

**NBIC Sub-Group Repairs & Alterations**

**Subject:** Review Form R-2 and Instructions accepted by Main Committee Letter Ballot September 2010

**NB-Item number:** Initiated by NB-staff ➔ **NB12-1101**

<b>Explanation of assignment needed:</b>	Mr. Terry Parks initiated this item to revisit the configuration of the “as-published” Form R-2 after receiving numerous comments as to how the Form was to work within the industry as well as within the National Board. To that end, Mr. Parks proposed a TG-approach with N-BD staff to clarify the objectives of the Form R-2 and best use the time between January 2012 and January 2013 to develop or introduce any other changes prior to issuing the 2013-Edition. This assignment represents:
✓	• Affirm the direction of the Committee to portray the natural continuity of work flow, and as described in the book at 5.2.2 when preparing a Form R-2, emphasizing the need to complete the design certification and review PRIOR to the start of construction.
✓	• Enhance the scope of work description fields to better afford the completion of the Form R-2 outside of an electronic format.
<b>No betterment</b> ∅	• Affirm the perception of betterment in separating the form as sheet 1 and sheet 2 for the purpose of expediting communication & registration.
✓	• Interact with N-BD staff as a TG to understand the fallout of the noted tasks and to recognize any obstacles to overcome within the Natl. -BD’s EDT-system.
✓	• Review the Instruction sheet developed by N-BD staff for inclusion into the Instructions for completing N-BD Forms @ 5.13.4.1.

**Assigned to:** M. Webb, Ron Pulliam, Wayne Jones, Nikki Estep and Donna Radcliff (N-BD staff), Ben Schaefer, Bob Wielgoszinski

**Background:** The Form R-2 as published in the 2011-Edition of NB-23 was published in error and does not reflect the accepted Form by MC-Letter Ballot in September 2010. See [Ballot Archives, NB08-0304](#). The N-BD will use the “as-published” Form R-2 until the correction or other action is adopted for the 2013 code Edition.

Existing Text in '11-Edition	Proposed Change #1 <small>(Proposed changes are <u>double-underlined</u>)</small>	Rationale
<p><b>5.13.4.1 INSTRUCTIONS FOR COMPLETING NATIONAL BOARD FORM “R” REPORTS</b></p>	<p style="color: blue;"><b>5.13.4.1 INSTRUCTIONS: ITEM 2</b></p>	
<p>5.13.4.1 INSTRUCTIONS FOR COMPLETING NATIONAL BOARD FORM “R” REPORTS</p> <p>2. When registering a Form “R”-Report with the National Board, this line is solely designated for a unique sequential number assigned by the “R” Certificate Holder. When the “R”-Form is not to be registered, indicate so by “N/A”. As described in 5.6, a log shall be maintained identifying sequentially, any “R”-forms registered with the National Board. <b>For re-rating only, the Design Organization registers the R-2. Where physical work is also performed, the Construction Organization registers the R-2.</b></p> <p align="center">—————→</p>	<p>2. When registering a Form “R”-Report with the National Board, this line is solely designated for a unique sequential number assigned by the “R” Certificate Holder. When the “R”-Form is not to be registered, indicate so by “N/A”. As described in 5.6, a log shall be maintained identifying sequentially, any “R”-forms registered with the National Board. <u>The requirements for registration can be found at Part 3, 5.5.</u></p> <p>Information is relocated to: <b>5.5.2 b) REGISTRATION OF ALTERATIONS</b></p>	<p>As instructions for line 2, the language specifically identifying registration requirements may be better profiled as a reference to the applicable section of the Code; Part 3, 5.5.2 a) - c).</p> <p style="color: blue;"><b>RELOCATED TO 5.5.2 b)- PROPOSED CHANGE 2</b></p> <p><b>-For re-rating only, the Design Organization registers the R-2. Where physical work is also performed, the Construction Organization registers the R-2.</b></p>

