

Date Distributed: February 9, 2022

NATIONAL BOARD INSPECTION CODE TASK GROUP HISTORICAL BOILERS

MINUTES

Meeting of January 17, 2022 San Diego, CA

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

Chairman, Trevor Seime, called the meeting to order at 8:02 am (PST)

2. Introduction of Members and Visitors

A roll call was taken of the Members, both in person and remote. All visitors, both in person and remote, stated their name, what company they were with, and their interest. (Attachment Page 1)

3. Check for a Quorum

With the members in attendance, both in person and remote, a quorum was established.

4. Awards/Special Recognition

None

5. Announcements

Secretary, J. Metzmaier made the announcements to the group. (Attachment Pages 2-3)

6. Adoption of the Agenda

A motion was made to adopt the agenda, and the motion was seconded. The below changes/additions were made to the agenda and another motion was made to adopt the revised agenda. The motion was seconded and unanimously approved.

- Add Michael Horton as a nominee (attended last two meetings, interest category of General Interest)
- Item 21-78 \rightarrow Change NBIC Location to Part 3.

7. Approval of the Minutes of the July 12th, 2021 Meeting

A motion was made to approve the minutes from the July 12, 2021, meeting. The motion was seconded and unanimously approved.

8. **Review of Rosters**

a. Membership Reappointments

None.

NOTE: Kathy Moore has stated she will be stepping down as a member of the Historical Task Group.

b. Membership Nominations

Michael Horton (interested category of General Interest) would like to become a member of the Historical Boilers Task Group.

Michael spoke to the group letting them know his work history and why he wants to become a member of the TG. Mr. Horton was put into a breakout room so the group could discuss his nomination. Mr. Rupert has worked with Mr. Horton and spoke on his behalf, noting he thinks he would be a great asset to the group. A motion was made to recommend Mr. Horton to the group. The motion was seconded and unanimously approved.

c. Officer Nominations

None.

9. Action Items

Item Number: 20-25 NBIC Location: Part 3, S2.13 No Attachment

General Description: Repair Procedure for Fire Boxes

Subgroup: SG Historical

Task Group: M. Wahl (PM), R. Forbes, T. Dillon, L. Moedinger & F. Johnson

Explanation of Need: In NBIC Part 3, S2.13.10.3, S2.13.11 do not define what to do at a riveted joint. On the tubesheet, or firedoor sheet, where it is flanged to rivet to the firebox, the repairs are silent on what to do at the riveted joint.

January 2022 Action:

PROGRESS REPORT: Mike Wahl stated he is still working on this item and will review the action item passed through Locomotive to create his proposal for the Historical TG.

Item Number: 20-26 NBIC Location: Part 2, S2 No Attachment

General Description: Concern for Historical Boiler Inspections Nationwide

Subgroup: SG Historical

Task Group: T. Dillon (PM), R. Underwood, L. Moedinger, M. Wahl, D. Rupert, K. Anderson, M.

Sansone, & J. Wolf

Explanation of Need: Currently Jurisdictions are not uniform in adoption of how and when inspections are performed.

January 2022 Action:

PROGRESS REPORT: Mr. Seime has stated that he does not feel this item should be an action item. The group discussed making it a "discussion item" as opposed to an action item. It was determined it should stay as an action item so it can be easier tracked. Mr. Sansone was not present to discuss how this was discussed at the BOT meeting. Mr. Seime said the NB is planning to set up a new training course for Historical Inspectors. Mr. Moedinger spoke to the group on what kind of training they have for Locomotive Inspectors. Mr. Seime has asked the Historical TG to send him information on what kind of information they would want in a training course so he can work with the National Board to create a course. He would like the group to start looking towards sending pictures to be used as reference in the training. The group discussed adding/referencing "Form C" in the training.

Item Number: 21-03 NBIC Location: Part 2, S2 No Attachment

General Description: Inspection of through stays and diagonal stays (submitted by David Rose)

Subgroup: Historical

Task Group: D. Rose (PM), R. Bryce, R. Forbes, C. Jowett

Explanation of Need: The code is silent on the inspection of through stays and diagonal stays. Additionally, new repair methods are available from ASME that can be incorporated.

January 2022 Action:

PROGRESS REPORT: Mr. Rose presented a document to the group showing the code changes/additions they are working on for the proposal. Mr. Moedinger had some questions on the information in the new wording, which Dr. Bryce was able to explain. Mr. Underwood has recommended the document showing the changes/additions be sent to out for **LB to the Historical TG for Review and Comment** prior to the proposal being sent for a vote. The group has agreed this would be a good idea to get further input.

Item Number: 21-09 NBIC Location: Part 3. S2 No Attachment

General Description: Incorporate new repair methods for through and diagonal stays (submitted by

David Rose)

Subgroup: Historical

Task Group: D. Rose (PM), R. Bryce, R. Forbes, C. Jowett

Explanation of Need: The code is silent on the inspection of through stays and diagonal stays. Additionally, new repair methods are available from ASME that can be incorporated.

