

## A Preview of the ENG Truck Operations Course



### About the Author

This course was written for SBE by Mike Seaver, CBT. Mike Seaver has spent the past 50 years working in the Broadcast field. He has served in almost every capacity of the business, including 18 years as Regional Director of Engineering for a major television group. Seaver is a Certified Broadcast Technologist and serves as Vice Chairman of SBE Chapter 49. Currently he operates Seaver Management and Consulting Services of Quincy, Illinois.

Ed Williams, CPBE edited the course. Williams is a 30 plus year veteran of radio and TV broadcasting and has spent his career designing, building, renovating and rebuilding facilities of all kinds. He is currently the Director of Engineering for Meredith Corporation's station duopoly, KPTV-KPDX in Portland, Oregon. He also led the design and installation effort for Meredith's Phoenix Centralcasting Facility located at KPHO. He has been an SBE member since the early 1990's and has been certified for nearly 20 years.

### Introduction

This course, designed for non-technical personnel, covers the basics necessary to produce a safe, good quality field produced shot from both microwave based vehicles and satellite uplink vehicles. We begin with a concentration on safety, advance to the basics of microwave principles and operation, then on to audio, video, various IFB techniques, lighting basics, use of wireless microphones and some advanced applications.

By the conclusion of the course the participant should possess the basics required to set up a good live shot from the field and understand the safe practices involved in the application of typical remote news gathering equipment.

### Course Content

1. Course Introduction
2. Introduction to the Mobile Electronic News Gathering System
3. Safety
4. Vehicle and Systems Operational Checks
5. Audio
6. Video
7. IFB - Interruptible Fold Back
8. Lighting
9. Advanced Topics
10. Addendum - California OSHA Regulations

### Enrollment Information

SBE Member Price:	\$85
Non-Member Price:	\$85

### Introduction to the Mobile Electronic News Gathering System



photo courtesy of Frontline Communications

Each station's application for use of a mobile electronic news gathering (**ENG**) system is as varied as the stations themselves. Some use the systems for extensive live news event coverage, while others use the equipment for diverse applications such as sales events, sports coverage and community involvement. The applications for these vehicles are almost endless.

Each application has its own unique set of circumstances requiring an ENG operator to understand the different methods of achieving a quality production. Live, fast breaking news requires the operator to be able to send live information quickly and with the best production techniques possible in an almost immediate manner. Production of a planned event such as a sporting, community involvement or sales event may require a completely different approach. It's typically the responsibility of the ENG operator to understand the needs and differences between the methods and the equipment necessary to accomplish the production.

The application of mobile ENG equipment is actually based on several systems of which the operator should have a good understanding. They are:

- The vehicle (whether a car, truck, or other mobile vehicle)
- Microwave equipment (mast, antenna, etc.) or satellite equipment if applicable
- Production equipment including video/audio devices and associated hardware and cables. (Switchers, audio mixers, cameras, etc.)
- Intercoms/**IFB** systems
- Lighting and peripherals
- Electrical system (**generator**, **shore power**)

While an ENG vehicle operator may not be an expert in each of these areas, a basic understanding of each is required. The operator should have at least enough knowledge to understand the capabilities, limitations and nuances of each, as well as the proper use and care of these systems and hardware. Depending on the size and organization of each station, the care and equipping of the vehicle/systems may be accomplished by various departments and personnel, but the ultimate responsibility for producing the live shot falls on the ENG operator. It is typically the responsibility of the operator to ensure that all systems are operable and in good condition before using the equipment. This may require you to keep a log of all maintenance performed on each system. It may be the operator's duty to make certain that all preventive maintenance and other work have been successfully performed. It is also your responsibility as operator to report any abnormal operation of any system to the appropriate department and follow up to be certain that any and all repair and/or maintenance work has been successfully performed. A simple log or some other form of documentation might be a helpful aid in keeping track of such activity. Your local station will typically cover all of these topics during training on an actual vehicle.

Periodic testing of systems is strongly advised in order to verify proper operation. It is better to discover a faulty cable, light, or system when it is not needed than when you are at the scene of a story and the gear is needed and not functional. It is advisable to be proactive with regard to maintenance of equipment and systems, not reactive.

While it is beyond the scope of this course to address each unique circumstance in which you may be required to perform your duties, the material in this training should assist you in understanding and applying the various systems involved in mobile electronic newsgathering. In the next lesson we will discuss how to be safe while working with electronic newsgathering equipment.

Ultimately, the responsibility for proper ENG vehicle operation falls to:

- The Engineering Department
- The News Department
- The vehicle operator
- The General Manager

Station applications for ENG vehicles are:

- For electronic news gathering
- For sports coverage
- For commercial production
- Almost endless