

THE NATIONAL BOARD

OF BOILER AND
PRESSURE VESSEL
INSPECTORS

NATIONAL BOARD TASK GROUP HISTORICAL BOILERS

MINUTES

Meeting of July 12th, 2021 Cincinnati, OH

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 Tom Dillon called the meeting to order at 8:08

2. Introduction of Members and Visitors

Secretary, Jodi Metzmaier, took a roll call for all members and visitors, both in person and on Zoom. All members stated "here", and all visitors stated their name and their company/interest. The members and visitors are listed on the attendance sheet (**Attachment page 1**).

3. Check for a Quorum

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

4. Awards/Special Recognition

Secretary, Jodi Metzmaier recognized David Rose with 5 years pin. Mr. Rose will receive his pin the at the next meeting he attends in person.

5. Announcements

Ms. Metzmaier made the announcements to the Task Group. (Attachment pages 2-3)

6. Adoption of the Agenda

Prior to the adoption of the agenda, the below items were added. A motion was made to adopt the agenda as revised. The motion was seconded, and unanimously approved.

- Note that Kevin Anderson is not listed on Attachment 1 of the agenda; however, he is a voting member. His membership passed through TG Historical and SC R&A in January 2021.
- ➤ Add Action Item 21-34
- ➤ Update Task group for Item 19-84 to include Chris Jowett.

7. Approval of the Minutes of the January 11, 2021 Meeting

A motion was made to approve the minutes from January 11, 2021 Task Group on Historical Boilers meeting. The motion was seconded and **unanimously approved**.

8. Review of Rosters

a. Membership Reappointments

There will no longer be voting for membership reappointments at the Task Group level.

b. Membership Nominations

There were no new membership nominations at this meeting.

c. Officer Nominations

i. Tom Dillon's term as Chair ends on August 30, 2021. He is eligible for reappointment.

Mr. Dillon addressed the TG, stating he will be retiring soon, but would be willing to continue being the chair if no one else was interested. Matt Sansone recommended Trevor Seime to be the new Chair. Frank Johnson recommended Jim Getter become the chair; however, Mr. Getter is not interested. Mr. Seime spoke to the TG and stated he is interested in becoming the chair of this group.

After discussion, a motion was made to recommend Mr. Seime as the Chair and have Mr. Dillon be the *unofficial* Vice Chair. The motion was seconded and was unanimously approved.

9. Action Items

Item Number: 19-84 NBIC Location: Part 2, S2.10.7 Attachment pages 4-5

General Description: Inspecting riveted joints for failure

Subgroup: SG Historical

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

Explanation of Need: The text covers cracks parallel to a longitudinal joint, but there is no text covering

inspection of plate material around a rivet.

July 2021 Action:

Mr. Underwood has presented a proposal to the TG. He reviewed the wording and the new figures the task group is proposing. The group had a discussion of whether to remove (f) from the proposal (The plate may fail at the caulking edge). It was discovered the wording regarding caulking is already in S2.10.2.2; therefore, it was removed from this paragraph. A motion was made to accept the revised proposal. The motion was seconded and **unanimously approved**.

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.

July 2021 Action:

PROGRESS REPORT: Mr. Seime addressed the TG regarding this item. Now that the item regarding this same topic has passed through TG Locomotive, SC R & A, and MC, the TG Historical needs to see how they want to proceed. The TG will work on this item to create a proposal for the January 2022 meeting. Mr. Moedinger also discussed the document passed through Locomotive in March 2021.

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 & J. Wolf

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

performed.

July 2021 Action:

PROGRESS REPORT: Mr. Dillon showed a PowerPoint to discuss the need for this item. Mr. Anderson stated he would like to see the owners of steam tractors show proof of insurance and all previous work that has been performed of all tractors they have, a "pedigree" of sorts. Many TG members agree there needs to be some accountability amongst the owners; however, it was also discussed that they need to be cautious about the direction of where the TG goes with this topic as far as the NBIC is concerned. Mr. Dillon discussed, and would like to discuss further, with the National Board to see if they can get access to the Historical Supplement for reference for schools/classes/training. The group discussed covering specifically NBIC Supplement 2 in the some of the courses the National Board currently offer. The group discussed using some of the TG Historical members to put together a training program/class for the National Board to offer Inspectors. The group will keep this item open for further discussion and hopefully they can create a proposal as a starting point to potentially put something in the book for training inspectors for Inspections on Historical Boilers. Mr. Sansone will work with the task group of this item, and then he will contact the National Board to begin the discussion of creating a new class for Inspections on Historical Boilers. Mr. Sansone will also bring up this topic at the next BOT meeting for discussion.

Task group update: Add M. Sansone

10. New Items:

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:** N one assigned

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.

July 2021 Action:

PROGRESS REPORT: Mr. Rose, who submitted this item, stated he is still working on a proposal to present to the group.

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

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: None assigned

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.

