Vehicle Performance Statistics &
WILD, THD, ABD, TPD

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Agenda

- Steel Wheels keep on turning
- The Hunt for Hunting Trucks
- Fun with Bearings (… Acoustically Speaking …)
- Truck Performers (Bogie and the Side Frames…)
- Vehicle Performance Data Statistics Update
Trend Analysis for Predictive/Preventive Maintenance

Time/Trend Plot of Wheel Impact Loads

AAR Rule 41
Condemnable

2 Mo+ Maintenance Window of Opportunity

MAXVERT (Kips)
Bearing Defects: Example Signature

S/N 54900
MULTIPLE CUP SPALLS
TEST BRG #9

Multiple Cup Spalls
Bearing Animation – Signature Variation
Truck Hunting (lateral instability)
Truck Curving Performance
Industry Vehicle Performance Database:

WILD Statistics Update

Wheel Impact Statistics

WILD Hits/1000 Wheels*

90-140kips
140+kips

EHMS Alerts: WILD Condemnable

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Industry Vehicle Performance Database:

EHMS Alerts: WILD Final Alerts

Opened
Closed
Summary

◆ Stress State Improving?
  • Wheel Impacts: Absolutely!
  • Truck Hunting: Too Early…
  • Acoustic Bearing: Promising…
  • Truck [Curving] Performance: Way Too Early..

◆ Questions??
That’s All Folks!!