

# NATIONAL TRANSPORTATION SAFETY BOARD

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



May 30, 2014

MATERIALS LABORATORY FACTUAL ADDENDUM REPORT

Report No. 12-089B

## A. ACCIDENT INFORMATION

Place : Pukoo, Hawaii  
Date : November 10, 2011  
Vehicle : Eurocopter EC130B4  
NTSB No. : WPR12MA034  
Investigator : Dennis Hogenson, AS-WPR

## B. COMPONENTS EXAMINED

Fenestron attachment ring.

## C. DETAILS OF THE EXAMINATION

A piece of the fenestron attachment ring rib from the accident helicopter was sent to Eurocopter for hardness testing using the Brinell hardness test method. The piece tested had a nominal thickness of 0.098 inch. The average of 5 hardness measurements was 154 HBW 2.5/62.5 with highest and lowest measured values of 150 HBW 2.5/62.5 and 158 HBW 2.5/62.5, respectively. The hardness measurements were all within the range specified for the fenestron attachment ring material.

Matthew R. Fox  
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