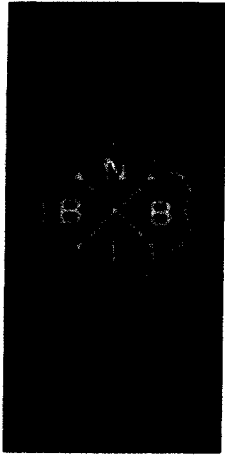


Date Distributed: February 10, 2010



**THE  
NATIONAL  
BOARD**  
OF BOILER AND  
PRESSURE VESSEL  
INSPECTORS

**SUBGROUP  
ON REPAIRS and ALTERATIONS  
SPECIFIC**

*MINUTES*

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*Meeting of January 19 2010  
Austin, Texas*

*These minutes are subject to approval and are for committee use only.  
They are not to be duplicated or quoted for other than committee use.*

The National Board of Boiler & Pressure Vessel Inspectors  
1055 Crupper Avenue  
Columbus, Ohio 43229-1183  
Phone: (614)888-8320  
FAX: (614)847-1828

**1. Call to Order**

The meeting was called to order at 1:00p.m.

**2. Announcements**

A reception will be held Wednesday evening @ 6:30 p.m. hosted by the National Board. Breakfast and lunch will be provided on Thursday by the National Board.

**3. Adoption of the Agenda**

Action items, NB10-0101 with Brain Boseo reporting and NB10-0801 with George Galanes reporting were added to the agenda. There was a motion to adopt the agenda as modified. The motion was unanimously approved.

**4. Approval of Minutes**

There was a motion to adopt the Minutes of July 2009. The motion was unanimously approved.

**5. Review of Roster (Attachment 1)**

The roster disclosed each member present excluding Mr. Hoh.

Mr. Angelo Bramucci's resume was submitted for consideration for membership to the subgroup. There was a motion to approve recommendation to the subcommittee. The motion was unanimously approved to Mr. Bramucci as a member of the Subgroup Specific to the Subcommittee.

**6. Action Items (Attachment 2)**

**NB08-0304 Par 3 Forms 5.13.4.1 SG on R and A Spec.** The instruction guide for "R" Forms needs to be improved. The form also needs to have the ability to expand to accommodate people filling it out completely. A TG of R. Pulliam (Chair), M. Webb and W. Jones has been assigned.

A detailed report was submitted by Ron Pulliam and after lengthy discussions the proposal was unanimously approved "in principle" with a modified version to be provided to the S.C. for letter ballot at the July 2010 meeting.

**NB10-0108 Part 3 S 5.4 d Yankee Dryer Rolls** Clarify documentation requirements for Yankee Dryers. Task group of J. Given has been assigned.

Mr. Given gave a progress report. He will work with Brian Tholke and expects to have a proposal at the next meeting.

**7. New Business**

**NB10-0101 Part 3 5.10** Change 5.10 to facilitate information flow, requirements for PRI stamping and nameplates.

Brian Boseo provided a progress report and expects to have a proposal for consideration at the next meeting.

**NB10-0801 Part 3 4.4.1 a) and 4.4.2 a)**Revise 4.4.1.a.3 and 4.4.2.a.4 to add cautionary note regarding pressure testing of thick walled PRI. (Attachment 2, pgs. 1-3)

Mr. Galanes proposed wording shown in the attachment. There was a motion to approve the wording. The motion was unanimously approved.

**8. Future Meetings**

July 2010	Columbus, OH
January 2011	Austin, TX

**9. Adjournment**





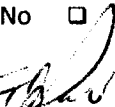



The meeting was adjourned at 5:00 p.m.

