

Advanced Turbine Support

General Electric 7FA: Dovetail cracking on the standard R-0 blades.

PURPOSE

To inform users of dovetail cracking that has been identified on the standard R-0 blades.

UNIT TYPE

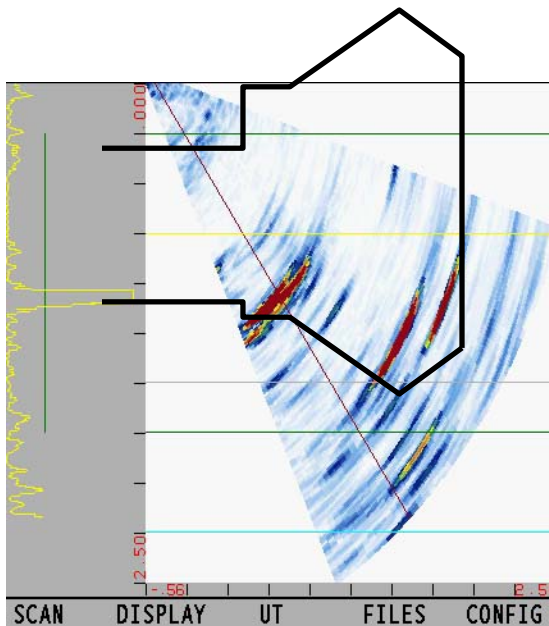
MS7001FA

HISTORY

We identified several units with cracks and or fretting in the dovetail area of the standard R-0 blades. The data available on two of these units is as follows: Unit 1 316 Total Starts with 2781 total hours. Unit 2 100 total starts with 21,732 total hours. The third blades identified with cracks were out of the unit and no hours and starts data was available.

RECOMMENDATION

Perform a phased array ultrasonic inspection of the R-0 and R-1 blade platforms as soon as possible. Any fretting indications found should be monitored on a 15-start interval.



7FA Standard R-0 blade on unit 1 with a 1.8" dovetail crack.



This close-up photograph shows where a crack was identified on unit 2. The crack was verified using UT in place and ET when removed. Best viewed at 200% zoom.