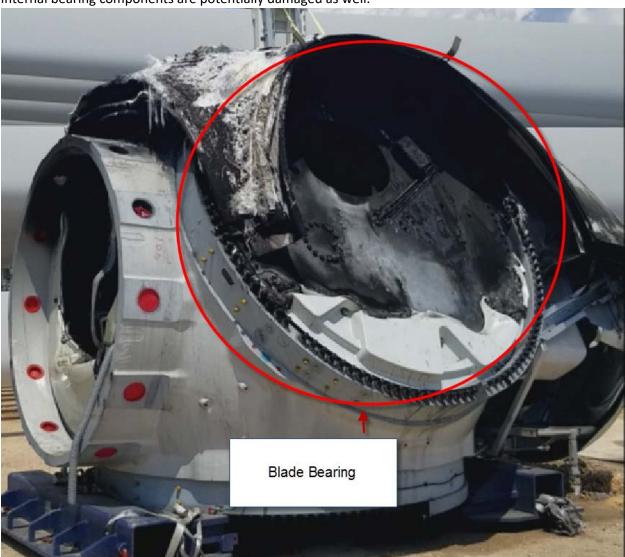
Analysis of fire damage to hub #18020106 in the Port of Houston

Based on the pictures provided to me by Construction personnel, this hub should be scrapped and not be refurbished. This is based on the following observations:

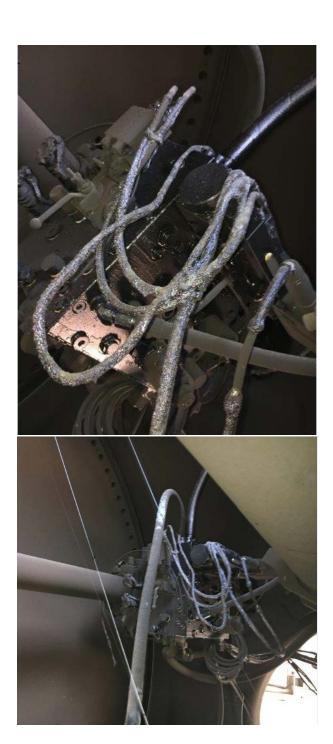
1. At least two of the three blade bearings and stiffener plates are damaged to the point of requiring replacement. Aside from the heat damage to the bolts and exterior of the bearing, the internal bearing components are potentially damaged as well.





2. Hydraulic manifold, pitch ram, torque arm and hoses, wires and sensors on each damaged blade are also damaged to the point of requiring replacement.





3. All three spinner shells have been burned and must be replaced.





4. The Hub controller cabinet is burned and must be replaced.