Respectfully Submitted,

Wayne Jones  
Acting Secretary

## Attendance List Repairs Alterations-Specific Subgroup

**Meeting Date: January 19, 2010**

<p><b>James T. Pillow</b> Common Arc Corporation 67 Wyndemere Lane Windsor, CT 06035</p> <p>Ph: 860-688-2531 Fax: 860-688-2531 E-mail: <a href="mailto:jpillow@commonarc.com">jpillow@commonarc.com</a></p>	<p>Attended: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p> Initial</p>	<p><b>George W. Galanes, PE</b> Manager, Metallurgy and QA Midwest Generation EME, LLC Joliet Station/Chicago Annex 1800 Channahon Road Joliet, IL 60436-8539</p> <p>Ph: 815-207-5897 Fax: 312-788-5218 E-mail: <a href="mailto:ggalanes@MWGen.com">ggalanes@MWGen.com</a></p>	<p>Attended: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p> Initial</p>
<p><b>Jack Given</b> Bureau Chief Department of Labor Boiler Safety Bureau 1101 Mail Service Center Raleigh, NC 27699-1101</p> <p>Ph: 919-807-2774 Fax: 919-807-2762 E-mail: <a href="mailto:jgiven@labor.nc.gov">jgiven@labor.nc.gov</a></p>	<p>Attended: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p> Initial</p>	<p><b>James Sekely</b> Wayne Crouse, Inc. 716 Vanderbilt Drive Monroeville, PA 15146</p> <p>Ph: 412-389-5567 Fax: 724-327-7381 E-mail: <a href="mailto:jsekely@comcast.net">jsekely@comcast.net</a></p>	<p>Attended: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p> Initial</p>
<p><b>Frank Pavlovicz</b> The Babcock &amp; Wilcox Company 20 S. Van Buren Ave. Barberton, Ohio 44133</p> <p>Ph: 330-860-6148 Fax: 330-860-8932 E-mail: <a href="mailto:fjpavlovicz@babcock.com">fjpavlovicz@babcock.com</a></p>	<p>Attended: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p> Initial</p>	<p><b>John Hoh</b> The National Board 1055 Crupper Ave. Columbus, OH 43229</p> <p>Ph: 614-888-8320 Fax: 614-847-1828 E-mail: <a href="mailto:jhoh@nationalboard.org">jhoh@nationalboard.org</a></p>	<p>Attended: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p> Initial</p>
<p><b>Wayne Jones</b> Arise Boiler Inspection and Insurance Company 705 East 4<sup>th</sup> Street Bay Minette, AL 36507</p> <p>Ph: 251-937-6225 Fax: E-mail: <a href="mailto:wayne.jones@ariseinc.com">wayne.jones@ariseinc.com</a></p>	<p>Attended: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p> Initial</p>	<p><b>Brian Boseo</b> 2000 Day Hill Road Windsor, CT 06095 Ph: <del>860-668-1911</del> 847-961-0047 Fax: 860-285-9656</p> <p>E-mail: <a href="mailto:brian.m.boseo@power.alstom.com">brian.m.boseo@power.alstom.com</a></p>	<p>Attended: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p> Initial</p>

# Attendance List Repairs Alterations-Specific Subgroup

Meeting Date: January 19, 2010

<p><b>Mike Huffman</b>          American Welding and Tank          111 Tank Road          Jessup, GA 31545          Ph: 912-427-5629          Fax: 912-427-5629          E-mail: <a href="mailto:mhuffman@awtank.com">mhuffman@awtank.com</a></p>	<p>Attended:          Yes <input checked="" type="checkbox"/>          No <input type="checkbox"/></p> <p><i>MH</i>          Initial</p>	<p><u>Name:</u> WALT SPERKO  <u>Company:</u> SPERKO ENGINEERING  <u>Address:</u> 4803 ARCH WOOD DR  <u>City/State/Zip:</u> GREENSBORO NC 27406  <u>Ph:</u> 336-674-0608 <u>Ext.</u>  <u>Fax:</u> _____  <u>E-mail:</u> SPERKO@ASME.ORG</p>
<p><u>Name:</u> BOB WIELGOSZINSKI  <u>Company:</u> HSB of CT  <u>Address:</u>  <u>City/State/Zip:</u> HARTFORD CT  <u>Ph:</u> 860 722 5064 <u>Ext.</u>  <u>Fax:</u>  <u>E-mail:</u></p>	<p><u>Name:</u> RON PULLIAM  <u>Company:</u> B&amp;W CONSTRUCTION Co.  <u>Address:</u> 74 ROBINSON AVE.  <u>City/State/Zip:</u> PAWSLTON, PA 442038  <u>Ph:</u> 330-860-2856 <u>Ext.</u>  <u>Fax:</u> 330-860-2180  <u>E-mail:</u> RL Pulliam@BABCORP.COM</p>	
<p><u>Name:</u> MIKE WEBB  <u>Company:</u> XCEL ENERGY  <u>Address:</u> 4653 TABLE MOUNTAIN DRIVE  <u>City/State/Zip:</u> GOLDEN, CO. 80403  <u>Ph:</u> 720) 497-2158 <u>Ext.</u>  <u>Fax:</u> 720) 497-2117  <u>E-mail:</u> <a href="mailto:mike.webb@xcelenergy.com">mike.webb@xcelenergy.com</a></p>	<p><u>Name:</u> JOE BLUEMEL <u>VISITOR</u>  <u>Company:</u> ONE CIS INS.  <u>Address:</u> 3663 N. SAM HOUSTON PKWY E  <u>City/State/Zip:</u> HOUSTON, TX  <u>Ph:</u> 281-986-1348 <u>Ext.</u>  <u>Fax:</u> 281 296 1379  <u>E-mail:</u> JOE.BLUEMEL@ONECIS.COM</p>	
<p><u>Name:</u> PAUL EDWARDS  <u>Company:</u> SHAW STONE + WEBSTER  <u>Address:</u>  <u>City/State/Zip:</u>  <u>Ph:</u> 617-589-5690 <u>Ext.</u>  <u>Fax:</u>  <u>E-mail:</u> PAUL.EDWARDS@SHAWGRP.COM</p>	<p><u>Name:</u> STUART CAMERON  <u>Company:</u> DOOSAN BABCOCK  <u>Address:</u> PORTERFIELD RD  <u>City/State/Zip:</u> BENFREW PA 4 80J  <u>Ph:</u> 44 (41) 885 3310 <u>Ext.</u>  <u>Fax:</u>  <u>E-mail:</u> <a href="mailto:scameron@doosanbabcock.com">scameron@doosanbabcock.com</a></p>	

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**4.4.1 TEST OR EXAMINATION METHODS APPLICABLE TO REPAIRS**

Based on the nature and scope of the repair activity, one or a combination of the following examination and test methods shall be applied to repairs and replacement parts used in repairs.

a) **Liquid Pressure Test**  
Pressure testing of repairs shall meet the following requirements:

1) Pressure tests shall be conducted using water or other liquid medium. The test pressure shall be the minimum required to verify the leak tightness integrity of the repair, but not more than 150% of the maximum allowable working pressure (MAWP) stamped on the pressure-retaining items, as adjusted for temperature. When original test pressure included consideration of corrosion allowance, the test pressure may be further adjusted based on the remaining corrosion allowance.

