



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: EA 03-022
Prompted By: FLEET COMPLAINT
Date Opened: 11/12/2003
Principal Investigator: NATE SEYMOUR
Subject: STRICK SEMI TRAILER HUB FAILURES

Manufacturer: STRICK CORPORATION
Products: 1997-2003 SEMI TRAILERS
Population: 10563

Problem Description: SEMI TRAILER BEARINGS ARE FAILING, WHICH COULD RESULT IN A WHEEL FIRE OR A WHEEL SEPARATION.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	57	52	57
Crashes/Fires:	15	0	15
Injury Incidents:	0	0	0
# Injuries:	0	0	0
Fatality Incidents:	0	0	0
# Fatalities:	0	0	0
Other*:	14	0	14

*Description Of Other: WHEEL SEPARATIONS

Action: THIS INVESTIGATION HAS BEEN UPGRADED TO AN ENGINEERING ANALYSIS.

Engineer: Nate Seymour *NJS*

Date: 11/12/2003

Div. Chief: Richard Boyd

Date: 11/12/2003

Office Dir.: Kathleen C. DeMeter

Date: 11/12/2003

Summary: A trucking fleet, operating 3,630 Strick trailers with greased wheel ends (low maintenance) reported 55 failures. Concerned with the safety ramifications, the fleet initiated a campaign to replace all such hubs with a standard oil bath wheel end after determining that Stricks would accept no responsibility.

□ The greased wheel ends were originally introduced to the market in the early 1990's as low maintenance, not requiring service for 300,000 to 500,000 miles. Through the mid 1990's, the rate of bearing failures and separations continuously increased, peaking in 1998. As a result, several industry task groups were formed to study the problem. Improved installation, inspection, and maintenance procedures were developed resulting in a reduction of failure incidents.

□ As a whole, the industry has become more educated on how to safely operate this wheel end system. Stricks however, seemingly took a hands off approach to the high failure rates in 1998. Although Stricks offered the greased wheel ends as an option, they were unable to stipulate with certainty the appropriate lubrication fill level. Conflicting maintenance recommendations from the axle and grease suppliers were passed on to the fleets. It appears that different fleets developed different approaches in implementing maintenance and choosing a grease supplier. This resulted in different levels of satisfactory performance in the field.

Currently ODI has identified 255 trailers, which for unknown reasons, appear to have a higher failure rate than other trailers with the same type of wheel ends.

ODI is upgrading this investigation to determine the cause of the failures.

*MK
faxed
11/17/03*