



**VEHICLE FACTORS GROUP CHAIRMAN'S  
FACTUAL REPORT**

**Vehicle Attachment - NTSB MCI Brake Pedal and Linkage Inspection Report**

**Palm Springs, California**

**HWY17MH005**

(3 pages)

# NATIONAL TRANSPORTATION SAFETY BOARD

Office of Research and Engineering  
Materials Laboratory Division  
Washington, D.C. 20594



February 8, 2017

MATERIALS LABORATORY FACTUAL REPORT

Report No. 17-017

## A. ACCIDENT INFORMATION

Place : Palm Springs, California  
Date : October 23, 2016  
Vehicle : 1996 MCI Motorcoach  
NTSB No. : HWY17MH005  
Investigator : Jerome Cantrell, HS-20

## B. COMPONENTS EXAMINED

Brake pedal, brake pedal mount, and brake linkage.

## C. DETAILS OF THE EXAMINATION

An overall view of the submitted brake components is shown in the upper image in figure 1. The brake control rod was fractured in the threaded region adjacent to the nut at the end closer to the brake pedal as indicated in figure 1. The brake control rod was bent in the threaded region adjacent to the fracture in the smooth portion of the rod approximately 4.5 inches from the fracture. The linkage between the control rod and the brake pedal was also bent.

A closer view of the fracture surface on the brake pedal side of the fracture is shown in the lower image in figure 1. The fracture surface had rough matte gray features and overall deformation consistent with ductile overstress fracture. Portions of the fracture were obliterated by post-fracture contact. Orange oxides consistent with post-fracture oxidation of the fracture surface was also observed. No evidence of a preexisting crack was observed.

Matthew R. Fox  
Senior Materials Engineer

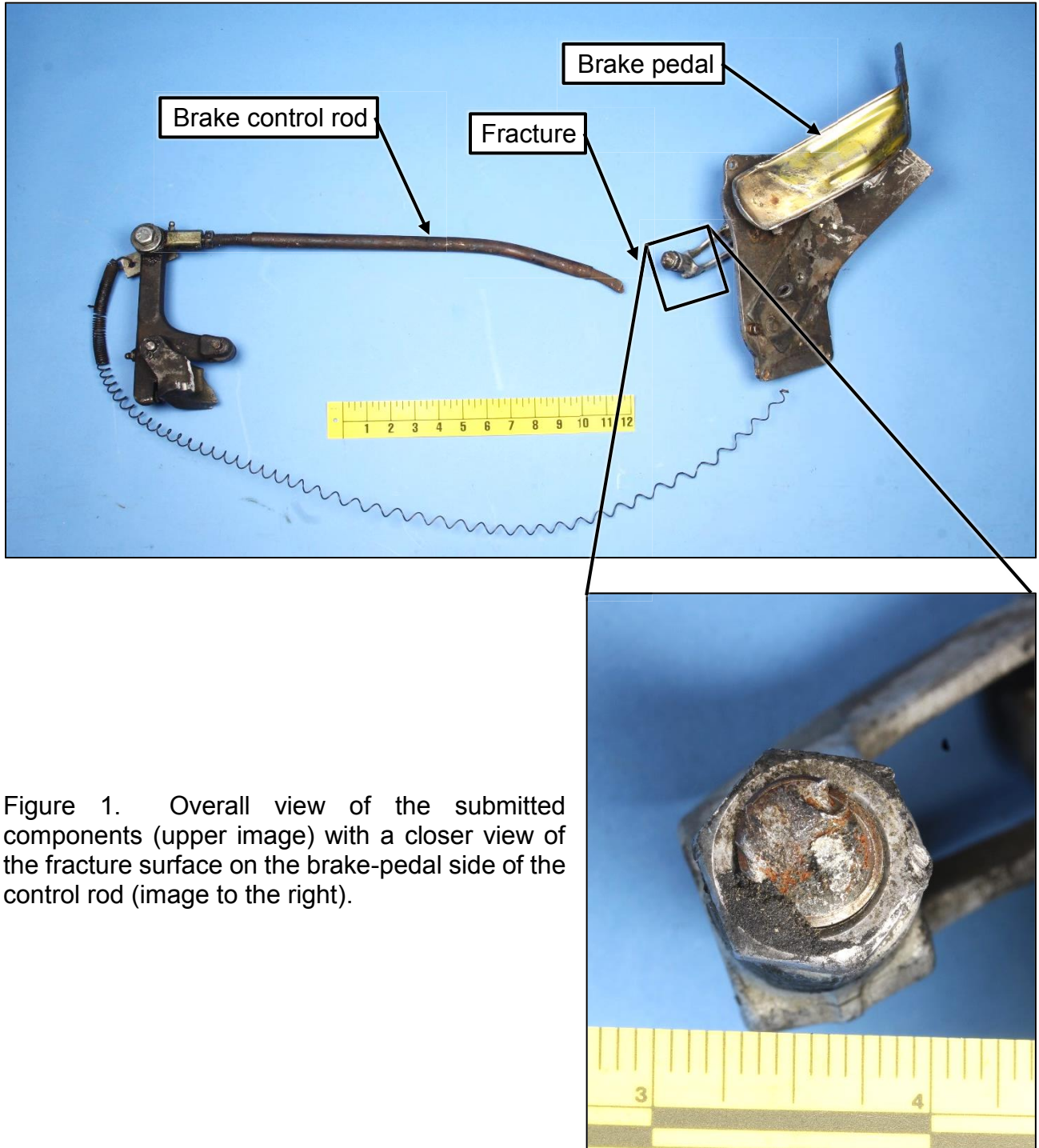


Figure 1. Overall view of the submitted components (upper image) with a closer view of the fracture surface on the brake-pedal side of the control rod (image to the right).