5 - Training & Qualifications

Policy
It is Bureau policy that only qualified personnel will be assigned duties in wildland fire suppression or prescribed fire. It is also BLM policy to adopt the National Wildfire Coordinating Group (NWCG) standard, and work jointly with other federal, state, and local agencies, through NWCG, to establish minimum fire qualification standards acceptable to all agencies. Interagency standards allow for a cost-effective exchange of personnel and resources, and reduce duplication among the agencies. BLM also participates with other Department of the Interior (DOI) agencies through the Interior Fire Coordination Committee (IFCC).

Introduction
Standards for DOI agencies, which may exceed the minimum standards established by NWCG, are coordinated through IFCC. Such additional standards will be approved by the Director, Office of Fire and Aviation, and implemented through the Incident Qualification and Certification System (IQCS).

Certification & Record Keeping
BLM Manual 9215, Fire Training and Qualifications, identifies the training and experience requirements for BLM personnel to perform jobs associated with the fire management program. The manual section also establishes state and field office responsibility for maintaining fire qualification records and position certification.

Instruction Memorandum 95-2001 established the IQCS as the DOI's fire qualifications and certification record keeping system. The master file report provided by the IQCS meets the bureau requirement for maintaining fire qualification records. The system is designed to provide managers at the local, state, and national levels with detailed qualification, experience, and training information needed to certify employees in wildland and prescribed fire positions. The IQCS is a tool to assist managers in certification decisions; it does not replace the manager’s responsibility to validate that employees meet all requirements for position performance based on bureau standards.

It is recommended that a hard copy file folder be kept for each employee. The contents may include: training certificates, Work Capacity Test (WCT) Record, evaluations from assignments, Position Task Book verification, yearly updated IQCS forms, and an Individual Employee Master File Report from IQCS.

Release Date: 4/00
The Incident Qualification Card (Red Card)
The Agency Administrator (or delegate) is responsible for annual certification of personnel serving in wildland and prescribed fire positions. Agency certification is issued annually in the form of an Incident Qualification Card (Red Card), which certifies that the individual is qualified to perform in a specified position. The Red Card must be reviewed for accuracy and signed by the approving official. The Agency Administrator, Fire Manager, and individual are responsible for monitoring medical status, fitness, training, and performance, and for taking appropriate action to ensure the employee meets all position performance requirements.

Issuing Red Cards to EFF-paid employees assigned to wildland and prescribed fire activities is at the discretion of the local unit, although documentation of training and physical fitness must still be accomplished. All Red Cards issued to BLM employees, with the exception of EFF-paid, will be printed using the DOI Shared Application Computer System (SACS) Incident Qualification and Certification System (IQCS).

Each State Director will designate an employee as the State Fire Qualifications Administrator, who ensures all incident experience, incident training, and Position Task Books for employees within the state are accurately recorded in the IQCS. All records must be updated annually or modified as changes occur.

Qualification System
BLM minimum qualification standards for wildland and prescribed fire are developed jointly with other federal and state agencies through the NWCG. These qualification standards are published in the NWCG Wildland and Prescribed Fire Qualification System Guide, PMS 310-1.

Annual Refresher Training
*BLM Manual 9215.22, Refresher Training,* requires all personnel participating in fire suppression or prescribed fire duties to attend annual safety refresher training, which includes at a minimum, the 10 Standard Fire Orders, 18 Watch Out Situations, and principles of LCES (Lookouts, Communications, Escape Routes, and Safety Zones), and hands-on fire shelter inspection and deployment practice. It is also recommended that refresher training include reviews of recent entrapments, near entrapments, deployments, and findings from safety research efforts.

Non-NWCG Agencies
Personnel from other agencies who do not subscribe to the NWCG qualification standards may be used on BLM-managed fires. However, BLM fire managers
must ensure these individuals are only assigned to duties commensurate with their abilities, agency qualifications, and equipment capabilities.

