



In-Station Training

TM 24-45 Off-Road Jeep Rollover Accident



Author

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Purpose

There is limited data on off-road rollover accidents involving sport utility vehicles. However, highway accident data analyzed by the National Highway Transportation Safety Administration (NHTSA) indicates that “Rollover crashes still comprise a disproportionately large number of highway fatalities. Although they account for only three percent of vehicles in crashes, they lead to approximately one-third of all occupant deaths” (NHSTA, 2011, p. iii). Rollovers present injury or fatality potential.

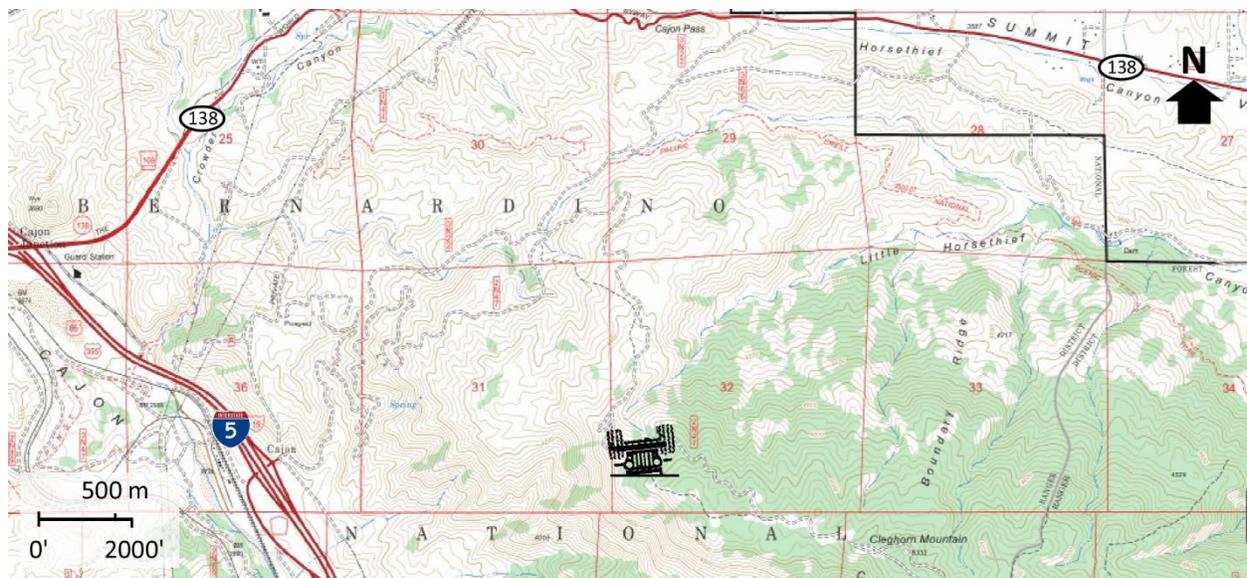
Learning Outcomes

Firefighters and officers perform an effective size-up, select an appropriate strategy, and implement tactics based on the strategic decision-making model when operating at vehicle accidents.

Conducting the Drill

This incident involved a single vehicle rollover accident on Forest Service Road 2N47 in San Bernardino County, CA on January 13, 2024, at 10:45 (San Bernardino County Fire Department, 2024 & Sweeney, 2024). Review the map and photos (Figures 1-4) to gain an understanding of the area of the incident.

Figure 1. Map of the Incident Area



Note: Adapted from SARTOPO. (2024). [US Forest Service topo 2026 (green)]. <https://bit.ly/3NxAtMJ>.

Figure 2. Aerial View



Note: Adapted from Google. (2024). [Aerial view Cleghorn Ridge OHV Road 2N47, Phelan, CA]. <https://bit.ly/3UffDWc>.

Figure 3. Forest Service Road 2N47 (representative conditions)



Note: Adapted from Haghighi, J. (2024). Cleghorn Ridge OHV Road: I-15 to Highway 138 at Silverwood Lake. <https://bit.ly/4faNxU7>.