July 2021 Action:

PROGRESS REPORT: Mr. Rose, who submitted this item, stated he is still working on a proposal to present to

the group.

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

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

July 2021 Action:

PROGRESS REPORT: Dr. Bryce is working on a proposal and will hopefully have something to present in

January 2022.

11. Future Meetings

- January 18-21, 2022 San Diego, CA
- July 2022 TBD

Secretary, J. Metzmaier discussed the future meeting with the group.

12. Adjournment

A motion was made to adjourn the meeting at 11:11 am. The motion was seconded, and unanimously approved.

Respectfully submitted,

Jodi Metzmaier

Task Group Historical Secretary

Historical Attendance - July 12, 2021

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

| VISITORS: | Company/Title/Intereset | In Person | Remote |
|-------------------|---|-----------|--------|
| Linn Moedinger | Member of Task Group Locomotive | | x |
| Michael Carlson | State of Washington | | x |
| Robin Forbes | Owner - Member of Herritage Boiler Association in BC Canada | | X |
| Michael Horton | Owner Operator - Chair of State boiler rules in MI | | X |
| Ron Kessler | Team Industrial | x | |
| Dave Johnson | Retired Boiler Inspector | x | |
| Robert Bryce | Boiler Standard for Canada | | X |
| Ron Spiker | State of South Carolina | x | |
| Donnie LeSage | State of Louisiana | x | |
| Ernest Brantley | Member of SG & SC Inspection | x | |
| Joel Amato | NBBI Staff | X | |
| Luis ponce | NBBI Staff | X | |
| Gary Scribner | NBBI Staff | | |
| Bob Wielgoszinski | NBIC Main Committee Chariman | | |

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.
- We will do a 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 host a reception for all committee members and visitors on Wednesday evening from 5:30pm 7:30 pm in the Continental Room on the Mezzanine Level.
- The National Board will host a breakfast for all committee members and visitors on Thursday morning at 7:00 am and a lunch at 11:30 am in the Rosewood room on the 4th floor of the Hotel.
- Coffee station with snacks will be provided in the morning (10:00 am) with different snacks/drinks on each floor. Afternoon (1:00 pm) coffee and cold drinks will be outside of the meeting rooms on the 3rd and 4th floors.
- The 2021 NBIC is available as of July 1st, 2021 and will become mandatory on January 1, 2022.
- Meetings schedule, 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.

Announcements

- Remember to add any attachments that you'd like to show during the meeting (proposals, reference documents, power point, etc.) to the cloud prior to the meeting.
 - o If needed, we can go over how to do this.
 - Power point attachments need to be sent to Jonathan prior to the meeting for approval.
- 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.
- All in person attendees can visit Jonathan in the office for a small gift.
- 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 19-84

Revision Date: July 12, 2021

Page **1** of **2**

Action Item Request Form

CODE REVISIONS OR ADDITIONS

Request for Code revisions or additions shall provide the following:

a) Proposed Revisions or Additions

Current text is incomplete with respect to inspecting riveted joints for failure. This proposal suggests adding more text, found in historic inspection documents, to further assist and direct the field inspector for assessing the condition of a riveted joint.

Existing Text:

S2.10.7 LIMITATIONS

- a) The maximum allowable working pressure shall be the lesser of that calculated in accordance with NBIC Part 2, S2.10, or the MAWP established by the original manufacturer.
- b) The shell or drum of a boiler in which a "lap seam crack" extending parallel to the longitudinal joint and located either between or adjacent to rivet holes, when discovered along a longitudinal riveted joint for either butt or lap joint, shall be permanently discontinued for use under steam pressure, unless it is repaired with jurisdictional approval.

Provide a brief explanation of the need for the revision or addition.

The text covers cracks parallel to a longitudinal joint, but there is no text covering inspection of plate material around a rivet.

eb) Background Information

Review of the NBIC shows that failure indicators of riveted seams have not been identified or itemized. This proposal addresses this oversite.

Referenced standards, related discussion follow proposed wording.

Item 19-84

Revision Date: July 12, 2021

Page **2** of **2**

Proposed wording

S2.10.2.3 INSPECTION OF RIVETED SEAMS

A riveted joint in a vessel subjected to pressure may fail in a number of different ways, depending on the type and relative proportions of the joint. Some methods of failure may be classified as follows:

- a.) Rivets may shear off;
- b.) The plate may tear along the centerline of the row of rivets;
- c.) The plate may shear in front of the rivets;
- d.) The plate may tear from the outer edge of the rivet hole to the caulking edge; or
- e.) The plate may crush in front of the rivets.

Figure S2.10.2.3 illustrates visual indicators of (a), (b), (c), (d), and (e). The Inspector shall visually inspect for cracked or stressed plate material along a riveted joint. Indications of failure shall be monitored or repaired, at the discretion of the Inspector and jurisdiction, when applicable.

FIGURE S2.10.2.3

