



Point Fire Case Study

Instructor Guide

(adapted from PMS 419, BLM Engine Operator Training)

This case study is usually presented on the first morning of the Bureau of Land Management “Engine Operator” course. It incorporates all aspects of the BLM Engine Operator course into one case study. This case study gives the BLM students a feel for what they will be expected to know as Engine Operators.

The topics covered in the Point Fire case study naturally lead to discussion and participation by the students. It is important that the instructor focus the discussion on the engine operator’s role in the events. It is not the intent of the case study to find fault or place blame on the individuals involved, but to introduce the students to “real” situations that they could find themselves in during operation of fire department engines. Emphasis should be on what they would do if given a similar situation. Try to keep the discussion of advanced tactics or the finding of fault of an individual or individuals to a minimum.

I. Objectives: Reference and apply department and interagency policies related to engine operations.

Apply critical problem solving skills and training to hazardous situations involving the operation of a wildland engine.

II. Materials Needed: Television and VCR. Point Fire Case Study Video, NFES 2663 (from PMS 419 Engine Operator training.) One student handout per student. Engine or command vehicle as noted below.

III. Time Required: 1-½ to 2 hours.

IV. Instructor Preparation: Instructors should be given time to review and become familiar with the content of the case study. The content and presentation media used should be previewed closely. Additional background material can be found at www.coloradofirecamp.com/point-fire .

Before the class, park an engine or command vehicle near the classroom for use during the “tailgate briefing.” Instructor should wear all wildland personal protective equipment (PPE) during class. Instructor will give tailgate briefing as outlined below.

V. Suggested Student Preparation: Students should be informed to bring all wildland PPE to training session. As students arrive for class, advise them to don all

wildland PPE, including web gear and fire shelter, and meet for a “tailgate briefing” at designated vehicle.

(Note: Not all fire departments have wildland PPE, packs or fire shelters. Students should wear whatever gear they would normally use on a wildland response. This circumstance, similar to the Point Fire, can be addressed during the later discussions.)

VI. Presentation Of The Point Fire Case Study: A three-part video is used to aid in the presentation of this case study. In order to help the students identify with the people and events presented, the students will “suit up” as wildland firefighters and be given a tailgate briefing (about 5 minutes) to explain the following:

- The intent of the case study is to learn from a tragic event and apply those lessons to your fire department.
- The general assignment for everyone is to watch 3 short video segments, read a brief overview, study a series of maps, and actively participate in discussions.
- One student will be given responsibility for personnel accountability, to record names of everyone in attendance, including those who arrive late or leave early.
- Another student will be assigned to provide a briefing to any students who arrive late to the training session. This briefing will include information given at the tailgate briefing and the highlights of the training thus far.
- There will be no breaks scheduled during the training. Students should be advised where snacks/refreshments can be found, as well as the restroom locations.
- Students (and the instructor) are expected to wear full PPE during the entire training. This includes helmet chinstraps properly secured and sleeves rolled down. Web gear and fire shelters may be taken off when the person is seated, but at a minimum, the shelter must be worn whenever leaving a chair (This simulates always wearing a shelter when exiting an engine.)
- Conclude the tailgate briefing by asking if anyone needs clarification on the preceding information and **what** assignments were given.

The students will watch the video (Part One) and write down in the Student Guide what they feel were problems or mistakes made by the engine operators in Engines 10 and 11 under the topics given. Students can follow along with the video by referring to maps on pages 5-8 of the student guide.

After stopping the video, allow the students a couple minutes to finish writing down

the mistakes they observed. The instructor will initiate discussion by selecting students to state their findings on each topic (involve the whole class). Allow 15 minutes for this discussion. The instructor needs to refer to the instructor's answer sheet to see if students are on track.

The topics to stress during student discussion should be:

- Communication
- Maintenance
- Driving
- Engine Protection
- Experience
- Troubleshooting
- Accident Investigation

The instructor should be aware that not all topics have been covered in Part One of the video.

- The events in this case study will lead to great discussion on why the individuals involved reacted to the situations as they did. This leads to speculation of thoughts and possible actions that will never be known. Focus all discussion to the facts as presented in the case study and the role of the engine operator.