Figure 4. Forest Service Road 2N47 (representative conditions)



Note: Adapted from Trails Offroad. (2024). 2N47 - Cleghorn Ridge, California | Offroad Trail Guide & Map. <https://bit.ly/405DGe5>.

The temperature is currently 52° F with no appreciable wind from the north (Weather Underground, 2024). You have been dispatched along with an engine (type one), medic unit, and command officer to the Summit OHV Staging Area off Route 138 for a rollover accident with entrapment on Forest Service Road 2N47 approximately 3 miles south of the OHV Staging. You are the company officer or AIC of the first arriving squad (four-wheel drive, type six engine) and have your company's typical staffing.

You hear a command officer (four-wheel drive vehicle), an engine, and an advanced life support (ALS) ambulance with typical staffing for your agency go enroute. You will arrive at the ORV Staging Area from the north on Cleghorn Road. The engine and ALS ambulance will arrive from the same direction six minutes after you. The command officer will arrive shortly after the engine. Any additional resources on the initial alarm or requested while enroute will arrive after the command officer.

1. What critical factors would you consider when dispatched and during response, what additional resources would you request (if any) and what conversations would you have with your crew?

Dispatch provides an update that the reporting party will flag you down at the Summit ORV Staging Area. You arrive at the staging area and the reporting party indicates that the best access to the accident is to go south on Cleghorn Road and to turn east on 2N47 with the accident on a side trail approximately 3 miles south of the ORV Staging Area just after several sharp turns in the trail.

Driving East on 2N47 you locate the incident and observe the conditions illustrated in Figure 5.

Figure 5. Conditions on Arrival



Note: Adapted from San Bernardino County Fire Department. (2024). *One rescued from Cajon Pass area off-road rollover* [Facebook post]. Retrieved October 20, 2024, from <https://bit.ly/3YcovwX>.

2. State your initial radio report (IRR) exactly as you would transmit it to dispatch.

3. What specific actions would you take (as the company officer) immediately upon arrival and exiting the apparatus and what task orders you would give your crew?

Initial reconnaissance determines that the driver is conscious with a respiratory rate of over 30 and he is trapped under the vehicle.

4. Would you change the action you are taking or modify the assignments given to your crew? If so, what task orders would you provide?

5. State your update report exactly as you would transmit it to dispatch.

6. Engine 2 and Medic 2 arrive and report that they are Level 1 ORV Staging Area. State the tactical assignment you would give them exactly as you would transmit it.

7. Based on the anticipated effectiveness of your tactical operations, state your conditions, actions, and needs (CAN) report that you would provide to the first arriving command officer as part of command transfer to IC #2.

This incident presented significant logistical issues due to terrain and distance from the ORV Staging Area as well as tactical requirements for stabilization, extrication, patient care, and rapid transport.

8. What actions did you take prior to arrival to address the potential logistical issues presented by this incident?

9. How did you approach stabilization and lifting of the vehicle to extricate the patient?

10. What was your plan for transportation of the patient to a trauma center?

Additional Learning: Identify locations within your response area that may present similar logistical challenges to rescue operations. Discuss how you will approach responses for technical rescue incidents in these locations. For East County Fire and Rescue Members, this would include the Jones Creek ORV Area/[Yacolt Burn State Forest Motorized Trails](#) (WA DNR, 2023).

References

- Google. (2024). [Aerial view Cleghorn Ridge OHV Road 2N47, Phelan, CA]. Retrieved October 20, 2024, from <https://bit.ly/3UffDWc>.
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- Trails Offroad. (2024). *2N47 - Cleghorn Ridge, California | Offroad Trail Guide & Map*. Retrieved October 20, 2024, from <https://bit.ly/405DGe5>.
- Washington Department of Natural Resources (WA DNR). (2023). *Yacolt Burn State Forest Motorized Trails* [map]. Retrieved October 20, 2024, from <https://bit.ly/4eahrXX>.
- Weather Underground (2022). *San Bernardino, CA weather history* [historical weather January 13, 2024]. Retrieved October 20, 2024, from <https://bit.ly/4dSfNdi>.