

KC#342

Gil-Yong Han

From: Johnston, Alex [Alex.Johnston@lr.org]

Sent: 08 January 2007 12:20

To: Johnston, Alex

Subject: FW: CSR-BC Relative displacement of transverse bulkhead

1. Could you forward our question below to IACS PT with respect to JBP Ch 8 Sec 4 2.3.6 for fatigue analysis of longitudinals in way of T.BHD.

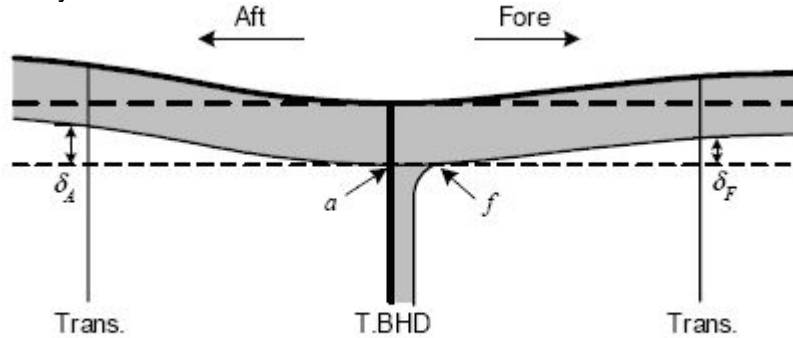


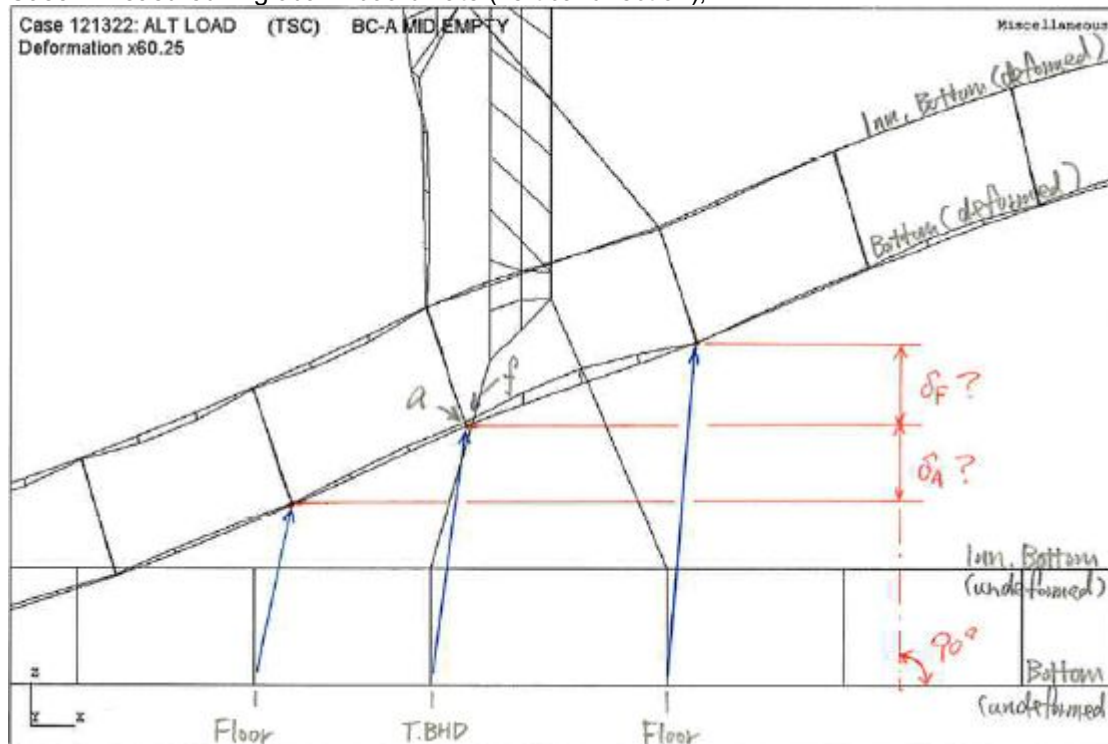
Figure 3: Relative displacement between the transverse bulkhead and the transverse web or floor

