

Present: All the Justices

HOPE GRIFFIN

OPINION BY JUSTICE LAWRENCE L. KOONTZ, JR.

v. Record No. 961851

JUNE 6, 1997

THE SPACEMAKER GROUP, INC.,  
T/A RICHMOND CLARKLIFT COMPANY

FROM THE CIRCUIT COURT OF THE CITY OF RICHMOND  
Theodore J. Markow, Judge

This is an appeal in an action asserting negligent servicing and reconditioning of an industrial lift truck resulting in personal injury to the plaintiff. We consider whether the trial court properly excluded certain expert testimony offered by the plaintiff.

#### Background

When summary judgment is based upon the granting of a motion to strike a party's evidence, we view the evidence and the inferences reasonably raised thereby in the light most favorable to the party whose evidence has been stricken. See Meador v. Lawson, 214 Va. 759, 761, 204 S.E.2d 285, 287 (1974).

This case involves a Clarklift three-wheel TW-25 lift truck (forklift). Three of the operational and safety features of that model forklift are relevant to the issue we address here. Although the record contains extensive technical descriptions of these features, for our purposes the essential details can be summarized as follows:

The TW-25 forklift's two drive wheels are operated by an electric motor. The forklift's accelerator assembly consists of a pedal and mechanical shaft. When the pedal is depressed, the shaft activates a switch which sends electric current from the

batteries to the motor. The shaft of the accelerator assembly shares its housing with two hydraulic hoses which are part of the forklift's cargo handler control system. These hoses can make periodic contact with the accelerator assembly and may become abraded as a result. It is not disputed in this case that the accident occurred because one of these hoses made contact with the accelerator assembly and caused it to stick in the depressed or "on" position.

The forklift's primary braking system is operated by depressing either of two brake pedals which rotate a shaft with two arms. One arm activates a brake drum rod, causing friction brakes to be applied to the drive wheels; the shaft's other arm activates an electrical cut-off switch which interrupts the flow of electricity to the motor.

Under the operator's seat of the forklift is a "deadman's switch" which serves as a redundant emergency braking system. Sufficient weight must be placed on the operator's seat to cause a connection in the switch which allows electricity to flow to the motor. If the weight is removed, spring tension causes the seat to rise, breaking the connection in the switch and interrupting the flow of electricity to the motor. Removing the weight on the seat also causes a mechanical parking brake to be applied.

In late 1992, Stanley Hardware Division (Stanley), part of a multi-state corporation with a manufacturing and warehouse facility in the City of Richmond, acquired five TW-25 forklifts as part of the purchase of another company. The forklifts had

been in service for over twenty years at the time they were acquired. Stanley determined that the forklifts required servicing and reconditioning prior to being added to the fleet of seven other forklifts already in use in its Richmond facility. Stanley contracted with The SpaceMaker Group, Inc., trading as Richmond Clarklift Co. (Clarklift), to bring the forklifts "to a level of dependability" including the replacement of all parts as necessary.

The forklifts were in Clarklift's possession for four and a half weeks during which time they were serviced by different employees. Jerald LaMaskin, owner of Clarklift, testified that the reconditioning of a forklift would include examining the safety features of the accelerator and brake assemblies and the deadman's switch, and repairing or replacing any defective parts which were discovered.

Clarklift returned the forklifts to Stanley in April 1993, and Stanley placed them into service. Because of the number of other forklifts available, forklift No. 5, the forklift involved in the accident, received relatively light use, with only approximately 101 hours of operation being recorded on its service meter over a six and a half month period. LaMaskin testified that 20 to 30 hours of operation per week would be common use for this model forklift.

On November 1, 1993, Hope Griffin was working at Stanley's facility operating a packaging machine. Stephanie Ghee, another Stanley employee, was operating forklift No. 5, bringing materials to the packaging machine. After transporting a pallet

with materials to be packaged to the work floor near the packaging machine, Ghee began to back the forklift away from the pallet. Griffin was facing the packaging machine with her back to Ghee and the forklift.

Ghee testified that when she depressed the accelerator pedal "the forklift just went all out of control." Griffin was struck by the rear of the forklift and pinned against the packaging machine. Although Ghee applied the foot brake, the forklift's drive wheels continued to spin. Ghee attempted several times to move the forklift's gear shift from reverse to neutral and then to forward. After Ghee had made several attempts to change gears, the forklift moved forward freeing Griffin. Ghee then jumped off the forklift which continued to travel forward and struck another piece of machinery on the work floor. Another employee then boarded the forklift and turned off its ignition switch.

