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# NATIONAL BOARD INSPECTION CODE COMMITTEE

THE  
NATIONAL  
BOARD  
OF BOILER AND  
PRESSURE VESSEL  
INSPECTORS

## *MINUTES*

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*Meeting of NBIC Sub-Group on Inspection and Repair of Locomotive Boilers  
12 - 13 April 2010  
Meeting at Strasburg, PA.*

*These minutes are subject to approval and are for committee use only.  
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The National Board of Boiler & Pressure Vessel Inspectors  
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Meeting convened at: 4:12 pm 12 April 2010

**Members present:** Reetz, Janssen, McCormack, Yuill, Butler, Ray, Moedinger, Withuhn, Jackson, Stone, Schueler, Conrad, Scerbo, Franzen

## 1. Agenda

There was a motion to adopt agenda by Mr. McCormack. The motion was seconded by Mr. Butler. The motion was unanimously approved.

## 2. Minutes

There was a motion to approve the minutes of the previous meeting by Mr. Jackson. The motion was seconded by Mr. Reetz. The motion was unanimously approved.

## 3. Announcements

### Errata

- Part 2, pg. 106, S1.4.2.1-l) – Should read *Rivet head wastage for riveted joints in tension shall be determined by measuring h in Fig. S1.4.2.1 l, where h shall not be less than 0.250 where:...*
- Part 3, pg. 111, materials list has deleted Pipe – SA-106, SA-53, seamless; has deleted Bronze castings – SB-61, SB-62, Sb-148; Bolts & Studs – SA-307 A or B;
- Part 3, pg. 111, S1.1.3.1 d), last sentence should be “stress” and not “strength”
- Part 3, pg. 119, Fig. S1.2.9.2-b should be renamed; Fig. S1.2.9.2-a should be moved to arch tube page;

Robin is taking care of the errata.

## 4. Old Business

**a. NBIC negative votes** - none

### **b. Technical Library Update**

There was a motion to close the Technical Library Update by Mr. Moedinger. The motion was seconded by Mr. Withuhn. The motion was unanimously approved.

### **c. Staybolts and Flue Tools**

A general discussion ensued in the ESC meeting regarding staybolt and flue tools; It was generally agreed that emphasis should be on the application and not the tools; Staybolt material and application was discussed and it was decided that this may be a subject that can be included in the NBIC; Secretary will put it in the NBIC agenda; This item was not officially opened so the secretary is removing it from the ESC agenda; nothing new as of 11/08; Dick Stone will make an initial draft for 11/09 meeting, as of 3/09; no discussion 11/09; no discussion 4/10;

**d. Boiler tube seal welding:** NB philosophy has changed to allow more explanatory items in the NBIC; to that end it was agreed to include the text from the current ASME Section I on flue application; a submission will be prepared for the 11/07 meeting; nothing new as of 11/08; Dick Stone will draft an initial document for 11/09 meeting, as of 3/09; no discussion 11/09; No discussion 4/10;

**e. FRA inspector class.** None scheduled for 2005. Nothing new as of 11/05; Rob Castiglione indicated the interest of FRA for recurring training for its inspectors as of 3/06; no report as of 11/06; discussion and

recommendations for future training as of 3/07; class set for week of 4 May 2008 as of 11/07; nothing new as of 3/08; Nothing new as of 11/08; Nothing new as of 3/09; none scheduled for 2010 as of 11/09; no classes for 2010;

**f. Recommended practice issues – items to be considered;**

Prioritization; Results of committee and guest poll:

1. Unqualified repair personnel & organizations – Yuill, McCormack
2. Standards for boiler surveys - Butler
3. Wrong materials used – all applications - Jackson
4. Riveting practices – fit up, prep, eccentric holes & tapers - Stone
5. Welding seams and rivets to stop leaks - Griner
6. Head of flexible staybolt welded to rusted off remnant of old sleeve - Stone
7. Understanding of stresses that cause staybolt failure - Moedinger
8. Material documentation - Jackson
9. Taking boiler UT readings only at the minimum requirement - Butler
10. Welding – weld caps to sleeves - Franzen
11. Welding by unqualified personnel - Griner
12. Full penetration welded bolt countersink prep - Janssen
13. Improper threaded staybolt application – overdriving, oil on threads, no bucking - Moedinger
14. Improper flue application – over rolling, incorrect type expanders – Conrad, Lee
15. Seal welding over oily surfaces - Janssen
16. Extent of pad welding – too much - Griner
17. Materials and skills not up to any standard - Jackson

Nothing new as of 11/08; assigned tasks at 3/09 meeting; nothing new as of 11/09; Nothing new as of 4/10

**g. Operating procedures for NBIC Steam Locomotive subgroup**

Adopted as presented at 3/09 meeting; no discussion at 11/09 meeting; See Action Item NB10 – 0502 attached;

There was a motion to submit Action Item NB10 – 0502 by Mr. Moedinger and seconded by Mr. Janssen. The motion was unanimously approved.

**Voted** – 12 affirmative, 0 negative, 0 abstaining, 0 not voting

**Discussion and Progress Report:** See Action Item NB10-0102 attached

**Motion** to submit Action Item NB10-0102 – McCormack, 2<sup>nd</sup> Butler

**Voted** - 12 affirmative, 0 negative, 0 abstaining, 0 not voting

**Discussion and Progress Report:** Main committee wants reference to safety relief valves in the inspection section and the repair section. Bob Reetz will inform the main committee that we are working on this issue.

**Discussion and Progress Report:** Flue application procedures – Stone

**Discussion and Progress Report:** Rivets – Stone

**Discussion and Progress Report:** Ferrules – Stone

**Discussion and Progress Report:** Staybolts – Stone

**Discussion and Progress Report:** This task group has been requested by ASME to write a locomotive construction code for ASME Section I; ASME 08-1760; NB10-0501

**New Business**

**Discussion and Progress Report:** See Action Item NB10-0503 attached

**Motion** to submit Action Item NB10-0503 – McCormack, 2<sup>nd</sup> Butler

**Voted** - 12 affirmative, 0 negative, 0 abstaining, 0 not voting

**Guest questions** - none

**Next meeting** – 31 October, 1 November 2010, Alamosa, CO

**Adjournment** – 11:48 am, 13 April 2010;

**Motion** - to adjourn – Conrad, 2<sup>nd</sup> Withuhn

**Voted** - 12 affirmative, 0 negative, 0 abstaining, 0 not voting

ATTACHMENT 1

**NBIC Subgroup & Engineering Standards Committee Members**

(M) = Member (MN) = Member non-voting

30 April 2010

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