## NBIC Sub-Group Repairs & Alterations

<b>Accepted Text NB-item: NB10-0701</b> <b>5.5.2 REGISTRATION FOR ALTERATIONS</b>	<b>Proposed Change #2</b> <small>(Proposed changes are <u>double-underlined</u>)</small> <b>5.5.2 REGISTRATION FOR ALTERATIONS</b>	Rationale
<p>a) If the pressure retaining item is originally registered with the National Board, an original Form R-2, together with attachments, shall be registered with the National Board.</p> <p>b) If the item was not <i>originally</i> registered with the National Board, one original Form R-2 <i>meeting the requirements of the Code</i>, together with attachments <i>when the exact scope of work is not described</i>, may be registered with the National board or retained as required by <i>The Quality Manual System</i>.</p> <p>As shown the <b><i>italicized script</i></b> represents item NB10-0701 accepted by Main Committee  <span style="margin-left: 150px;">→ <b>"b" is relocated as "d"</b> →</span></p>	<p>a) No Change</p> <p><u>b) For re-rating <u>or design-only where no physical work is performed</u>, the Design Organization <u>assigns a unique sequential number shown on the Form R-2; front and back, as instructed at 5.13.4.1 item 2 and when required, is responsible for registering the Form R-2 Report with the National Board.</u></u></p> <p><u>c) Where physical work is also performed, the Construction Organization <u>assigns a unique sequential number shown on the Form R-2; front and back, as instructed at 5.13.4.1 item 2 and when required, is responsible for registering the Form R-2 Report with the National Board.</u></u></p> <p><u>d) If the item was not <i>originally</i> registered with the National Board, one original Form R-2 <i>meeting the requirements of the Code</i>, together with attachments <i>when the exact scope of work is not described</i>, may be registered with the National board or retained as required by <i>The Quality Manual System</i>.</u></p>	<p>The proposed relocation of information shown as "b" and "c" is from Instruction item #2. The subject matter @ 5.5.2 "REGISTRATION FOR ALTERATIONS" goes beyond an Instruction item for line 2 and describes <b>Code-responsibilities of the Design and Construction organizations</b>. The Task Group suggests it may be better suited as <b>Code-text</b> rather than as an instruction item.</p>
<b>Existing Text in '11-Edition</b> <b>5.2.2 PREPARATION OF FORM R-2</b>	<b>Proposed Change #3</b> <small>(Proposed changes are <u>double-underlined</u>)</small>	Rationale
<p>c) ...The construction organization shall complete the Form R-2 provided by the design organization, including the "Construction Certification" section of the form. When no construction work is performed (e.g., a re-rating with no physical changes), the "R" Certificate Holder responsible for the design shall prepare the Form R-2, including the gathering and attaching of the supporting reports.</p>	<p>c) ...The construction organization shall complete the Form R-2 provided by the design organization, including the "Construction Certification" section of the form. When no construction work is performed (e.g., a re-rating or <u>design-only</u> with no physical changes), the "R" Certificate Holder responsible for the design shall prepare the Form R-2, including the gathering and attaching of the supporting reports <u>and other information pertaining to the work.</u></p>	<p>Adding <u>design only</u> merely represents consistency to the thought of limited scope throughout the section.</p> <p>The addition reflecting the reports <u>and other information pertaining to the work.</u> merely affirms instruction item-12 and instruction item-15 @ 5.13.4.1.</p>

# NBIC Sub-Group Repairs & Alterations

Accepted by MC by Letter Ballot, (NOT PUBLISHED) for '11-Edition- 2-Page, single side

## Separated Form R-2- DESIGN REPORT- Sheet 1

## Separated form R-2- CONSTRUCTION REPORT- Sheet 2

**FORM R-2 REPORT OF ALTERATION**  
in accordance with provisions of the *National Board Inspection Code*

**DESIGN REPORT** SHEET 1 OF 2

1. Design performed by \_\_\_\_\_ (name of "R" organization responsible for design) \_\_\_\_\_ (Form "R" Registration No.)  
 \_\_\_\_\_ (address) \_\_\_\_\_ (P.O. No., Job No., etc.)

2. Owner \_\_\_\_\_ (name)  
 \_\_\_\_\_ (address)

3. Location of installation \_\_\_\_\_ (name)  
 \_\_\_\_\_ (address)

4. Item identification \_\_\_\_\_ Name of original manufacturer \_\_\_\_\_  
 (boiler, pressure vessel, or piping)

5. Identifying nos.: \_\_\_\_\_ (nfg. serial no.) \_\_\_\_\_ (National Board No.) \_\_\_\_\_ (jurisdiction no.) \_\_\_\_\_ (other) \_\_\_\_\_ (year built)

6. NBIC Edition / Addenda: \_\_\_\_\_ (edition) \_\_\_\_\_ (addenda)  
 Original Code of Construction for Item: \_\_\_\_\_ (name / section / division) \_\_\_\_\_ (edition / addenda)  
 Construction Code Used for Alteration Performed: \_\_\_\_\_ (name / section / division) \_\_\_\_\_ (edition / addenda)

7. Description of Design Scope: \_\_\_\_\_  
 (use supplemental sheet, Form R-4, if necessary)  FORM R-4, REPORT SUPPLEMENTARY SHEET IS ATTACHED

