

# Interagency Standards for Fire and Fire Aviation Operations

Department of the Interior  
Bureau of Land Management  
National Park Service  
U.S. Fish and Wildlife Service

Department of Agriculture  
Forest Service

## 2008



January 2008  
NFES 2724

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# Standards for Fire and Fire Aviation Operations

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**NATIONAL INTERAGENCY FIRE CENTER**

3833 S. Development Avenue  
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To: Agency Personnel

From: Fire and Aviation Directors;  
Bureau of Land Management  
Forest Service  
U.S. Fish and Wildlife Service  
National Park Service

Subject: *Interagency Standards for Fire and Fire Aviation Operations*

The Federal Fire and Aviation Leadership Council chartered a task group to annually revise, publish and distribute the federal *Interagency Standards for Fire and Fire Aviation Operations*.

*Interagency Standards for Fire and Fire Aviation Operations*, states, references, or supplements policy for Bureau of Land Management, Forest Service, Fish and Wildlife Service, and National Park Service fire and fire aviation program management.

Employees engaged in fire management activities will continue to comply with all agency specific health and safety policy documents. Employees engaged in fire suppression and other fire management activities will comply with standards stated in the *NWGC Incident Response Pocket Guide* (PMS 461, NFES 1077) and the *NWCG Fireline Handbook* (PMS 410-1, NFES 0065

For the Bureau of Land Management this document is supplemental policy.

For the USDA Forest Service this document is referenced in *Forest Service Manual 5108*.

For the U.S. Fish and Wildlife Service this document is supplemental policy.

For the National Park Service this document is supplemental policy, in addition to *Reference Manual 18*.

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This document addresses specific action items that are contained in the Interagency Strategy for the Implementation of Federal Wildland Fire Management Policy.

The contents of this book are not to be modified. Supplemental agency specific direction of a more restrictive nature may be issued separately.

Suggestions for modification of this publication should be sent to your agency representatives listed on this page.

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**Chapter 01****Federal Wildland Fire Management Policy and Guidance Overview****Scope**

*Interagency Standards for Fire and Fire Aviation Operations*, states, references, or supplements policy for Bureau of Land Management, Forest Service, Fish and Wildlife Service, and National Park Service fire and fire aviation program management. Original source policy is stated or referenced throughout this handbook. This handbook attempts to quote verbatim, rather than to paraphrase, policy that is stated elsewhere. It also attempts to limit duplication of source policy when a reference will suffice. *Interagency Standards for Fire and Fire Aviation Operations* is intended to comply with and support the 2001 Federal Wildland Fire Management Policy and other existing federal policy.

**Purpose**

*Interagency Standards for Fire and Fire Aviation Operations* provides fire and fire aviation program management direction for Bureau of Land Management, Forest Service, Fish and Wildlife Service, and National Park Service managers. Employees engaged in fire management activities will continue to comply with all agency specific health and safety policy documents, and with fire operations standards stated in the *NWGC Incident Response Pocket Guide* (PMS 461, NFES 1077) and the *NWCG Fireline Handbook* (PMS 410-1, NFES 0065).

**2001 Federal Wildland Fire Management Policy**

The 2001 Federal Fire Policy comprises the following Guiding Principles and discreet policies. As a whole these guiding principles and policy statements guide the philosophy, direction, and implementation of fire management planning, activities, and projects on federal lands.

**Guiding Principles of the Federal Wildland Fire Management Policy**

1. Firefighter and public safety is the first priority in every fire management activity.
2. The role of wildland fire as an essential ecological process and natural change agent will be incorporated into the planning process. Federal agency land and resource management plans set the objectives for the use and desired future condition of the various public lands.
3. Fire Management Plans, programs, and activities support land and resource management plans and their implementation.
4. Sound risk management is a foundation for all fire management activities. Risks and uncertainties relating to fire management activities must be understood, analyzed, communicated, and managed as they relate to the cost of either doing or not doing an activity. Net gains to the public benefit will be an important component of decisions.
5. Fire management programs and activities are economically viable, based upon values to be protected, costs, and land and resource management objectives. Federal agency administrators are adjusting and reorganizing

- 1 programs to reduce costs and increase efficiencies. As part of this process,  
2 investments in fire management activities must be evaluated against other  
3 agency programs in order to effectively accomplish the overall mission, set  
4 short- and long-term priorities, and clarify management accountability.
- 5 6. Fire Management Plans and activities are based upon the best available  
6 science. Knowledge and experience are developed among all wildland fire  
7 management agencies. An active fire research program combined with  
8 interagency collaboration provides the means to make these tools available  
9 to all fire managers.
- 10 7. Fire Management Plans and activities incorporate public health and  
11 environmental quality considerations.
- 12 8. Federal, state, tribal, local, interagency, and international coordination and  
13 cooperation are essential. Increasing costs and smaller work forces require  
14 that public agencies pool their human resources to successfully deal with  
15 the ever-increasing and more complex fire management tasks. Full  
16 collaboration among federal agencies and between the federal agencies and  
17 international, state, tribal, and local governments and private entities  
18 results in a mobile fire management work force available for the full range  
19 of public needs.
- 20 9. Standardization of policies and procedures among federal agencies is an  
21 ongoing objective. Consistency of plans and operations provides the  
22 fundamental platform upon which federal agencies can cooperate, integrate  
23 fire activities across agency boundaries, and provide leadership for  
24 cooperation with state, tribal, and local fire management organizations.  
25 *(2001 Federal Wildland Fire Management Policy, pages 21-22)*

## 26 **Elements of the Federal Wildland Fire Management Policy**

### 27 **1. Safety**

28  
29 Firefighter and public safety is the first priority. All Fire Management  
30 Plans and activities must reflect this commitment.

### 31 **2. Fire Management and Ecosystem Sustainability**

32  
33 The full range of fire management activities will be used to help achieve  
34 ecosystem sustainability, including interrelated ecological, economic, and  
35 social components.

### 36 **3. Response to Wildland Fire**

37  
38 Fire, as a critical natural process, will be integrated into land and resource  
39 management plans and activities on a landscape scale across agency  
40 boundaries. Response to wildland fires is based on ecological, social and  
41 legal consequences of the fire. The circumstances, under which a fire  
42 occurs, and the likely consequences on firefighter and public safety and  
43 welfare, natural and cultural resources, and values to be protected; dictate  
44 the appropriate response to fire.



- 1 **4. Use of Wildland Fire**  
2 Wildland fire will be used to protect, maintain and enhance resources and,  
3 as nearly as possible, be allowed to function in its natural ecological role.  
4 Use of fire will be based on approved Fire Management Plans and will  
5 follow specific prescriptions contained in operational plans.  
6
- 7 **5. Rehabilitation and Restoration**  
8 Rehabilitation and restoration efforts will be undertaken to protect and  
9 sustain ecosystems, public health, safety, and to help communities protect  
10 infrastructure.  
11
- 12 **6. Protection Priorities**  
13 The protection of human life is the single overriding suppression priority.  
14 Setting priorities among protecting human communities and community  
15 infrastructure, other property and improvements, and natural and cultural  
16 resources will be done based on the values to be protected, human health  
17 and safety, and the costs of protection. Once people have been committed  
18 to an incident, these human resources become the highest value to be  
19 protected.  
20
- 21 **7. Wildland Urban Interface**  
22 The operational roles of the federal agencies as a partner in the Wildland  
23 Urban Interface are wildland firefighting, hazard reduction, cooperative  
24 prevention and education, and technical assistance. Structural fire  
25 suppression is the responsibility of tribal, state or local governments.  
26 Federal agencies may assist with exterior structural fire protection  
27 activities under formal fire protection agreements that specify the mutual  
28 responsibilities of the partners, including funding. (Some federal agencies  
29 have full structural protection authority for their facilities on lands they  
30 administer and may also enter into formal agreements to assist state and  
31 local governments with structural protection.)  
32
- 33 **8. Planning**  
34 Every area with burnable vegetation must have an approved Fire  
35 Management Plan. Fire Management Plans are strategic plans that define a  
36 program to manage wildland and prescribed fires based on the area's  
37 approved Land Management Plan. Fire Management Plans must provide  
38 for firefighter and public safety; include fire management strategies,  
39 tactics, and alternatives; address values to be protected and public health  
40 issues; and be consistent with resource management objectives, activities  
41 of the area, and environmental laws and regulations.  
42
- 43 **9. Science**  
44 Fire management plans and programs will be based on a foundation of the  
45 best available science. Research will support ongoing efforts to increase  
46 our scientific knowledge of biological, physical, and sociological factors.

1 Information needed to support fire management will be developed through  
2 an integrated interagency fire science program. Scientific results must be  
3 made available to managers in a timely manner and must be used in the  
4 development of land management plans, fire management plans, and  
5 implementation plans.

6  
7 **10. Preparedness**

8 Agencies will ensure their capability to provide safe, cost-effective fire  
9 management programs in support of land and resource management plans  
10 through appropriate planning, staffing, training, equipment, and  
11 management oversight.

12  
13 **11. Suppression**

14 Fires are suppressed at minimum cost, considering firefighter and public  
15 safety, benefits, and all values to be protected; consistent with resource  
16 objectives.

17  
18 **12. Prevention**

19 Agencies will work together with their partners, other affected groups, and  
20 individuals to prevent unauthorized ignition of wildland fires.

21  
22 **13. Standardization**

23 Agencies will use compatible planning processes, funding mechanisms,  
24 training and qualification requirements, operational procedures, values-to-  
25 protected methodologies, and public education programs for all fire  
26 management activities.

27  
28 **14. Interagency Cooperation and Coordination**

29 Fire management planning, preparedness, prevention, suppression, fire use,  
30 restoration and rehabilitation, monitoring, research, and education will be  
31 conducted on an interagency basis with the involvement of cooperators and  
32 partners.

33  
34 **15. Communication and Education**

35 Agencies will enhance knowledge and understanding of wildland fire  
36 management policies and practices through internal and external  
37 communication and education programs. These programs will be  
38 continuously improved through the timely and effective exchange of  
39 information among all affected agencies and organizations.

40  
41 **16. Agency Administrator and Employee Roles**

42 Agency administrators will ensure that their employees are trained,  
43 certified and made available to participate in the wildland fire program  
44 locally, regionally, and nationally as the situation demands. Employees  
45 with operational, administrative, or other skills will support the wildland

1 fire programs as necessary. Agency administrators are responsible and will  
2 be held accountable for making employees available.

### 4 **17. Evaluation**

5 Agencies will develop and implement a systematic method of evaluation to  
6 determine effectiveness of projects through implementation of the 2001  
7 Federal Wildland Fire Management Policy. The evaluation will assure  
8 accountability, facilitate resolution of areas of conflict, and identify  
9 resource shortages and agency priorities.

10 *(2001 Federal Wildland Fire Management Policy, pages 22-24)*

## 12 **Fire Operations Doctrine**

### 14 **Purpose of Fire Operations Doctrine**

15 Fire operations doctrine states the fundamental principles on the subject of fire  
16 operations. Doctrine establishes a particular way of thinking about fire  
17 operations. It provides a philosophy for leading firefighters in fire operations, a  
18 mandate for professionalism, and a common language. Fire operations doctrine  
19 does not consist of procedures to be applied to specific situations so much as it  
20 sets forth general guidance that requires judgment in application.

### 22 **The Nature of Fire Operations**

23 Fire is a complex, dynamic, and often unpredictable phenomenon. Fire  
24 operations require mobilizing a complex organization that includes  
25 management, command, support, and firefighting personnel, as well as aircraft,  
26 vehicles, machinery, and communications equipment. While the magnitude and  
27 complexity of the fire itself, and of the human response to it, will vary, the fact  
28 that fire operations are inherently dangerous will never change. A firefighter  
29 utilizing the best available science, equipment, and training, and working within  
30 the scope of agency doctrine and policy, can still suffer serious injury or death.

### 32 **Wildland Fire Operations Risk Management**

33 The primary means by which we prevent accidents in wildland fire operations is  
34 through aggressive risk management. Our safety philosophy acknowledges that  
35 while the ideal level of risk may be zero, a hazard free work environment is not  
36 a reasonable or achievable goal in fire operations. Through organized,  
37 comprehensive, and systematic risk management, we will determine the  
38 acceptable level of risk that allows us to provide for safety yet still achieve fire  
39 operations objectives. Risk management is intended to minimize the number of  
40 injuries or fatalities experienced by wildland firefighters.

### 42 **Fire Preparedness**

43 Fire preparedness is the state of being prepared to provide an appropriate  
44 response to wildland fires based on identified objectives. Preparedness is the  
45 result of activities that are planned and implemented prior to fire ignitions.  
46 Preparedness requires identifying necessary firefighting capabilities and

1 implementing coordinated programs to develop those capabilities. Preparedness  
2 requires a continuous process of developing and maintaining firefighting  
3 infrastructure, predicting fire activity, identifying values to be protected, hiring,  
4 training, equipping, pre-positioning and deploying firefighters and equipment,  
5 evaluating performance, correcting deficiencies, and improving operations. All  
6 preparedness activities should be focused on developing fire operations  
7 capabilities and on performing successful fire operations.

8

### 9 **Fire Operations Command Philosophy**

10 It is essential that our philosophy of command support the way we conduct fire  
11 operations. First and foremost, in order to generate effective decision making in  
12 fire operations and to cope with the unpredictable nature of fire, commanders  
13 intent must be lucid and unambiguous, and lines of authority must be clearly  
14 articulated and understood. Subordinate commanders must make decisions on  
15 their own initiative based on their understanding of their commander's intent. A  
16 competent subordinate commander who is at the point of decision may  
17 understand a situation more clearly than a senior commander some distance  
18 removed. In this case, the subordinate commander must have the freedom to  
19 take decisive action directed toward the accomplishment of operational  
20 objectives. However, this does not imply that unity of effort does not exist, or  
21 that actions are not coordinated. Unity of effort requires coordination and  
22 cooperation among all forces toward a commonly understood objective.  
23 Unified, coordinated action, whether between adjacent single resources on the  
24 fireline or between the highest command level and the most subordinate  
25 firefighter, is critical to successful fire operations.

26

### 27 **Fire Leadership**

28 Leadership is the art of influencing people in order to achieve a result. The most  
29 essential element for success in the wildland fire service is good leadership.  
30 Good leaders provide purpose, direction, and motivation for wildland  
31 firefighters working to accomplish difficult tasks under dangerous, stressful  
32 circumstances. Leaders often face difficult problems to which there are no  
33 simple, clear-cut, by-the-book solutions. In these situations, leaders must use  
34 their knowledge, skill, experience, education, values, and judgment to make  
35 decisions and to take or direct action - in short, to provide leadership. All  
36 firefighters, regardless of position, must provide leadership.

37

### 38 **Fire Suppression**

39 The purpose of fire suppression is to put the fire out in a safe, effective, and  
40 efficient manner. Fires are easier and less expensive to suppress when they are  
41 smaller. When the management goal is full suppression, aggressive attack is the  
42 single most important method to ensure the safety of firefighters and the public,  
43 and to limit suppression costs. Aggressive attack provides the Incident  
44 Commander maximum flexibility in suppression operations. Successful attack  
45 relies on speed and appropriate force. All aspects of fire suppression benefit  
46 from this philosophy. Planning, organizing, and implementing fire suppression

1 operations should always meet the objective of directly, quickly, and  
2 economically contributing to the suppression effort. Every firefighter, whether  
3 in a management, command, support, or direct suppression role, should be  
4 committed to maximizing the speed and efficiency with which the most capable  
5 firefighters can engage in suppression action. When the management goal is  
6 other than full suppression, or when conditions dictate a limited suppression  
7 response, decisiveness is still essential, and an aggressive approach toward  
8 accomplishment of objectives is still critical.

### 10 **Principles of Suppression Operations**

11 The primary means by which we implement command decisions and maintain  
12 unity of action is through the use of common principles of suppression  
13 operations. These principles guide our fundamental fire suppression practices,  
14 behaviors, and customs, and are mutually understood at every level of  
15 command. They include Risk Management, Standard Firefighting Orders and  
16 Watch Out Situations, LCES and the Downhill Line Construction Checklist.  
17 These principles are fundamental to how we perform fire suppression  
18 operations, and are intended to improve decision making and firefighter safety.  
19 They are not absolute rules. They require judgment in application.

### 21 **Principles of Fire Suppression Action**

22 The principles of fire suppression action provide a framework for developing  
23 fire suppression strategy and for conducting fire suppression operations. Again,  
24 these are not absolute, immutable rules. These five principles give us a  
25 consistent set of considerations with which to evaluate decisions, plans and  
26 actions in different situations.

#### 28 **1. Objective**

29 The principle of the objective is to direct every fire suppression operation  
30 toward a clearly defined, decisive, and obtainable objective. The purpose  
31 of fire suppression operations is to achieve the suppression objectives that  
32 support the overall management goals for the fire.

#### 34 **2. Speed and Focus**

35 Speed is rapidity of action. Focus is the convergence of appropriate  
36 resources at the desired position to initiate action. The principle of speed  
37 and focus maintains that rapidly deploying and concentrating firefighting  
38 resources, in a calculated fashion, at the decisive time and place increases  
39 the likelihood of successful suppression actions.

#### 41 **3. Positioning**

42 The principle of positioning maintains that rapid, flexible and opportunistic  
43 movement increases the effectiveness of fire suppression resources.

44 Positioning ranges from single resource offensive or defensive reactions to  
45 dynamic fire conditions, to pre-positioning of multiple resources based on  
46 predicted activity and values at risk. Positioning should always be

1 undertaken with speed and focus in mind, and with sufficient time for  
2 positioning to occur before operations begin.

#### 4 **4. Simplicity**

5 The principle of simplicity is that clear, uncomplicated plans and concise  
6 orders maximize effectiveness and minimize confusion. Simplicity  
7 contributes to successful actions.

#### 9 **5. Safety**

10 The principle of safety maintains that ensuring the safety of firefighters and  
11 other persons affected by fire operations is fundamental to successful  
12 suppression action. Safety not only contributes to successful actions, it is  
13 indispensable to them.