Have the students now read the Point Fire overview in the Student Handout, beginning on page 2. This reading material matches what was presented in Part One of the video. Allow 10 minutes for reading.

Show Part Two of the video. Have the students fill in any additional information by writing in their Student Guide.

The instructor will again open up the class for discussion by selecting students to state their findings on each topic (involve the whole class). Allow about 15 minutes for this discussion. The instructor needs to refer to their answer sheet to see if students are on track and have completed all topic areas given.

Part Three of the video focuses on the 10 Fire Orders and 18 Watchout Situations. Allow about 10 minutes to discuss.

Conclude the training by asking if students now understand **why** the tailgate briefing was held and special assignments given.

Point Fire Case Study

Answer Sheet

This case study describes the actions and events that occurred during a double-fatality wildfire in southwestern Idaho on July 28, 1995. Mistakes were made by both agency and cooperators. In this case study we are looking at the mistakes made by the cooperators' Engines 10 and 11. The students need to key in on the actions of the engine operators (ENOP) in Engine 10 and 11, but keep in mind the actions of the other engines. The mistakes should be grouped and written under the seven topic items.

I. COMMUNICATION

Book Answers:

Internal - As an ENOP, the passing of information among crew members and crew leaders is crucial for safe and efficient operations.

- Did not follow orders
- Did not communicate actions with supervisor or adjoining forces

External - An ENOP must be able to communicate effectively with adjoining forces and cooperators. If a communication link has not been established, an ENOP has the responsibility to establish communications with any forces within their area of responsibility.

- No communications established with cooperators (BLM)
- Did not alert IC of status or request orders

II. MAINTENANCE

Book Answers:

An ENOP must know their engine inside and out. It is a requirement that all ENOPs understand and use the Fire Engine Maintenance Procedure and Record Book as outlined in the Standard for Fire and Aviation Operations. This book allows the ENOP to track maintenance schedules and trends with their engine and pump package. It is the ENOP's responsibility to insure that routine maintenance is completed and documented on this form.

- Their engine had a history of breaking down.
- No records were kept of maintenance or repair to the engine.

- The engine was never taken out of service or fixed, even though it consistently overheated in fire situations.

III. DRIVING

Book Answers:

The responsibilities of the ENOP during off-road driving situations is to minimize hazards to the crew and equipment and complete the assignment.

- Such as driving through heavy vegetation, which limits visibility and exposes the engine cooling system to debris, which resulted in engine failure.

IV. ENGINE PROTECTION

Book Answers:

In the event of a potential burnover, and/or entrapment, an ENOP should be prepared to protect personnel and equipment. The ENOP is responsible for ensuring that the engine is capable of providing a means of safety to personnel by having an emergency water supply (10% of total pumpable capacity) and an adequate protection line. It is the responsibility of the ENOP to train and brief module members on tactics used during an engine entrapment.

- There were no protection lines available on the engine.
- There was no water left in tank for emergency use.
- There was no training done on wildland entrapments.
- The crew was not issued the proper wildland PPE including fire shelters.

V. EXPERIENCE

Book Answers:

The ENOP must only operate within their qualifications and training. The ENOP is responsible for ensuring module members are performing duties commensurate to their qualifications and training.

- The engine operator was acting outside the scope of his or her training.
- This crew was very inexperienced with only 1.5 years of fire fighting combined among the crew.
- The engine module only had 5 hours of wildland fire training each.
- Several of the 18 watch out situations were ignored.
- Seven of the 10 standard fire orders were broken.

VI. TROUBLESHOOTING

Book Answers:

Understanding basic troubleshooting concepts of the engine and pump package gives the ENOP the ability to perform emergency field repair.

- The engine operator did not have the basic troubleshooting skills needed by an engine operator.
- The engine operator had to be told to clean the screen on the radiator.

VII. ACCIDENT INVESTIGATION

Book Answers:

An ENOP must understand his or her role in the investigation process in the event of a serious fire entrapment or fatality. This includes documentation of events with corresponding times. It is important to preserve the accident scene for investigation purposes.

- Some personnel did not give a written statement of the incident for approximately one week.
- The accident scene was disturbed before the investigating team arrived.
- The burnt engine was removed from the scene.