



NWCG Task Book for the Position of:
FIRE EFFECTS MONITOR
(FEMO)

**(POSITION PERFORMANCE REQUIRED ON A WILDLAND
FIRE ASSIGNMENT)**

PMS 311-71

MAY 2008

Task Book Assigned To:

Trainee's Name: _____

Home Unit/Agency: _____

Home Unit Phone Number: _____

Task Book Initiated By:

Official's Name: _____

Home Unit Title: _____

Home Unit/Agency: _____

Home Unit Phone Number: _____

Home Unit Address: _____

Date Initiated: _____

**Verification/Certification of Completed Task Book
for the Position of:**

FIRE EFFECTS MONITOR

Final Evaluator's Verification

*To be completed **ONLY** when you are recommending the trainee for certification.*

I verify that (trainee name) _____ has successfully performed as a trainee by demonstrating all tasks for the position listed above and should be considered for certification in this position. All tasks are documented with appropriate initials.

Final Evaluator's Signature: _____

Final Evaluator's Printed Name: _____

Home Unit Title: _____

Home Unit/Agency: _____

Home Unit Phone Number: _____ Date: _____

Agency Certification

I certify that (trainee name) _____ has met all requirements for qualification in the above position and that such qualification has been issued.

Certifying Official's Signature: _____

Certifying Official's Printed Name: _____

Title: _____

Home Unit/Agency: _____

Home Unit Phone Number: _____ Date: _____

Additional copies of this publication are available through:
NWCG, Publications Management System at <http://www.nwcg.gov/pms/taskbook/taskbook.htm>

NATIONAL WILDFIRE COORDINATING GROUP (NWCG) POSITION TASK BOOK

NWCG Position Task Books (PTBs) have been developed for designated National Interagency Incident Management System (NIIMS) positions. Each PTB lists the competencies, behaviors and tasks required for successful performance in specific positions. Trainees must be observed completing all tasks and show knowledge and competency in their performance during the completion of this PTB.

Trainees are evaluated during this process by qualified evaluators, and the trainee's performance is documented in the PTB for each task by the evaluator's initials and date of completion. An Evaluation Record will be completed by all evaluators documenting the trainee's progress after each evaluation opportunity.

Successful performance of all tasks, as observed and recorded by an evaluator, will result in a recommendation to the agency that the trainee be certified in that position. Evaluation and confirmation of the trainee's performance while completing all tasks may occur on one or more training assignments and may involve more than one evaluator during any opportunity.

INCIDENT/EVENT CODING

Each task has a code associated with the type of training assignment where the task may be completed. The codes are: O = other, I = incident, WF = wildland fire, W = wildfire, RX = prescribed fire, WFU = wildland fire use, and R = rare event. The codes are defined as:

- O = Task can be completed in any situation (classroom, simulation, daily job, incident, prescribed fire, etc.).
- I = Task must be performed on an incident managed under the Incident Command System (ICS). Examples include wildland fire, structural fire, oil spill, search and rescue, hazardous material, and an emergency or non-emergency (planned or unplanned) event.
- WF = Task must be performed on a wildland fire incident (the term *wildland fire* includes wildfire/W, prescribed fire/RX, or wildland fire use/WFU).
- W = Task must be performed on a wildfire incident.
- RX = Task must be performed on a prescribed fire incident.
- WFU = Task must be performed on a wildland fire use incident.
- R = Rare events such as accidents, injuries, vehicle or aircraft crashes occur infrequently and opportunities to evaluate performance in a real setting are limited. The evaluator should determine, through interview, if the trainee would be able to perform the task in a real situation.

While tasks can be performed in any situation, they must be evaluated on the specific type of incident/event for which they are coded. For example, tasks coded W must be evaluated on a wildfire; tasks coded WFU must be evaluated on wildland fire use, and so on. Performance of any task on other than the designated assignment is not valid for qualification.