**Qualification and Certification Committee**

It is recommended that a qualification and certification committee be established for each field office with fire management responsibilities. In areas cooperating with other federal, state, or local agencies, an interagency qualification and certification committee should include representatives from each unit. These qualification and certification committees provide management oversight and review of the wildland and prescribed fire positions under their jurisdiction. The committee also:

- Certifies that qualifications generated by IQCS or other agency systems for employees are valid by reviewing the training and experience of each employee.
- Determines if each employee possesses the personal characteristics necessary to perform the wildland and prescribed fire positions in a safe and efficient manner.
- Makes recommendations to the appropriate agency administrator or designee—who is responsible for final signature.
- Develops interagency training requirements and sponsors courses that can be offered locally.
- Ensures training nominees meet minimum requirements for attending courses.

**Physical Fitness**

Studies of wildland firefighting clearly show the link between fitness and work performance. Fit workers can do more work with less fatigue and still have a reserve to meet unforeseen emergencies. They perform better in a hot environment and recover faster from adverse firefighting conditions like long shifts and reduced rest. In short, fitness is the most important factor in work capacity.

Concern for employee safety and health has prompted screening procedures to ensure that only the fit are assigned to physically demanding fire management activities. Unfit persons can become a hazard to themselves and/or co-workers.

Agency Administrators are responsible for ensuring the overall physical fitness of firefighters. By evaluating regular and project work assignments and overall crew physical condition, the agency administrator may authorize employees who are available and serving in wildland or prescribed fire positions that require a
physical fitness rating of arduous, one hour each day for fitness conditioning as needed. Furthermore, individuals who have a position with an arduous physical requirement may be periodically tested during the fire season to ensure they are retaining the required level of fitness and conditioning.

### Physical Training and Conditioning

Fitness conditioning periods may be identified and structured to include aerobic and muscular exercises. Team sports are not authorized for fitness conditioning. Chapters 7, 8, and 9 of *Fitness and Work Capacity, 2nd ed.* (1997), provide excellent guidance concerning training specifically for the pack test, aerobic fitness programs, and muscular fitness training.

#### Work Capacity Tests (WCTs)

The BLM has adopted the NWCG approved WCTs as the official method of assessing wildland firefighter fitness levels.

WCTs are administered annually to all employees who will be serving in wildland or prescribed fire positions that require a fitness level. **WCTs must be administered and passed prior to assigning the employee to wildland or prescribed fire duty.**

Agency administrators (or delegates) are responsible for ensuring that the Health Screen Questionnaire is administered prior to initiating a physical training program and/or the WCT, and that accurate documentation on a WCT Record is retained until the next testing. Test results must also be entered in the IQCS annually to update the fitness level and date that will appear on the Red Card. Physical fitness dates entered in IQCS will reflect the date the employee passed the fitness test.

#### WCT Categories

The NWCG Wildland and Prescribed Fire Qualification System Guide, 310-1 identifies WCTs for agency-specific positions. There are three fitness levels – Arduous, Moderate, and Light—which require an individual to demonstrate their ability to perform the fitness requirements of the position. Duties in the “None” category are normally performed in a controlled environment, such as an incident base. For any position identified in the 310-1 with a fitness level of “None” or any technical specialist positions required to be on the fireline for non-suppression tasks, the required fitness level shall be “Light.”

### Work Capacity Test

<table>
<thead>
<tr>
<th>Work Category</th>
<th>Test</th>
<th>Distance</th>
<th>Weight</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arduous</td>
<td>Pack Test</td>
<td>3 miles</td>
<td>45 lb.</td>
<td>45 min.</td>
</tr>
</tbody>
</table>

Release Date: 4/00
CHAPTER 5  TRAINING & QUALIFICATIONS

<table>
<thead>
<tr>
<th>Level</th>
<th>Field Test</th>
<th>Distance</th>
<th>Weight</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moderate</td>
<td>2 miles</td>
<td>25 lb.</td>
<td>30 min.</td>
<td></td>
</tr>
<tr>
<td>Light</td>
<td>1 mile</td>
<td>none</td>
<td>16 min.</td>
<td></td>
</tr>
</tbody>
</table>

**Arduous** – Duties involve field work requiring physical performance with above average endurance and superior conditioning. These duties may include an occasional demand for extraordinarily strenuous activities in emergencies under adverse environmental conditions and over extended periods of time. Requirements include running, walking, climbing, jumping, twisting, bending, and lifting more than 50 pounds; the pace of work typically is set by the emergency conditions.