Pressure Test, if applied \_\_\_\_\_ psi MAWP \_\_\_\_\_ psi

8. Replacement Parts. Attached are Manufacturer's Partial Data Reports or Form R-3's properly completed for the following items of this report:  
 \_\_\_\_\_ (name of part, item number, data report type or Certificate of Compliance, nfg's name and identifying stamp)

9. Remarks: \_\_\_\_\_

**DESIGN CERTIFICATION**

I, \_\_\_\_\_ certify that to the best of my knowledge and belief the statements in this report are correct and that the Design Change described in this report conforms to the *National Board Inspection Code*.  
 National Board "R" Certificate of Authorization No. \_\_\_\_\_ expires on \_\_\_\_\_  
 Date \_\_\_\_\_ Signed \_\_\_\_\_  
 (name of design organization) (authorized representative)

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**CERTIFICATE OF DESIGN CHANGE REVIEW**

I, \_\_\_\_\_ holding a valid Commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of \_\_\_\_\_ and employed by \_\_\_\_\_ of \_\_\_\_\_ have reviewed the design change as described in this report and state that to the best of my knowledge and belief such change complies with the applicable requirements of the *National Board Inspection Code*.  
 By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.  
 Date \_\_\_\_\_ Signed \_\_\_\_\_ Commissions \_\_\_\_\_  
 (inspector) (National Board and jurisdiction no.)

**FORM R-2 REPORT OF ALTERATION**  
in accordance with provisions of the *National Board Inspection Code*

**CONSTRUCTION REPORT** SHEET 2 OF 2

1. Construction performed by \_\_\_\_\_ (name of "R" organization responsible for construction) \_\_\_\_\_ (Form "R" Registration No.)  
 \_\_\_\_\_ (address) \_\_\_\_\_ (P.O. No., Job No., etc.)

2. Owner \_\_\_\_\_ (name)  
 \_\_\_\_\_ (address)

3. Location of installation \_\_\_\_\_ (name)  
 \_\_\_\_\_ (address)

4. Item identification \_\_\_\_\_ Name of original manufacturer \_\_\_\_\_  
 (boiler, pressure vessel, or piping)

5. Identifying nos.: \_\_\_\_\_ (nfg. serial no.) \_\_\_\_\_ (National Board No.) \_\_\_\_\_ (jurisdiction no.) \_\_\_\_\_ (other) \_\_\_\_\_ (year built)

**CERTIFICATE OF DESIGN** \_\_\_\_\_, ACKNOWLEDGED by CONSTRUCTION ORGANIZATION  
 (Identify the design organization's Form "R" Registration No. (or referencing P.O., job, or tracking number if the Form "R" Report is not registered))  
 I, \_\_\_\_\_ acknowledge the provisions and requirements of design described on the DESIGN REPORT, sheet 1, and the design was introduced into the construction scope as required by the *National Board Inspection Code*.  
 Date \_\_\_\_\_ Signed \_\_\_\_\_  
 (name of construction organization) (authorized representative)

7. Description of Construction Scope: \_\_\_\_\_  
 (use supplemental sheet, Form R-4, if necessary)  FORM R-4, REPORT SUPPLEMENTARY SHEET IS ATTACHED

Pressure Test, if applied \_\_\_\_\_ psi MAWP \_\_\_\_\_ psi

8. Replacement Parts. Attached are Manufacturer's Partial Data Reports or Form R-3's properly completed for the following items of this report:  
 \_\_\_\_\_ (name of part, item number, data report type or Certificate of Compliance, nfg's name and identifying stamp)

9. Remarks: \_\_\_\_\_

**CONSTRUCTION CERTIFICATION**

I, \_\_\_\_\_ certify that to the best of my knowledge and belief the statements in this report are correct and that all material, construction, and workmanship on this Alteration conforms to the *National Board Inspection Code*.  
 National Board "R" Certificate of Authorization No. \_\_\_\_\_ expires on \_\_\_\_\_  
 Date \_\_\_\_\_ Signed \_\_\_\_\_  
 (name of alteration organization) (authorized representative)

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**CERTIFICATE OF INSPECTION**

I, \_\_\_\_\_ holding a valid Commission issued by the National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of \_\_\_\_\_ and employed by \_\_\_\_\_ have inspected the work described in this report on \_\_\_\_\_ and state that to the best of my knowledge and belief this work complies with the applicable requirements of the *National Board Inspection Code*.  
 By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.  
 Date \_\_\_\_\_ Signed \_\_\_\_\_ Commissions \_\_\_\_\_  
 (inspector) (National Board and jurisdiction no.)