2) During a pressure test where the test pressure will exceed 90% of the set pressure of the pressure relief device, the device shall be removed whenever possible. If not possible, a spindle restraint may be used following the valve manufacturer's instructions and recommendations. Extreme caution should be employed to ensure only enough force is applied to contain pressure. Excessive mechanical force applied to the spindle restraint may result in damage to the seat and/or spindle and may interfere with the proper operation of the valve. The spindle restraint shall be removed following the test.

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The organization who performs the pressure test and applies a spindle restraint shall attach a metal tag that

identifies the organization and date the work was performed to the pressure relieving device. If the seal was broken, the organization shall reseal the adjustment housing with a seal that identifies the responsible organization. The process shall be acceptable to the Jurisdiction where the pressure-retaining items are installed.

3) The metal temperature for the pressure test shall be in accordance with the original code of construction, but not less than 60°F (16°C) unless the owner provides information on the toughness characteristics of the material to indicate the acceptability of a lower test temperature. ~~During close examination the metal temperature shall not exceed 120°F (49°C), unless the owner specified requirements for a higher test temperature, and it is acceptable to the Inspector.~~

*insert x*

4) Hold-time for the pressure test shall be a minimum of 10 minutes prior to examination by the Inspector. Where the test pressure exceeds the MAWP of the item, the test pressure shall be reduced to the MAWP for close examination by the Inspector. Hold-time for close examination shall be as necessary for the Inspector to conduct the examination.

b) **Pneumatic Test**

A pneumatic test may be conducted. Concurrence of the owner shall be obtained in addition to that of the Inspector and Jurisdiction where required. The test pressure shall be the minimum required to verify leak tightness integrity of the repair, but shall not exceed the maximum pneumatic test pressure of the original code of construction. Precautionary requirements of the original code of construction shall be followed.

- c) Initial Service Leak Test  
When an initial service leak test is permitted by the original code of construction, such testing may also be used to verify the leak tightness integrity of repairs.
- d) Vacuum Test  
A vacuum test may be conducted. Vacuum test methods used shall be suitable to verify the leak tightness integrity of the repair.
- e) Nondestructive Examination (NDE)  
NDE may be conducted. Exclusive use of Visual Examination (VT) shall not be permitted. NDE methods used shall be suitable for providing meaningful results to verify the integrity of the repair.

**4.4.2 TEST OR EXAMINATION METHODS APPLICABLE TO ALTERATIONS**

Based on the nature and scope of the alterations activity, one or a combination of the following examination and test methods shall be applied to alterations and replacement parts used in alterations.

- a) Liquid Pressure Test  
Pressure testing of alterations shall meet the following requirements:
  - 1) A pressure test as required by the original code of construction shall be conducted. The test pressure shall not exceed 150% of the maximum allowable working pressure (MAWP) stamped on the pressure-retaining item, as adjusted for temperature. When the original test pressure included consideration of corrosion allowance, the test pressure may be further adjusted based on the remaining corrosion allowance. The pressure test for replacement parts may be performed at the point of manufacture or point of installation.
  - 2) As an alternative to pressure testing connecting welds in accordance with

the original code of construction, connecting welds may be tested or examined in accordance with the rules for repairs (see 4.4.1). Connecting welds are defined as welds attaching the replacement part to the pressure-retaining item.

- 3) During a pressure test where the test pressure will exceed 90% of the set pressure of the pressure relief device, the device shall be removed whenever possible. If not possible, a spindle restraint may be used following the valve manufacturer's instructions and recommendations. Extreme caution should be employed to ensure only enough force is applied to contain pressure. Excessive mechanical force applied to the spindle restraint may result in damage to the seat and/or spindle and may interfere with the proper operation of the valve. The spindle restraint shall be removed following the test.
  - a. The organization who performs the pressure test and applies a spindle restraint shall attach a metal tag that identifies the organization and date the work was performed to the pressure relieving device. If the seal was broken, the organization shall reseal the adjustment housing with a seal that identifies the responsible organization. The process shall be acceptable to the Jurisdiction where the pressure-retaining items are installed.
- 4) The metal temperature for the pressure test shall be in accordance with the original code of construction, but not less than 60°F (16°C), unless the owner provides information on the toughness characteristics of the material to indicate the acceptability of a lower test temperature. During close examination the metal temperature shall not exceed 120°F (49°C), unless the owner

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