**Moderate** – Duties involve field work requiring complete control of all physical faculties and may include considerable walking over irregular ground, standing for long periods of time, lifting 25 to 50 pounds, climbing, bending, stooping, twisting, and reaching. Occasional demands may be required for moderately strenuous activities in emergencies over long periods of time. Individuals usually set their own work pace.

**Light** – Duties mainly involve office type work with occasional field activity characterized by light physical exertion requiring basic good health. Activities may include climbing stairs, standing, operating a vehicle, and long hours of work, as well as some bending, stooping, or light lifting. Individuals can usually govern the extent and pace of their physical activity.

**Test Administration**

1) A job hazard analysis (JHA) shall be developed and approved for each field office prior to administrating the Work Capacity Test (see the sample JHA in the Appendix).

2) A Health Screen Questionnaire will be administered prior to initiating a physical training program and/or the WCT with the following objectives:
   - To identify, prior to the work capacity testing, at-risk personnel;
   - To identify existing injuries or illness and minimize the probability of new injuries;
   - To establish the need for a medical examination (see Medical Examinations criterion below).

3) Administer the test using the JHA as a briefing guide.

4) Document using the Health Screen Questionnaire and Work Capacity Test Record (see below). These documents must be retained until the next testing.
Health Screen Questionnaire  The purpose is to identify individuals who may be at risk in taking the Work Capacity Test (WCT) and recommend an exercise program and/or medical examination prior to taking the WCT.

Employees are required to answer the following questions. The questions were designed, in consultation with occupational health physicians, to identify individuals who may be at risk when taking a WCT. The information on this Health Screen is considered confidential and must be filed appropriately.

Solicitation of this information is authorized by Title 5 U.S. Code Section 3301, which provides for a determination of an individual’s fitness-for-duty.

Yes  No

1) During the past 12 months have you at any time (during physical activity or while resting) experienced pain, discomfort or pressure in your chest?
2) During the past 12 months have you experienced difficulty breathing or shortness of breath?
3) Are you currently under a doctor’s care for a heart or lung related condition?
4) Have you ever been diagnosed with, and are you currently being treated for, high blood pressure?
5) Do you have a blood pressure with systolic (top #) greater than 140 or diastolic (bottom #) greater than 90?
6) Do you have a resting pulse greater than 100 beats per minute?
7) Do you have a bone or joint condition that could be made worse by a change in your physical activity?
8) Do you know of any other medical or physical reason you should not take the Work Capacity Test?
9) Do you have asthma, diabetes, epilepsy or elevated cholesterol?

A Yes answer will only mean that a physical and/or functional fitness evaluation is required prior to the employee taking the WCT. A doctor will then make a determination as to whether or not the employee should participate in a WCT.

I understand that if I need to be evaluated, it will be based on the fitness requirements of the position(s) for which I am qualified.

Participant _____________  Administrator _______________  Date _____

60  Release Date: 4/00
**Work Capacity Test Record** Units will document the administration of the WCT to all employees and job applicants. This documentation must be retained until the next WCT is administered. Units may also be requested to provide data from these records to assist in the evaluation of the WCT process.

The information on the Work Capacity Test Record is considered confidential and must be filed appropriately. The identity of the individual must be protected.

Solicitation of this information is authorized by Title 5 U.S. Code Section 3301, which provides for a determination of an individual’s fitness-for-duty.

