The P-3 Nose Gear Drag Strut Assembly Upgrade

Critical Issues

» No current form of inspection (Except specialized NDI testing)
» Hidden corrosion
» Hidden fatigue cracks

Features and Benefits

» High-Grade machined aluminum versus traditional forging
» Load stress points re-distributed to minimize structural stress
» Robust design and specialized material to resist corrosive environment
» Lockheed Martin Certified Parts Provider approved

Reliability and Performance Enhancements:

<table>
<thead>
<tr>
<th>Drag Strut Material</th>
<th>Use of 7050-T7451 aluminum plate is more corrosion resistant than the 7049 forging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drag Strut Coatings</td>
<td>Change to an anodized finish per Mil-A-8625, Type III, Class 1, .001 thick</td>
</tr>
<tr>
<td>Drag Strut Bushings</td>
<td>Material change to aircraft alloy 8620. Typical uses for this alloy are gears, ring gears, shafts and crankshafts</td>
</tr>
</tbody>
</table>

The results of this study show that with the given set of parameters defined in the “Linear Static Extension Study” the drag strut would not begin to see any fatigue failures until well after 200,000 cycles.