Conclusions

1. Cracks in the 8\textsuperscript{th} position from a high stress concentration result from poor fabrication and inspection techniques.

2. All blade boxes should be inspected yearly to detect any additional cracks which might develop.

3. Crack initiation is not considered critical because the past 16,000 hours of operation have shown cracks can reach considerable length without box failure.

4. The number of times cracked boxes are repaired should be limited.

5. An inspection plan is being developed to accomplish 2, above.

6. Read recommendations that the blade boxes be redesigned and new blade boxes built.

Since repeated rewelding may have a deleterious effect on the metal, cracks in the pin holes, cracks in the 7\textsuperscript{th} box probably resulted from poor fabrication and inspection techniques.
3. Grain direction played no significant role in crack initiation.

2. Galling played no significant role in crack initiation.

1. Cracks consistently initiated at points of maximum stress.

8. IP summary.