To be completed by employee:

Name (Last, first): __________ Where employed: __________

Date of birth: _____ Height: _____ Weight: _____

Date test taken: _____ Test administered by: ____________ (print name)

ICS position for which test is required (highest needed) _________

Performance level needed (circle one): Arduous Moderate Light

Type of test taken (circle one): Pack Test Field Test Walk Test

**Work Capacity Test Descriptions:**

<table>
<thead>
<tr>
<th>Pack Test</th>
<th>Field Test</th>
<th>Walk Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pack weight</td>
<td>45 lbs.</td>
<td>25 lbs.</td>
</tr>
<tr>
<td>Distance</td>
<td>3 miles</td>
<td>2 miles</td>
</tr>
<tr>
<td>Time</td>
<td>45 minutes</td>
<td>30 minutes</td>
</tr>
</tbody>
</table>

To be completed by test administrator:

Test result time: _______

Employee passed test (circle one): yes / no

I certify that the pack test was administered according to Bureau guidelines.

(Signature of Test Administrator) (Title) (Date)

Revision 2 (Feb 1998)
Medical Examinations

Agency administrators and supervisors are responsible for the occupational health and safety of their employees performing wildland and prescribed fire activities, and may require employees to take a medical examination at any time.

Establishing medical qualification programs, as stated in 5 CFR 339, provides consistent medical standards in order to safeguard the health of employees whose work may subject them or others to significant health or safety risks due to occupational or environmental exposure or demands. A DOI sponsored, multi-disciplinary team of medical, safety, human resources, and wildland fire experts will establish a consensus medical standard for wildland and prescribed firefighters. This standard will be developed as a comprehensive program designed to be consistent and defensible with all current federal regulations.

The following minimum requirements establish interim bureau policy and associated guidance until department or inter-departmental policy is provided:

1) All employees who participate in wildland or prescribed fire activities requiring a fitness level must answer all the questions on the Health Screen Questionnaire prior to taking their Work Capacity Test. If any Yes answer is indicated, a physical and/or functional fitness evaluation is required prior to the employee taking the WCT. A doctor will then make a determination as to whether or not the employee should participate in a WCT.

2) All permanent, career-seasonal, seasonal, and student career experience program employees, 40 years of age and older, who participate in wildland or prescribed fire activities requiring a fitness level of arduous must have a physical examination every three years or as indicated by the Health Screen Questionnaire. The physical examination will include a stress EKG.

3) All newly hired temporary employees who participate in wildland or prescribed fire activities requiring a fitness level of arduous must have a pre-employment physical to determine their suitability prior to their initial entry on duty. Temporary rehires who participate in wildland or prescribed fire activities requiring a fitness level of arduous will receive a physical exam every three years.

Medical examinations are a diagnostic tool that can give an early warning to employees involved in wildland or prescribed fire activities about potential health problems. By providing specific guidance in this area, the bureau will not only provide for the well-being of valued employees, but also meet the bureau's need to determine an individual's capacity for arduous work.
CHAPTER 5  TRAINING & QUALIFICATIONS

Medical Examination Components

<table>
<thead>
<tr>
<th>Medical History</th>
<th>Vision</th>
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</thead>
<tbody>
<tr>
<td>Hearing</td>
<td>Heart and Blood Vessels</td>
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<tr>
<td>Nose, Mouth, and Throat</td>
<td>Teeth</td>
</tr>
<tr>
<td>Lungs</td>
<td>Abdomen</td>
</tr>
<tr>
<td>Genitourinary/Metabolic</td>
<td>Spine</td>
</tr>
<tr>
<td>Extremities</td>
<td>Nervous System</td>
</tr>
<tr>
<td>Skin</td>
<td>Other Defects</td>
</tr>
</tbody>
</table>

Note: see the Appendix for Certificate of Pre-appointment Medical Examination for Firefighter, which may be used to supplement the SF-78 for arduous temporary and permanent positions.