2. Relative displacement δ_A , δ_F ;

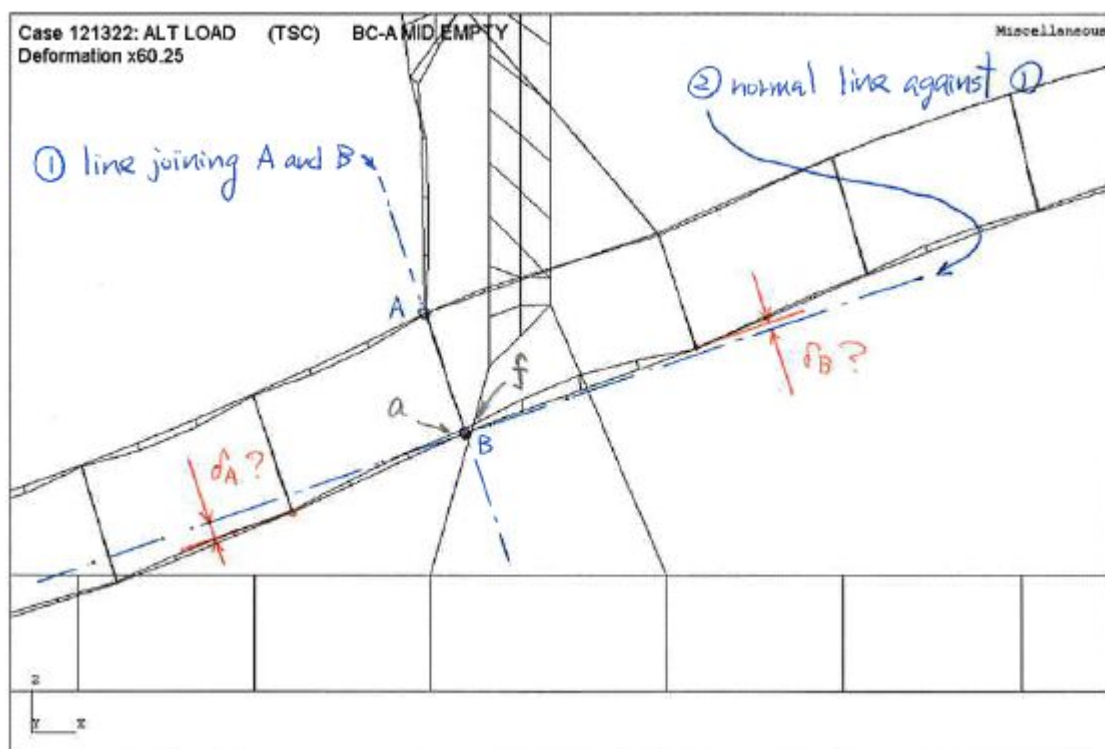
Example displacement in alternate condition is shown below with undeformed shape. We have considered how to treat this relative displacement and some ideas are illustrated. Could you confirm which interpretation (Case 1 ~ 3) is correct?

2.1. On bottom shell;

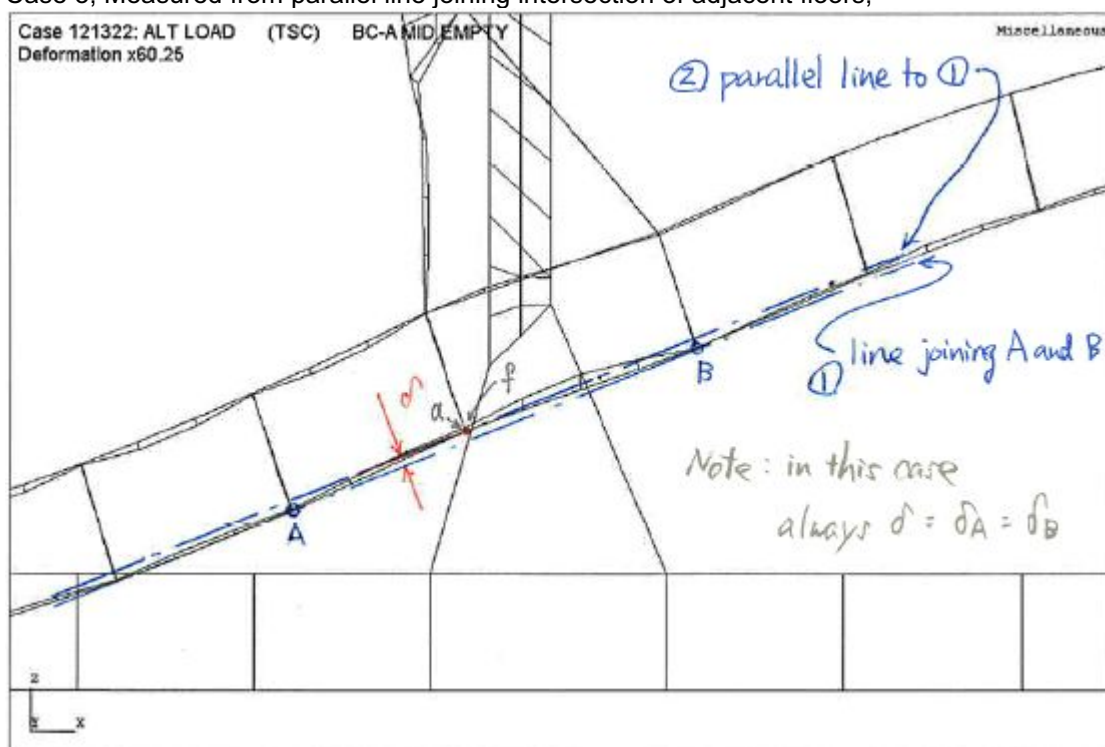
Case 1 Measured in global Z coordinate (vertical direction);



