

Electronic News Gathering Camera and Live Truck Safety Fact Sheet

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Living in an information-driven society has put more importance on the gathering of news and gathering it quickly. To help gather news, the industry uses electronic news-gathering (ENG) camera systems. These cameras can be carried to almost any location and vantage point. Unfortunately, ENG cameras and the associated microwave-based vehicles and satellite uplink vehicles, known as “live” trucks, can pose safety risks if not handled properly.



Camera Risk Factors

Television news has changed dramatically in the past few decades, largely due to a type of ENG, known as digital satellite news gathering (DSNG). As the use of digital technologies and satellite transmission has grown, on-location broadcasting equipment has become more portable. However, the following safety considerations remain:

- **Safe lifting.**
When handling cameras and equipment, practice safe lifting techniques. Place the camera close to your body, use your knees to squat and lift, and tighten your abdominal muscles. Avoid lifting the camera at arm's length.
- **Balance and support.**
Carry a tripod in your other hand to provide balance when carrying a camera. Whenever possible, place the camera on a supporting surface or

tripod to reduce strain on muscles and connective tissues.

- **Environmental awareness.**
Be aware of your surroundings and practice safety when reaching the site of a news event, especially in natural disasters or catastrophe situations. Choose structures carefully for camera vantage points, watching for slip and trip hazards and ensuring the structures can bear your weight.
- **Avoid ladders.**
Never use ladders as a filming location. Carrying the camera prevents maintaining three points of contact on the ladder. This can lead to falls and injuries.
- **Physical conditioning.**
Regular exercise, including shoulder-strengthening exercises and stretches, can help condition a camera operator's upper body and lower back. Consult a doctor and seek advice from a trainer for appropriate exercises.

“Live” truck safety

Live trucks are used in ENG to transmit live audio and video signals from the field. These vehicles are equipped with technology that allows for real-time reporting, typically using microwave or satellite transmission. Hazards associated with these vehicles and ways to mitigate the risk of injury or death include:

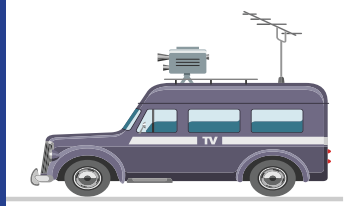
- **The need for safe driving practices.**
Live trucks do not have a license to exceed speed limits to get to a news scene quickly. These trucks have a lot of weight mounted high in their structures, so they do not handle well. The extra weight also means longer braking distances. Be aware of these facts as you drive. When you work in a location where you are exposed to moving traffic, wear a reflective vest in both daylight and nighttime conditions. Stay alert.
- **Operation and deployment of the mast.**
Install systems that allow mast control

from a distance using switches requiring constant pressure. This provides an overhead view during mast raising. Ensure proper:

- **Illumination.**
Equip the truck with high-intensity spotlights to locate overhead power lines and other obstructions. Illuminate the area above and around the mast before raising it.
- **Power line clearance.**
Maintain a safe distance of at least 10 feet from power lines. In case of a mast contacting a power line, stay inside the truck and call for help. Warn bystanders to maintain a safe distance. If the truck begins to burn, jump out with your feet pressed together without touching the ground with any other part of your body. Shuffle your feet until you get a safe distance.
- **Level Indicators.**
Install level indicators to ensure the truck is parked on level ground to



Courtesy Wikimedia Commons BBC HD SNG.jpg and MSH04 news media trucks at CVO office 10-02-04 med.jpg



prevent accidents caused by angled positioning.

- **Audio and visual indicators.**
Install indicators to warn against moving the vehicle while the mast is raised.
- **Regular inspections.**
Monthly inspections of the hydraulic pump that raises the mast should be conducted.
- **Weather conditions.**
Avoid operating the mast during thunderstorms or when lightning is visible or audible.
- **Site survey.**
Survey news sites regularly and identify safe parking spots for live trucks to minimize risks.
- **Potential exposure to radio-frequency (RF) energy from antennas.**
RF energy from antennas can be a hazard when using live trucks for electronic news gathering. RF energy is emitted by antennas and can be absorbed by the human body,

potentially causing harm. The main concern is the possibility of excessive RF exposure leading to adverse health effects, such as tissue heating or electrical shock. To mitigate this hazard, it is important to follow these safety guidelines:

- **Training and awareness.**
Personnel should receive training on the potential hazards of RF exposure and education on safety procedures when working in the vicinity of antennas.
- **Compliance with safety limits.**
Adherence to safety limits outlined in relevant safety codes, such as the Federal Communications Commission, is essential to mitigate the risks. These guidelines include limits on RF exposure levels and requirements for monitoring and controlling RF emissions.
- **Shielding and higher ground.**
Shielding the mobile radio behind a wall or large vehicle and finding higher ground can help reduce potential RF exposure.
- **Park strategically.**
Events may occur during live broadcasts – such as protests that turn violent or

changes in dangerous weather – which can create the need to leave or relocate immediately. In these situations, be prepared with the following:

- **Have an emergency exit plan.**
Before parking, ensure that you have a clear route to exit quickly if needed. Identify alternative routes and have a plan in place to navigate away from the area safely.
- **Stay aware of your surroundings.**
Keep a constant eye on the situation around you. Stay vigilant and monitor any changes in the crowd or the atmosphere. If you notice any signs of escalating tension or potential danger, be prepared to leave immediately.
- **Keep your keys accessible.**
Ensure that you have easy access to

your keys at all times. Keep them in a secure and easily accessible location to allow you to quickly enter your vehicle and leave if necessary.

- **Stay informed.**
Follow other reliable sources of information to stay updated on the latest developments and any unfolding potential risks that may be outside your viewing range. This will help you make informed decisions about when to leave and how to stay safe.
- **Trust your instincts.**
If you feel unsafe or uncomfortable at any point, trust your instincts and prioritize your safety. It is better to leave early or find a safer location than to risk your well-being.



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1-800-252-7031, Option 2

*The Texas Department of Insurance,
Division of Workers' Compensation (DWC)-Workplace Safety
P.O. Box 12050
Austin, TX 78711-2050*

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