Prescribed Fire

Qualifications
The NWCG Wildland Fire Qualification Subsystem Guide, PMS 310-1 is the BLM standard for prescribed fire qualifications. All BLM personnel assigned to prescribed fire operations will meet the minimum qualifications outlined in the subsystem guide. This includes personnel assisting other agencies even though the other agency may have established lower qualification standards.

The IQCS does not separate prescribed fire qualifications by fuel type. The local units are responsible for ensuring that prescribed fire Burn Boss and Ignition Specialist qualifications and training are appropriate for the fuel type(s) that they will be working in. “Management has the ultimate responsibility and is accountable for failures resulting from inappropriate use of personnel in unfamiliar fuel types, regardless of their Red Card rating.”

Physical Fitness Requirements
The prescribed fire qualifications systems does not establish physical fitness levels. The following requirements are established by the BLM for each prescribed fire position.

Arduous: All holding and ignition personnel, Ignition Specialist 2 (RXI2), Ignition Specialist 1 (RXI1), Fire Effects Monitor (FEMO), and Prescribed Fire Burn Boss 3 (RXB3).

Moderate: Prescribed Fire Burn Boss 2 (RXB2).

Light: Prescribed Fire Burn Boss 1 (RXB1).

Release Date: 4/00
**None:** Prescribed Fire Manager 1 (RXM1), and Prescribed Fire Manager 2 (RXM2).

**Note:** Due to agency differences in physical fitness requirements, managers will need to verify fitness levels individually, since IQCS will not check it automatically. The positions effected are: RXI1, RXI2, and RXB2.

**Currency Requirements**
The prescribed fire qualifications system does not establish currency requirements to maintain prescribed fire qualifications. The currency requirement is set at five years.

**Bureau Specific Positions**
As a supplement to the qualifications system, the BLM has identified the additional positions of Prescribed Fire Burn Boss 3 (RXB3), Engine Operator (ENOP), and Chainsaw Operators and Fallers.

**Prescribed Fire Burn Boss 3 (RXB3)**
**Qualifications:** ICT5, FFT1  
**Additional Required Training:** S-290  
**Suggested Additional Training:** S-201

The intent of the position is to qualify a person to supervise prescribed fire operations that are of "low complexity." These types of operations typically would have few personnel assigned, have a very low threat of escape, and present a minimal risk to the people involved in the operation. Examples of these types of operations would be: burning of piled slash, the burning of landings, ditch burning, debris burning, and small broadcast burns with a minimal chance for escape. **These types of operations still require a signed prescribed fire plan.**

This position is supported by the IQCS. The activity area is BL and the position code is RXB3. Managers will need to check the requirements individually, since IQCS will not check them automatically.

**Engine Operator (ENOP)**
**Qualifications:** CDL, FFT1  
**Additional Required Training:** S-201, BLM Engine Operator Task Book  
**Recommended Training:** BLM Engine Operator Course
This position meets the needs at the local initial attack level. Successful completion of the Bureau’s task book for this position is required for qualification. See Chapter 8, Suppression Resources, for detailed information on additional performance requirements for this position.

**Chain Saw Operators and Fallers**

Chainsaws are an effective tool used in wildland and prescribed fire management. It is important that individuals involved in these activities are properly trained in safe and efficient operations.

The BLM has established the following minimum qualification and certification process for **BLM Chainsaw Operators (Red Card certified as Faller A)**:

- Successful completion of S-212, including the field exercise.
- Agency Administrator (or delegate) certification of qualifications after verification that training is successfully completed.
- Annual refresher training is required and specified by the local unit.
- Documentation must be maintained for individuals, including annual refresher training.

The BLM has established the following minimum qualification and certification process for **BLM Fallers (Red Card certified as Faller B or C)**:

- Coordinate with cooperators or contractors to adopt Faller training.
- Certification of employees will remain the responsibility of the Agency Administrator (or delegate) after successful completion of training has been verified.
- Training and certification of Fallers should be addressed case-by-case, and used only if a strong need is identified.

- Annual refresher training is required and specified by the local unit.
- Documentation must be maintained for annual refresher training.