January 2022 Action:

Mr. Rose presented the suggested code additions, he stated the figure that is with the document will need to be updated. Mr. Rose has recommended the document showing the additions be sent to out for **LB to the Historical TG for <u>Review and Comment</u>** prior to the proposal being sent for a vote. The group has agreed this would be a good idea to get further input.

Item Number: 21-34 NBIC Location: Part 2, S2 No Attachment

General Description: Working Pressure Calculations for Curved Stayed Surfaces

Subgroup: Historical

Task Group: Mike Wahl (PM), R. Bryce, & T. Dillon

Background: In January 2021, Dr. Bryce initiated the conversation with the group for this topic. He is proposing the group open an item to address working pressure calculations for curved stayed surfaces. After discussion, a task group was formed

January 2022 Action:

PROGRESS REPORT: Dr. Bryce has presented his research to the group, discussing how he came up with the new wording/equation. Mr. Wahl & Dr. Bryce noted that these code additions are only for internal pressure, and a separate item will be opened for the external pressure. They will continue to work on the proposal and have it ready for next meeting. Mr. Wahl will open the new item for external pressure.

10. New Items:

Item Number: 21-48 NBIC Location: Part 2, S2.6.3.4 Attachment Page 4

General Description: Correction of references in S2.6.3.4 a) 1) and 2).

Subgroup: Historical

Task Group: None assigned

Submitted by: John Emmett Cady

Background: the sentences in S2.6.2 (b&c) were re-lettered sometime between 2013 and 2019 and the references back to them in S2.6.3.4 were not changed at the same time. This also applies to S2.6.3.4 a) 1 & 2. This correction may be needed in other sentences, but I have not identified the need yet.

January 2022 Action:

Mr. Seime presented this item to the Group. After review, a motion was made to accept the changes as shown in the proposal. The group asked National Board to look at other potential references to this section to make sure that this reference doesn't need to be changed elsewhere. The motion was seconded and **unanimously approved**.

Item Number: 21-66 NBIC Location: Part 2, S2.7.3.2 No Attachment

General Description: Correct Water Treatment

Subgroup: Historical

Task Group: None assigned

Submitted by: Mohamed Elsayed/Province of Manitoba

Background: As a jurisdiction we would like to define a process for treating the water that is used in historical boilers. Historical boiler owners in the province of Manitoba are stating that corrosion inhibitors do not have a noticeable capacity for slowing the effects of corrosive compounds in non-treated water. The request for this item is triggered from a discussion with historical boiler owners in the province of Manitoba. The owners are requesting a clarification for what the expectations are for treating the water used in the historical boilers.

January 2022 Action:

The group reviewed the new item and discussed if this is a jurisdictional issue or if this is something that can be done on a National Board level—they decided it's outside of the National Board's scope. Mr. Galanes suggested closing this item with no action and sending a reply to the submitter stating this is a jurisdiction issue and doesn't belong in the NBIC. After further discussion, a motion was made to **close the item with no action**, and Dr. Bryce will reach out to submitter to explain decision. The motion was seconded and unanimously approved.

Item Number: 21-78 NBIC Location: Part 23, \$2.13.9.5 No Attachment

General Description: Alternative Weld Joint for Historical Boiler Barrel Replacement

Subgroup: Historical

Task Group: None assigned

Submitted by: Robert Underwood

Background: Historical boilers were manufactured with riveted joints, however in many cases it's more practical to use welded joints when restoring historical boilers. However, ASME Section I does not allow fillet welded lap joints when connecting replacement barrels to the wrapper sheet. The strength of a double fillet welded lap joint has proven to be equal, if not greater in strength than riveted joint designs and this proposal will introduce this type of joint as an alternative to riveted lap joints. This proposal would introduce double welded lap joint connections of the barrel to wrapper sheet in lieu of riveted joints. It is not practical in many cases for repair firms to connect this joint by riveting.

January 2022 Action:

PROGRESS REPORT: Mr. Seime suggested a TG be created to discuss this item. Mr. Underwood uploaded documents to the Cloud for reference on this Item. Ms. Wadkinson suggested the TG speak with the Locomotive TG and ASME Section I Committee.

Task Group: R. Underwood (PM), C. Jowett, F. Johnson, T. Dillon, M. Wahl, R. Bryce

11. Future Meetings

- July 2022 TBD
- January 2023 TBD

Mr. Seime discussed future meetings with the group.

12. Adjournment

A motion was made to adjourn the meeting at 10:53am (PST). The motion was seconded and unanimously approved.