### 15 **Cost Effective Fire Operations**

16 Maximizing the cost effectiveness of any fire operation is the responsibility of  
17 all involved; including those that authorize, direct or implement those  
18 operations. Cost effectiveness is the most economical use of the suppression  
19 resources necessary to accomplish mission objectives. Accomplishing fire  
20 operations objectives safely and efficiently will not be sacrificed for the sole  
21 purpose of “cost savings.” Care will be taken to ensure that suppression  
22 expenditures are commensurate with values to be protected, while understanding  
23 that other factors may influence spending decisions, including the social,  
24 political, economic, and biophysical environments.

### 26 **Fire Management Objectives**

27 Federal agency fire management programs should help resource managers  
28 protect, maintain, and enhance federal lands in a cost effective manner.

29 Wildland fire management objectives are:

- 30 • Protect human life, property, and natural/cultural resources both within and  
31 adjacent to agency administered lands.
- 32 • Minimize damages and maximize overall benefits of wildland fire within  
33 the framework of land use objectives and Resource Management Plans.
- 34 • Manage the wildland fire program in accordance with congressional intent  
35 as expressed in the annual appropriations act and enabling legislation, and  
36 comply with applicable departmental manual and agency policies and  
37 procedures.
- 38 • Promote an interagency approach to managing fires on an ecosystem basis.
- 39 • Employ strategies to manage wildland fires that provide for firefighter and  
40 public safety, minimize cost and resource damage, and are consistent with  
41 values to be protected and management objectives.
- 42 • Stabilize and rehabilitate resources and improvements lost in or damaged  
43 by fire or suppression activities.
- 44 • Minimize, and where necessary, mitigate human-induced impacts to  
45 resources, natural processes, or improvements attributable to wildland fire  
46 activities.

- 1 • Promote public understanding of fire management programs and  
2 objectives.
- 3 • Organize a fire staff that can apply the highest standards of professional  
4 and technical expertise.
- 5 • Encourage research to advance the understanding of fire behavior, effects,  
6 ecology, and management.
- 7 • Integrate fire management through all levels of the planning process.
- 8 • Prevent and investigate all unplanned human-caused fires.

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## Chapter 02 BLM Wildland Fire and Aviation Program Organization and Responsibilities

### Introduction

This document states, references, or supplements policy for Bureau of Land Management (BLM) Fire and Aviation Program Management. The standards provided in this document are based on current Department of Interior (DOI) and Bureau policy, and are intended to provide fire program guidance. The intent is to ensure safe, consistent, efficient, and effective fire and aviation operations. This document will be reviewed and updated annually.

### Fire and Aviation

The BLM Fire and Aviation Directorate (FAD) consists of an Assistant Director (AD), Deputy Assistant Director (BODAD), Deputy Assistant Director (WODAD), Fire Operations Division Chief, Aviation Division Chief, Planning and Resources Division Chief, Support Services Division Chief, Budget and Evaluation Chief, External Affairs Division Chief, National Radio Communication Division Chief, and Equal Employment Opportunity Manager.

### Program Manager Responsibilities

#### Assistant Director, Fire and Aviation

- Develops policies and standards for firefighting safety, training, and for the prevention, suppression, and use of wildland fires on Bureau lands.
- Provides guidance to State Directors on the use of prescribed fire and fuels management to achieve hazardous fuels reduction and resource management objectives.
- Integrates fire and aviation management procedures into natural resource management.
- Establishes position competencies, standards, and minimum qualifications for Fire Management Officers, Fire Management Specialists, and leaders based on federal interagency standards recommended by the National Fire and Aviation Executive Board.
- Implements the interagency Fire Program Analysis (FPA) process and develops procedures and standards for the distribution of program resources.
- Reviews and evaluates state fire and aviation management programs.
- Represents the BLM in the coordination of overall fire and aviation management activities at National Interagency Fire Center (NIFC), on intra- and interagency fire committees, groups, and working teams.
- In conjunction with Federal Fire Directors, establishes priorities for assignment of critical resources during wildland fire emergencies.
- Initiates or participates in Boards of Review concerning actions taken on selected wildland fires.



- 1 • Negotiates cooperative agreements and/or modifications of existing national  
2 level agreements to improve fire and aviation management activities on  
3 bureau lands.
- 4 • Reviews funding requests for severity, hazardous fuel reduction, and  
5 emergency rehabilitation of bureau lands damaged by wildland fires; makes  
6 determinations on funding levels and recommends approval to the Director,  
7 BLM.
- 8 • Serves as designated contact for the United States Department of the  
9 Treasury for the certification and revocation of Certifying Officers and  
10 Assistant Disbursing Officers (CO/ADO) and Designated Officials for  
11 emergency incident payments.

#### 12 13 **Fire Operations Division Chief**

- 14 • Serves as the principal technical expert on fire operations to the Assistant  
15 Director, Deputy Assistant Director (FA) and to the BLM State Fire  
16 Programs.
- 17 • Provides the Assistant Director and the Deputy Assistant Director (FA)  
18 technical advice, operational oversight, and leadership in all aspects of fire  
19 operations.
- 20 • Performs annual fire program preparedness reviews. Evaluates compliance  
21 with policies, objectives, and standards. Assesses operational readiness and  
22 provides technical assistance to solve identified problems. Performs other  
23 operations reviews as required /requested.
- 24 • Assists the Assistant Director and Deputy Assistant Director (FA), in the  
25 formulation and establishment of national policies and programs pertinent  
26 to wildland fire preparedness, suppression, shared national resources, safety,  
27 training, and equipment.
- 28 • Serves as the BLM technical expert on national interagency mobilization  
29 and utilization of fire suppression resources.
- 30 • Develops national plans, standards, and technical guides for the BLM and  
31 interagency fire management operations.
- 32 • Develops and implements safety programs, accident investigation  
33 procedures, and safety trend analyses.

#### 34 35 **Aviation Division Chief**

- 36 • Serves as principal aviation advisor to the Assistant Director, Deputy  
37 Assistant Director (FA), other staffs, states, and to the DOI.
- 38 • Identifies and develops bureau aviation policies, methods and procedures, as  
39 well as standardized technical specifications for a variety of specialized  
40 firefighting and other missions for incorporation into the directives system.
- 41 • Coordinates aviation-related activities between the Washington Office  
42 (WO), states, and with other wildland firefighting, regulatory, investigative,  
43 military agencies, and services.
- 44 • Coordinates provision and use of aviation resources with Business  
45 Practices, aviation user staffs at the WO, and state office level.

- 1 • Represents the BLM at interagency meetings, in interagency committees  
2 developing government-wide aviation policies, requirements, procedures,  
3 reports, and at aviation industry meetings and conventions.
- 4 • Develops and implements aviation safety programs, accident investigation  
5 procedures, and aviation safety trend analyses.
- 6 • Plans and conducts reviews and evaluations of state aviation programs.
- 7 • Plans and conducts technical and managerial analyses relating to the  
8 identification of aviation organization and resources appropriate for agency  
9 use, cost-effectiveness of aviation firefighting, other specialized missions,  
10 aircraft acquisition requirements, equipment developmental needs, and  
11 related areas.

12

**13 Planning and Resources Division Chief**

- 14 • Responsible for the development and implementation of the bureau wide  
15 fire planning program. Provides guidance and assistance in administering  
16 the technical and operational aspects of BLM's fire planning program at the  
17 regional and agency levels for the accurate identification of program  
18 funding needs. Checks for accuracy in computations with instructions and  
19 policies.
- 20 • Responsible for the development and coordination of the BLM's prescribed  
21 fire, fuels management, and fire prevention annual program, and  
22 recommends the distribution of program funds to regions.
- 23 • Tracks all fuels management fund distributions and prior year carryover  
24 funds. Develops and maintains a national database for fuels management  
25 accomplishments in Indian Trust Lands.
- 26 • Analyzes hazards and risks in the wildland urban interface using fuels  
27 modification or reduction techniques, and develops recommendations for  
28 bureau-wide application. Examines and analyzes laws and regulations  
29 pertaining to prescribed fire use/fuels management in the wildland urban  
30 interface, and works with top level bureau representatives, states and rural  
31 fire districts to recommend policy which will achieve uniformity.
- 32 • Serves as the BLM's primary subject matter expert for National Fire  
33 Management Analysis System (NFMAS) fire planning, Personal Computer  
34 Historical Analysis (PCHA), Geographic Information System (GIS), Global  
35 Positioning System (GPS), Lightning Detection System (LDS), Weather  
36 Information Management System (WIMS), prescribed fire software  
37 programs, and provides user training in those applications.

38

**39 Support Services Division Chief**

- 40 • Manage all aspects of the responsibilities and programs under the  
41 jurisdiction of NIFC for the benefit of the BLM and cooperating agencies.
- 42 • Directs the accomplishment of the approved operating budget, exercising  
43 appropriate control to assure program quality goals are met according to  
44 established standards.

- 1 • Interprets departmental and bureau policies and directives as they affect  
2 NIFC programs.
- 3 • Participates in the BLM-wide and interagency task force activities as a  
4 leader or member.
- 5 • Responsible for the NIFC Site and Facilities Management, Business  
6 Practices, Human Resources, and Information Resource Management.
- 7 • Is a focal point and frequent spokesperson for the bureau and the national  
8 level management, assures a public awareness of bureau programs and  
9 coordinates with key officials in affected federal agencies, states, and  
10 occasionally with other entities such as: foreign governments, private  
11 individuals, private organizations, vendors, suppliers, transportation groups,  
12 airlines, and others.
- 13 • Supports the implementation of the BLM's Automation/Modernization/  
14 Information Resource Management (IRM) initiatives as they apply to  
15 BLM/NIFC.

#### 17 **External Affairs Division Chief**

- 18 • Responsible for coordination of information between the Departmental  
19 Office of Wildland Fire Coordination to the BLM, BIA, USFWS, NPS, FS,  
20 National Association State Foresters (NASF), and Federal Emergency  
21 Management Agency (FEMA) at NIFC.
- 22 • Responsible for coordination of the responses to: Office of management and  
23 Budget (OMB), Government Accounting Office (GAO), congressional,  
24 political and other external inquires between agencies and departments,  
25 establishing and maintaining cooperative relationships resulting in quality  
26 work products.
- 27 • Serves as the manager of the External Affairs program for the National  
28 Interagency Fire Center.
- 29 • Develops recommendations pertaining to External Affairs aspects for BLM  
30 Fire and Aviation policies.
- 31 • Initiates External Affairs policies and procedures pertaining to Fire and  
32 Aviation for adoption at the department level in conjunction with other  
33 departments and agencies.
- 34 • Serves as personal and direct representative of the Assistant Director, Fire  
35 and Aviation at various meetings and functions with members of congress  
36 and staff, state governors and legislatures, officials of local, state and  
37 federal agencies, major private corporations, public and private interest  
38 groups, and foreign governments.
- 39 • Serves as External Affairs expert and consultant to the Assistant Director,  
40 Fire and Aviation on a wide variety of issues and policies of controversial  
41 nature, providing analysis and advice on public reaction to major policy and  
42 program issues.
- 43 • Coordinate with legislative affairs on proposed legislation regarding FA.

44  
45

**1 Equal Employment Opportunity Manager (EEO)**

- 2 • Manages the Equal Employment Opportunity (EEO) program in accordance  
3 with legal, regulatory, and policy requirements.
- 4 • Manages and directs the Counseling Program, and Alternative Dispute  
5 Resolution (ADR) programs, in accordance with Equal Employment  
6 Opportunity Commission (EEOC) regulations and BLM policy as well as  
7 for other NIFC agencies.
- 8 • Advises managers and aggrieved persons of employee rights and  
9 responsibilities, procedural options and timeframes in conflict situations,  
10 formulates proposed resolutions.
- 11 • Negotiates with managers, aggrieved persons and their representatives to  
12 informally resolve EEO matters, and executes final settlement agreements.
- 13 • Manages the Affirmative Employment Program (AEP).
- 14 • Develops and maintains the accessibility program for the disabled, required  
15 under Section 504 of the *Rehabilitation Act of 1973*, as amended, and the  
16 *Americans with Disability Act* (ADA of 1990).
- 17 • Conducts analyses to evaluate progress in meeting equal employment  
18 opportunity program goals.
- 19 • Administers training activities for the organization.
- 20 • Provides managers and supervisors with guidance and advice on issues  
21 related to EEO/civil rights program activities.
- 22 • Represents the organization in meetings with public and private groups,  
23 universities, minority and women's organizations, other DOI components,  
24 and other federal agencies.

**26 National Radio Communications Division (WO-410)**

- 27 • The National Radio Communications Division (NRCD) provides national  
28 leadership and policy development for national level cooperative  
29 agreements and memorandums of understanding with cooperators and  
30 partners to achieve radio interoperability, system sharing, and other areas of  
31 mutual interest.
- 32 • Provides support regarding the national radio contracts (GSA, DOI, etc.) to  
33 evaluate conventional P-25 radio equipment requirements.
- 34 • Coordinates national level interagency sharing initiatives and develops long  
35 term national overarching radio system plans to share radio backbone and  
36 mountaintop facilities, frequencies and equipment with federal, state and  
37 local cooperators. Process radio frequency authorizations (RFAs), and  
38 performs 5-year radio frequency reviews to ensure compatible operation and  
39 optimal use of the limited frequency spectrum resources.
- 40 • Leads/participates in meetings and represent the bureau's radio interests  
41 with established federal, state, and local technical advisory groups. Manage  
42 bureau-wide radio equipment tracking systems, life cycle replacement  
43 planning, and equipment replacement budget procedures.
- 44 • Develops national policies and guidance for the BLM related to OSHA and  
45 other federal laws and standards. Utilizes the BLM CASHE Audit program

- 1 to ensure communication site inspections and facility assessments
- 2 conducted every five years in coordination with WO-360. Leads the
- 3 development of national training programs concerned with the
- 4 standardization, control, operation, testing and repair of communications
- 5 programs.
- 6 • Responsible for reviews and investigation or reports related to safety issues
- 7 with radio equipment. Works with the National Safety Manager (WO-740)
- 8 in establishing radio related safety training. Develops safety handbooks and
- 9 leads risk assessments analysis associated with the National Radio
- 10 Communications Program.
- 11 • Responsible for radio telecommunication systems security and ensures
- 12 strong security encryption needs are established.

13  
14 **State Director**

15 The State Director is responsible to the Assistant Director of BLM for fire  
16 management programs and activities within their state. The State Director will  
17 meet the required elements outlined in the *Interagency Fire Program*  
18 *Management Qualifications Standards and Guide* and ensure training is  
19 completed to support delegations to line managers and principal acting.

20  
21 **District/Field Manager**

22 The District/Field Manager is responsible to the State Director for the safe and  
23 efficient implementation of fire management activities within their unit. This  
24 includes cooperative activities with other agencies or landowners in accordance  
25 with delegations of authorities. The District/Field Manager and their principal  
26 acting will meet the required elements outlined in the *Management Performance*  
27 *Requirements for Fire Operations* below.

28  
29 **Management Performance Requirements for Fire Operations**

PERFORMANCE REQUIRED	FA Directorate	State Director /Associate	District /Resource Area Manager	Field Manager
1. Ensures that Fire Management Plans (FMP) reflects the agency commitment to firefighter and public safety, while utilizing the full range of fire management activities available for ecosystem sustainability.	X	X	X	X

PERFORMANCE REQUIRED	FA Directorate	State Director /Associate	District /Resource Area Manager	Field Manager
2. Develops fire prevention, fire suppression, and fire use standards that are compliant with agency fire policies.	X	X	X	X
3. Ensures use of fire funds is in compliance with department and agency policies.	X	X	X	X
4. Ensures that incident responses will be based on current and approved Resource Management Plans (RMP) and FMPs.		X	X	X
5. Attends the <i>Fire Management Leadership Course</i> . Ensure that personnel delegated fire program responsibilities have completed the <i>Fire Management Leadership Course</i> .			X	X
6. Provides a written Delegation of Authority to FMOs that gives them an adequate level of operational authority. If fire management responsibilities are zoned, ensure that all appropriate Agency administrators have signed the delegation.		X	X	X
7. Ensures that only trained, certified fire and non-fire personnel are available to support fire operations at the local and national level.	X	X	X	X

PERFORMANCE REQUIRED	FA Directorate	State Director /Associate	District /Resource Area Manager	Field Manager
8. Ensures that master agreements with cooperators are valid and in compliance with agency policy, and that attached Annual Operating Plans are current.	X	X	X	X
9. Personally visits at least one wildland and one prescribed fire each year.			X	X
10. Annually convenes and participates in pre-and post season fire meetings.	X	X	X	X
11. Reviews critical operations and safety policies and procedures with fire and fire aviation personnel.		X	X	X
12. Ensures timely follow-up to fire management program reviews.	X	X	X	X
13. Ensures that fire and fire aviation preparedness reviews are conducted annually in all unit offices. Personally participate in at least one review annually.	X	X	X	X
14. Ensures that investigations are conducted for incidents with potential, entrapments, and serious accidents as per the standards in Chapter 18.	X	X	X	X
15. Provides a written delegation of authority, WFSAs, and an <i>Agency Administrator Briefing to Incident Management Teams</i> .		X	X	X

PERFORMANCE REQUIRED	FA Directorate	State Director /Associate	District /Resource Area Manager	Field Manager
16. Ensures that resource advisors are identified, trained and available for incident assignment. Refer to <i>Resource Advisors Guide for Wildland Fire</i> PMS 313, NFES 1813, Jan 2004.			X	X
17. Attends post fire closeout on Type 1 and Type 2 fires. (Attendance may be delegated.)		X	X	X
18. Ensures that a Wildland Fire Implementation Plans (WFIP) are completed, implemented and updated daily for all fires managed as wildland fire use.		X	X	X
19. Ensures that trespass actions are initiated and documented to recover cost of suppression activities, land rehabilitation, and damages to the resource and improvements for all human-caused fires where liability can be determined, as per " <i>Fire Trespass Handbook</i> " H-9238-1.		X	X	X
20. Ensures compliance with National and State Office policy for prescribed fire activities. Provides periodic reviews of the prescribed fire program.	X	X	X	X
21. Ensures that Prescribed Fire Plans are approved and meet agency policies.		X	X	X



PERFORMANCE REQUIRED	FA Directorate	State Director /Associate	District /Resource Area Manager	Field Manager
22. Ensures that the Prescribed Fire Plan has been reviewed and recommended by a qualified technical reviewer who was not involved in the plan preparation.			X	X
23. Ensures that a policy has been established to review and sign the go-no/go checklist.			X	X
24. Ensures Unit Safety Program is in place, has a current plan, has an active safety committee, that includes the fire program.	X	X	X	X
25. Annually updates and reviews the <i>Agency Administrator's Guide to Critical Incident Management</i> (NFES 1356)	X	X	X	X
26. Ensure that current fire and weather information is posted and available for all employees.			X	X

1

2 **State Office**

3 The State Fire Management Officer (SFMO) provides leadership for their agency  
 4 fire and fire aviation management program. The SFMO is responsible and  
 5 accountable for providing planning, coordination, training, technical guidance,  
 6 and oversight to the state fire management programs. The SFMO also represents  
 7 the State Director on interagency geographic coordination groups and Multi-  
 8 Agency Coordination (MAC) groups. The SFMO provides feedback to  
 9 Districts/Field Offices on performance requirements.

