

**BUREAU OF LAND MANAGEMENT
2004 ATV FATALITY**

LESSONS LEARNED

Synopsis:

On August 2, 2004, a Seasonal Biological Technician for the Bureau of Land Management, Grand Junction Field Office, Colorado, died as a result of an All Terrain Vehicle (ATV) accident.

The employee arrived for work the morning of August 2, and reconfirmed his work plan and schedule with his supervisor. They agreed that he would conduct land health surveys in the Coon Hollow area, 20 miles north of Grand Junction. They had previously discussed the need for an ATV in order to accomplish the planned work. The machine had been reserved and loaded in the employee's truck for transport to the work area. The supervisor and employee were confident that the employee had the expertise in ATV operation and in field work to accomplish the tasks without assistance. They discussed a route to follow and agreed that the employee would return to the office by 1600 to 1630. The employee departed for the Coon Hollow area and no further contact was established.

At approximately 1615, the supervisor noted that the employee had not returned from the field nor had he established contact. The supervisor began a radio and telephone search and when no contact had been established by 1730, he began notifying Field Office management. The supervisor also began enlisting personnel for a search operation. The Mesa County Sheriff's Office was notified and the county Search and Rescue organization was put on standby.

Search parties were dispatched to the Coon Hollow area and began searching at approximately 2030. The employee's truck was located at 2120. Approximately one hour later at 2224, the employee was found pinned under the ATV he had been operating. After a first aid assessment, the employee was presumed to be deceased and notification was made to the search parties and Mesa County Sheriff personnel. Two search individuals remained to secure the accident site while the rest converged at the location where the truck had been found.

Mesa County Deputies, as well as a body recovery team, arrived onsite at approximately 0200 on August 3, and assumed control of the scene. They photographed the scene, position of the body, and equipment.

Upon notification, BLM activated a Serious Accident Investigation Team (SAIT) which was immediately dispatched to Grand Junction. The SAIT conducted the investigation in accordance with 485 DM Chapter 7, the results of which are summarized in this document.

Cause of death: Positional asphyxiation.

LESSONS LEARNED

Contributing Factors:

This accident resulted from a combination of numerous factors. Contributing factors include the following:

1. The terrain on which the employee was operating pushed the limits of the ATV.
2. The rocky, steep and uneven terrain.
3. Employee's lack of ATV training.
4. The throttle response affected the safe operation of the ATV and its center of gravity, possibly lifting the front end when attempting to accelerate over the large rock in the trail.
5. The location of the shifter-lever could require the operator, when operating on inclines, to shift the body towards the rear of the machine in order to access the shifter-lever and change gears, thus affecting the center of gravity of the machine.
6. The employee's body position on the ATV may have caused a shift in the center of gravity of the machine, thus causing it to tip over backwards, tumbling down the hill and coming to rest on the employee.
7. The propensity of the ATV to free-wheel when no pressure is applied to the throttle.
8. Lack of supervisory controls. Lack of a completed Risk Assessment or JHA.

SAIT Recommendations:

1. Provide ATV-specific training to all affected employees, to include refresher training and training when new equipment is introduced into the workplace.
2. Inform all BLM offices of the hazards associated with "free-wheeling" and the findings of the ATV investigation.
3. Conduct and document all required risk assessments and personal protective equipment assessments.
4. Assign one employee to be responsible for all service and maintenance of the ATVs.
5. Implement a daily inspection program.

6. Implement a scheduled maintenance program based on the recommendations of the equipment manufacturer.
7. Update current BLM policy to require either of the following:
 - a. Two-person system when operating ATV's in remote locations, or
 - b. Ensure there is frequent communication between BLM employees in remote locations and local dispatch.
8. Due to the difficulty in shifting the transmission from HIGH RANGE to LOW RANGE or into REVERSE, this ATV (year, make and model) must be removed from service immediately.