

Date Distributed: January 24, 2017



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

NATIONAL BOARD SUBGROUP HISTORICAL BOILERS

MINUTES

Meeting of January 9th, 2017
San Diego, California

*These minutes are subject to approval and are for the 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 10:03 a.m. on January 9, 2017 by Mr. Joel Amato.

2. Introduction of Members and Visitors

The attendees are identified on the attendance sign in sheet (**Attachment Pages 1 & 2**). With the attached attendance listing, a quorum was established.

3. Announcements

- The National Board invites all committee members and visitors to a reception at the Quad AleHouse on Wednesday, January 11th. The event begins at 5:30pm. The venue is approximately a five minute walk from the hotel.
- The draft of the 2017 edition of the NBIC has been approved by the NBIC Committee, and will be available for purchase on July 1st, 2017.
- Additional announcements were made by the Secretary, Jodi Metzmaier

4. Adoption of the Agenda

NB16-0502, NB16-0503, and a few discussion items were added to the agenda. The revised agenda was then adopted unanimously.

5. Approval of the Minutes of July 18th, 2016 Meeting

The minutes from the July 2016 meeting were approved unanimously.

6. Review of Rosters

a. Membership Nominations

Mr. Mark Jordan would like to become a member of SG Historical Boilers. After discussion, it was noted that the January 2017 meeting is the second meeting Mr. Johnson has attended. The group will vote on his membership in July 2017. There were no further nominations.

7. Action Items

Item Number: NB13-0903	NBIC Location: Part 2, S2.14	Attachment page 3-4
General Description: Add safety requirements for use of liquid or gaseous fuels to fire a historical boiler		
Subgroup: Historical		
Task Group: D. Rupert (PM), T. Dillon, J. Larson, R. Bryce		
January 2017 Action:		
Mr. D. Rupert and Mr. D. Cook presented and discussed new wording to add to Part 2, S2.14 with the Subgroup. After much discussion, a motion was made to send the new wording to letter ballot for the subgroup. The motion was passed unanimously.		

Item Number: NB15-1602	NBIC Location: Part 3, S2.7.1	No Attachment
<p>General Description: Revise material list for historical boiler reports to include bolts, studs, nuts and formed pressure parts</p> <p>Subgroup: Historical</p> <p>Task Group: T. Dillon (PM), M. Wahl, G. Galanes, D. Rose</p> <p>January 2017 Action: Mr. T. Dillon gave a progress report. After much discussion, the task group stated they should have something to present to the subgroup in July 2017.</p> <p>Add David Rose to the Task Group.</p>		

Item Number: NB16-0502	NBIC Location: Part 2, S2.8.2e&f	No Attachment
<p>General Description: Gage Glass and water level</p> <p>Subgroup: Historical</p> <p>Task Group: Dennis Rupert (PM), Frank Johnson, Tom Dillon</p> <p>January 2017 Action Mr. D. Rupert a progress report. He presented examples for discussion to the Subgroup. After much discussion with the group the task group will continue to work and should have something to present in July 2017.</p>		

Item Number: NB16-0503	NBIC Location: Part 2, S2.13.13.4	No Attachment
<p>General Description: Add types of rivet heads</p> <p>Subgroup: Historical</p> <p>Task Group: R. Bryce (PM)</p> <p>January 2017 Action Mr. R. Bryce gave a progress report. He presented a figure for discussion and new wording to add c) to S2.13.13.4. After much discussion with the group the task group will continue to work with the wording and possibly ass a diagram. They are hoping to have something to present in July 2017.</p>		

8. New Business

Items Opened at SG Historical:

Item Number: NB17-0601	NBIC Location: Part 3, S2.13	No Attachment
<p>General Description: Single staybolt with threaded & welded connections</p> <p>Subgroup: Historical</p> <p>Task Group: M. Wahl (PM), G. Galones, R. Underwood</p> <p>January 2017 Action Item was opened and a task group was assigned. No further action was taken at this time.</p>		

Item Number: NB17-0602	NBIC Location: Part 3	No Attachment
General Description: Scope of repair/new boiler with an R stamp.		
Subgroup: Historical		
Task Group: R. Underwood (PM), M. Wahl		
<u>January 2017 Action</u>		
Item was opened and a task group was assigned. No further action was taken at this time.		

Item Number: NB17-0603	NBIC Location: Part 2, S2.10.2.1	No Attachment
General Description: Revises wording adding “Common.”		
Subgroup: Historical		
Task Group: D. Rose (PM), M. Wahl		
<u>January 2017 Action</u>		
Item was opened and a task group was assigned. No further action was taken at this time.		

Discussions

- 1) The group discussed the requirement for dual calculations required for barrel. The group discussed this item at length and determined that there is no need to require the calculation of the barrel and the joint separately. The consensus was unanimous to maintain the current requirements required by NBIC Part 2.
- 2) The subgroup discussed requiring calculations for both square and rectangular stayed surfaces. The group discussed this item at length and determined that the rectangular calculation may be used on square or rectangular stay bolt patterns. The consensus was unanimous.

9. Future Meetings

July 17-20, 2017 – Columbus, Ohio
January 8-11, 2018 – Location TBD

10. Adjournment

A motion was made and unanimously approved to adjourn the meeting at 2:36 p.m.