10

11 **District/Field Office**

12 The District/Field Office Fire Management Officer (FMO) is responsible and  
 13 accountable for providing leadership for fire and fire aviation management  
 14 programs at the local level. The FMO determines program requirements to  
 15 implement land use decisions through the Fire Management Plan (FMP) to meet  
 16 land management objectives. The FMO negotiates interagency agreements and

1 represents the District/Field Office Manager on local interagency fire and fire  
2 aviation groups.

3

#### 4 **Manager's Oversight**

5 Agency administrators are required to personally visit an appropriate number of  
6 fires each year. Appendix A contains information to support the Agency  
7 administrators during these visits.

8

#### 9 **Post Incident Review**

10 Appendix B the "Managers Supplement for Post Incident Review" emphasizes  
11 the factors that are critical for ensuring safe and efficient wildland fire  
12 suppression, and provides examples for managers to use in their review of  
13 incident operations and incident commanders.

14

15 Requirements for fire management positions are outlined in the *Interagency Fire*  
16 *Program Management Qualifications Standards and Guide* (IFPM) Standard.

17 The supplemental Qualification Standard for professional GS-0401 Fire  
18 Management Specialist positions, approved by the Office of Personnel  
19 Management, is also included in the IFPM Standard. The *Interagency Fire*  
20 *Program Management Qualification Standards and Guide* can be found in its'  
21 entirety on the IFPM website: <http://www.ifpm.nifc.gov>.

22

#### 23 **Training for Acting Agency Administrators**

24 Agency administrators and their actings must complete one of the following  
25 courses within two years of being appointed to a designated management  
26 position.

- 27 • National- *Fire Management Leadership*
- 28 • Geographic- *Local Fire Management Leadership*

29

30 Either class is acceptable but the national course is preferred.

31

32 Experience requirements for positions in Alaska Fire Service, Oregon and  
33 California (O&C) Districts, NIFC, national office, and other fire management  
34 positions in units and state/regional offices will be established as vacancies occur,  
35 but will be commensurate with the position's scope of responsibilities. The  
36 developmental training to fully achieve competencies should be addressed in an  
37 IDP within a defined time period.

38

#### 39 **Fire Management Staff Performance Requirements for Fire Operations**

PERFORMANCE REQUIRED	State FMO	District/ Zone FMO	Field Office/ Resource Area FMO
1. Establishes and manages a safe, effective, and efficient fire program.	X	X	X

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PERFORMANCE REQUIRED	State FMO	District/ Zone FMO	Field Office/ Resource Area FMO
2. Ensures that the Fire Management Plan (FMP) reflects the agency commitment to firefighter and public safety, while utilizing the full range of fire management activities available for ecosystem sustainability. <i>(Federal Wildland Fire Management Plan 2001 [FWFMP])</i>	X	X	X
3. Provides the expertise and skills to fully integrate fire and fire aviation management into interdisciplinary planning efforts.	X	X	X
4. Ensures that only trained and qualified personnel are assigned to fire and fire aviation duties.	X	X	X
5. Ensures completion of a Job Hazard Analysis (JHA)/Risk Assessment for fire and fire aviation activities so mitigation measures are taken to reduce risk.		X	X
6. Ensures compliance with work/rest guidelines during all fire and fire aviation activities.	X	X	X
7. Ensures that the fire and fire aviation management employees understand their role, responsibilities, authority, and accountability.	X	X	X
8. Organizes trains, equips, and directs a qualified work force. Establishes and implements performance review process.	X	X	X
9. Develops, implements, evaluates, and documents fire and fire aviation training to meet current and anticipated needs.	X	X	X
10. Ensures fire and fire aviation policies are understood, implemented, and coordinated with other agencies as appropriate.	X	X	X
11. Monitors fire suppression activities to recognize when complexity levels exceed program capabilities. Increases managerial and operational resources to meet the need.	X	X	X
12. Monitors fire season severity predictions, fire behavior, and fire activity levels. Takes action to ensure safe, efficient, and effective operations.	X	X	X

PERFORMANCE REQUIRED	State FMO	District/ Zone FMO	Field Office/ Resource Area FMO
13. Ensures that master agreements with cooperators are valid and in compliance with agency policy, and that attached Annual Operating Plans are current.	X	X	X
14. Develops, maintains and implements current operational plans. (e.g., dispatch, preparedness, prevention).		X	X
15. Ensures use of fire funds is in compliance with department and agency policies.	X	X	X
16. Ensures that fire severity funding is requested, used, and documented in accordance with agency standards ( <i>Interagency Standards for Fire and Fire Aviation Operations</i> , Chapter 10).	X	X	X
17. Reviews and approves appropriate overtime authorization requests for personnel providing fire suppression coverage during holidays, special events, and abnormal fire conditions.		X	X
18. Ensures a process is established to communicate fire info to public, media, and cooperators.	X	X	X
19. Annually convenes and participates in pre-and post season fire meetings. Specifically address management controls and critical safety issues.	X	X	X
20. Oversees pre-season preparedness review of fire and fire aviation program.	X	X	X
21. Initiates, conducts, and/or participates in fire program management reviews and investigations.	X	X	X
22. Personally participates in periodic site visits to individual incidents and projects.		X	X
23. Utilizes the Incident Complexity Analysis appendix F & G to ensure the proper level of management is assigned to all incidents.	X	X	X
24. Ensures that transfer of command occurs as per appendix D on incidents.		X	X
25. Ensures that incoming personnel and crews are briefed prior to fire and fire aviation assignments.		X	X

PERFORMANCE REQUIRED	State FMO	District/ Zone FMO	Field Office/ Resource Area FMO
26. Ensures an accurate and defensible Wildland Fire Situation Analysis (WFSA) is completed and updated daily for all fires that escape initial attack.	X	X	X
27. Ensures that a Wildland Fire Implementation Plan (WFIP) is completed, approved, and certified daily for all fires managed for Wildland Fire Use objectives.	X	X	X
28. Works with cooperators, groups, and individuals to develop and implement processes and procedures for providing fire safe communities within the wildland urban interface.	X	X	X
29. Ensures that trespass actions are initiated and documented to recover cost of suppression activities, land rehabilitation, and damages to the resource and improvements for all human-caused fires where liability can be determined, as per H-9238-1.	X	X	X
30. Ensures training for fire cause determination and fire trespass.	X	X	X
31. Ensures compliance with National and State Office policy for prescribed fire activities. Provides periodic reviews of the prescribed fire program.	X	X	X
32. Annually updates and reviews the <i>Agency Administrator's Guide to Critical Incident Management</i> . (NFES 1356)	X	X	X
33. Ensures that fire season severity predictions, weather forecasts, fire behavior predictors, and fire activity levels are monitored and communicated daily to all employees (hard copy, web page, email, radio, or fax).		X	X
34. Uses current National and Local Mobilization Guides and ensures that national, geographic and local mobilization standards are followed.	X	X	X
35. Complies with established property control/management procedures.	X	X	X

1

1 **Delegation of Authority**

2

3 **Delegation for State Fire Management Officers**

4 In order to effectively perform their duties, a SFMO must have certain authorities  
5 delegated from the State Director. This delegation is normally placed in the state  
6 office supplement to agency manuals. This delegation of authority should include  
7 the following roles and responsibilities:

- 8 • Serve as the State Director's authorized representative on geographic area  
9 coordination groups, including MAC groups.
- 10 • Coordinate and establish priorities on uncommitted fire suppression  
11 resources during periods of shortages.
- 12 • Coordinate logistics and suppression operations statewide.
- 13 • Relocate agency pre-suppression/suppression resources within the  
14 state/region based on relative fire potential/activity.
- 15 • Correct unsafe fire suppression activities.
- 16 • Direct accelerated, aggressive initial attack when appropriate.
- 17 • Enter into agreements to provide for the management, fiscal, and  
18 operational functions of combined agency operated facilities.
- 19 • Suspend prescribed fire activities when warranted.
- 20 • Give authorization to hire Emergency Firefighters in accordance with the  
21 DOI Pay Plan for Emergency Workers.
- 22 • Approve emergency fire severity funding expenditures not to exceed the  
23 agency's annual authority.
- 24 • Appendix C provides a sample "Delegation of Authority".

25

26 **Safety Officer**

27 Safety and occupational health program responsibilities are interwoven  
28 throughout Bureau program areas, including fire management. Safety of our  
29 employees lies within every level of the organization and program  
30 implementation can have a direct impact on firefighting personnel. To ensure  
31 that program requirements are met, the following checklist shall be utilized.

32

33

**Safety Responsibilities to the Fire Program**

<b>PERFORMANCE REQUIRED</b>	<b>State Safety Manager</b>	<b>District/Zone Safety Manager</b>	<b>Unit Fire Management Officer</b>	<b>Field/Resource Area Manager</b>
1. A Unit Safety Plan, addressing general safety and health program management, has been approved by the Agency Administrator.		X	X	X
2. A work place hazard/risk assessment has been completed for non suppression related fire activities.		X		

PERFORMANCE REQUIRED	State Safety Manager	District/Zone Safety Manager	Unit Fire Management Officer	Field/Resource Area Manager
3. An individual has been designated as the Unit Safety Officer.	X			X
4. Maintains a working relationship with all facets of the fire organization including outstations.		X	X	
5. A safety committee or group which includes fire representation is organized to monitor safety and health concerns and activities.		X	X	X
6. Written safety and health programs required by OSHA are in place and being implemented to include fire personnel.	X	X		
7. Employees are being provided mandatory safety and health training.		X	X	X
8. Fire safety programs (e.g., SAFENET, 6 Minutes for Safety, Safety Alerts) are known and being utilized.			X	
9. Safety publications are available to all fire employees (e.g., <i>Incident Response Pocket Guide, 1112-2 Manual, Fireline Handbook 410-1</i> ).			X	
10. Procedures are in place to ensure <i>Interagency Standards for Fire and Fire Aviation Operations</i> is being followed.			X	
11. Procedures are in place to monitor WCT results and ensure medical examination policies are followed.			X	
12. Material Safety Data Sheets (MSDS) are present, accessible, and available for all hazardous materials used and stored in the work area.		X	X	

PERFORMANCE REQUIRED	State Safety Manager	District/Zone Safety Manager	Unit Fire Management Officer	Field/Resource Area Manager
13. Special projects risk assessments are completed and crew briefings are given prior to beginning work.		X	X	
14. Procedures are in place to purchase non-standard equipment as identified in the JHA/Risk Assessment process, and to ensure compliance with consensus standards (e.g., ANSI, NIOSH) for PPE.	X	X		X
15. PPE supplied, is serviceable, and being utilized.		X	X	
16. Ensures tailgate safety meetings are held and documented.			X	
17. Monitors and reviews wildland fire activities to ensure adherence to agency safety policy.		X	X	
18. Procedures are in place for reporting unsafe and unhealthful working conditions.		X		X
19. Accident reporting procedures are documented and supervisors are trained in the use of Safety Management Information System (SMIS).	X	X		X
20. Injury data is monitored and reviewed to determine trends affecting the health and welfare of employees.	X	X		
21. General facility and work areas inspections are conducted to ensure requirements are met per 29 CFR 1910.	X	X		

1

2 **Employee Responsibility**

3 All employees, cooperators, contractors, and volunteers who participate in  
4 wildland fire operations have the duty to treat one another with respect and to  
5 maintain a work environment free of misconduct and harassment.

6



1 Misconduct includes but is not limited to: alcohol misuse, driving while  
2 intoxicated, the use of illegal drugs, hazing, insubordination, disregard for  
3 policies and procedures and the destruction or theft of government property.

4  
5 Harassment is coercive or repeated, unsolicited and unwelcome verbal  
6 comments, gestures or physical contacts and includes retaliation for confronting  
7 or reporting harassment.

8  
9 Harassment and misconduct will not be tolerated under any circumstances and  
10 will be dealt with in the strictest of terms. We must all take responsibility for  
11 creating and ensuring a healthy and safe work environment. Employees who  
12 experience or witness harassment, misconduct or any inappropriate activity  
13 should report it to the proper authority immediately.

#### 14 15 **Examples of harassment and misconduct**

- 16 • **Physical conduct** - Unwelcome touching, standing too close, looking up  
17 and down, inappropriate or threatening staring or glaring, obscene,  
18 threatening, or offensive gestures.
- 19 • **Verbal or written misconduct** - Inappropriate references to body parts;  
20 derogatory or demeaning comments, jokes, or personal questions; sexual  
21 innuendoes; offensive remarks about race, gender, religion, age, ethnicity,  
22 or sexual orientation, obscene letters or telephone calls, catcalls, whistles or  
23 sexually suggestive sounds.
- 24 • **Visual or symbolic misconduct** - Display of nude pictures, scantily-clad,  
25 or offensively-clad people; display of offensive, threatening, demeaning, or  
26 derogatory symbols, drawings, cartoons, or other graphics; offensive  
27 clothing or beverage containers, bumper stickers, or other articles.
- 28 • **Hazing** - Hazing is considered a form of harassment. "Hazing" is defined as  
29 "*any action taken, or situation created intentionally, to produce mental or*  
30 *physical discomfort, embarrassment, or ridicule*".
- 31 • **Alcohol** - The use of alcohol during any work period is strictly prohibited.  
32 The performance of job duties while under the influence of alcohol is  
33 prohibited. Underage personnel alcohol use is prohibited at all times.

#### 34 35 **BLM Mobile Fire Equipment Policy**

##### 36 37 **Introduction**

38 The following section represents a general overview of the BLM Mobile Fire  
39 Equipment Policy. The policy can be found in it's entirety on the BLM  
40 Equipment Development Website at:  
41 <http://web.blm.gov/internal/fire/EquipDev/index.htm>

##### 42 43 **Policy and Guidance**

44 The BLM fire equipment program includes the design, development, and  
45 acquisition of specialized wildland fire equipment suitable to meet the full range  
46 of fire management requirements. The design and development is accomplished

1 through the analysis of performance needs required by BLM Field Units, and  
2 working with industry to produce prototypes for testing and eventually  
3 production units. Acquisition of equipment is accomplished primarily through  
4 contracting. The BLM fire equipment program balances state-of-the-art  
5 technology with overall cost efficiency to provide maximum safety for personnel  
6 while effectively meeting its fire management needs.

7  
8 It is agency policy to maintain each piece of fire equipment at a high level of  
9 performance and in a condition consistent with the work it has been designed to  
10 perform. This shall be accomplished through application of a uniform preventive  
11 maintenance program, timely repair of components broken or damaged while on  
12 assignment, and in accordance with all agency fiscal requirements. Repairs shall  
13 be made and parts replaced, as identified, to keep the equipment functional and in  
14 top operating condition.

15  
16 BLM mobile fire equipment is not to be altered or modified without approval of  
17 the BLM National Fire Equipment Committee.

### 18 **Equipment Groups**

19 There are three levels of Fire Equipment Committees: National, State, and  
20 Interagency. Fire equipment Committees address the broad spectrum of  
21 equipment subjects and make recommendations. State Committees will report to  
22 the respective State Fire Management Officer. The National Fire Equipment  
23 Committee (NFEC) will report to the Fire Operations Group (FOG). Equipment  
24 committees should invite other agency equipment leads to share ideas, transfer  
25 technology and coordinate efforts.

### 26 **Equipment Development**

27  
28 The BLM has established a fire equipment development process to ensure that  
29 any new fire equipment or technologies meet or exceed established performance  
30 standards. All new fire equipment will follow this development process and will  
31 be tested and evaluated under actual field conditions prior to being made  
32 available for general ordering.

### 33 **BLM Equipment Development Unit**

34  
35 The BLM maintains the Fire Equipment Development Unit (EDU) located at  
36 NIFC. This unit is responsible for the development, ordering, inspection,  
37 receiving and distribution of new fire equipment that will meet or exceed the  
38 minimum performance standards established by the BLM National Fire  
39 Equipment Committee. The EDU website is located at:  
40 <http://web.blm.gov/internal/fire/EquipDev/index.htm>.

### 41 **Standardization**

42  
43 Standardization of fire equipment aides in the ability to produce equipment that  
44 effectively meets the user's needs at the lowest possible cost with the least impact  
45 on fire programs. Standardization also contributes to the ability to provide  
46

1 effective, consistent and quality training to the BLM Fire Program workforce.  
2 The BLM National Fire Equipment Committee has the responsibility to approve  
3 and establish the minimum performance standards for all BLM specific fire  
4 equipment.

#### 6 **Deficiency Reporting**

7 The BLM Fire Equipment Improvement/Deficiency Reporting System (IDRS) is  
8 used to collect improvement suggestions and deficiency reports for all BLM fire  
9 equipment. The reporting system enables  
10 the BLM Equipment Development Unit (EDU) to build a comprehensive  
11 database to document problems, identify trends, and establish priorities for  
12 development and modification of new and existing equipment.

13  
14 Field Offices submit reports for problems encountered with BLM fire equipment.  
15 Reports may also be submitted for suggestions of improvement. Submitted  
16 reports receive immediate attention and the sender receives verification of  
17 receipt. The EDU will follow-up with the submitting Field Office to correct the  
18 deficiency or work to incorporate the improvement suggestion.

19 IDRS can be found under “Improvement/Deficiency Report” on the BLM  
20 Equipment Development Website at:  
21 <http://web.blm.gov/internal/fire/EquipDev/index.htm>.

