

NWCG Task Book for the Position of:

**WILDLAND FIRE INVESTIGATOR
(INVF)**



(POSITION PERFORMANCE REQUIRED ON A WILDFIRE ASSIGNMENT)

PMS 311-66

JUNE 2009

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: _____

The material contained in this book accurately defines the performance expected of the position for which it was developed. This task book is approved for use as a position qualification document in accordance with the instructions contained herein.

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

WILDLAND FIRE INVESTIGATOR

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/publications/position-taskbooks>

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, W = wildfire, RX = prescribed fire, W/RX = wildfire OR prescribed fire 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.
- W = Task must be performed on a wildfire incident.
- RX = Task must be performed on a prescribed fire incident.
- W/RX = Task must be performed on a wildfire OR prescribed fire 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 RX must be evaluated on prescribed fire 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/publications/310-1>.

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, 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.

Wildland Fire Investigator (INVF)

Competency: Assume position responsibilities.

Description: Successfully assume role of Wildland Fire Investigator 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. Demonstrate knowledge of investigative procedures and pertinent legal case law. <ul style="list-style-type: none"> • <i>NFPA 921</i> • <i>Merrill-Dow Pharmaceuticals vs. Daubert</i> • <i>Kumho Tire vs. Carmichael</i> 	O		
2. Obtain and assemble information and materials needed for kit. Suggested items: <ul style="list-style-type: none"> • <i>Forms and logs</i> • <i>Writing materials</i> • <i>Clipboard</i> • <i>Fire spread markers</i> • <i>Sketching/diagramming materials</i> • <i>Straight-edge ruler</i> • <i>Flagging/barrier tape</i> • <i>Strong magnet</i> • <i>Magnifying glass or 3x reading glasses</i> • <i>100' steel tapes</i> • <i>Compass</i> • <i>Belt weather kit</i> • <i>Camera/film/memory cards</i> • <i>Evidence tags/containers</i> • <i>Shovel</i> • <i>Gridding material</i> • <i>Reference point materials</i> 	O		

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

Wildland Fire Investigator (INVF)

TASK	C O D E	EVAL. RECORD #	EVALUATOR: Initial & date upon completion of task
3. 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>Complete ICS 260, Resource Order with special equipment needs</i> 	O		
4. Obtain safety equipment necessary for assignment. <ul style="list-style-type: none"> • <i>Personal protective equipment (PPE)</i> 	O		
5. 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: Gather, update, and apply situational information relevant to the assignment.			
6. Obtain 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		
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		

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

Wildland Fire Investigator (INVF)

TASK	C O D E	EVAL. RECORD #	EVALUATOR: Initial & date upon completion of task
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		

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Wildland Fire Investigator (INVF)

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. Participate in briefings and After Action Reviews (AAR).	I		
Behavior: Ensure documentation is complete and disposition is appropriate.			
11. Record observations and events from time of dispatch to initial arrival at fire scene. <ul style="list-style-type: none"> • <i>Dispatch information</i> • <i>Reporting party</i> • <i>Weather reports</i> • <i>Vehicles and people en route</i> • <i>Status of gates</i> • <i>Preserve tire and shoe impressions</i> • <i>Scene security</i> • <i>Witnesses/potential suspects</i> • <i>First fire unit on scene</i> • <i>Fire behavior, size, and direction of spread</i> • <i>Identify, preserve, and collect physical evidence</i> • <i>Land/property ownership</i> • <i>Unusual occurrences</i> 	W		
12. Document evidence relating to identified fire cause.	O		
13. Document and describe forensic services required for investigation.	O		
14. Document and display elements of the crime of wildland fire arson for your jurisdiction.	O		
15. Document and present common ignition sources, evidence, and indicators routinely encountered at the scene of an arson fire.	O		

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

Wildland Fire Investigator (INVF)

TASK	C O D E	EVAL. RECORD #	EVALUATOR: Initial & date upon completion of task
Behavior: Gather, produce and distribute information as required by established guidelines and ensure understanding by recipient.			
16. Provide statement describing why other ignition factors/causes relating to a wildfire need to be addressed and/or eliminated. <ul style="list-style-type: none"> • <i>Describe general environmental conditions required for ignition for each cause category.</i> • <i>Prepare to testify if needed.</i> 	O		

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

Wildland Fire Investigator (INVF)

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
Behavior: Administer and/or apply agency policy, contracts and agreements.			
17. Follow wildland fire investigation administrative and legal procedures.	O		
18. State the authority for specific agency/jurisdiction. <ul style="list-style-type: none"> • <i>Conduct fire investigations and seize evidence.</i> • <i>Enter upon lands.</i> • <i>Secure fire scenes.</i> 	O		
19. Apply laws, rules, and regulations applicable to agency/jurisdiction for wildland fire investigation.	O		
20. Apply administrative, civil, and criminal process(es) to wildland fire investigation in agency/jurisdiction.	O		
Behavior: Gather, analyze, and validate information pertinent to the incident or event and make recommendations for setting priorities.			
21. Collect fire weather data.	O		
22. Gather and record fire behavior observations relevant to determining fire origin and cause. <ul style="list-style-type: none"> • <i>Basic fuel components</i> • <i>Basic weather components</i> • <i>Basic topography components</i> • <i>Interrelationship of fire behavior components</i> • <i>Fire behavior effects on burn patterns</i> • <i>Fire behavior effects relevant to potential ignition sources</i> 	O		

