Facilities Panel Chair Report

Tonya Boney gave a brief report on the following items:

1. Overview of the PPPF Panel
2. ECB selected two projects for funding.

NAVSEA Update – Tom Hite

1. Programs on better funding footing
 - o Money has been allocated
 - o PMO, NS 05 & 04
2. RA Projects
 - o New Panel Projects solicitation
 - o New RA solicitation mid summer to avoid end of year burdens
3. ONR MANTECH
 - o 50M in funding
 - o RTOC mandatory
 - o Program Emphasis
 - VCS
 - CVN78 – need to reduce acquisition costs
 - DDG1000 – no projects in future
 - DDG 51 Flight III – need projects (FY13)
 - LCS –
 - o ManTech holding meeting May 25 in Pittsburgh to review

Welding Panel Project Reports - All Reports will be posted on the Panel Web Site

1. Prototype Portable FSW System – Fred Callahan (SP7-A11-2)
2. Optimized GMAW – Paul Blomquist (SP7-A11-3)
3. Tandem Twin GMAW vs SAW – Ken Johnson (SP7-A11-4)



4. Trackless Tractor – Jamie Beard (SP7-A11-5)
5. Fastening Technologies – Chris Hsu (SP7-A11-6)

PPPF Panel Project Reports - Report will be posted on the Panel Web Site

1. Safe Practice for Common Shipyard Rigging – Lucas Gray (PPPF-A11-1)

Technical Presentations – All presentations will be posted on the Panel Web Site

1. Integrated Design Manual for Structural Shapes and Reduction of Weld Fumes – Paul Blomquist (SP7-A11-7)
2. Delta Spot –Stefan Mayr (SP7-A11-8)
3. Virtual Welding System – Jerry Jones No copy provided
4. Adaptive Pipe Welding – YuMing Zhang (SP7-A11-9)
5. ByPass Control Welding System – YuMing Zhang (SP7-A11-10)
6. Special Cameras for Shipbuilding Welds – Steve Eldeson (SP7-A11-11)

Discussion of Potential Panel Projects

Discussion was held on potential new panel projects. A reminder – all new projects must address or tackle one of the following:

- Improve Quality Improve Energy Efficiency Improve TOC

Ideas that were discussed include the following:

- Hobart
 - Reduce by Diffusible H2 by 50%
- Nelson
 - Under water welding
- AET
 - Single Sided Resistance Welding
 - Knowledge based welding system
- Lincoln
 - Coating moisture pick up – exposure time
- Yuming
 - Bypass Technology for manual GMAW



Next Meeting

The next meeting is currently scheduled to take place as part of the All Panel meeting to be held October 4 -6 in Newport News, VA unless the voting members would like to schedule an interim meeting prior to the All Panel meeting.

The following locations are under consideration for the next meeting.

- CTC, Johnstown, PA
- ESAB, Florence, SC
- Lincoln Electric, Cleveland, OH
- Miller Electric, Appleton, WI
- Penn State University, State College, PA
- University of Kentucky, Lexington, KY
- Wolf Robotics, Ft. Collins, CO

Adjournment:

Chair Kvidahl officially adjourned meeting at 5:20pm.

Fronius USA hosted an informal networking reception for panel participants.

Thursday, April 21 Tour of Fronius USA and AET

Fronius USA provided participants with presentations on their company and their product lines. Several live welding demonstrations of the following processes were performed:

- Horizontal Tandem GMAW, CMT Overlay – NiCu on HY, CMT Advanced – Sheet Metal Welding and CMT Pinning, TransSteel with Powerliner
- Attachment SP7-A11-12 is collage of photos from the event

The group then traveled to IPG for a demonstration of Laser Hybrid welding with Fronius TPS Power Supply and Laser Head.

Lastly, the group traveled to AET where they were given an overview of AET's technology (SP7-A11-13) and tours of their facility.

Minutes submitted by:

Mike Ludwig