#### 23 **Acquisition**

24 The Working Capital Fund (WCF) life cycle for each class of vehicle and  
25 available funds in the WCF will determine when fire vehicles are to be replaced.  
26 Fire equipment acquisition is done by submitting an order to the EDU. The EDU  
27 will work with the ordering Unit, the WCF, Contracting, the vendor and other  
28 pertinent parties to fill the order.

#### 30 **Funding**

31 Procurement of nonstandard equipment with fire management funds, when  
32 standard equipment is available, must have written approval by the Operations  
33 Division Chief of the BLM Fire and Aviation Directorate and the State Fire  
34 Management Officer. Most fire vehicles are funded through the WCF. Other  
35 types of fire equipment are funded through the normal budget process at the State  
36 and local level. Special projects may be funded in a variety of ways including  
37 through the Fire and Aviation Directorate, special project allocations, available  
38 mid or year end funds, State or local funding, Interagency agreement, or through  
39 the WCF.

#### 41 **BLM Fire Equipment Ordering Guide**

42 The BLM Fire Equipment Ordering Guide lists standard fire equipment, outside  
43 the cache system, that is available for ordering by BLM units. This equipment  
44 has been approved by the EDU, NFEC and WCF as the current standard. The  
45 guide contains current model fire apparatus, support vehicles, and equipment.  
46 The guide can be found on the Equipment Development website at:

1 <http://web.blm.gov/internal/fire/EquipDev/index.htm>

2

### 3 **Equipment Modification/Retrofitting**

4 Any major retrofit, change or addition to BLM fire equipment requires  
5 submission of a proposal to the BLM National Fire Equipment Committee  
6 (NFEC). The NFEC in conjunction with the BLM Equipment Development Unit  
7 will consider and approve/disapprove any such proposals. Minor changes or add-  
8 ons may be approved through the EDU.

9

### 10 **Working Capital Fund**

11 The BLM Working Capital Fund (WCF) is managed by the BLM Vehicle Fleet  
12 Manager at the Denver Service Center. Replacement of fire vehicles that have  
13 reached the end of their service life and certain maintenance expenditures are  
14 managed through the WCF. Vehicle replacement and maintenance is  
15 accomplished with funds that are paid into the WCF over the life of the vehicle.  
16 The WCF collects funds through Fixed Ownership Rates (FOR) and Use Rates.

17

### 18 **Property Transfer/Replacement**

19 Surplus, early turn-ins, and transfer fire vehicles may be transferred to another  
20 area for continued service with the approval of the State Fire Management  
21 Officer and the WCF Manager. In these instances, the vehicle remains in the  
22 same class, and the FOR and use rates will continue to be charged to the unit  
23 acquiring the vehicle. Field Offices wishing to dispose of fire engine equipment  
24 prior to the normal replacement date may do so. In these instances, no future  
25 replacement is automatically provided and there is no accrued credit for the FOR  
26 collected on that unit prior to disposal. Field offices acquiring this type of  
27 equipment continue payment of the FOR and use rates.

28

### 29 **Conversions**

30 Offices in possession of fire engine equipment due for replacement have the  
31 option of replacing that equipment with vehicle(s) of another class. The change  
32 in NUS must be consistent with the approved FMP (conversion of two light  
33 engines to one heavy engine). The Operations Division Chief of the BLM Fire  
34 and Aviation Directorate, State Fire Management Officer and WCF Manager  
35 must provide written approval. Sufficient contributions through the FOR or other  
36 funds to make up any difference in cost are required.

37

### 38 **BLM Firefighter Organization**

39

#### 40 **Introduction**

41 Firefighters operate within the Incident Command System (ICS), which is a  
42 component of the National Interagency Incident Management System (NIIMS).  
43 In the ICS, firefighters are either assigned as single resource overhead  
44 (individuals assigned to specific supervisory positions) or as members of an  
45 organized unit. These units include:

- 1 • **Hand Crews** - Vehicle mobile firefighters that specialize in the use of hand  
2 tools, chainsaws, portable pumps and ignition devices for tactical operations.  
3 Hand crew types include Interagency Hotshot Crews (IHC)s, Type 1 Crews,  
4 Type 2 Initial Attack Crews, and Type 2 Crews.
- 5 • **Engine Crews** - Engine mobile firefighters that specialize in the use of  
6 engines for tactical operations.
- 7 • **Helitack** - Helicopter mobile firefighters that specialize in the use of  
8 helicopters for tactical and logistical operations.
- 9 • **Smokejumpers** - Fixed wing aircraft and parachute mobile firefighters that  
10 specialize in the use hand tools, chainsaws, and ignition devices for tactical  
11 operations.

12 The individuals within these units are trained to provide different levels and types  
13 of tactical, logistical, and managerial capability. Operational standards are:

14  
15 **BLM Firefighter Priority for Use**

- 16 1. Initial attack on lands for which the BLM has suppression responsibility.
- 17 2. Other fire suppression/management assignments on BLM lands.
- 18 3. Other fire suppression/management assignments on other agency lands.
- 19 4. All risk incidents.

20  
21 **BLM Firefighter General Non-Fire Training Requirements**

	<b>One-Time Training</b>	<b>Recurring Training</b>	<b>Annual Training</b>
All Firefighters	First Responder Awareness Level (Hazardous Materials) Bloodborne Pathogen	First Aid/CPR (every 2 years) Defensive Driving (every 3 years)	RT-130 Annual Fireline Safety Training Do What's Right/EEO HazMat Refresher

22  
23 **BLM Firefighter Mandatory Physical Fitness Standards**

24 The *Wildland Fire Qualifications System Guide* (PMS 310-1) establishes  
25 physical fitness standards for NWCG sanctioned firefighters. These standards  
26 are assessed using the Work Capacity Tests (WCT). Information on the WCT is  
27 located in Chapter 13 of this publication.

28  
29 **BLM Firefighter Target Physical Fitness Standards**

30 These are voluntary targets. They are not mandatory. These targets are  
31 established to provide BLM firefighters a common standard against which to  
32 gauge their physical fitness level. BLM firefighters are encouraged to try to meet  
33 or exceed these standards.

34  
35  
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39

	Age 20-29	Age 30-39	Age 40-49	Age 50 & Up
1.5 Mile Run	11:58	12:25	13:05	14:43
Sit-Ups (1 minute)	40	36	31	26
Push-Ups (1 minute)	33	27	21	15

1  
2 The guide below may be used to adjust the 1.5 mile run times to compensate for  
3 altitude differences:

Altitude in feet	1.5 mile run time adjustment
0 – 5,000	No adjustment
5,000 – 6,000	Add 30 seconds
6,000 – 7,000	Add 40 seconds
7,000 – 8,000	Add 50 seconds

4  
5 **BLM Hand Crew Standards (all crew types)**

- 6 • **Language** - CRWB and FFT1: must be able to read and interpret the  
7 language of the crew as well as English.  
8 • **Flight Weight** - 5100 pounds  
9 • **Personal gear** - Sufficient for 14 day assignments  
10 • **Physical fitness** - Arduous, all positions  
11 • **Required Equipment & PPE** - Fully equipped as specified in the:  
12 *Interagency Standards for Fire and Fire Aviation Operations* (Red Book)  
13

14 **BLM Crew Typing Standards**

Crew Type	IHC	Type 1	Type 2IA	Type 2
<b>Crew Size</b>	Minimum 18 Maximum 25	Minimum 18 Maximum 20	Minimum 18 Maximum 20	Minimum 18 Maximum 20
<b>Leadership Qualifications</b>	1-Supt. 1-Assist Supt 3 Squad Leaders See quals chart below	1-CRWB 1-ICT4 3-ICT5	1 CRWB 3 ICT5	1 CRWB 3 FFT1
<b>Incident Management Capability</b>	Operate up to 3 independent squads w/ T4 and T5 command capability	Operate up to 3 independent squads w/ T5 command capability	Operate up to 3 independent squads with T5 command capability	Operate as single crew in full crew configuration
<b>Crew Experience</b>	80% of the crewmembers must have at least 1 season experience in fire suppression	80% of the crewmembers must have at least 1 season experience in fire suppression	60% of the crewmembers must have at least 1 season experience in fire suppression	40% of the crewmembers must have at least 1 season experience in fire suppression
<b>Crew Utilization</b>	National Shared Resource	Local unit control	Local unit control	Local unit control

<b>Communication</b>	7 programmable handheld radios. 1 programmable mobile radio in each truck	5 programmable handheld radios	4 programmable handheld radios	4 programmable handheld radios
<b>Training</b>	40 hours annual training prior to assignment.	40 hours Basic firefighter training OR 4 hours annual fireline fresher training prior to assignment.	40 hours Basic firefighter training OR 4 hours annual fireline fresher training prior to assignment.	40 hours Basic firefighter training OR 4 hours annual fireline fresher training prior to assignment.
<b>Logistics</b>	Squad level agency purchasing authority	Crew level agency purchasing authority	Crew level agency purchasing authority	No purchasing authority
<b>Transportation</b>	Own transportation	Own transportation	Need transportation	Need transportation
<b>Works together 40 hours/week</b>	Yes	Yes	No	No

1

2 **BLM Interagency Hotshot Crews**

3 BLM IHCs, and IHC (IA), carry 18-25 firefighters and are used primarily for  
4 wildfire suppression, fuels reduction, and other fire management duties. They are  
5 capable of performing self-contained initial attack suppression operations, and  
6 commonly provide incident management capability at the Type 3 or 4 level.

7 BLM IHCs, and IHC (IA), meet all IHC certification standards stated in the  
8 National Hotshot Crew Operating Guide.

9

10 **BLM Interagency Hotshot Crews (Initial Attack)**

11 BLM IHC (IA) are BLM Hotshot Crews which meet all interagency standards for  
12 an IHC program and have enhanced IA capabilities and responsibilities for BLM  
13 lands. The focus of these crews will be IA on BLM lands and their utilization  
14 will be through the national Fire Aviation Directorate (Division of Fire  
15 Operations). Initial attack fire suppression will be prioritized for these crews  
16 above all other duties, with the exception of life and property protection. These  
17 crews will maintain their suppression proficiency by being utilized for the full  
18 range of incident assignments through the coordination system. However they  
19 will be reassigned and dedicated to BLM initial attack fire suppression  
20 assignments as determined by agency needs.

21

22 **BLM IHC Locations**

State	Crew	Location
AK	Chena	Fairbanks
	Midnight Sun	
CA	Diamond Mountain	Susanville
	Kern Valley	Bakersfield
ID	Snake River	Pocatello

State	Crew	Location
MS	Jackson	Jackson
NV	Silver State	Carson City
OR	Vale	Vale

1

2 **BLM IHC (IA) Locations**

State	Crew	Location
CO	Craig	Craig
NV	Ruby Mountain	Elko
UT	Bonneville	Salt Lake City

3

4 **BLM IHC Training and Qualification Requirements**

Position	IQCS Min.	Fire Training
<b>Crewmember</b>	FFT2	I-100 Intro to ICS S-130 Firefighter Training L-180 Human Factors on the Fireline S-190 Intro to Wildland Fire Behavior
<b>Lead Crewmember</b>	FFT1 ICT5	All the above plus: S-211 Portable Pumps and Water Use S-212 Chain Saws S-131 Firefighter Type 1 S-270 Basic Air Operations
<b>Squad Leader</b>	FFT1 ICT5	All the above plus: S-200 Initial Attack IC S-215 Fire Ops in the WUI S-230 Crew Boss Single Resource S-234 Ignition Operations S-260 Incident Business Management S-290 Intermediate Fire Behavior I-200 Basic ICS
<b>Assistant Superintendent</b>	STCR ICT4	All the above plus: I-300 Intermediate ICS S-330 Task Force/Strike Team Leader S-390 Intro to Fire Behavior Calculations L-280 or equivalent
<b>Superintendent</b>	TFLD ICT4 FIRB	All the above.

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### **BLM IHC Initial Ordering**

- BLM IHC will status themselves with their local dispatch center in accordance with local policies and procedures.
- BLM IHC will be assigned by their dispatching GACCs in accordance with geographic area policies and procedures.
- BLM IHC have the local unit option of traveling with 25 personnel when on incident assignments. BLM IHC superintendents will obtain prior approval from the dispatching GACC when the assignment requires fixed wing transport and the crew size is greater than 20.

### **BLM IHC Pre-position/Reassignment**

The FA Division of Fire Operations will pre-position/reassign BLM IHCs to meet BLM national priorities according to the following procedure:

- BLM IHCs will be statused and assigned according to established coordination system procedures.
- The FA Division of Fire Operations will track BLM IHC status.
- FA fire Ops, in consultation with the State Fire Operations Specialist of the BLM IHC in question, will provide the Chief, Division of Fire Operations, a recommendation for pre-position/reassignment.
- The Chief, Division of Fire Operations will make the final decision based on current and predicted fire activity and national BLM priorities.
- FA fire ops will relay the Division Chief's decision to NICC and follow up with an immediate call to the state fire operations specialist.
- NICC will process that order through normal channels in such a manner as to have the crew reassigned within 3 hours of NICC receiving the order.
- BLM IHC crews which are committed to incidents that have extended containment dates, are in mop-up/rehab, or are staging crews will be prioritized for pre-position/reassignment.

### **Local Unit Process for Requesting BLM IHC support**

- BLM units needing IHC support for current and predicted IA will submit an oral request to their State Fire Operations Specialist.
- The State Fire Operations Specialist will forward approved requests to FA Division of Fire Operations.
- FA fire ops will determine BLM IHC availability and submit a pre-position/reassignment recommendation to the Chief, Division of Fire Operations, as per the above procedure.

### **BLM IHC Status Reporting System**

- BLM IHCs will report status through the BLM IHC Status Reporting System.
- BLM IHC superintendents will regularly update the system by contacting the BOI SMJ Duty Officer with any change in crew status and/or current

- 1 utilization when on assignment.
- 2 • The BOI SMJ duty officer is available 24 hours, seven days per week at
- 3 > 800-925-8307 (work hours)
- 4 > 208-387-5426 (work hours)
- 5 > 208-850-5144 (after hours)
- 6 • BLM IHC status will be posted at
- 7 <http://www.nifc.gov/smokejumper/smjrppt.php>
- 8

### 9 **BLM Engines**

10 BLM engines carry 2-6 firefighters and are used primarily for wildfire  
 11 suppression, fuels reduction, and other fire management duties. They are capable  
 12 of performing self-contained initial attack suppression operations, and can  
 13 generally provide single resource incident management capability up to the Type  
 14 4 level.

### 16 **Fire Engine Maintenance Procedure and Record (FEMPR)**

17 The FEMPR will be used to document periodic maintenance on all engines.  
 18 Apparatus safety and operational inspections will be performed at the intervals  
 19 recommended by the manufacturer and on a daily and post-fire basis as required.  
 20 All annual inspections will include a pump gpm test to ensure the  
 21 pump/plumbing system is operating at desired specifications. The FEMPR can  
 22 be found at:

23 [http://www.blm.gov/nifc/st/en/prog/fire/training/fire\\_training/projects/enop.html](http://www.blm.gov/nifc/st/en/prog/fire/training/fire_training/projects/enop.html)

24

### 25 **BLM Engine Typing**

26 BLM engines are typed according to the following interagency standards stated  
 27 in the *NWCG Fireline Handbook (PMS 410-1)*:

Components	Structure Engines		Wildland Engines				
	1	2	3	4	5	6	7
Pump Rating							
Min. Flow (GPM)	1000+	250+	150	50	50	30	10
At rated pressure (PSI)	150	150	250	100	100	100	100
Tank Capacity Range (Gallons)	400+	400+	500+	750+	400-750	150-400	50-200
Hose, 2.5" (feet)	1200	1000					
Hose, 1.5" (feet)	400	500	500	300	300	300	
Hose, 1" (feet)			500	300	300	300	200
Ladders	48'	48'					
Master Stream (GPM)	500						

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02-27

Personnel (Minimum)	4	3	3	2	2	2	2
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1 **BLM Engine Minimum Staffing Requirements**

2 All BLM engines will meet these staffing standards on every assignment. BLM  
3 engines operating with more than 3 firefighters will always have a fully qualified  
4 ENOP (other than the captain). Chase vehicles are considered part of the engine  
5 staffing.

6

BLM WCF Vehicle Class	NWCG Type Class	Engine Captain	Engine Operator	Engine Crewmember
625 Unimog	4	1	1	1
626 Unimog	4	1	1	1
650 Hummer	6	1		1
662 Light	6	1		1
663 Light	6	1		1
664 Enhanced Light	6	1		1
665 Interface	3	1		2
667 Heavy Engine	4	1		2
668 Super-heavy Tactical Engine	4	1	1	1
668 Super-heavy Tactical Tender	2 (Tender)	1		1

7

8 **BLM Engine - Fire Training and Qualification Standards**

Position	IQCS	Training
Crewmember	FFT2	I-100 Intro to ICS S-130 Firefighter Training L-180 Human Factors on the Fireline S-190 Intro to Wildland Fire Behavior
Engine Operator	FFT1 ENOP	All the above plus: BLM Engine Operator Course (ENOP) S-131 Firefighter Type 1 S-133 Look Up/Down/Around S-211 Pumps and Water Use S-212 Wildfire Power Saws L-280 Followership to Leadership
Engine Captain	ENGB ICT5	All the above plus: I-200 Basic ICS S-200 Initial Attack Incident Commander S-215 Fire Ops in the Wildland/Urban Interface S-230 Crew Boss (Single Resource) S-231 Engine Boss (Single Resource) S-234 Ignition Operations S-260 Incident Business Management S-270 Basic Air Operations S-290 Intermediate Fire Behavior

1

2 **BLM Engine - Driver Training and Qualification Requirements**

Position	Initial Training	Refresher Training
Crewmember	BLM Engine Driver Orientation <i>and</i> Defensive Driving	BLM Engine Driver Orientation* (annual) <i>and</i> Defensive Driving (every 3 years)
Engine Operator <i>and</i> Engine Captain	BLM (ENOP)Engine Operator Course <i>and</i> CDL Permit (GVW 26,000 or greater) <i>and</i> Defensive Driving	BLM Engine Driver Refresher (annual) <i>and</i> Defensive Driving (every 3 years)
WCF class 650 and 668 drivers	WCF class 650 and 668 driver and maintenance training **	

3 \* *S-216 Driving for the Fire Service* or the *BLM Engine Operator Course* will  
4 satisfy this refresher training requirement.