Tasks within the PTB are numbered sequentially; however, the numbering does NOT indicate the order in which the tasks need to be performed or evaluated.

The bullets under each numbered task are examples or indicators of items or actions related to the task. The purpose of the bullets is to assist the evaluator in evaluating the trainee; the bullets are not all-inclusive. Evaluate and initial ONLY the numbered tasks. DO NOT evaluate and initial each individual bullet.

A more detailed description of this process and definitions of terms are included in the *Wildland Fire Qualification System Guide*, PMS 310-1. This document can be found at <http://www.nwcg.gov/pms/docs/docs.htm>.

RESPONSIBILITIES

The responsibilities of the Home Unit/Agency, Trainee, Coach, Training Specialist, Evaluator, Final Evaluator and Certifying Official are identified in the *Wildland Fire Qualification System Guide*, PMS 310-1. It is incumbent upon each of these individuals to ensure their responsibilities are met.

INSTRUCTIONS FOR THE POSITION TASK BOOK EVALUATION RECORD

Evaluation Record #

Each evaluator will need to complete an evaluation record. Each evaluation record should be numbered sequentially. Place this number at the top of the evaluation record page and also use it in the column labeled "Evaluation Record #" for each numbered task the trainee has satisfactorily performed.

Trainee Information

Print the trainee's name, position on the incident/event, home unit/agency, and the home unit/agency address and phone number.

Evaluator Information

Print the Evaluator's name, position on the incident/event, home unit/agency, and the home unit/agency address and phone number.

Incident/Event Information

Incident/Event Name: Print the incident/event name.

Reference: Enter the incident code and/or fire code.

Duration: Enter inclusive dates during which the trainee was evaluated.

Incident Kind: Enter the kind of incident (wildfire, prescribed fire, wildland fire use, search and rescue, flood, hurricane, etc.).

Location: Enter the geographic area, agency, and state.

Management Type or Prescribed Fire Complexity Level: Circle the ICS organization level (Type 5, Type 4, Type 3, Type 2, Type 1, Area Command) or the prescribed fire complexity level (Low, Moderate, High).

Fire Behavior Prediction System (FBPS) Fuel Model Group: Circle the Fuel Model Group letter that corresponds to the predominant fuel type in which the incident/event occurred.

G = Grass Group (includes FBPS Fuel Models 1 – 3):

1 = short grass (1 foot); 2 = timber with grass understory; 3 = tall grass (1½ - 2 feet)

B = Brush Group (includes FBPS Fuel Models 4 – 6):

4 = Chaparral (6 feet); 5 = Brush (2 feet); 6 = dormant brush/hardwood slash;

7 = Southern rough

T = Timber Group (includes FBPS Fuel Models 8 – 10)

8 = closed timber litter; 9 = hardwood litter; 10 = timber (with litter understory)

S = Slash Group (includes FBPS Fuel Models 11 – 13)

11 = light logging slash; 12 = medium logging slash; 13 = heavy logging slash

Evaluator’s Recommendation

For 1 – 4, initial only one line as appropriate; this will allow for comparison with your initials in the Qualifications Record.

Record additional remarks/recommendations on an Individual Performance Evaluation, or by attaching an additional sheet to the evaluation record.

Evaluator’s Signature

Sign here to authenticate your recommendations.

Date

Document the date the Evaluation Record is being completed.

Evaluator’s Relevant Qualification (or agency certification)

List your qualification or certification relevant to the trainee position you supervised.

Note: Evaluators must be either qualified in the position being evaluated or supervise the trainee; Final Evaluators must be qualified in the trainee position they are evaluating.

Fire Effects Monitor (FEMO)

Competency: Assume position responsibilities.

Description: Successfully assume role of Fire Effects Monitor and initiate position activities at the appropriate time according to the following behaviors.