Case 2; Measured from parallel line at the location considered;

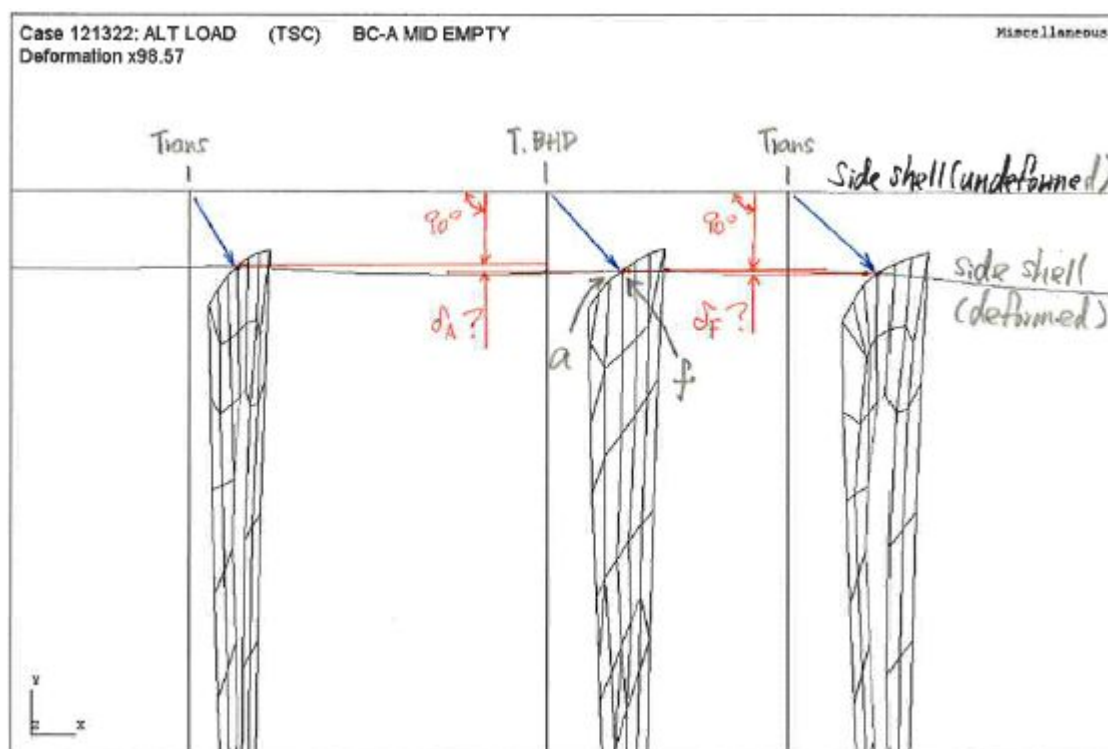


Case 3; Measured from parallel line joining intersection of adjacent floors;