5 \*\* WCF class 650 and 668 driver and maintenance training will be conducted by  
6 the FAD Division of Fire Operations Equipment Development Unit annually.  
7 Travel, per-diem, vehicle operating charges and fuel costs directly related to this  
8 training will be covered by the EDU; base 8 salary and overtime costs will be  
9 covered by the students' home unit.

- 10 • BLM engine training courses can be found at:  
11 [http://www.blm.gov/nifc/st/en/prog/fire/training/fire\\_training.html](http://www.blm.gov/nifc/st/en/prog/fire/training/fire_training.html)

12

13 All hands-on components of engine driver training courses will be conducted on  
14 the specific vehicle or vehicle type that the driver will be using.

15

16 **BLM Engine Ordering**

- 17 • BLM engines will status themselves with their local dispatch center in  
18 accordance with local policy and procedure.
- 19 • Availability of BLM engines for off unit assignments rests with the local  
20 unit fire management.
- 21 • BLM units needing engines from off their own unit for support will contact  
22 their state operations with a request.
- 23 • State operations will contact the FA or other BLM state office operations  
24 with the request.

25

26 Equivalent courses that satisfy driver training requirements, such as the National  
27 Safety Council sanctioned Emergency Vehicle Operator Course (EVOC), will be  
28 approved in writing by FAD Fire Operations on a case-by-case basis.

1

**2 BLM Smokejumpers**

3 BLM Smokejumpers operate in teams of 2-8 firefighters and are used primarily  
4 for wildfire suppression, fuels reduction, and other fire management duties. They  
5 are capable of performing self-contained initial attack suppression operations,  
6 and commonly provide single resource incident management capability at the  
7 Type 3 level. The primary locations of the BLM smokejumper bases are Boise,  
8 Idaho and Fairbanks, Alaska.

9

**10 BLM SMJ Operations**

11 BLM smokejumper operational and administrative procedures are located in the  
12 Interagency Smokejumper Operations Guide (ISOG), the BLM Ram-Air  
13 Training Manual (RATM), the Boise Smokejumpers User Guide, the Alaska Fire  
14 Service Operational Procedures, Policies, and Guidelines, and other pertinent  
15 agreements and operating plans.

16

**17 BLM SMJ Coordination & Dispatch**

18 Smokejumpers are a national shared resource and are ordered according to  
19 geographic area or national mobilization guides. Specific information on the  
20 coordination, dispatch, ordering, and use of BLM smokejumpers can be found in  
21 the BLM Boise Smokejumpers User Guide, and in the Alaska Fire Service  
22 Operational Procedures, Policies, and Guidelines. Contact BLM smokejumpers  
23 in Boise at (208) 387-5426 or in Alaska at (907) 356-5540 for these publications.

24

**25 BLM SMJ Equipment**

26 BLM smokejumpers use aircraft approved by the interagency Smokejumper  
27 Aircraft Screening and Evaluation Board (SASEB). All aviation operations will  
28 be performed according to established agency policies and procedures.

29

30 BLM smokejumpers use the Smokejumper Ram-Air Parachute System  
31 exclusively. All abnormalities in personnel parachute equipment and procedures  
32 will be reported through the Malfunction and Abnormality Reporting System  
33 (MARS). All parachuting operations will be performed according to established  
34 agency policies and procedures. All modifications to and deviations from  
35 established standards will be reported, documented, and approved through the  
36 BLM SMJ Modification Documentation (MODOC) process.

37

**38 BLM SMJ Training**

39 To ensure proficiency and safety, smokejumpers complete annual training in  
40 aviation, parachuting, fire suppression, administration, and safety. Experienced  
41 jumpers receive annual refresher training in these areas. First year smokejumpers  
42 undergo a rigorous four week long smokejumper training program. Candidates  
43 are evaluated to determine:

- 44 • Level of physical fitness
- 45 • Ability to learn and perform smokejumper skills
- 46 • Ability to work as a team member

- 1 • Attitude
- 2 • Ability to think clearly and remain productive in a stressful environment

3

4 **BLM Smokejumper Training and Qualification Standards**

Position	IQCS Target	SMJ Trng. Target.
Dept Managers	T1 and T2 C&G, FUMA	
Spotter	ICT3, DIVS, ATGS RXB2, SOFR	Senior Rigger
Lead Smokejumper	STLD, TFLD FOBS	
Smokejumper	ICT4, CRWB, FIRB	
Rookie Smokejumper	ICT5, FFT1 FEMO	

5

6 **BLM Smokejumper Physical Fitness Standards**

National SMJ Standard	BLM SMJ Target Standard
1.5 mile run in 11:00 minutes or less	1.5 mile run in 9:30 or less, or 3 mile run in 22:30 minutes or less
45 sit-ups	60 sit-ups
25 push-ups	35 push-ups
7 pull-ups	10 pull-ups
110 lb pack-out over 3 miles over level terrain in 90 minutes or less	110 lb pack-out over 3 miles over level terrain in 90 minutes or less
Successful completion of the WCT at an arduous rating	Successful completion of the WCT at an arduous rating

7

8 **BLM Operational Duty Officer (ODO)**

9 Each BLM unit Fire Management Officer will perform the duties of an ODO or  
10 will provide a delegated ODO for their units during any period of predicted  
11 incident activities. ODOs responsibilities may be performed by any individual  
12 with a signed Delegation of Authority from the local agency administrator.  
13 Qualifications for the ODO will be identified within the Unit Annual Operating  
14 Plan. The required duties for all BLM ODOs are:

- 15 • Monitor unit incident activities for compliance with BLM safety policies.
- 16 • Coordinate and set priorities for unit suppression actions and resource allocation.
- 17
- 18 • Keep unit agency administrators, suppression resources, and Information Officers informed of the current and expected situation.
- 19
- 20 • Plan for and implement actions required for future needs.
- 21 • Document all decisions and actions.

22 ODOs will provide operational oversight of these requirements as well as any  
23 unit specific duties assigned by the local fire managers through the local unit fire  
24 operating plan. ODOs will not fill any ICS incident command functions

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- 1 connected to any incident. In the event that the ODO is required to accept an
- 2 incident assignment, the FMO will ensure that another qualified and authorized
- 3 ODO is in place prior to the departure of the outgoing ODO.

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**Chapter 03**

**National Park Service Program Organization & Responsibilities**

**Agency Administrator Roles**

**Director**

The Director of the National Park Service is responsible to the Secretary of the Interior for fire management programs on public lands administered by the National Park Service. The Division of Fire and Fire Aviation Management is responsible to the Director for policy formulation and program oversight.

The Chief, Division of Fire and Aviation Management will meet the required elements outlined in the *Management Performance Requirements for Fire Operations*.

**Regional Director**

The Regional Director is responsible to the Director for fire management programs and activities within their region.

The Regional Director will meet the required elements outlined in the *Management Performance Requirements for Fire Operations* and ensure training is completed to support delegations to line managers and principal actings.

**Park Superintendent**

The Park Superintendent is responsible to the Regional Director for the safe and efficient implementation of fire management activities within their unit, including cooperative activities with other agencies or landowners in accordance with delegations of authorities. The Park Superintendent or principal acting will meet the required elements outlined in the *Management Performance Requirements for Fire Operations*.

**Management Performance Requirements for Fire Operations**

PERFORMANCE REQUIRED	NPS Director.	Regional Director.	Park Supt.
1. Take necessary and prudent actions to ensure firefighter and public safety.	X	X	X
2. Ensure sufficient qualified fire and non-fire personnel are available to support fire operations at a level commensurate with the local and national fire situations.	X	X	X
3. Ensure Fire Management Officers (FMOs) are fully qualified as identified in the <i>Interagency Fire Program Management Qualification Standards</i> .	X	X	X



PERFORMANCE REQUIRED	NPS Director.	Regional Director.	Park Supt.
4. Provide a written Delegation of Authority to individual(s) responsible for wildland fire management activities to ensure an adequate level of operational authority, including MAC Group authority, as appropriate. Depending on park organizational structure, written delegations may be provided to the Chief Ranger, Natural Resource Specialist, FMO, designated Fire Coordinator, Park Group FMO, or to individuals from neighboring fire management organizations, provided a written agreement or memorandum of understanding is in-place. Where applicable, an Inter-park Agreement that specifies the reciprocal responsibilities of the Superintendent and Park Group FMO will be prepared. This Inter-park Agreement will be accompanied by an annual delegation of authority.	X	X	X
5. Identify resource management objectives in a current fire management plan (FMP).			X
6. Review and approve wildland fire preparedness funding based on and accurate and defensible readiness analysis. Review and approve fuels management funding requests based on a systematic prioritization process commensurate with current measures of performance	X	X	X
7. Develop protection and fire use standards and constraints that are in compliance with agency fire policies.		X	X
8. Ensure use of fire funds is in compliance with Department and Agency policies.	X	X	X

PERFORMANCE REQUIRED	NPS Director.	Regional Director.	Park Supt.
9. Management teams will meet once a year to review fire and aviation policies, roles, responsibilities, and delegations of authority. Specifically address oversight and management controls, critical safety issues, and high-risk situations such as team transfers of command, periods of multiple fire activity, and Red Flag Warnings.	X	X	X
10. Review safety policies, procedures, and concerns with field fire and fire aviation personnel. Discussions should include issues that could compromise safety and effectiveness during the upcoming season.			X
11. Ensure timely follow-up actions to program reviews, fire preparedness reviews, fire and fire aviation safety reviews, fire critiques, and post-season reviews.	X	X	X
12. Ensure fire and fire aviation preparedness reviews are conducted in all unit offices each year.		X	X
13. Ensure an approved burn plan is followed for each prescribed fire project, including follow-up monitoring and documentation to ensure management objectives are met.		X	X
14. Meet annually with major cooperators and review interagency agreements to ensure their continued effectiveness and efficiency. (may be delegated).		X	X
15. Ensure that a Wildland Fire Situation Analysis (WFSA) is completed and approved on all fires that escape initial attack.			X
16. Ensure reviews are conducted on all fires that require a WFSA. Personally attend reviews on Type 1 and Type 2 fires (Regional Director may delegate).		X	X

PERFORMANCE REQUIRED	NPS Director.	Regional Director.	Park Supt.
17. Ensure that a Wildland Fire Implementation Plan (WFIP) is completed and implemented for all fires managed for resource benefits.			X
18. Provide management oversight by personally visiting wildland and prescribed fires each year.		X	X
19. Provide incident management objectives, written delegations of authority, and Agency Administrator briefings to Incident Management Teams.			X
20. Monitor the fire situation and provide oversight during periods of critical fire activity/situations of high risk.	X	X	X
21. Evaluate the need for resource advisors for all fires, and assign as appropriate.			X
22. Convene and participate in annual pre- and post-season fire meetings.	X	X	X
23. Attend <i>Fire Management Leadership Course</i> .		X	X
24. Ensure appropriate investigations are conducted for incidents, entrapments, and serious accidents.	X	X	X
25. For all unplanned human-caused fires where liability can be determined, ensure actions are initiated to recover cost of suppression activities, land rehabilitation, and damages to the resource and improvements.		X	X
26. Certify Wildland Fire Implementation Plan or Wildland Fire Situation Analysis as needed depending on the complexity of the incident.			X
27. Complete Go/No-Go checklist for prescribed fire.			X
28. Ensure there is adequate direction in fire management plans to identify fire danger awareness with escalating fire potential.			X

PERFORMANCE REQUIRED	NPS Director.	Regional Director.	Park Supt.
29. Ensure compliance with National and Regional Office policy and direction for prescribed fire activities and ensure that periodic reviews and inspections of the prescribed fire program are completed.	X	X	X
30. Review Prescribed Fire Plans and recommend or approve the plans depending upon the delegated authority. Ensure that the Prescribed Fire Plan has been reviewed and recommended by a qualified technical reviewer who was not involved in the plan preparation.		X	X
31. At National Preparedness Level 4 and 5, approve the initiation or continuation of wildland fire use and prescribed fire applications based on an assessment of risk, impacts of the proposed actions on area resources and activities, and include feedback from the geographic area multi-agency coordinating group.		X	

1

2 **Fire Management Staff Roles**

3

4 **National Office**

5 The Fire Director, NPS-NIFC, provides leadership for their fire and aviation  
 6 management programs, and assists regions and parks to develop, implement, and  
 7 maintain safe, effective, and efficient fire and aviation management programs  
 8 that meet land management objectives.

9

10 The Fire Director is responsible and accountable for developing policy, program  
 11 direction, and international coordination. The Fire Director works with  
 12 interagency cooperators to coordinate, reduce duplication, increase efficiencies  
 13 in wildland fire management, and provide feedback to regional offices on  
 14 performance requirements.

15

16 **Regional Office**

17 The Regional Fire Management Officer (RFMO) provides leadership for their  
 18 fire and fire aviation management program.

19

20 The RFMO is responsible and accountable for providing planning, coordination,  
 21 training, technical guidance, and oversight to the park fire management  
 22 programs. The RFMO also represents the Regional Director on interagency

- 1 geographic coordination groups and Multi-Agency Coordination (MAC)  
 2 Groups. The RFMO provides feedback to units on performance requirements.

3

4 **Park**

- 5 The Fire Management Officer (FMO) is responsible and accountable for  
 6 providing leadership for fire and fire aviation management programs at the local  
 7 level. The FMO determines program requirements to implement land use  
 8 decisions through the Fire Management Plan (FMP) to meet land management  
 9 objectives. The FMO negotiates interagency agreements and represents the  
 10 Agency Administrator on local interagency fire and fire aviation groups.

11

- 12 The Superintendent annually shall provide and update the expectations of the  
 13 FMO duties by means of two instruments. One is a limited Delegation of  
 14 Authority (DOA) that encompasses the scope of duties outlined above. The  
 15 other is an Inter-park Agreement for those cases where a Park Group FMO  
 16 handles defined duties on behalf of another NPS unit within the defined Park  
 17 Group.

18

19 **Fire Management Staff Performance Requirements for Fire Operations**

PERFORMANCE REQUIRED	Fire Director	RFMO	FMO
1. Maintain safety first as the foundation for all aspects of fire and fire aviation management.	X	X	X
2. Ensure completion of a job hazard analysis (JHA) for fire and fire aviation activities so mitigation measures are taken to reduce risk.			X
3. Ensure work/rest and length of assignment guidelines are followed during all fire and fire aviation activities. Deviations must be approved and documented.	X	X	X
4. Ensure that only trained and qualified personnel are assigned to fire and fire aviation duties.	X	X	X
5. Develop, implement, evaluate, and document fire and fire aviation training program to meet current and anticipated needs.	X	X	X
6. Establish an effective process to gather, evaluate, and communicate information to managers, supervisors, and employees. Ensure clear and concise communications are maintained at all levels.	X	X	X
7. Develop and maintain an open line of communication with public and cooperators.	X	X	X

PERFORMANCE REQUIRED	Fire Director	RFMO	FMO
8. Ensure that the fire and fire aviation management staff understand their role, responsibilities, authority, and accountability.	X	X	X
9. Based on allocated funding level, provide a safe, effective, and efficient fire protection and use program.	X	X	X
10. Organize, train, equip, and direct a qualified work force. An Individual Development Plan must be provided for incumbents who do not meet new standards. Establish qualification review committees.	X	X	X
11. Take appropriate action when performance is exceptional or deficient.	X	X	X
12. Ensure fire and fire aviation policies are understood, followed, and coordinated with other agencies as appropriate.	X	X	X
13. Monitor to recognize when complexity levels exceed program capabilities. Increase managerial and operational resources to meet the need.	X	X	X
14. Initiate, conduct, and/or participate in fire management related reviews and investigations.	X	X	X
15. Provide for and personally participate in periodic site visits to individual incidents and projects.	X	X	X
16. Utilize the incident complexity analysis to ensure the proper level of management is assigned to all incidents.		X	X
17. Review and evaluate performance of the fire management organization and take appropriate actions.	X	X	X
18. Ensure incoming personnel and crews are briefed prior to fire and fire aviation assignments.		X	X
19. Ensure a Wildland Fire Situation Analysis (WFSA) is completed and retained for all fires that escape initial attack.		X	X
20. Monitor fire season severity predictions, fire behavior, and fire activity levels. Take appropriate actions to ensure safe, efficient, and effective operations.	X	X	X

PERFORMANCE REQUIRED	Fire Director	RFMO	FMO
21. Ensure that adequate resources are available to implement fire management operations.	X	X	X
22. Provide fire personnel with adequate guidance, training and decision-making authority to ensure timely decisions.		X	X
23. Ensure a written/approved burn plan exists for each prescribed fire project.		X	X
24. Ensure all escaped prescribed fires receive a review at the proper level.	X	X	X
25. Ensure effective transfer of command of incident management occurs and oversight is in place.	X	X	X
26. Develop and maintain agreements, annual operating plans, and contracts on an interagency basis to increase effectiveness and efficiencies.	X	X	X
27. Provide the expertise and skills to fully integrate fire and fire aviation management into interdisciplinary planning efforts.	X	X	X
28. Work with cooperators to identify processes and procedures for providing fire safe communities within the wildland urban interface.	X	X	X
29. Develop, maintain, and annually evaluate the FMP to ensure accuracy and validity.		X	X
30. Ensure budget requests and allocations reflect analyzed anticipated workload.	X	X	X
31. Develop and maintain current operational plans, e.g., dispatch, pre-attack, prevention.	X	X	X
32. Ensure that reports and records are properly completed and maintained.	X	X	X
33. Ensure fiscal responsibility and accountability in planning and expenditures.	X	X	X
34. Assess, identify, and implement program actions that effectively reduce unwanted wildland fire ignitions and mitigate risks to life, property, and resources.		X	X
35. Effectively communicate the “natural role” of wildland fire to internal and external agency audiences.	X	X	X

PERFORMANCE REQUIRED	Fire Director	RFMO	FMO
36. Complete trespass actions when unplanned human-caused fires occur.		X	X
37. Ensure compliance with National and Regional Office policy and direction for prescribed fire activities and ensure that periodic reviews and inspections of the prescribed fire program are completed.	X	X	X

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**Requirements for Fire Management Positions**

All NPS employees assigned dedicated fire management program responsibilities at the park, regional, or national level shall meet established interagency and NPS competencies (knowledge, skills and abilities) and associated qualifications.

