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

August 16, 2000

MATERIALS LABORATORY FACTUAL REPORT

Report No. 00-108

ACCIDENT

Place	: Nantucket, Massachusetts
Date	: October 31, 1999
Vehicle	: Boeing 767-366ER
NTSB No.	: DCA0M-A006
Investigator	: Scott Warren, AS-40

B. COMPONENTS EXAMINED

PCA #3 – Servo Slide and Sleeve, Bias Spring, Spring Guide.

C. DETAILS OF THE EXAMINATION

This is additional information was generated after the metallurgical report No. 00-071 had been issued.

The weight of the servo slide including a broken off portion of the rolled pin was 46.7 grams.
The weight of the guide including two broken off portions of the rolled pin was 6.8 grams.
The weight of the servo sleeve was 164.7 grams.
The weight of the spring was 1.4 grams.

The inside and outside diameters (ID and OD) of the rolled pin were measured at the exterior surface of the guide using a "Smart Scope" measuring unit.

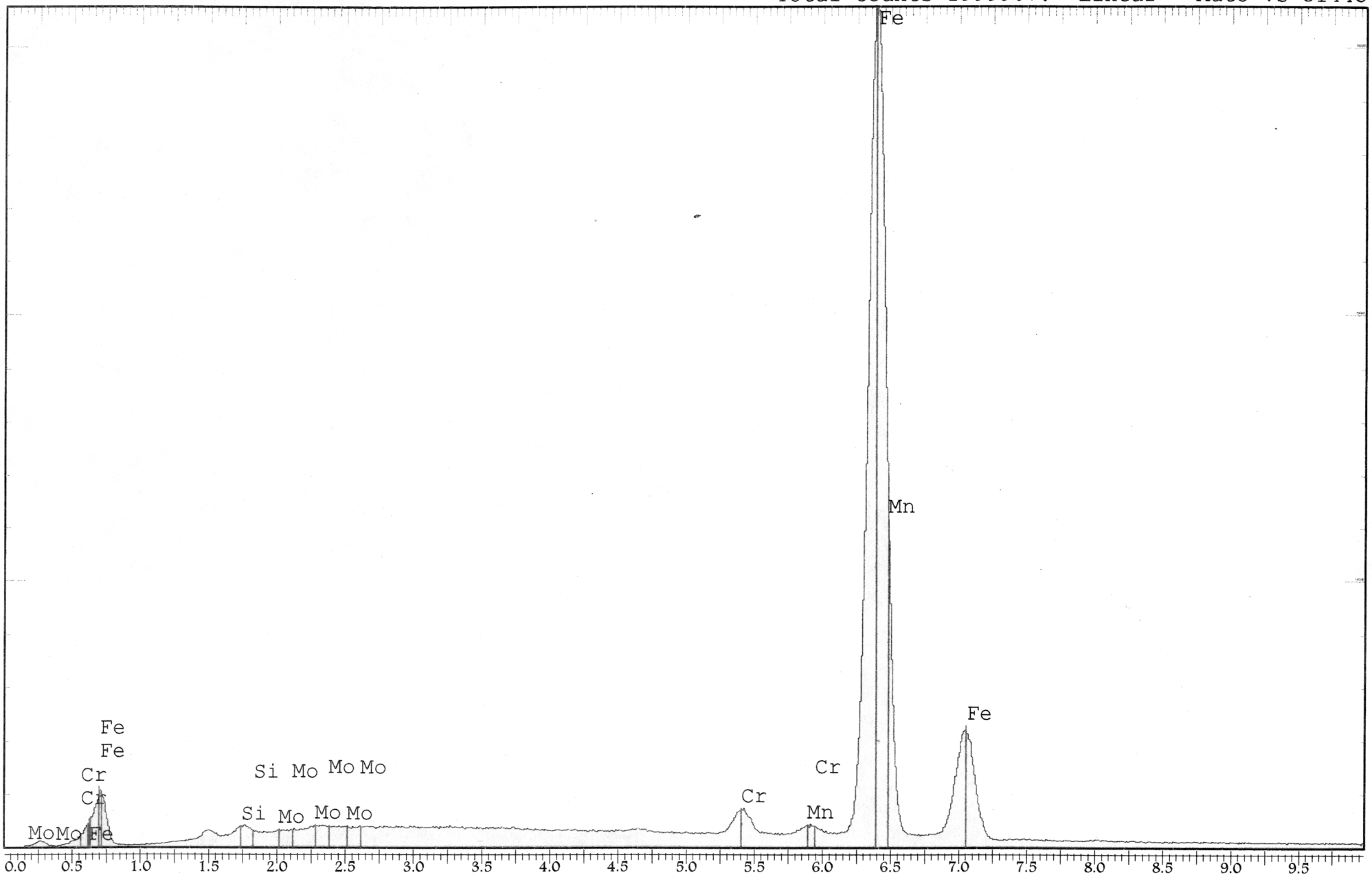
The ID of the pin measured approximately 0.032 inch.
The OD of the pin measured approximately 0.059 inch.

An X-ray energy dispersive analysis performed at the surface of the slide generated a spectrum that contained iron as a major peak with minor peaks of chromium, manganese, silicon, and molybdenum, consistent with low alloy steel. The representative spectrum is attached.

Jean Bernstein
Senior Metallurgist

Spectrum: SLIDE Range:10 keV

Total Counts=1999907. Linear Auto-VS=31445



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