TASK	C O D E	EVAL. RECORD #	EVALUATOR: Initial & date upon completion of task
Behavior: Ensure readiness for assignment.			
1. Obtain and assemble information and materials needed for kit.	O		
2. Obtain complete information from dispatch upon assignment. <ul style="list-style-type: none"> • <i>Incident name</i> • <i>Incident order number</i> • <i>Request number</i> • <i>Incident phone number</i> • <i>Reporting time</i> • <i>Reporting location</i> • <i>Transportation arrangements/travel routes</i> • <i>Contact procedures during travel (telephone/radio)</i> • <i>Current situation</i> • <i>Expected duration of assignment</i> 	O		
3. Arrive at incident and check in. <ul style="list-style-type: none"> • <i>Arrive properly equipped at assigned location within acceptable time limits.</i> 	I		
Behavior: Ensure availability, qualifications, and capabilities of resources to complete assignment.			
4. Obtain appropriate work materials, supplies, and equipment to complete assignment. <ul style="list-style-type: none"> • <i>Order supplies using established procedures.</i> 	I		

Evaluate the numbered tasks ONLY. DO NOT evaluate bullets; they are provided as examples/additional clarification.

Fire Effects Monitor (FEMO)

TASK	C O D E	EVAL. RECORD #	EVALUATOR: Initial & date upon completion of task
Behavior: Gather, update, and apply situational information relevant to the assignment.			
5. Obtain initial briefing from assignment supervisor. <ul style="list-style-type: none"> • <i>Organizational structure</i> • <i>Weather</i> • <i>Fire behavior</i> • <i>Communications</i> • <i>Resources</i> • <i>Safety</i> 	I		
6. Review agency wildland fire procedures, policies and regulations related to position. <ul style="list-style-type: none"> • <i>Conversations with supervisor.</i> • <i>Reading appropriate agency manuals and handbooks.</i> 	O		
Behavior: Establish effective relationships with relevant personnel.			
7. Conduct self in a professional manner. <ul style="list-style-type: none"> • <i>Respectful and courteous.</i> • <i>Respectful of public and private property.</i> 	I		
8. Establish and maintain positive interpersonal and interagency working relationships.	I		
Behavior: Understand and comply with ICS concepts and principles.			
9. Apply the ICS. <ul style="list-style-type: none"> • <i>Follow chain of command.</i> • <i>Maintain appropriate span of control.</i> • <i>Use appropriate ICS forms.</i> • <i>Use appropriate ICS terminology.</i> 	I		

Evaluate the numbered tasks ONLY. DO NOT evaluate bullets; they are provided as examples/additional clarification.

Fire Effects Monitor (FEMO)

Competency: Communicate effectively.

Description: Use suitable communication techniques to share relevant information with appropriate personnel on a timely basis to accomplish objectives in a rapidly changing, high risk environment

TASK	C O D E	EVAL. RECORD #	EVALUATOR: Initial & date upon completion of task
Behavior: Ensure relevant information is exchanged during briefings and debriefings.			
10. Identify the roles and responsibilities of the Fire Effects Monitor on the incident.	WF		
Behavior: Ensure documentation is complete and disposition is appropriate.			
11. Document first order fire effects related to fire treatment objectives. <ul style="list-style-type: none"> • <i>Burn pattern</i> • <i>Fuel loadings and consumption</i> • <i>Burn severity</i> • <i>Plant mortality</i> • <i>Scorch height</i> • <i>Depth of burn</i> • <i>Hydrophobicity</i> • <i>Air quality</i> • <i>Water quality</i> • <i>Historic property damage</i> 	WF		
12. Document observed fire behavior and effects. <ul style="list-style-type: none"> • <i>Compare observed fire behavior and effects, with planned or anticipated effects.</i> • <i>Describe in narrative format how well wildland or prescribed fire objectives were met.</i> 	WF		
Behavior: Gather, produce and distribute information as required by established guidelines and ensure understanding by recipient.			
13. Plot the burn area and perimeter on a map.	WF		

Evaluate the numbered tasks ONLY. DO NOT evaluate bullets; they are provided as examples/additional clarification.