All NPS employees assigned to wildland fire management incidents will meet the training and qualification standards set by the National Wildfire Coordinating Group.

All wildland fires will be managed by an individual qualified and certified at the command level appropriate to the complexity level of the incident.

The qualification standards identified in the *Interagency Fire Program Management Qualifications Standards* will be required, in conjunction with specific agency requirements, when filling vacant fire program positions, and as an aid in developing Individual Development Plans (IDPs) for employees.

**Training**

**Training for Park Superintendents**

The following training is required for park superintendents with significant fire programs, including but not limited to those that are fire program funded.

- Fire Management Leadership
  - The national course is the preferred alternative to the regionally-sponsored course. The training should be completed within two years of appointment to a designated management position.

**Training for Fire Management Officers**

The following training is required for fire management officers.

- Fire Program Management



1 **Delegation of Authority**

2

3 **Delegation for Regional Fire Management Officers**

4 In order to effectively perform their duties, the RFMO must have certain  
5 authorities delegated from the Regional Director. The delegation of authority  
6 should include the following roles and responsibilities:

- 7 • Serve as the Regional Director's authorized representative on geographic  
8 area coordination groups, including MAC groups.
- 9 • Coordinate and establish priorities on uncommitted fire suppression  
10 resources during periods of shortages.
- 11 • Coordinate logistics and suppression operations region-wide.
- 12 • Relocate agency pre-suppression/suppression resources within the region  
13 based on relative fire potential/activity.
- 14 • Correct unsafe fire suppression activities.
- 15 • Direct accelerated, aggressive initial attack when appropriate.
- 16 • Enter into agreements to provide for the management, fiscal, and  
17 operational functions of combined agency operated facilities.
- 18 • Suspend prescribed fire activities when warranted.
- 19 • Give authorization to hire Emergency Firefighters in accordance with the  
20 DOI Pay Plan for Emergency Workers.
- 21 • Approve emergency fire severity funding expenditures not to exceed the  
22 Regional annual authority.

23

24 **NPS Duty Officer (DO)**

25 Park unit Fire Management Officers are responsible to provide DO coverage on  
26 their units during any period of predicted incident activities. DOs  
27 responsibilities may be performed by any individual with a signed Delegation of  
28 Authority from the local agency administrator. The required duties for all DOs  
29 are:

- 30 • Monitor unit incident activities for compliance with NPS safety policies.
- 31 • Coordinate and set priorities for unit suppression actions and resource  
32 allocation.
- 33 • Keep unit agency administrators, suppression resources, and Information  
34 Officers informed of the current and expected situation.
- 35 • Plan for and implement actions required for future needs.
- 36 • Document all decisions and actions.

37

38 DOs will provide operational oversight of these requirements as well as any unit  
39 specific duties assigned by the local fire managers through the local unit fire  
40 operating plan. DOs will not fill any ICS incident command functions  
41 connected to any incident. In the event that the DO is required to accept an  
42 incident assignment, the FMO will ensure that another authorized DO is in place  
43 prior to the departure of the outgoing DO.

44

**1 Fire Equipment Management**

2 The NPS manages the Working Capital Fund (WCF) Fire Equipment Program  
3 through the Fire Management Program Center. The working capital funding for  
4 the program is administered through an interagency agreement with the BLM.  
5 The NPS's WCF fire equipment program acquires specialized equipment  
6 including; cabs, chassis, utility bodies, and pump packages to meet the NPS's  
7 fire program requirements. Specialized fire equipment design and specifications  
8 are developed through the analysis of identified needs, and survey of new  
9 technologies. Acquisition of units is done through contracting with vendors  
10 identified on GSA contracts.

11

**12 Fire Equipment Development**

13 The Fire Equipment and Facilities Specialist, located at NIFC, is responsible for  
14 ordering, receiving, inspection, and distribution of new fire equipment.

15

**16 Funding Accessories and Upgrades**

17 For equipment funded through the WCF, options added that are not part of the  
18 current agency standard (e.g. supplemental lighting, winches, special paint,  
19 radios, etc.) are add-on items and are not funded with WCF funds. The cost of  
20 the modifications and optional equipment, which is not part of the current NPS  
21 standard, (including the replacement/modification of equipment provided with  
22 the vehicle), is the responsibility of the regional or local office.

23

**24 Travel on WCF Funds**

25 Travel using WCF funding is allowed only for Fire Management Program  
26 Center and Accounting Operation Center staff attending pre-work conferences,  
27 serving as contracting officers or project inspectors on fire equipment related  
28 contracts. The WCF program also provides travel funding for one park person  
29 to transport new specialized fire vehicles back their respective parks. WCF  
30 funds will not be used to transport new equipment back to parks commercially  
31 except under extenuating circumstances. Ideally the retrieval of new vehicles  
32 should be done by park fire individuals so they can obtain a thorough briefing of  
33 the operational features of the vehicle by the manufacturer.

34

**35 Vehicle Repairs, Maintenance**

36 The cost of WCF vehicle repairs and maintenance is the responsibility of the  
37 individual parks unless the damage is directly attributable to operations on a  
38 wildfire. In that case, with approval from the incident IC, the damages may be  
39 paid for under the fire's suppression account.

40

**41 Fixed Ownership Rates (FOR's)**

42 FORs are fees that are paid into the WCF annually for each vehicle in the  
43 program. These fees continue to accumulate over the life of a vehicle, and are  
44 used to replace each vehicle at the end of its life cycle. The FOR is adjusted  
45 annually by the WCF manager to reflect changes in replacement costs due to  
46 inflation and/or changes in performance.

1 **Fire Equipment Committee**

2 The NPS equipment committee meets twice yearly to identify equipment  
3 problems, needs, priorities, and NPS standards. This committee is comprised of  
4 engine foremen (captains), fire management officers, and representation from  
5 the Fire Use Modules. The permanent chairperson is the Fire Equipment and  
6 Facilities Specialist at the Fire Management Program Center.

7

8 **Property Transfer/Replacement**

9 Surplus vehicles purchased through the WCF will be excessed through the BLM  
10 Working Capital Fund Program. An SF-126 form will be submitted to the NPS  
11 Fire Equipment and Facilities Specialist upon receipt of new vehicle. After  
12 review, the form will be transferred to BLM. BLM will manage the disposal of  
13 all surplus WCF equipment. Residual value of sold excessed fire vehicles is  
14 returned back into the NPS WCF. Parks should not excess WCF fire equipment  
15 through normal GSA channels. Vehicles not purchased through the WCF should  
16 be disposed of per current NPS property disposal procedures.

17

18 **Fitness Equipment and Facilities**

19 *DO/RM-57 Occupational Medical Standards, Health and Fitness defines the*  
20 *minimum equipment needed to meet physical fitness goals. The following*  
21 *guidance will be used to specifically determine fire funding expenditures for*  
22 *equipment purchase:*

23

24 The fire funding expenditure will represent the percentage of arduously-rated  
25 fitness participants in a park. For example, park XX may have 20 total  
26 arduously-rated fitness participants in its health and fitness program, five (5) of  
27 whom are wildland firefighters. Fire funding would pay 25 percent of the cost  
28 of equipment purchase.

29

30 Where all of a park's mandatory fitness participants are wildland firefighters;  
31 fire will fund up to a maximum of \$1,200 per park for equipment purchase. The  
32 regional fire management officer's approval is required for purchases in excess  
33 of that amount.

34

35 DO-57/RM indicates that health club costs must be borne by park management  
36 for mandatory fitness participants. However, in-park exercise facility  
37 development is the preferred option. Where this is not possible, health club  
38 costs, not to exceed \$360 per year, may be paid from fire funds for each  
39 wildland firefighter mandatory program participant. Approval from the regional  
40 fire management officer is required for annual fees that exceed \$360.

41

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43

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45

1 **Wildland Fire Uniform Standards**

2 The Service-wide Uniform Program Guideline (DO-43) sets forth the  
3 Servicewide policies and associated legal mandates for wearing the National  
4 Park Service (NPS) uniform and for authorizing allowances to employees.

5  
6 The guideline states that superintendents administer the uniform program within  
7 their areas, and are responsible for developing and communicating local uniform  
8 and appearance standards in accordance with DO-43, determining who will wear  
9 the uniform and what uniform will be worn, and enforcing uniform and  
10 appearance standards. Three options exist for uniforms for wildland fire  
11 personnel:

- 12 • Within the context of the uniform standards, if the conventional NPS  
13 uniform is identified at the local level as required for specified fire  
14 management staff, fire program management funds may be used to support  
15 uniform purchases in accordance with allowance limits identified in DO-  
16 43.
- 17 • While Nomex outerwear (i.e., shirts, trousers, brush-coats), routinely  
18 issued as personal protective equipment, has become recognized as the  
19 uniform of the wildland firefighter as a matter of necessity, these apparel  
20 also have justifiable utility as a uniform standard at the park level for  
21 certain fire and/or ONPS base-funded wildland fire staff.
- 22 • When the conventional NPS uniform or the full Nomex outerwear is not  
23 appropriate or justified, local management with park superintendent  
24 approval may establish a predetermined dress code for fire staff. The goals  
25 of the NPS uniform program can appropriately be applied (with common  
26 sense) to this departure from the norm.

27  
28 Where appropriate and justified, fire funds may be applied to the purchase of  
29 100 percent cotton tee shirts and sweatshirts, and ball caps, with appropriate  
30 logo and color scheme, to augment the Nomex outerwear worn in conjunction  
31 with project or wildland fire management incidents. Nomex outerwear will  
32 usually be returned to the park's fire cache based on the tour of duty (end of  
33 season, transfer to another park, etc.).

34  
35 The fire management officer is responsible for establishing a reasonable  
36 allotment schedule for new or returning employees, commensurate with supplies  
37 provided in previous seasons. A suggested per person issuance is three to four  
38 tee shirts, one ball cap, and one sweatshirt (where appropriate). \$100 would  
39 normally be adequate to cover costs of this issuance.

40  
41 Just as with uniform allowance discussed in DO-43, the intent of fire-funded  
42 purchases is to defray the cost of the appropriate apparel, not necessarily to  
43 cover the cost of all items. This will not only be factored into the quantities  
44 deemed necessary for the individual, but would also preclude fire-funded  
45 purchases of fleece jackets, rain gear, and other personal items generally

- 1 considered the responsibility of those employees not covered by the NPS
- 2 uniform program. Exceptions to this should be well-justified and documented.
- 3
- 4 **Fire Management Credentials**
- 5 Official fire management credentials, with numbered badge, can be obtained by
- 6 approved permanent or permanent less-than-full-time NPS employees. These
- 7 credentials will be utilized for identification purposes only and will not be worn
- 8 with the official NPS uniform or otherwise conflict with DO-43. Lost or stolen
- 9 credentials, as government property, should be entered into NCIC for
- 10 confiscation and return when found.

**Chapter 04****U.S. Fish & Wildlife Service Program Organization & Responsibilities****Introduction**

This document states, references, or supplements policy for the U.S. Fish and Wildlife Service Wildland Fire Management Program. The standards provided in this document are based on current U.S. Department of the Interior and Bureau policy, and are intended to provide fire program guidance. The intent is to ensure safe, consistent, efficient, and effective fire and aviation operations. This document will be reviewed and updated annually.

**Agency Administrator Roles****Director**

The Director of the Fish and Wildlife Service has overall responsibility for the service wildland fire management program. The Director will ensure that all regional fire management activities are formally evaluated.

**Chief, National Wildlife Refuge System**

The National Wildlife Refuge System under the Chief provides leadership for the wildland fire management program. The National Wildlife Refuge System also formally evaluates all regional fire activities at least every five years. The Assistant Director is authorized to promulgate and approve the *Fire Management Handbook* and other fire related handbooks as needed to provide guidance.

**Regional Director**

The Regional Director is responsible to the Director for fire management programs and activities within their region. The Regional Director will meet the required elements outlined in the *Management Performance Requirements for Fire Operations* and ensure training is completed to support delegations to line managers and principal actings.

**Regional Chief and Refuge Supervisors**

Regional Chiefs and Refuge Supervisors are delegated specific leadership responsibilities by the Regional Director. They provide oversight and direction, in coordination with, the Wildland Fire Management Program for the National Wildlife Refuge System. These responsibilities occur through established lines of authority as assigned by the Regional Director.

**Project Leader**

The Project Leader is responsible to the Regional Director for the safe and efficient implementation of fire management activities within their unit, including cooperative activities with other agencies or landowners in accordance with delegations of authorities. The Project Leader or principal acting will meet

- 1 the required element outlined in the *Management Performance Requirements for*  
 2 *Fire Operations*.

3

4

**Management Performance Requirements for Fire Operations**

<b>PERFORMANCE REQUIRED</b>	<b>FWS Director</b>	<b>Regional Director</b>	<b>Regional Chief / Refuge Supervisor</b>	<b>Project Leader</b>
1. Ensures that Fire Management Plans (FMP) reflect the agency commitment to firefighter and public safety, while utilizing the full range of fire management activities available for ecosystem sustainability.	X	X	X	X
2. Develops fire prevention, fire suppression, and fire use standards that are compliant with agency fire policies.	X	X	X	X
3. Ensures use of fire funds is in compliance with department and agency policies.	X	X	X	X
4. Ensures that all fire management activities are supported by a current FMP and is integrated with an approved Comprehensive Conservation Plan.	X	X	X	X

PERFORMANCE REQUIRED	FWS Director	Regional Director	Regional Chief / Refuge Supervisor	Project Leader
5. Attends the <i>Fire Management Leadership Course</i> . Ensure that personnel delegated fire program responsibilities have completed the <i>Fire Management Leadership Course</i> .			X	X
6. Provides a written Delegation of Authority to FMOs that gives them an adequate level of operational authority. If fire management responsibilities are zoned, ensure that all appropriate Agency administrators have signed the delegation.		X	X	X
7. Ensures that only trained, certified fire and non-fire personnel are available to support fire operations at the local and national level.	X	X	X	X
8. Ensures that master agreements with cooperators are valid and in compliance with agency policy, and that attached Annual Operating Plans are current.	X	X	X	X



<b>PERFORMANCE REQUIRED</b>	<b>FWS Director</b>	<b>Regional Director</b>	<b>Regional Chief / Refuge Supervisor</b>	<b>Project Leader</b>
9. Personally visits at least one wildland and one prescribed fire each year.				X
10. Annually convenes and participates in pre-and post season fire meetings.	X	X	X	X
11. Reviews critical operations and safety policies and procedures with fire and fire aviation personnel.		X	X	X
12. Ensures timely follow-up to fire management program reviews.	X	X	X	X
13. Ensures that fire and fire aviation preparedness reviews are conducted annually in all unit offices. Personally participate in at least one review annually.	X	X	X	X
14. Ensures that investigations are conducted for incidents with potential, entrapments, and serious accidents as per agency policy.	X	X	X	X

PERFORMANCE REQUIRED	FWS Director	Regional Director	Regional Chief / Refuge Supervisor	Project Leader
15. Provides a written delegation of authority, WFSA, and an <i>Agency Administrator Briefing to Incident Management Teams</i> .				X
16. Ensures that resource advisors are identified, trained and available for incident assignment. Refer to <i>Resource Advisors Guide for Wildland Fire PMS 313, NFES 1813, Jan 2004</i> .				X
17. Attends post fire closeout on Type 1 and Type 2 fires. (Attendance may be delegated.)		X	X	X
18. Ensures that a Wildland Fire Implementation Plans (WFIP) are completed, implemented and updated daily for all fires managed as wildland fire use.		X	X	X

PERFORMANCE REQUIRED	FWS Director	Regional Director	Regional Chief / Refuge Supervisor	Project Leader
19. Ensures that trespass actions are initiated and documented to recover cost of suppression activities, land rehabilitation, and damages to the resource and improvements for all human-caused fires where liability can be determined, as per <i>FWS Fire Trespass Handbook</i> .		X	X	X
20. Ensures compliance with National and Regional Office policy for prescribed fire activities. Provides periodic reviews of the prescribed fire program.	X	X	X	X
21. Ensures that Prescribed Fire Plans are approved and meet agency policies.		X	X	X
22. Ensures that the Prescribed Fire Plan has been reviewed and recommended by a qualified technical reviewer who was not involved in the plan preparation.				X

PERFORMANCE REQUIRED	FWS Director	Regional Director	Regional Chief / Refuge Supervisor	Project Leader
23. Ensures that a policy has been established for review and signing of the go-no/go checklist.				X
24. Ensures Unit Safety Program is in place, has a current plan, has an active safety committee, and includes the fire program.	X	X	X	X
25. Annually updates and reviews the <i>Agency Administrator's Guide to Critical Incident Management</i> (NFES 1356)	X	X	X	X
26. Ensure that current fire and weather information is posted and available for all employees.				X

1

2 **Fire Management Staff Roles**

3

4 **National Office**

5 **Service Fire Management Coordinator (SFMC)**

6 The Service Fire Management Coordinator is the Chief of the Fire Management  
 7 Branch in the National Wildlife Refuge System, and is the Service  
 8 representative at the National Interagency Fire Center (NIFC). The SFMC,  
 9 through *Service Manual 621 FW 1*, is delegated authority by the Director to  
 10 represent the Service on the National Multi-Agency Coordinating Group (MAC  
 11 Group). The SFMC is responsible for implementing the decisions of the MAC  
 12 Group as they affect U.S. Fish and Wildlife Service areas. The decisions of the  
 13 MAC Group include the prioritizing of incidents nationally and the allocation or  
 14 reallocation of firefighting resources to meet national priorities.

15

16 The Fire Management Branch is responsible for providing technical direction  
 17 and coordination of fire management planning, policy development, and  
 18 procedures servicewide.

