HAZCOM

Significant Incident Alert

Type of Incident	HPI – Near Miss
Key Issues	Equipment Integrity
INX ID	105306
Date & Time	Friday 25th November 2022
Location	Between Km 118 to Km 117
Consequence	Actual – Level 1 Potential – Level 5 (Multiple Fatality)

DESCRIPTION

A Starwest Hino Prime Mover and trailer, was transporting a 20 ft container from the Kiunga port to the Tabubil WH131 as part of a convoy for the OTML Major Projects department.

Whilst travelling along a downslope section of the road between Km118 to Km117, the prime mover operator reported he was unable to engage a low gear and that the brake system was not operating effectively.

The operator managed to bring the prime mover and trailer to a stop on an incline, and then attempted to apply both the prime mover and trailer brakes. The prime mover and trailer started to move in a reverse direction back down the road ~57 m, where it then "jack knifed" before coming to rest on the side of the road

LESSONS

- Highway Transport is a known Major Hazard. The key or critical controls associated with equipment maintenance (pneumatic air clutch and braking systems in particular) require to be regularly reviewed and validated to confirm the control effectiveness to prevent recurrence.
- Records of the scheduled maintenance and inspections of the braking system were available, however specific maintenance/inspections on the condition and effectiveness of the pneumatic air system were not included.
- It is recognised that conducting specific maintenance/inspections in a static workshop environment or prestart may not provide a true indication of the serviceability or effectiveness of the overall braking system i.e. the brake activation and air system replenishment as many of the tests are conducted one item at a time.

ACTIONS – (There were a number of actions as a result from this event the key actions were ;)

- Asset Maintenance - repair or replace faults identified on prime mover during post incident inspection, including all incident related damage.
- Asset Maintenance - conduct a review of all Starwest fleet that have pneumatic air braking systems. Update existing scheduled brake drum and shoe system checks service sheets to include brake pneumatic system checks applicable to the service interval and OEM requirements.
- Asset Maintenance - review engineering solutions and implement an interim control for the accessibility for the operator to be able to conduct an OEM approved air tank moisture checks and assist in the identification of any drain valve leaks for the Hino Prime Movers in particular.
- Asset Maintenance - confirm that both operating visual and audible in cabin alarms to alert operators of low air system faults for all fleet that have pneumatic air braking systems. Where identified as not fitted create and complete a scheduled maintenance plan for any deficiencies identified.
- Asset Maintenance - OTML 6 monthly inspection checklist for all OTML and Business Partner fleet, to include pneumatic air system OEM operation and design checks to ensure the system is in good condition, maintained and effective, and that audible and visual alarms are in working order.
- Asset Maintenance - OTML to progressively conduct a prime mover fleet inspection on all OTML vehicles that have pneumatic air system as part of the OEM operation design to ensure there are no leaks and system is operating as per OEM design.
- Asset Maintenance – all OTML and Business Partners to be advised that daily operator prestarts for all mobile equipment, including Prime Movers and Trailers, are to be amended with a one-page checklist to include air system / pressure checks as a Category "A". This will be an interim measure until updated prestart books are available

- Trakpro (and ADAS cameras) – review and update the OTML mobile Equipment standard, in relation to the requirement for ADAS cameras to be installed in what class of mobile equipment (i.e. all trucks, all buses, all mobile cranes and for LV's used for night shift worker or highway use). Trakpro speed alert system to be installed on all mobile equipment.
- Trakpro (and ADAS cameras) - formally review the functionality of the ADAS camera system (software platform and hardware compatibility), and the process and effectiveness of the management/reporting of the ADAS camera alerts
- TrakPro - OTML Trakpro Power BI status dashboard site wide improvement initiative which provides real time status of the Trakpro units for both OTML and Business Partner mobile equipment fleet (including light vehicle, bus, truck, cranes and ancillary fleet). Implement process to ensure the OTML and Business Partner fleet is maintained and up to date (including new and disposed assets).
- TrakPro – All Business Partner management, including Starwest, to be provided with access to the OTML Trakpro Power BI site wide fleet status dashboard (OTML management already have access via the OTWP LV Teams site).
- Trakpro – Starwest management to ensure the mobile equipment fleet details contained in the site wide TrakPro dashboard is current and maintained (by way of confirmation to the OTML Ancillary Workshop Manager – refer also action 14)
- TrakPro – formal communication to the effect that all OTML and Business Partner management are responsible to continuously review the Trakpro status of the mobile equipment fleet. OTML and Business Partners are not to operate any mobile equipment fleet which are required, but not fitted with functioning TrakPro speed and ADAS cameras under any circumstances and must be stood down until rectified. Contravention of this requirement will be deemed a serious safety breach and dealt with accordingly. Report to be included as monthly SHEC Committee meeting agenda item.
- TrakPro - Starwest management to continuously review the Trakpro status of the business fleet. Starwest not to operate any mobile equipment (light vehicles, buses, etc) which are required, but not fitted with functioning TrakPro speed and ADAS camera equipment under any circumstances and must be stood down until rectified.
- Operator Training and Competency - review and update VOC's and driver training to include an understanding and assessment on function and checks of the pneumatically operating braking systems.
- Major Hazard Risk Bowtie Studies - facilitated workshop studies for Fatigue Management and Highway Transport, then develop action plan to implement identified new additional key controls and process to measure the effectiveness existing/new key controls sitewide. This proactive sitewide initiative by OTML, the action status of which will be tracked separately in INX
- Communication and Awareness – include Highway Transport and key controls as specific OHS theme for Jan/Feb 2023 for the OTML Logistics, OTML Major Projects, Starwest and Milum informed by the risk bowtie studies
- Communication and Awareness - provide learnings and awareness via a site wide communication regarding functional checks of the pneumatically operating braking system
- Contract Performance Review – formal, documented, quarterly Starwest contract performance reviews including safety performance KPI's, maintenance system KPI's, status outstanding actions, improvement initiatives and concerns. OTML Contracts and OHS personnel to attend. Status tracked and reported to SHEC Committee.

Brendan Gowdie
Acting General Manager – Major Projects