This form may be obtained from The National Board of Boiler and Pressure Vessel Inspectors, 1015 Copper Ave., Columbus, OH 43212

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## PROPOSED Change #4- - RETURN TO 1-PAGE, 2-SIDED FORM (See objectives page 1)

<b>PROPOSED- Front page</b>	<b>PROPOSED- Back page</b>
<p style="text-align: center;"><b>FORM R-2 REPORT OF ALTERATION</b> in accordance with provisions of the <i>National Board Inspection Code</i></p> <p style="text-align: right;">(Form "R" Registration No.) _____ (P.O. No., Job No., etc.) _____</p> <hr/> <p>1a. <b>Design</b> performed by: _____ <small>(name of "R" organization responsible for design)</small> _____ <small>(address)</small></p> <p>1b. <b>Construction</b> performed by _____ <small>(name of "R" organization responsible for construction)</small> _____ <small>(address)</small></p> <p>2. <b>Owner of Pressure Retaining Item</b> _____ <small>(name)</small> _____ <small>(address)</small></p> <p>3. <b>Location of installation</b> _____ <small>(name)</small> _____ <small>(address)</small></p> <p>4. <b>Item</b> identification _____ <b>Name of original manufacturer</b> _____ <small>(boiler, pressure vessel, or piping)</small></p> <p>5. <b>Identifying nos.:</b> _____ <small>(mfg. serial no.) (National Board No.) (Jurisdiction No.) (other) (year built)</small></p> <p>6. <b>NBIC Edition / Addenda:</b> _____ <small>(edition) (addenda)</small></p> <p><b>Original Code of Construction for Item:</b> _____ <small>(name / section / division) (edition / addenda)</small></p> <p><b>Construction Code Used for Alteration Performed:</b> _____ <small>(name / section / division) (edition / addenda)</small></p> <p>7a <b>Description of Design Scope:</b> _____ _____ _____ _____</p> <p style="text-align: center;"><input type="checkbox"/> <b>Form R-4, Report Supplementary Sheet is attached</b></p> <p>7b <b>Description of Construction Scope:</b> _____ _____ _____ _____</p> <p style="text-align: center;"><input type="checkbox"/> <b>Form R-4, Report Supplementary Sheet is attached</b></p> <p><b>Pressure Test, if applied</b> _____ <b>psi</b> <b>MAWP</b> _____ <b>psi</b></p> <p>8. <b>Replacement Parts.</b> Attached are Manufacturer's Partial Data Reports or Form R-3's properly completed for the following items of this report: _____ <small>(name of part, item number, data report type or Certificate of Compliance, mfg's name and identifying stamp)</small> _____ _____</p>	<p>Form R-2 (back) _____ <small>(Form "R" Registration No.)</small> _____ <small>(P.O. No., Job No., etc.)</small></p> <p>9. <b>Remarks:</b> _____ _____ _____</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p style="text-align: center;"><b>DESIGN CERTIFICATION</b></p> <p>I, _____ certify that to the best of my knowledge and belief the statements in this report are correct and that the Design Change described in this report conforms to the <i>National Board Inspection Code</i>. National Board "R" Certificate of Authorization No. _____ expires on _____ Date _____ Signed _____ <small>(name of design organization) (authorized representative)</small></p> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p style="text-align: center;"><b>CERTIFICATE OF DESIGN CHANGE REVIEW</b></p> <p>I, _____ holding a valid Commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of _____ and employed by _____ of _____ have reviewed the design change as described in this report and state that to the best of my knowledge and belief such change complies with the applicable requirements of the <i>National Board Inspection Code</i>. By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection. Date _____ Signed _____ Commissions _____ <small>(inspector) (National Board and jurisdiction no.)</small></p> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p style="text-align: center;"><b>CONSTRUCTION CERTIFICATION</b></p> <p>I, _____ certify that to the best of my knowledge and belief the statements in this report are correct and that all material, construction, and workmanship on this Alteration conforms to the <i>National Board Inspection Code</i>. National Board "R" Certificate of Authorization No. _____ expires on _____ Date _____ Signed _____ <small>(name of alteration organization) (authorized representative)</small></p> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p style="text-align: center;"><b>CERTIFICATE OF INSPECTION</b></p> <p>I, _____ holding a valid Commission issued by the National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the jurisdiction of _____ and employed by _____ of _____ have inspected the work described in this report on _____ and state that to the best of my knowledge and belief this work complies with the applicable requirements of the <i>National Board Inspection Code</i>. By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection. Date _____ Signed _____ Commissions _____ <small>(inspector) (National Board and jurisdiction no.)</small></p> </div>