**Release Date: January 2008**

1 **Regional Office**

2 **Regional Fire Management Coordinator (RFMC)**

3 The Regional Fire Management Coordinator provides coordination, training,  
4 planning, evaluation, and technical guidance for the region and is available to  
5 provide assistance for intra-agency and interagency wildland fire management  
6 needs. The RFMC will meet qualification requirements established by the  
7 service for the position. The RFMC, through written delegation by the Regional  
8 Director, is delegated authority to represent the region on the Geographic Multi-  
9 Agency Coordinating Group (GMAC Group). The RFMC is responsible for  
10 implementing the decisions of the MAC Group as they affect U.S. Fish and  
11 Wildlife Service areas. The decisions of the GMAC Group include the  
12 prioritizing of incidents and the allocation or reallocation of firefighting  
13 resources to meet wildland fire management priorities.

14

15 **Refuge**

16 **Fire Management Officer (FMO)**

17 The Fire Management Officer (FMO) is responsible and accountable for  
18 providing leadership for fire management programs at the local level. The FMO  
19 determines program requirements to implement land use decisions through the  
20 Fire Management Plan (FMP) to meet land management objectives. The FMO  
21 negotiates interagency agreements and represents the Agency Administrator on  
22 local interagency fire and fire aviation groups.

23

24 An FMO may be assigned to provide wildland fire management support to a  
25 group of refuges (zone or district) when individually each refuge does not  
26 warrant a fulltime FMO.

27

28 **Training**

29 The qualification standards identified in the *Interagency Fire Program*  
30 *Management Qualification Standards* will be required, in conjunction with  
31 specific agency requirements, when filling vacant fire program positions, and as  
32 an aid in developing Individual Development Plans (IDPs) for employees.

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1 **Fire Management Staff Performance Requirements for Fire Operations**

<b>PERFORMANCE REQUIRED</b>	<b>Fire Director</b>	<b>RFMC</b>	<b>Zone/District FMO</b>
1. Establishes and manages a safe, effective, and efficient fire program.	X	X	X
2. Ensures that the Fire Management Plan (FMP) reflects the agency commitment to firefighter and public safety, while utilizing the full range of fire management activities available for ecosystem sustainability. <i>(Federal Wildland Fire Management Plan 2001)</i>	X	X	X
3. Provides the expertise and skills to fully integrate fire and fire aviation management into interdisciplinary planning efforts.	X	X	X
4. Ensures that only trained and qualified personnel are assigned to fire and fire aviation duties.	X	X	X
5. Ensures completion of a Job Hazard Analysis (JHA)/Risk Assessment for fire and fire aviation activities so mitigation measures are taken to reduce risk.		X	X
6. Ensures compliance with work/rest guidelines during all fire and fire aviation activities.	X	X	X
7. Ensures that the fire and fire aviation management employees understand their role, responsibilities, authority, and accountability.	X	X	X
8. Organizes trains, equips, and directs a qualified work force. Establishes and implements performance review process.	X	X	X
9. Develops implements, evaluates, and documents fire and fire aviation training to meet current and anticipated needs.	X	X	X

PERFORMANCE REQUIRED	Fire Director	RFMC	Zone/District FMO
10. Ensures fire and fire aviation policies are understood, implemented, and coordinated with other agencies as appropriate.	X	X	X
11. Monitors fire suppression activities to recognize when complexity levels exceed program capabilities. Increases managerial and operational resources to meet the need.	X	X	X
12. Monitors fire season severity predictions, fire behavior, and fire activity levels. Takes action to ensure safe, efficient, and effective operations.	X	X	X
13. Ensures that master agreements with cooperators are valid and in compliance with agency policy, and that attached Annual Operating Plans are current.	X	X	X
14. Develops, maintains and implements current operational plans. (e.g., dispatch, preparedness, prevention).		X	X
15. Ensures use of fire funds is in compliance with department and agency policies.	X	X	X
16. Ensures that fire severity funding is requested, used, and documented in accordance with agency standards ( <i>Interagency Standards for Fire and Fire Aviation Operations</i> , Chapter 9).	X	X	X
17. Reviews and approves appropriate overtime authorization requests for personnel providing fire suppression coverage during holidays, special events, and abnormal fire conditions.		X	X
18. Ensures a process is established to communicate fire info to public, media, and cooperators.	X	X	X

PERFORMANCE REQUIRED	Fire Director	RFMC	Zone/District FMO
19. Annually convenes and participates in pre-and post season fire meetings. Specifically address management controls and critical safety issues.	X	X	X
20. Oversees pre-season preparedness review of fire and fire aviation program.	X	X	X
21. Initiates, conducts, and/or participates in fire program management reviews and investigations.	X	X	X
22. Personally participates in periodic site visits to individual incidents and projects.		X	X
23. Utilizes the Incident Complexity Analysis appendix F & G to ensure the proper level of management is assigned to all incidents.	X	X	X
24. Ensures that transfer of command occurs as per appendix D on incidents.		X	X
25. Ensures that incoming personnel and crews are briefed prior to fire and fire aviation assignments.		X	X
26. Ensures an accurate and defensible Wildland Fire Situation Analysis (WFSA) is completed and updated daily for all fires that escape initial attack.	X	X	X
27. Ensures that a Wildland Fire Implementation Plan (WFIP) is completed, approved, and certified daily for all fires managed for Wildland Fire Use objectives.	X	X	X
28. Works with cooperators, groups, and individuals to develop and implement processes and procedures for providing fire safe communities within the wildland urban interface.	X	X	X



PERFORMANCE REQUIRED	Fire Director	RFMC	Zone/District FMO
29. Ensures that trespass actions are initiated and documented to recover cost of suppression activities, land rehabilitation, and damages to the resource and improvements for all human-caused fires where liability can be determined, as per <i>FWS Fire Trespass Handbook</i> .	X	X	X
30. Ensures training for fire cause determination and fire trespass.	X	X	X
31. Ensures compliance with National and State Office policy for prescribed fire activities. Provides periodic reviews of the prescribed fire program.	X	X	X
32. Annually updates and reviews the <i>Agency Administrator's Guide to Critical Incident Management</i> . (NFES 1356)	X	X	X
33. Ensures that fire season severity predictions, weather forecasts, fire behavior predictors, and fire activity levels are monitored and communicated daily to all employees (hard copy, web page, email, radio, or fax).		X	X
34. Uses current National and Local Mobilization Guides and ensures that national, geographic and local mobilization standards are followed.	X	X	X
35. Complies with established property control/management procedures.	X	X	X

1

2 **Delegation of Authority**

3

4 **Delegation for Regional Fire Management Coordinators (RMFC)**

5 In order to effectively perform their duties, a RFMC must have certain  
6 authorities delegated from the Regional Director. This delegation is normally  
7 placed in the regional office supplement to agency manuals. This delegation of  
8 authority should include:

- 1 • Serve as the Regional Director's authorized representative on geographic
- 2 area coordination groups, including MAC groups.
- 3 • Coordinate and establish priorities on uncommitted fire suppression
- 4 resources during periods of shortages.
- 5 • Coordinate logistics and suppression operations regional-wide.
- 6 • Relocate agency pre-suppression/suppression resources within the region
- 7 based on relative fire potential/activity.
- 8 • Correct unsafe fire suppression activities.
- 9 • Direct accelerated, aggressive initial attack when appropriate.
- 10 • Enter into agreements to provide for the management, fiscal, and
- 11 operational functions of combined agency operated facilities.
- 12 • Suspend prescribed fire activities when warranted.
- 13 • Give authorization to hire Emergency Firefighters in accordance with the
- 14 DOI Pay Plan for Emergency Workers.
- 15 • Approve emergency fire severity funding expenditures not to exceed the
- 16 agency's annual authority.

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## Chapter 05

### USDA Forest Service Wildland Fire and Aviation Program Organization and Responsibilities

#### Introduction

This handbook is intended to be a program reference guide that documents the standards for operational procedures and practices for the USDA Forest Service Fire and Aviation Management program. The standards provided in this handbook are based on current agency and interagency wildland fire management policy, and is intended to provide fire and aviation program guidance and to ensure safe, consistent, efficient, and effective fire and aviation operations. This document will be reviewed and updated annually.

#### Foundational Doctrine

The following collection of principles and beliefs form the foundational doctrine for fire suppression in the U.S. Forest Service. These principles and beliefs operate at multiple organizational levels, including:

- Forest Service Wide (i.e., apply to all employees and activities)
- Fire and Aviation Management (i.e., are specific to the fire and aviation management program)
- Fire Suppression (i.e., are specific to fire fighting activities).

#### The Operational Environment

- *Fire Suppression*

1. No resource or facility is worth the loss of human life, however the wildland fire suppression environment is complex and possesses inherent hazards that can, even with reasonable mitigation, result in harm to fire fighters engaged in fire suppression operations. In recognition of this fact, we are committed to the aggressive management of risk.

#### Mission

- *Forest Service Wide*

2. The Forest Service is prepared and organized to support national and international emergencies with trained personnel and other assets when requested.

3. Agency employees respond when they come across situations where human life is immediately at risk or there is a clear emergency, and they are capable of assisting without undue risk to themselves or others.

4. In responding to emergencies, we will bring the same professionalism and passion for safety as we do to non-emergency situations.

1 5. Support for local fire emergencies takes priority over accomplishment of local  
2 resource targets. Support of non-local fire emergencies will be at the discretion  
3 of the local line officer, as bounded by agency agreements and Regional or  
4 National direction.

5

6 6. A cooperative relationship between the Forest Service and other agencies is  
7 essential. The Forest Service is committed to honor its part of the joint  
8 responsibility to develop and maintain effective working relationships with its  
9 intergovernmental cooperators.

10

11 • *Fire & Aviation Management*

12 7. Fire management is central to meeting the Forest Service mission –  
13 conserving natural resources, restoring ecological health, and protecting  
14 communities.

15

16 • *Fire Suppression*

17 8. Successful fire suppression is essential to support the Forest Service mission.

18

19 9. The intent of wildfire suppression is to protect human life, property, and at  
20 risk lands and resources.

21

22 **Leadership and Accountability**

23

24 • *Forest Service Wide*

25 10. The hallmarks of Forest Service leadership are action, attitude, and  
26 accountability.

27

28 11. Leaders express clear and concise intent to ensure assignments are managed  
29 safely, effectively, and efficiently.

30

31 12. Leaders regularly monitor operations for effectiveness, and take action when  
32 there is recognition of exceptional or problematic employee performance.

33

34 13. Both positive reinforcement and discipline will be based on individual  
35 behavior as measured by: adherence to the rules; appropriate application of  
36 doctrine, principles and guidelines; execution of responsibilities commensurate  
37 with role; and appropriate use of available information.

38

39 • *Fire Suppression*

40 14. Demonstrated fitness for command is a requirement for leadership positions  
41 associated with fire fighting.

42

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1 **Roles and Relationships**

2

3 • *Forest Service Wide*

4 15. Commitment to duty, respect for others, and personal integrity are expected.  
5 Every employee fosters a work environment that is enjoyable, rewarding,  
6 recognizes the value of diversity, and is free of harassment.

7

8 • *Fire & Aviation Management*

9 16. Line officers with fire management responsibilities will have knowledge and  
10 understanding of fire program management.

11

12 17. Contracted resources will meet identified standards for qualifications,  
13 training, productivity, and efficiency necessary to meet emergency response  
14 needs.

15

16 18. It is the Forest Service responsibility to initiate and participate in public  
17 education efforts to promote support for necessary fire management activities.

18

19 • *Fire Suppression*

20 19. Every Forest Service employee has a responsibility to support fire  
21 suppression emergencies in a manner that meets identified needs, and is within  
22 their qualifications and capabilities.

23

24 **Operations**

25

26 • *Forest Service Wide*

27 20. Employees are expected and empowered to be creative and decisive, to  
28 exercise initiative and accept responsibility, and to use their training, experience,  
29 and judgment in decision-making to carry out their leader's intent.

30

31 21. Employees are expected and empowered to make reasonable and prudent  
32 decisions to accomplish the agency mission while minimizing exposure to  
33 hazards.

34

35 22. Clear, uncomplicated plans and concise orders maximize effectiveness and  
36 minimize confusion.

37

38 • *Fire Suppression*

39 23. When it is time to fight fire, we do so in a manner that maximizes  
40 effectiveness of effort, has highest regard for firefighter and public safety, and  
41 controls costs.

42

43 24. Every fire suppression operation is directed toward clearly-defined, decisive,  
44 and obtainable objectives.

45

- 1 25. Command and control must be decentralized to cope with the unpredictable  
2 nature of fire. To achieve their leader's intent and accomplish operational  
3 objectives, subordinate commanders are required to make decisions on their own  
4 initiative, and to coordinate their efforts.  
5
- 6 26. Unity of effort is maintained and suppression actions are coordinated at all  
7 times.  
8
- 9 27. Using principles requires judgment in application, while adherence to rules  
10 does not. In combination, principles and rules guide our fundamental wildland  
11 fire suppression practices and behaviors, and are mutually understood at every  
12 level of command.  
13
- 14 28. Rapid deployment and concentration of fire suppression resources at the  
15 decisive time and place is essential to successful fire suppression actions.  
16
- 17 29. Maintaining high capability for initial attack is essential to public and fire  
18 fighter safety, accomplishment of management objectives, and cost containment.  
19

## 20 **Risk Management**

### 22 • *Fire Suppression*

- 23 30. We practice risk management to minimize the exposure and affects of the  
24 inherent hazards in fire suppression while maximizing the opportunities to  
25 achieve leader intent.  
26

## 27 **Agency Administrator Positions**

28 The Forest Service Director of Fire and Aviation Management, the Director of  
29 Human Resources and the Forest Service Line Officer Team have developed  
30 core fire management competencies for inclusion into the position descriptions  
31 and in selection criteria for agency administrators. They are presented here for  
32 reference.  
33

## 34 **Evaluation Criterion**

35 Knowledge of fire program management including ability to integrate fire and  
36 fuels management across all program areas and functions; ability to implement  
37 fire management strategies and integrate natural resource concerns into  
38 collaborative community protection and ecosystem restoration strategies;  
39 knowledge to oversee a fire management program including budget,  
40 preparedness, prevention, suppression, and hazardous fuels reduction; ability to  
41 serve as an agency administrator during an incident on an assigned unit; and  
42 ability to provide a fully staffed, highly qualified, and diversified firefighting  
43 workforce that exists in a "safety first" and "readiness" environment.  
44  
45  
46

1 **Training and Core Competencies**

- 2 • Attend a regional or national “Fire Management Leadership for Agency  
3 Administrators” training session  
4 • Require a shadow assignment with a fully qualified agency administrator  
5 • Receive training or experience in the Wildfire Situation Analysis (WFSA)  
6 and Wildland Fire Implementation Plan (WFIP)  
7 • Provide a Delegation of Authority to Incident Commanders  
8

9 **Line Officer Certification Program**

10 The following principles will guide certification of agency administrators in fire  
11 management:

- 12 • Regional Foresters are accountable for certification of line officers  
13 • Line officer evaluation includes standards for training, background and  
14 experience, and demonstrated ability, which will result in a qualitative  
15 evaluation of readiness by the Regional Forester  
16 • When the complexity level of a fire exceeds a line officer’s certification, a  
17 coach will be assigned to advise (but not replace)  
18 • This certification program will be periodically evaluated and updated as  
19 needed  
20 • Decision Support Groups may be requested and would be assigned as fire  
21 costs approach certain thresholds  
22 • The Coaching/Shadowing program, to be administered by each Region, is  
23 an integral part of this certification program  
24

25 **Line Officers will be evaluated in three basic areas**

- 26 • Training  
27 • Background and experience  
28 • Demonstrated understanding of concepts and principles  
29

30 This certification program is a multi-level process where line officers  
31 demonstrate competence in one of three levels of managing fires. Those levels  
32 would be Working, Journey, and Advanced.  
33

34 **Guidelines**

35 In consideration of the appropriate level (Working, Journey, and Advanced) to  
36 assign a line officer, the Regional Forester should consider the following  
37 guidelines:

- 38 • For individuals that do not meet at least the Working Level, a coach will be  
39 assigned to support that line officer in managing Type3 or higher wildfire  
40 incidents.  
41

42 **Working Level** - The line officer could manage a low to moderate complexity  
43 fire and Fire-Use fire. The line officer should meet the following:

- 44 • **Training:** Fire Management Leadership or National Fire Management for  
45 Line Officers, and WFSA Certification (FSM 5130)

- 1 • **Background and Experience:** Successful management of a minimum of  
2 one Type 3 or higher fire, or one successful higher complexity fire (Type  
3 2I or higher) quality shadow assignment (consider complexity and size of  
4 the fires). Management oversight of a low-complexity fire program and/or  
5 experience as an agency administrator or representative. Applicable  
6 experience in all-risk or other incident oversight may be considered in lieu  
7 of this experience, as well as Fire-Use experience. Consider career fire  
8 experience
- 9 • **Demonstrated Ability:** Successful evaluation by a coach (including  
10 feedback from ICs or ACs) that the candidate has demonstrated  
11 understanding and application of the responsibilities of an agency  
12 administrator on smaller low-complexity fires with a basic understanding  
13 of the elements of the core competencies

14  
15 **Journey Level** - The line officer could manage a moderate to high complexity  
16 fire. The line officer needs to be certified at the Working Level and should meet  
17 the following:

- 18 • **Training:** Fire Management Leadership or National Fire Management for  
19 Line Officers, and WFSA Certification (FSM 5130).
- 20 • **Background and Experience:**
  - 21 ➤ Successful management of a minimum of one Type II or higher fire,  
22 or one successful higher complexity fire (Type I) quality shadow  
23 assignment, depending on fire experience (complexity and size of the  
24 fires should be considered).
  - 25 ➤ Management oversight of a moderate-complexity fire program or  
26 experience as an agency administrator or representative on Type II or  
27 higher fires.
  - 28 ➤ Applicable experience in all-risk or other incident oversight may also  
29 be considered in lieu of other guidelines, as well as Fire-Use  
30 experience.
- 31 • **Demonstrated Ability:** Successful evaluation by a coach (including  
32 feedback from ICs or ACs) that the candidate has demonstrated  
33 understanding and application of the responsibilities of an agency  
34 administrator on moderate to large complex fires in the core competencies,  
35 and other elements that may be relevant.