Respectfully submitted,

Jodi Metzmaier

Historical Task Group Secretary

Historical Attendance - January 17, 2022

				Not In
MEMBERS:	Interest Category	In Person	Remote	Attendance
Trevor Seime - Chair	Jurisdictional Authorities	X		
Tom Dillon - Vice Chair	General Interest	X		
Jodi Metzmaier	NBIC Secretary	X		
Jim Getter	Manufacturers	X		
Kevin Anderson	Users	X		
Frank Johnson	Users	X		
Chris Jowett	National Board Certificate Holder	X		
Don Kinney	Jurisdictional Authorities	X		
Kathy Moore	National Board Certificate Holder	X		
David Rose	Users		X	
Dennis Rupert	General Interest		X	
Matt Sansone	Jurisdictional Authorities			X
Rob Underwood	Authorized Inspection Agencies	X		
Mike Wahl	General Interest	X		
Jon Wolf	Authorized Inspection Agencies		X	

VISITORS:	Company/Title/Intereset	In Person	Remote
Dean Aling	Owner/OperatorBC, CA	х	
Jon Ferreira	The Harford Steam Boiler Inspection and Insurance Company	X	
Linn Moedinger	Member of Task Group Locomotive		X
Teresa Melfi	Lincoln Electric	х	
Michael Horton	Owner Operator - Chair of State boiler rules in MI		X
Robert Bryce	Boiler Standard for Canada		X
K.R. Hough	General Interset		X
Mike Carlson	State of WA		X
Bob Derby	Administrator for United Associations		X
Melissa Wadkinson	Chair of Subcommittee Installation	X	
Robin Forbes	Owner/OperatorBC, Canada		X
Dick Smith	CollectorGeneral Interest		X
David Jowett	Certificate Holder	X	
Jake Williams	Operator/User	X	
Jeff Lerch	Certificate Holder	x	
Michelle Vance	NBBI Staff	X	
George Galanes	MC Chair	х	
Greg Goosens	NBBI Staff - Jurisdictional Liasian	х	
Luis ponce	NBBI Staff	X	

Announcements

- Zoom Notes:
 - o Make sure all participants have their actual name on their zoom account.
 - o Request attendees to add an "M" for Member, "V" for Visitor, or "S" for Staff at the end of their name. Example: Jodi Metzmaier S
 - Click "Participants", click "more" next to your name, click "rename," and add the applicable letter.
 - o Make Chair "co-host" if they are signed in on zoom.
 - o Remind everyone to stay muted until they would like to speak.
 - We can use "raise hand" feature if needed.
- Chair's Choice Normal voice voting, or just negative voice voting.
 - O Voice voting for the negatives, not voting, and abstentions only. Once the motion and second have been established, the chair will ask for any negatives, not voting and abstentions.
- For new member voting, we will let the nominees speak on their behalf, if they are joining us via Zoom, we will send them to a "breakout room" while the group has a discussion and votes. Once the vote is completed, the nominees will be allowed back into the main meeting "room". If the nominee is at the meeting, we will ask them to leave the room for discussion and vote.
- The National Board will be hosting a reception on Wednesday evening from 5:30pm to 7:30pm at The Smoking Gun. Information for the Smoking Gun can be found on the National Board website under the **Inspection Code** tab → NBIC Meeting Information.
- The National Board will host a breakfast and lunch on Thursday. Breakfast will be served from 7:00am to 8:00am, and lunch will be served from 11:30am to 12:30pm. Both meals will be served at the hotel in Le Fontainebleau. Members, visitors, and guests are all welcome.

PLEASE REGISTER IF YOU HAVE NOT ALREADY DONE SO.

- Coffee stations will be provided outside of the meeting rooms on each floor.
- The 2021 NBIC is now mandatory, effective **January 1, 2022**.
- Meeting schedules, meeting room layouts, and other helpful information can be found on the National Board website under the **Inspection Code** tab → NBIC Meeting Information.
- If the meeting ends early use the extra time to work with your task groups.
 - o This can be done through Zoom/WebEx if needed.
- Remember to add any attachments that you'd like to show during the meeting (proposals, reference documents, power point, etc.) to the cloud <u>prior to the meeting</u>.
 - o If needed, we can go over how to do this.
 - o ALL power point attachments need to be sent to Jonathan prior to the meeting for approval.

Announcements

- Always submit attachments in word format showing "strike through/underline"
 - O Does anyone need to know how to do this?
- Naming format reminder:
 - o Item number person who made the revision date update
- As a reminder, anyone who would like to become a member of a group or committee:
 - o must attend at least 2 meetings prior to being put on the agenda for membership consideration. The nominee will be on the agenda for voting during their 3rd meeting.
 - o The nominee should submit the formal request along with their resume to Jonathan PRIOR TO the meeting. *nbicsecretary@nbbi.org*
 - o If needed, we can also create a ballot for voting on a new member between meetings. To do this, you will need to contact Jonathan.
- Thank you to everyone who registered online for this meeting. The online registration is very helpful for planning our reception, meals, the room set up, etc. Please continue to use the online registration for each meeting.

Item 21-48 1/14/222 Item submitted by John Cady

S2.6.3.4 GENERALIZED THINNED AREAS

- a) For corroded areas exceeding the specifications in S2.6.3.1, S2.6.3.2, and S2.6.3.3, the remaining thickness may be averaged over an area not exceeding the UT-grid size specified in S2.6.2 (+)c).
 - 1) The least measured remaining thickness within the grid indicated in S2.6.2 () or S2.6.2 () as applicable shall not be less than 50% of the required thickness per the calculation for MAWP.
 - 2) The average remaining thickness recognized from the grid indicated in S2.6.2 c) or S2.6.2 d)c) as applicable shall not be less than 75% of the required thickness per the calculation for MAWP.