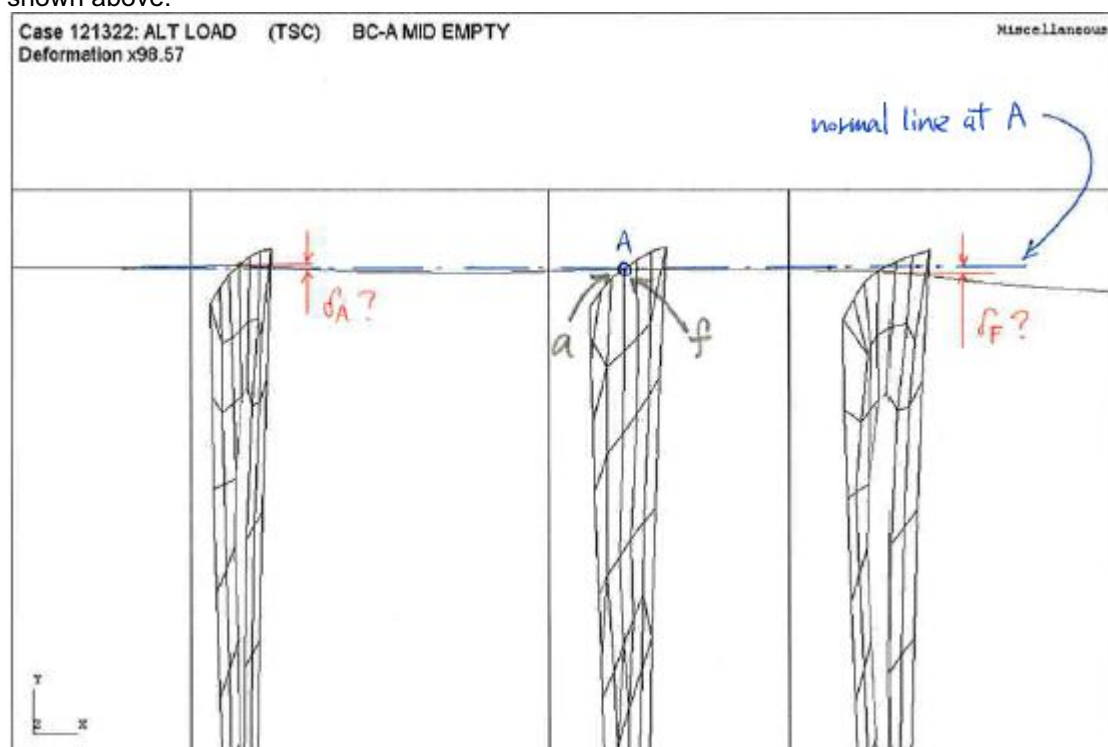


2.2. On side shell;

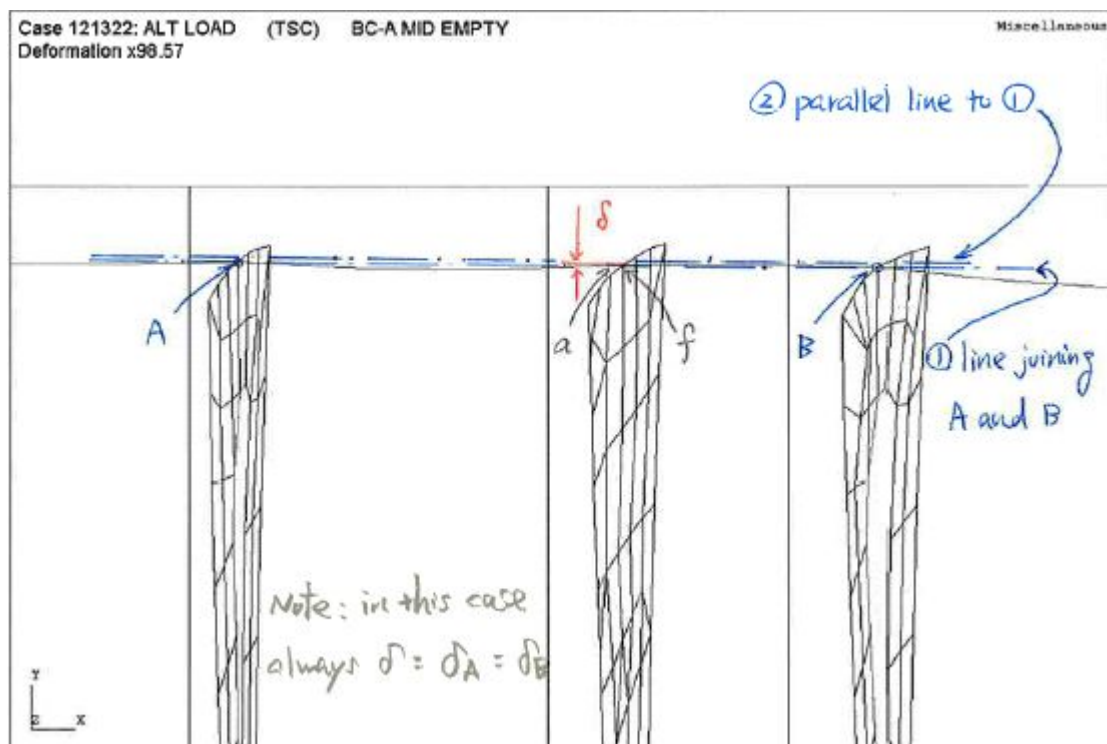
Case 1 Measured in global Y coordinate (transverse direction);



Case 2 Measured from normal line at the location considered;
However, it seems difficult to make the normal line as there are no connecting point such as inner bottom as shown above.



Case 3 Measured from parallel line joining intersection of adjacent transverse webs;



3. This interpretation is urgently requested .

We very much appreciate your kind support,

Best Regards,

A Fukushima

Surveyor

Hull Structures Group

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