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Subject: LMES LL: Shattered Camper Cover Rear Window

The following Lockheed Martin Energy Systems, Lesson Learned originated at the East Tennessee Technology Park (ETTP). This lesson discusses an incident that could have resulted in more serious injuries and which could be applicable at other DOE facilities. If you have any questions, please contact Joanne Schutt, (423)574-1248, e-mail [schuttje@ornl.gov](mailto:schuttje@ornl.gov).

Thanks--  
Cynthia M. Eubanks

**TITLE: Shattered Camper Cover Rear Window**

**IDENTIFIER: L-1998-OR-LMESETTP-0101**

**DATE: January 22, 1998**

**LESSONS LEARNED STATEMENT:** The rear window on some camper covers can shatter causing potential injury to employees.

**DISCUSSION:** On January 5, 1998, a Non-Destructive Assay (NDA) technician returned to his pick-up truck with instruments he had been using in the K-31 building. The pick-up truck was parked on level ground. When the technician opened the rear camper cover window to place instruments in the back of the pick-up, the window shattered with a violent force.

The camper cover is approximately six years old. The label on the side windows reads as follows: TGS TEMPERED, AS3 M10, 1/8GL, DOT 243.

The window hardware consisted of two latches with locking mechanisms at the lower corners, two dampening pistons attached to each side of the window and to the roof of the cover, and two hinges on each side near the top of the window. Each piece of hardware was attached through holes in the glass. The dampening pistons were labeled as having 35 pounds of tension and were difficult to compress by hand. The rear window did not have a frame around the entire perimeter.

It was the practice of the technician to leave the latches unlatched and unlocked so that the window could be opened by using only one of the latches to lift open the window. When the window was opened, approximately 4 inches of the glass shattered into small fragments 1/4 to 1/2 inches in size and fragments were scattered as far as 25 to 30 feet. Most of the glass fell to the ground near the back of the truck.

The technician received minor lacerations to the middle finger of the right hand and the index finger of the left hand. He had just removed his safety glasses, but did not receive an eye injury. The technician was checked by the ETTP Medical Department.

**ANALYSIS:** Discussions during the critique suggested that the lack of a frame around the glass window and the use of latches attached through the glass at each corner caused a stress condition

when the window was lifted with only one corner latch. The stress or twisting movement could have caused the window to shatter.

**RESOLUTION/RECOMMENDED ACTIONS:** A review of the Consumer Product Safety Commission (CPSC) information has not identified any recalls of this type of camper cover. This lesson learned is disseminated to communicate this incident to other employees. If similar problems have been encountered, please contact J. E. Schutt at (423)574-1248.

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**PRIORITY DESCRIPTOR:** Blue/Information

**DOE FUNCTIONAL CATEGORY:** Occupational Safety

**LMES FUNCTIONAL CATEGORY:** SH - Safety & Health

**KEYWORDS:** camper cover, glass, shattered, injury, window

**REFERENCES:** ETPP Critique CR-98-1

**FOLLOW-UP ACTION:** Information in this report is accurate to the best of our knowledge. As means of measuring the effectiveness of this report please notify Joanne E. Schutt at 423/574-1248, e-mail at [s6u@ornl.gov](mailto:s6u@ornl.gov) of any action taken as a result of this report or of any technical inaccuracies you find. Your feedback is important and appreciated. Cynthia M. Eubanks (423)576-7763; FAX=(423)576-8835 Mgr. Issues Management Staff Lockheed Martin Energy Systems, Inc.