An inspection of the forklift's accelerator assembly housing showed that the hydraulic hoses were loose inside the assembly in such a way that they would make periodic contact with the accelerator linkage. One of the hoses had caught on the accelerator linkage, causing it to stick in the depressed or "on" position. The hoses showed signs of abrasion indicating repeated contact with the accelerator linkage.

An inspection of the foot brake assembly showed that the arm which would have activated the electrical cut-off switch did not reach the switch when the brakes were applied. This defect was the result of excessive wear in the connection between the arm

and the rotating brake shaft. Similarly, the deadman's switch mechanisms were misadjusted so that neither the electrical cut-off switch nor the parking brake would be activated by removal of weight from the operator's seat.

Griffin filed a motion for judgment alleging that Clarklift was negligent in the manner in which it reconditioned the forklift. Relevant to this appeal, the principal disputed issue at trial was whether the abrasion of the hydraulic hoses was such that it would have been apparent at the time the forklift was serviced, putting Clarklift on notice that the hoses needed replacing and tying down in order to avoid their catching on the accelerator linkage. Clarklift maintained that the condition of the hoses at the time it serviced the forklift was a matter of conjecture due to the passage of time between the reconditioning and the accident.

At trial, LaMaskin testified that had the abrasion been discovered during the reconditioning, the hoses would have been replaced and "rerouted," though not necessarily tied down. LaMaskin further testified that the "abrasion did not happen in one day, that it happened over a period of time, and it could [have been] several months."

Griffin sought to introduce expert testimony from Curtiss Owen, a forklift mechanic with 15 years experience, and Charles Crim, a materials engineer employed by an independent testing lab, concerning the length of time it would take for the abrasion of the hydraulic hoses to occur and whether that defective condition, and the other defects previously mentioned, would have

been obvious at the time of the reconditioning. In each instance, Clarklift objected to such testimony on the ground that it would be mere speculation to attempt to determine, from its condition some months later, the condition of the forklift at the time it was reconditioned. In each instance the trial court sustained the objection.

Griffin proffered testimony from the two experts that the abrasion of the hoses could not have occurred entirely during the 101 hours of use following the reconditioning. Each expert noted that the exterior rubber coating and the interior steel mesh housing of the hoses were extremely durable. Crim stated that the hoses would have been in substantially the same condition at the time of the reconditioning as they appeared following the accident. Owen estimated the level of abrasion indicated that it had occurred over "[t]he life of the machine."

At the conclusion of Griffin's evidence, Clarklift made a motion to strike Griffin's evidence on the ground that it failed to show that the defective condition of the hydraulic hoses, the foot brake assembly, and the deadman's switch existed at the time Clarklift serviced the forklift and that Clarklift was aware of these conditions. Although stating that it did so "with great reluctan[ce]," the trial court sustained Clarklift's motion to strike because "there would be at most rank speculation to figure out how long . . . these conditions existed." We awarded Griffin this appeal.

#### The Expert Testimony

The thrust of the expert testimony excluded by the trial

court was that the abrasion of the hoses could not have occurred entirely during the 101 hours of use following the reconditioning, and, thus, that the defective condition existed during the time Clarklift serviced the forklift. In Tittsworth v. Robinson, 252 Va. 151, 475 S.E.2d 261 (1996), we summarized the circumstances under which expert testimony is to be permitted:

Generally, expert testimony is admissible in civil cases if it will assist the fact finder in understanding the evidence. Such testimony, however, must meet certain fundamental requirements. Such testimony cannot be speculative or founded upon assumptions that have an insufficient factual basis. Such testimony also is inadmissible if the expert has failed to consider all the variables that bear upon the inferences to be deduced from the facts observed.

Id. at 154, 475 S.E.2d at 263 (citations omitted).

Contrary to Clarklift's contention that the two experts based their opinions solely on their observation of the end condition of the hoses, the record shows that each considered the structure and design of the hoses and the force necessary to cause abrasion of their exterior coating and interior lining. These factors are not matters of common knowledge; thus the experts' opinions would have been of benefit to the jury in understanding the evidence. Moreover, the experts' assumption that the abrasion of the hoses occurred through repetitive contact of moderate force over a long period of time, rather than constant contact during the 101 hours the forklift was in service, was premised upon a sufficient factual basis established by their inspection of the forklift and their knowledge of its mechanical operation. Although Clarklift could challenge the

weight to be given to this assumption on cross-examination, we hold that the trial court erred in excluding the expert testimony. Moreover, this evidence alone is sufficient to raise a jury question whether Clarklift was negligent in not discovering and repairing the defective condition of the forklift.

For these reasons, we will reverse the judgment of the trial court and remand the case for a new trial.

Reversed and remanded.