NATIONAL TRANSPORTATION SAFETY BOARD
Office of Research and Engineering
Materials Laboratory Division
Washington, D.C. 20594

May 12, 2008

MATERIALS LABORATORY FACTUAL REPORT Report No. 08-054

A. ACCIDENT

Place	:	Mexican Hat, Utah
Date	:	January 7, 2008
Vehicle	:	MCI Motorcoach
NTSB No.	:	HWY08MH012
Investigator	:	Ron Kaminski

B. COMPONENTS EXAMINED

Portion of a window post from the right side of the motorcoach.

C. DETAILS OF THE EXAMINATION

A portion of a window post, approximately 3 feet long, was submitted for examination, as shown in figure 1. The post had a hollow rectangular cross section. One end of the post (the end on the right in figure 1) contained an overstress bending/buckling fracture. The other end of the post (the end on the left in figure 1) was intact to where it was welded to a horizontal member. The welds were limited to the two longer sides of the rectangular cross section of the post. Fractures in the horizontal member were also typical of overstress separation. The portion of the post contained overall bowing deformation, as can be seen in figure 1.

Printed characters on the side of the post contained the following information: “304, HEAT# 617073, 07/20/06, 20:50, OP#39, MADE IN CANADA, FISCHER CANADA 50mm X 75mm X 3.0mm PER MCI SPEC 712054”, indicating that the post material was 304 stainless steel, that the section size was 50 mm by 75 mm, and that the wall thickness was 3.0 mm, per MCI specification 712054. Measurement of the section size showed a width of 2.99 inches (76 mm), a depth of 1.90 inches (48.3 mm), and a wall thickness of 0.117 inch (3 mm), consistent with the nominal sizes printed on the post.

James F. Wildey II
Supervisory Metallurgist

ImageNo:0805A00148, Project No:2008010006

Figure 1. Overall view of the portion of the window post submitted for examination.