Fire Effects Monitor (FEMO)

TASK	C O D E	EVAL. RECORD #	EVALUATOR: Initial & date upon completion of task
14. Communicate effectively with supervisor, fire operations staff, and as appropriate, crew members and adjoining forces. <ul style="list-style-type: none"> • <i>Advise supervisor of monitoring progress and results, equipment problems, safety of assigned personnel.</i> • <i>Request assistance to meet monitoring objectives.</i> • <i>Advise crew members of potential or impending safety hazards.</i> • <i>Inform crew members of appropriate mitigation actions (e.g., posting of lookouts, identification of safety zones and escape routes).</i> 	WF		
15. Characterize and report the range of variability of first order fire effects due to changes in fire behavior.	WF		

Evaluate the numbered tasks ONLY. DO NOT evaluate bullets; they are provided as examples/additional clarification.

Fire Effects Monitor (FEMO)

Competency: Ensure completion of assigned actions to meet identified objectives.

Description: Identify, analyze, and apply relevant situational information and evaluate actions to complete assignments safely and meet identified objectives. Complete actions within established timeframe.

TASK	C O D E	EVAL. RECORD #	EVALUATOR: Initial & date upon completion of task
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Behavior: Gather, analyze, and validate information pertinent to the incident or event and make recommendations for setting priorities.

16. Review the monitoring plan prior to implementation and communicate concerns to supervisor. <ul style="list-style-type: none"> • <i>Components for operational standards, timeliness, and available resources.</i> • <i>Expected monitoring intensity, required documentation with respect to fire behavior, and expected fire effects.</i> • <i>Relationship of the prescription factors, burn objectives, and monitoring plan.</i> • <i>Potential safety hazards as they relate to the collection of monitoring data.</i> • <i>Smoke management requirements.</i> 	WF		
17. Monitor, obtain, and record weather data. <ul style="list-style-type: none"> • <i>Recognize the differences among general, local and convective winds on a fire management operation.</i> • <i>Identify, observe and record appropriate weather data such as mid-flame wind speed, wind direction, relative humidity and other characteristics that influence fire behavior.</i> • <i>Document rationale for selection of suitable weather sampling site(s).</i> 	WF		
18. Monitor and record fire behavior data throughout the fire management operation. <ul style="list-style-type: none"> • <i>Observe and record appropriate fire behavior characteristics, such as rate of spread, flame length, residence time.</i> 	WF		
19. Recon burn unit or assigned area.	WF		

Evaluate the numbered tasks ONLY. DO NOT evaluate bullets; they are provided as examples/additional clarification.

Fire Effects Monitor (FEMO)

TASK	C O D E	EVAL. RECORD #	EVALUATOR: Initial & date upon completion of task
20. Monitor and record smoke management information. <ul style="list-style-type: none"> • <i>Recognize and report emission problems.</i> • <i>Maintain communications with the National Weather Service, weather observers, lookouts.</i> • <i>Identify smoke characteristics, including inversions, wind sheared columns, direction of smoke flow, and smoke impacts to sensitive sites.</i> 	WF		
21. Collect appropriate fuel, soil, and vegetation samples for later moisture analysis. <ul style="list-style-type: none"> • <i>Observe and record land and vegetation data influencing fire behavior (e.g., slope, aspect, shading, crown cover, tree height).</i> 	WF		
<p>Behavior: Prepare clear and concise assessments regarding hazards, hazard behavior, weather, and other relevant events.</p>			
22. Recognize and report atmospheric characteristics that influence fire behavior. <ul style="list-style-type: none"> • <i>Fire whirls, their causes, and associated fire control problems.</i> • <i>Winds associated with thunderstorm cells and their effect on fire depending on location and direction of passage.</i> • <i>Wind speed changes and direction shifts associated with cold front passage and the effects on fire behavior.</i> 	WF		
<p>Behavior: Follow established procedures and/or safety procedures relevant to given assignment.</p>			
23. Conduct monitoring operations according to the Standard Fire Orders, Watch Out Situations, LCES (Lookouts, Communications, Escape Routes, Safety Zones) principles, prescribed fire plan and agency specific policies and standards. <ul style="list-style-type: none"> • <i>Location of established safety zones and escape routes.</i> • <i>Fire behavior and safety hazards which endanger personnel.</i> 	WF		