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

Wildland Fire Investigator (INVF)

TASK	C O D E	EVAL. RECORD #	EVALUATOR: Initial & date upon completion of task
23. Conduct a systematic wildland fire investigation using the seven steps of scientific methodology. <ul style="list-style-type: none"> • <i>Recognize the need</i> • <i>Define the problem</i> • <i>Collect the data</i> • <i>Analyze the data</i> • <i>Develop a hypothesis</i> • <i>Test the hypothesis</i> • <i>Select final hypothesis</i> 	O		
24. Conduct investigative actions. <ul style="list-style-type: none"> • <i>Scene security</i> • <i>Witness interviewing</i> • <i>Origin search techniques</i> • <i>Evidence collection/processing</i> • <i>Photographic documentation</i> • <i>Sketching and diagramming</i> 	W		
25. Identify wildland fire arson indicators. <ul style="list-style-type: none"> • <i>Basic arson pattern recognition.</i> • <i>Special crime scene processing requirements for suspected arson incidents.</i> • <i>Agency's policy for notification and referral of suspected arson incidents.</i> 	O		

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

Wildland Fire Investigator (INVF)

TASK	C O D E	EVAL. RECORD #	EVALUATOR: Initial & date upon completion of task
Behavior: Prepare clear and concise assessments regarding hazards, hazard behavior, weather, and other relevant events.			
26. Monitor assignment for unsafe situations. <ul style="list-style-type: none"> • <i>Fire incident response</i> • <i>Initial arrival at incident</i> • <i>Initial arrival at fire origin area</i> • <i>Fire Operations and Standard Firefighting Orders</i> • <i>Natural hazards</i> • <i>Human caused hazards</i> • <i>Hazardous materials</i> • <i>Clandestine drug labs</i> • <i>Other criminal activity/hostile encounters</i> • <i>Railroads</i> • <i>Highway traffic</i> • <i>Power lines</i> • <i>Industrial operations</i> 	W		
Behavior: Utilize information to produce outputs.			
27. Document wildfire burn pattern indicators and wildland fire spread. <ul style="list-style-type: none"> • <i>Fire spread sketch/diagram</i> • <i>Basic indicator documentation</i> 	W		
28. Prepare an investigative report. <ul style="list-style-type: none"> • <i>Incident synopsis</i> • <i>Incident area description</i> • <i>Notification</i> • <i>Scene investigation</i> • <i>Subjects mentioned</i> • <i>Examination of origin</i> • <i>Findings</i> • <i>Address/eliminate other potential causes</i> • <i>Exculpatory evidence</i> • <i>Evidence summary</i> • <i>Interview summary</i> • <i>Supporting documentation</i> • <i>Photographic exhibits</i> • <i>Sketches/diagrams</i> 	W		

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

Wildland Fire Investigator (INVF)

TASK	C O D E	EVAL. RECORD #	EVALUATOR: Initial & date upon completion of task
29. Identify wildland fire burn pattern macro and micro indicators. <ul style="list-style-type: none"> • <i>“V” macro pattern</i> • <i>Degree of damage indicators</i> • <i>Angle of char/laddering/climbing</i> • <i>Grass stem indicators</i> • <i>Staining/sooting</i> • <i>Spalling</i> • <i>Ash indicators</i> • <i>Foliage freeze patterns</i> • <i>Cupping</i> • <i>Depth of char</i> • <i>Curling</i> • <i>Die out patterns</i> 	W		
30. Demonstrate the ability to present effective testimony. <ul style="list-style-type: none"> • <i>Pre-trial preparation</i> • <i>Courtroom demeanor</i> • <i>Qualifying as an expert witness</i> 	O		
31. Prepare a professional resume/curriculum vitae (CV).	O		
32. Track wildfire spread using fire burn pattern indicators. <ul style="list-style-type: none"> • <i>Identify head, backing, and transition zones.</i> • <i>Use visible markers to document fire spread.</i> 	W		
Behavior: Take appropriate action based on assessed risks.			
33. Apply the Risk Management Process found in the IRPG and Fireline Handbook. <ul style="list-style-type: none"> • <i>Step 1: Situation Awareness</i> • <i>Step 2: Hazard Assessment</i> • <i>Step 3: Hazard Control</i> • <i>Step 4: Decision Point</i> • <i>Step 5: Evaluate</i> 	I		

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

Wildland Fire Investigator (INVF)

TASK	C O D E	EVAL. RECORD #	EVALUATOR: Initial & date upon completion of task
Behavior: Follow established procedures and/or safety procedures relevant to given assignment.			
34. Follow agency procedures for reporting unsafe situations or accidents.	O		
35. Use proper origin search techniques to determine fire origin. <ul style="list-style-type: none"> • <i>Witness information</i> • <i>Initial attack information</i> • <i>Burn pattern indicators</i> 	W		
36. Identify and secure fire origin using standard methods. <ul style="list-style-type: none"> • <i>Macro indicators</i> • <i>Micro indicators</i> • <i>Point of origin</i> • <i>Area of origin (both general and specific)</i> • <i>Basic origin search techniques</i> 	W		
37. Identify cause of a wildfire and analyze, address, or eliminate other causes utilizing standard wildland fire cause categories.	W		
Behavior: Plan for demobilization and ensure demobilization procedures are followed.			
38. 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, 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: _____
 Incident Kind: Wildfire, Prescribed Fire, All Hazard, Other (specify): _____
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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): _____