Respectfully submitted,



Jodi Metzmaier
SG Historical Secretary

SG Historical Attendance Sheet - 1/9/17

Name	Company	Phone Number	Email	Signature	Attend Rec.?	Guest?
Joel Amato	State of Minnesota	(651) 284-5137	joel.amato@state.mn.us		X	
Tom Dillon	Deltak MSEA	(763) 425-0733 612-308-9560	tdillon@deltak.com dillon66@HPC@GMAIL.COM			
Bob Ferrell	National Board	(614) 888-8320	rferrell@nationalboard.org			
Jim Getter	Worthington Industries	(614) 840-3087	jim.getter@worthingtonindustries.com		X	
Frank Johnson	PBF Energy	(419) 698-6614	frank.johnson@pbfenergy.com		X	
David Rose	T&T Inspections	(780) 217-8175	dr3747@telus.net			
Dennis Rupert	Consultant	(517) 437-4565 517 9980152	rupertcull@comcast.net			
Robert Underwood	Hartford Steam Boiler	(618) 593-6231	robert_underwood@hsbct.com		X	X
Mike Wahl	Wisconsin Historical Steam Engine Association	(920) 972-7308	mikew@midstal.com			
Jodi Metzner	NBBB	-	-		X	
Robert Bryce	NMBA	780-545-4480	rbryce@heartlandsteamboilers.com		X	
Paul Shanks	ONECIS	281 986 1371	Paul.Shanks@onecis.com		X	X
Donnie Lesage	LA SFM	225 268-5549	Donnie.Lesage@LA.Gov		X	
DON COOK	STATE OF CA	510 622-3050	dcook@dir.ca.gov		X	
DEAN ALLINGB	OWNER/USER	661-313 2848	STEAMRQUE@AOL			
JAKE WILLIAMS	USER CHIEF ENGINEER A.G.S.E.M.	760-638 7502	OwnersAndBoilers@hotmail.com			
MARK JORDAN	KENTUCKY	502 671-9220	MARK.JORDAN@KY.GOV			
MONTE BOST	HSB	937 620-3676	monte_bost@hsbct.com		X	X
Brandon Wilson	DTS	724-599 4689	bwilson@diamondtechnicalservices.com		X	
JAMIE WALKER	HAYES MECH.	773 292-2707	JWALKER@HAYESMECHANICAL.COM			X
MARK HORBACZEWSKI	DTS	815 634 2727	Mhorbaczewski@diamondtechnicalservices.com			X

NB13-0903**Action Item Request****Code Revision or Addition: Part 2, S2.14**

The requestor, Mr. Don Cook, Chief Inspector - State of California, has been seeing occasions in his state where historical boilers are being fired with liquid or gaseous fuels and is asking the Committee to provide some cautionary guidance in NBIC to address these important safety issues related to that activity.

PROPOSE: New paragraph, Part 2, Supplement S2.14.16:

FIRING OF HISTORICAL BOILERS WITH LIQUID OR GASEOUS FUELS.

Hand firing of historical boilers with liquid or gaseous fuels poses significant additional safety concerns beyond those encountered when firing with solid fuels for which these boilers were originally designed, such as coal, straw or wood. The cautionary notes listed below are provided as examples to remind the owner or user that additional safety concerns do exist when firing historical boilers with these alternate fuels. These notes are not meant to be all-inclusive so each boilers fuel system should be designed appropriately.

- a) JURISDICTIONAL ACCEPTANCE: The owner or user should check with the Jurisdictional as applicable to determine if this alternative firing method is accepted.
- b) OWNER OR USER KNOWLEDGE: The owner or user will have an intimate knowledge of the fuel used, fuel transfer system, on board fuel storage, burner, firing controls, emergency shut off devices and procedures.
- c) PURGING: To prevent a firebox explosion, it is essential to ensure that the furnace is purged of combustible gasses prior to applying the fuel ignition source. Firebox flame-outs can occur. Caution must be exercised to assure the fire box is 100% purged prior to attempting to re-light.
- d) FLAME IMPINGEMENT: Direct flame impingement of the metal surfaces within the furnace can damage the boiler. Installation of refractory or fire brick in the firebox is a common practice to prevent this potential damage.
- e) LOW WATER: The owner or user must have a plan and method to immediately shut off the fuel supply to the burner when a boiler low water condition occurs.
- f) FUEL CONTAINMENT: The fuel storage system must be suitably designed with the appropriate shut off devices for the specific fuel product. The mounting method and proximity of the fuel storage container to the furnace must be considered to prevent the fuel from accidental ignition.
- g) FUEL SYSTEM: The fuel delivery system from fuel source to the burner should be suitably designed for the specific fuel product including appropriate emergency shut off devices. The routing of the fuel delivery system should be a consideration as well.
- h) FUEL AIR MIXTURE: The burner utilized must be designed to operate within the confines of the boiler furnace and provide the proper fuel/air mixture.
- i) SAFETY VALVE: The boilers minimum relieving capacity shall be computed for the type of fuel used.
- j) COMPRESSED NATURAL GAS (CNG) vs LIQUID PETROLEUM GAS (LPG): CNG is lighter than air and LPG is heavier than air. The owner or user should understand the properties of the fuels to ensure the gas will not accumulate in the boiler (see Purging above).