Evaluate the numbered tasks ONLY. DO NOT evaluate bullets; they are provided as examples/additional clarification.

Fire Effects Monitor (FEMO)

TASK	C O D E	EVAL. RECORD #	EVALUATOR: Initial & date upon completion of task
Behavior: Plan for demobilization and ensure demobilization procedures are followed.			
24. Demobilize and check out. <ul style="list-style-type: none"> • <i>Receive demobilization instructions from incident supervisor.</i> • <i>If required, complete ICS 221, Demobilization Checkout and submit completed form to the appropriate person.</i> 	I		

Evaluate the numbered tasks ONLY. DO NOT evaluate bullets; they are provided as examples/additional clarification.

Trainee Information

Printed Name:
 Trainee Position on Incident/Event:
 Home Unit/Agency:
 Home Unit /Agency Address and Phone Number:

Evaluator Information

Printed Name:
 Evaluator Position on Incident/Event:
 Home Unit/Agency:
 Home Unit /Agency Address and Phone Number:

Incident/Event Information

Incident/Event Name: _____ Reference (Incident Number/Fire Code): _____
 Duration: _____
 Incident Kind: Wildfire, Prescribed Fire, Wildland Fire Use, All Hazard, Other (specify): _____
 Location (include Geographic Area, Agency, and State): _____
 Management Type (circle one): Type 5, Type 4, Type 3, Type 2, Type 1, Area Command
OR Prescribed Fire Complexity Level (circle one): Low, Moderate, High
 FBPS Fuel Model Letter: G = Grass, B = Brush, T = Timber, S = Slash

Evaluator's Recommendation
 (Initial only one line as appropriate)

- _____ **1)** The tasks initialed and dated by me on the Qualification Record have been performed under my supervision in a satisfactory manner. The trainee has successfully performed all tasks in the PTB for the position. I have completed the Final Evaluator's Verification section and recommend the trainee be considered for agency certification.
- _____ **2)** The tasks initialed and dated by me on the Qualification Record have been performed under my supervision in a satisfactory manner. However, opportunities were not available for all tasks (or all uncompleted tasks) to be performed and evaluated on this assignment. An additional assignment is needed to complete the evaluation.
- _____ **3)** The trainee did not complete certain tasks in the PTB in a satisfactory manner and additional training, guidance, or experience is recommended.
- _____ **4)** The individual is severely deficient in the performance of tasks in the PTB for the position and additional training, guidance, or experience is recommended prior to another training assignment.

Record additional remarks/recommendations on an Individual Performance Evaluation, or by attaching an additional sheet to the evaluation record.

Evaluator's Signature: _____ Date: _____

Evaluator's Relevant Qualification (or agency certification): _____

Trainee Information

Printed Name:
 Trainee Position on Incident/Event:
 Home Unit/Agency:
 Home Unit /Agency Address and Phone Number:

Evaluator Information

Printed Name:
 Evaluator Position on Incident/Event:
 Home Unit/Agency:
 Home Unit /Agency Address and Phone Number:

Incident/Event Information

Incident/Event Name: _____ Reference (Incident Number/Fire Code): _____
 Duration: _____
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- _____ **3)** The trainee did not complete certain tasks in the PTB in a satisfactory manner and additional training, guidance, or experience is recommended.
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Evaluator's Signature: _____ Date: _____

Evaluator's Relevant Qualification (or agency certification): _____