

## **S-244 Field Observer/Fire Effects Monitor**

### *Self-Study Learning Objectives*

#### **Unit 1. FOBS/FEMO Roles and Responsibilities**

Students will be able to:

1. Define the roles of the Field Observer or Fire Effects Monitor within the Incident Command System (ICS).
2. Demonstrate the responsibilities of the Field Observer or Fire Effects Monitor.
3. List contents of kit.
4. Describe the elements of monitoring required by the Interagency Prescribed Fire Implementation Plan.
5. Describe the rationale for monitoring on a wildfire.
6. Describe the relationship between strategic objectives from Land Management, Resource Management and/or Fire Management Plans and the incident/project objectives
7. Describe relationship between management objectives and monitoring protocols.
8. Document observations of weather, fire behavior, smoke production and fire effects using existing forms.
9. Document the comparison of predicted fire behavior, fire effects, and weather to observed.
10. Describe in narrative format how closely wildland fire management objectives were met.
11. Document follow-up actions as needed.

#### **Unit 2. Mapping & Navigation**

1. Demonstrate the ability to navigate by pacing and using a compass.
2. Demonstrate the ability to navigate using a GPS receiver.
3. Demonstrate the ability to orient and interpret maps.
4. Demonstrate the ability to produce accurate, legible field maps and notes.

#### **Unit 3. Environmental Observations**

1. Demonstrate the ability to observe and document fire behavior factors.
2. Demonstrate the ability to observe, document, and immediately report extreme fire behavior.
3. Describe how environmental characteristics influence fuel moistures.
4. Describe how accuracy of fuel moisture measurements affects outputs of Fire Behavior Prediction Systems.
5. Describe how to determine the sample strategy for fuel moisture sampling.
6. Describe methods to measure fuel moisture in dead and live fuels, including soil, duff and litter.

#### **Unit 4. Fire Effects Monitoring**

1. Describe fire effects including burn pattern, fuel loading and consumption, burn severity, plant mortality, scorch height, depth of burn, water quality and property damage and methods to measure and document them.
2. Describe fuel loading and photomonitoring protocols to be used in measuring fire effects.
3. Describe variability in fire behavior and fire effects with respect to space and time (seasonal and diurnal).
4. Describe smoke dispersal observation, measurement and documentation protocols.