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**Swanson, Greg**

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**From:** Crane, Charlie  
**Sent:** Tuesday, September 17, 2002 1:29 PM  
**To:** Swanson, Greg  
**Subject:** FW: Impact of Making the P&W HPFTP Speed Sensor a Fracture Critical Part

-----Original Message-----

From: Smith, Clyde G. [mailto:clayde.smith@pw.utc.com]  
Sent: Tuesday, September 17, 2002 12:46 PM  
To: Charlie Crane (E-mail)  
Cc: Holton, Anthony W.  
Subject: Impact of Making the P&W HPFTP Speed Sensor a Fracture Critical Part

Charlie,  
We had a meeting at P&W with Project, Structures, Design, Quality, and Configuration Management this afternoon to define the impacts of making the Single Piece Speed Sensor P/N 4701604 a Fracture Critical Part. The following are the impacts that were identified:

1. Requires a Class 1 Engineering Change - History has shown it can take up to 6 mos. and \$ 10K to process a CL 1 Change.
2. Requires a new Part Number.
3. Requires updates to the following documents for new Part Number:
  - Speed Sensor Part FR
  - Speed Sensor Structural Analysis VCR
  - Fracture Control Plan FR
  - Inspectability Report FR
  - Loose Parts Kit Drawing
  - 801 Installation Drawing
  - ICD with new Part Number
  - QAD
  - CIL
4. During the time to accomplish all of this, all of the Single Piece Speed Sensors would have been delivered and a decision would have to be made on how to handle the parts in the field (11 Units) , ie. inspect and re-identify (Cost TBD).
5. This whole effort is a big job and will take a significant amount of \$ and time to accomplish.
6. Another question is how this will affect approval of the Single Piece Housing Speed Sensor VCR FR20715-123 ? Can the MSFC CCB approve the VCR and issue a Directive to designate the Speed Sensor as Fracture Critical, in order to board the other two Speed Sensor VCR's ?

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