36  
37 **Advanced Level** - The line officer could manage a high complexity fire. The  
38 line officer needs to be certified at the Journey Level and should meet the  
39 following:

- 40 • **Training:** Fire Management Leadership or National Fire Management for  
41 Line Officers, and WFSA Certification (FSM 5130).
- 42 • **Background and Experience:**
  - 43 ➤ Successful management of a minimum of 5 Type I or II fires (at least  
44 one of which is a Type I fire), depending on fire experience  
45 (complexity and size of the fires should be considered).



- 1       ➤ Management oversight of a moderate to high-complexity fire  
2       program.  
3       ➤ Applicable experience in all-risk or other incident oversight may also  
4       be considered in lieu of other guidelines, as well as Fire-Use  
5       experience.
- 6       • **Demonstrated Ability:** Successful evaluation by a coach (including  
7       feedback from ICs or ACs) that the candidate has demonstrated  
8       understanding and application of the responsibilities of an agency  
9       administrator on large complex fires in the core competencies, and other  
10      elements that may be relevant.

11

### 12 **Other Considerations**

13 Core competencies, consistent with Fire Doctrine principles, include:

- 14       • Safety  
15       • Strategies and tactics for Cost Containment  
16       • Incident Management Processes  
17       • Understanding of decision support tools  
18       • Situational Awareness of resource availability & allocation  
19       • WFSA/WFIP  
20       • Monitoring and Evaluation of fire operations  
21       • Risk Management  
22       • Social/Political awareness and interpersonal relations

23

24 Other Training Opportunities to Achieve Core Competencies - Additional  
25 Training Opportunities/Suggestions (will be updated as program is evaluated)

- 26       • Upper levels of Fire Leadership and Fire Management courses  
27       • Be the actual line officer in the Type III IC certification sand table  
28       exercises  
29       • Develop a “graduate-level seminar” on advanced risk management  
30       • The Fire Management for Agency Administrators course needs a  
31       curriculum revision (Currently the national and regional courses are  
32       redundant)  
33       • Get assigned to a Type I or Type II team as a training assignment (e.g.  
34       shadow Plans) and see the world from their viewpoint  
35       • Assist in 420 simulation as a line officer  
36       • WFSA and WFIP training  
37       • Include risk management and fire management topics to annual line officer  
38       meetings  
39       • Attend staff rides (staff rides need to include a stand that portrays the line  
40       officer perspective)  
41       • Prescribed fire training centers

42

### 43 **Guidance on the Selection of Coaches**

44 Coaches can be current or former line officers. The Regional Forester  
45 determines the level of certification for which a coach is qualified.

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**05-7**

1 Criteria for individuals serving as Coaches are as follows:

- 2 • Must be a "Journey" level line officer in dealing with large fire incident, or  
3 rated at an experience level commensurate with incident being managed.  
4 Present and past Agency Administrators can serve as coaches, including  
5 retirees that were qualified/experienced.  
6 • Is willing and able to serve as a Coach.

7  
8 **Performance Standards**

9 Add the following standards to the existing performance standards for Forest  
10 Supervisors and District Rangers under Performance Standard #4, Leadership,  
11 Coaching, and Supervising:

- 12 • Integrate fire and fuels management across all functional areas.  
13 • Implement fire management strategies and integrate natural resource  
14 concerns into collaborative community protection and ecosystem  
15 restoration strategies on the unit.  
16 • Manage a budget that includes fire preparedness, prevention, suppression,  
17 and hazardous fuels in an annual program of work for the unit.  
18 • Perform duties of agency administrator and maintain those qualifications.  
19 • Provide a fully staffed, highly qualified, and diverse workforce in a "safety  
20 first" environment.

21  
22 These standards are based on current policy and provide program guidance to  
23 ensure safe, consistent, efficient, and effective Fire and Aviation Operations.  
24 This document will be reviewed and updated annually.

25  
26 **Specific Agency Administrator Performance Standards for Fire and**  
27 **Aviation at the Field Level**

28  
29 **Preparedness**

- 30 • Take all necessary and prudent actions to ensure firefighter and public  
31 safety.  
32 • Ensure sufficient qualified fire and non-fire personnel are available to  
33 support fire operations at a level commensurate with the local and national  
34 fire situation.  
35 • Ensure accurate position descriptions are developed and reflect the  
36 complexity of the unit. Individual Development Plan promote and enhance  
37 FMO currency and development.  
38 • Provide a written Delegation of Authority to FMOs that provides an  
39 adequate level of operational authority at the unit level. Include Multi-  
40 Agency Coordinating (MAC) Group authority, as appropriate.  
41 • Identify resource management objectives to maintain a current Fire  
42 Management Plan (FMP) that identifies an accurate level of funding for  
43 personnel and equipment.  
44 • Develop preparedness and fire use standards that are in compliance with  
45 agency fire policies.

- 1 • Management teams meet once a year to review fire and aviation policies,  
2 roles, responsibilities, and delegations of authority. Specifically address  
3 oversight and management controls, critical safety issues, and high-risk  
4 situations such as transfers of incident command, periods of multiple fire  
5 activity, and Red Flag Warnings.
- 6 • Ensure fire and aviation preparedness reviews are conducted each year.
- 7 • Meet annually with major cooperators and review interagency agreements  
8 to ensure their continued effectiveness and efficiency.
- 9 • Convene and participate in annual conferences and fire reviews.
- 10 • Agency administrators, Fire Program Managers, and/or Safety and Health  
11 Program Managers shall conduct after action reviews on all Type 3 fires  
12 and a minimum of 10% of their unit's Type 4, and 5 fires and document  
13 their inspections in the incident records.

#### 15 **Suppression**

- 16 • Ensure use of fire funds is in compliance with Agency policies.
- 17 • Wildland Fire Situation Analysis (WFSA) is completed and approved on  
18 all fires that escape initial attack. Alternative evaluation and certification  
19 requirements are followed.
- 20 • WFSA's that are expected to exceed \$10,000,000.00 in suppression costs  
21 are forwarded to the Regional Office for review and approval.
- 22 • Management reviews are conducted on all fires that require a WFSA.  
23 Personally attend reviews on Type 1 and Type 2 fires.
- 24 • Provide incident management objectives, written delegations of authority,  
25 and a complete agency administrator Briefing to Incident Management  
26 Teams.
- 27 • Evaluate the need for resource advisors for all fires, and assign as  
28 appropriate.
- 29 • For all unplanned human-caused fires where responsibility can be  
30 determined, ensure actions are initiated to recover cost of suppression  
31 activities, land rehabilitation, damages to the resource, and improvements.

#### 33 **Safety**

- 34 • Review safety policies, procedures, and concerns with field fire and  
35 aviation personnel.
- 36 • Ensure timely follow-up actions to program reviews, fire preparedness  
37 reviews, fire and aviation safety reviews, and management reviews.
- 38 • Monitor the fire situation and provide oversight during periods of critical  
39 fire activity and situations of high risk.
- 40 • Ensure there is adequate direction in fire management plans to maintain  
41 fire danger awareness.
- 42 • Take appropriate actions with escalating fire potential.
- 43 • Ensure appropriate investigations are conducted for incidents, entrapments,  
44 and serious accidents.

45

**1 Fire Use**

- 2 • Ensure an approved burn plan is followed for each prescribed fire project,  
3 including follow-up monitoring and documentation to ensure management  
4 objectives are met.
- 5 • Ensure that a Wildland Fire Implementation Plan (WFIP) is completed and  
6 implemented for all fires managed for resource benefits.
- 7 • Provide management oversight by personally visiting wildland and  
8 prescribed fire activities each year.
- 9 • Ensure compliance with National and Regional Office policy and direction  
10 for prescribed fire activities and ensure that periodic reviews and  
11 inspections of the prescribed fire program are completed.
- 12 • Approve Prescribed Fire Plans. Authority may be delegated to the agency  
13 administrators as provided under specific directions.
- 14 • Review Prescribed Fire Plans and recommend or approve the plans  
15 depending upon the delegated authority. Ensure that the Prescribed Fire  
16 Plan has been reviewed and recommended by a qualified technical  
17 reviewer who was not involved in the plan preparation.

**19 Fire Management Positions**

20 The following lists show the minimum operational experience recommended for  
21 fire management positions. The *Interagency Fire Program Management*  
22 *Qualifications Standards* will be used as guidelines in conjunction with specific  
23 agency requirements when filling vacant fire program positions, and as an aid in  
24 developing Individual Development Plans (IDPs) for employees.

**26 Specific Fire Management Staff Performance Standards for Fire  
27 Operations at the Field Level****29 Preparedness**

- 30 • Maintain “safety first” as the foundation for all aspects of fire and aviation  
31 management.
- 32 • Ensure that only trained and qualified personnel are assigned to fire and  
33 aviation duties.
- 34 • Develop, implement, evaluate, and document fire and aviation training  
35 program to meet current and anticipated needs.
- 36 • Establish an effective process to gather, evaluate, and communicate  
37 information to managers, supervisors, and employees. Ensure clear  
38 concise communications are maintained at all levels.
- 39 • Ensure fire and aviation management staffs understand their roles,  
40 responsibilities, authority, and accountability.
- 41 • Develop and maintain an open line of communication with public and  
42 cooperators.
- 43 • Regardless of funding level, provide a safe, effective, and efficient fire  
44 preparedness and fire use program.

- 1 • Organize, train, equip, and direct a qualified work force. An Individual  
2 Development Plan (IDP) must be provided for incumbents who do not  
3 meet new standards. Establish qualification review process.
- 4 • Take appropriate action when performance is exceptional or deficient.
- 5 • Ensure fire and aviation policies are understood, followed, and coordinated  
6 with other agencies as appropriate.
- 7 • Ensure that adequate resources are available to implement fire management  
8 operations.
- 9 • Provide fire personnel with adequate guidance, training, and decision-  
10 making authority to ensure timely decisions.
- 11 • Develop and maintain agreements, annual operating plans, and contracts on  
12 an interagency basis to increase effectiveness and efficiencies.
- 13 • Develop, maintain, and annually evaluate the FMP to ensure accuracy and  
14 validity.
- 15 • Ensure budget requests and allocations reflect preparedness requirements  
16 in the FMP.
- 17 • Develop and maintain current operational plans. (e.g., dispatch, pre-attack,  
18 prevention).
- 19 • Ensure that reports and records are properly completed and maintained.
- 20 • Ensure fiscal responsibility and accountability in planning and  
21 expenditures.
- 22 • Assess, identify, and implement program actions that effectively reduce  
23 unwanted wildland fire ignitions and mitigate risks to life, property, and  
24 resources.
- 25 • Work with cooperators to identify processes and procedures for providing  
26 fire safe communities within the wildland urban interface.

27

### 28 **Suppression**

- 29 • Ensure completion of a job hazard analysis (JHA) for fire and fire aviation  
30 activities, and implement applicable risk mitigation measures.
- 31 • Provide for and personally participate in periodic site visits to individual  
32 incidents and projects.
- 33 • Utilize the incident complexity analysis to ensure the proper level of  
34 management is assigned to all incidents.
- 35 • Ensure incoming personnel and crews are briefed prior to fire and aviation  
36 assignments.
- 37 • Coordinate the development of the Wildland Fire Situation Analysis  
38 (WFSA) with local unit staff specialists for all fires that escape initial  
39 attack.
- 40 • Ensure effective transfer of command of incident management occurs and  
41 safety is considered in all functional areas.
- 42 • Monitor fire activity to anticipate and recognize when complexity levels  
43 exceed program capabilities. Increase managerial and operational  
44 resources to meet needs.
- 45 • Complete cost recovery actions when unplanned human-caused fires occur.

1 **Safety**

- 2 • Ensure work/rest and R&R guidelines are followed during all fire and  
3 aviation activities. Deviations are approved and documented.
- 4 • Initiate, conduct, and/or participate in fire management related reviews and  
5 investigations.
- 6 • Monitor fire season severity predictions, fire behavior, and fire activity  
7 levels. Take appropriate actions to ensure safe, efficient, and effective  
8 operations.

9  
10 **Fire Use**

- 11 • Ensure a written, approved burn plan exists for each prescribed fire project.
- 12 • Ensure all escaped prescribed fires receive a review at the proper level.
- 13 • Provide the expertise and skills to fully integrate fire and aviation  
14 management into interdisciplinary planning efforts.
- 15 • Effectively communicate the “natural role” of wildland fire to internal and  
16 external agency audiences.
- 17 • Ensure compliance with National and Regional Office policy and direction  
18 for prescribed fire activities and ensure that periodic reviews and  
19 inspections of the prescribed fire program are completed.

## Chapter 07 Safety and Risk Management

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### Introduction

The primary means by which we prevent accidents in wildland fire operations is through aggressive risk management. Our safety philosophy acknowledges that while the ideal level of risk may be zero, a hazard free work environment is not a reasonable or achievable goal in fire operations. Through organized, comprehensive, and systematic risk management, we will determine the acceptable level of risk that allows us to provide for safety yet still achieve fire operations objectives. Risk management is intended to minimize the number of injuries or fatalities experienced by wildland firefighters.

### Definitions

**Safety** - may be defined as a measure of the degree of freedom from risk or conditions that can cause death, physical harm, or equipment or property damage.

**Risk Management** - is defined as a continuous, five-step process that provides a systematic method for identifying and managing the risks associated with any operation.

### Policy

Firefighter and public safety is our first priority. All Fire Management Plans and activities must reflect this commitment. The commitment to and accountability for safety is a joint responsibility of all firefighters, managers, and administrators. Individuals must be responsible for their own performance and accountability.

Every supervisor, employee, and volunteer is responsible for following safe work practices and procedures, as well as identifying and reporting unsafe conditions.

All firefighters, fireline supervisors, fire managers, and agency administrators have the responsibility to ensure compliance with established safe firefighting practices and principles.

#### *Agency Specific Safety Policy Documents*

- **BLM** - *BLM Handbook 1112-1, 1112-2*
- **FWS** - *Service Manual 241 FW7, Firefighting*
- **NPS** - *DO-50 and RM-50 Loss Control Management Guideline*
- **FS** - *FSH-6709.11 Health and Safety Code Handbook*

### Guiding Principles

The primary means by which we implement command decisions and maintain unity of action is through the use of common principles of operations. These

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1 principles guide our fundamental wildland fire management practices,  
2 behaviors, and customs, and are mutually understood at every level of  
3 command. They include Risk Management, Standard Firefighting Orders and  
4 Watch Out Situations, LCES and the Downhill Line Construction Checklist.  
5 These principles are fundamental to how we perform fire operations, and are  
6 intended to improve decision making and firefighter safety. They are not  
7 absolute rules. They require judgment in application.

### 9 **Goal**

10 The goal of the fire safety program is to provide direction and guidance for safe  
11 and effective management in all activities. Safety is the responsibility of  
12 everyone assigned to wildland fire, and must be practiced at all operational  
13 levels from the national fire director, state/regional director, and unit manager - to  
14 employees in the field. Agency administrators need to stress that firefighter and  
15 public safety always takes precedence over property and resource loss.  
16 Coordination between the fire management staff and unit safety officer(s) is  
17 essential in achieving this objective. For additional safety guidance and  
18 reference refer to:

- 19 • *Fireline Handbook (PMS 410-1, NFES 0065).*
- 20 • *Incident Response Pocket Guide (IRPG) (PMS 461, NFES 1077).*
- 21 • *Wildland Firefighter Health & Safety Report (Annual MTDC Publication).*
- 22 • *National Interagency Mobilization Guide (NFES 2092).*

### 24 **Risk Management Process**

25 The Risk Management Process identified in the *NWCG Incident Response*  
26 *Pocket Guide (IRPG)* helps ensure that critical factors and risks associated with  
27 fireline operations are considered during decision making. This process  
28 enhances safety practices when applied to fire operations prior to taking action.  
29 The Risk Management Process is found on the inside of the back cover of  
30 *Interagency Standards for Fire and Fire Aviation Operations*.

### 32 **Job Hazard Analysis (JHA)**

33 A completed Job Hazard Analysis is required for:

- 34 • Jobs or work practices that have potential hazards.
- 35 • New, non-routine, or hazardous tasks to be performed where potential  
36 hazards exist.
- 37 • Jobs that may require the employee to use non-standard personal protective  
38 equipment (PPE).
- 39 • Changes in equipment, work environment, conditions, policies, or  
40 materials.
- 41 • Supervisors and appropriate line managers must ensure that established  
42 JHAs are reviewed and signed prior to any non-routine task or at the  
43 beginning of the fire season. Additional JHA information can also be  
44 obtained at: [http://www.fs.fed.us/r1/people/jha/jha\\_index\\_www.html](http://www.fs.fed.us/r1/people/jha/jha_index_www.html).



- 1 • **BLM** - A risk assessment (in lieu of JHA) must be completed for all non-  
2 suppression work practices/projects that have potential hazards.  
3

#### 4 **Work/Rest**

5 To assist in mitigating fatigue, days off are allowed during and after  
6 assignments. If necessary to reduce fatigue, the Type 1 or 2 Incident  
7 Commander (IC) or agency administrator (AA) (incident host or home unit) may  
8 provide time off supplementary to mandatory days off requirements. For Type  
9 3-5 incidents, paid days off should be rare exceptions. However, if necessary,  
10 the agency administrator (incident host or home unit) may authorize day(s) off  
11 with pay.

12  
13 The IC or AA authority to grant a day off with pay lies within 5 U.S.C. 6104, 5  
14 CFR 610.301-306, and 56 Comp. Gen. Decision 393 (1977).

- 15 • Plan for and ensure that all personnel are provided a minimum 2:1 work to  
16 rest ratio (for every 2 hours of work or travel, provide 1 hour of sleep  
17 and/or rest).
- 18 • Work shifts that exceed 16 hours and/or consecutive days that do not meet  
19 the 2:1 work/rest ratio should be the exception, and no work shift should  
20 exceed 24 hours. However, in situations where this does occur (for  
21 example, initial attack), incident management personnel will resume 2:1  
22 work/rest ratio as quickly as possible.
- 23 • The Incident Commander or agency administrator must justify work shifts  
24 that exceed 16 hours and those that do not meet 2:1 work to rest ratio.  
25 Justification will be documented in the daily incident records.  
26 Documentation shall include mitigation measures used to reduce fatigue.
- 27 • The Time Officer's/Unit Leader's approval of the Emergency Firefighter  
28 Time Report (OF-288), or other agency pay document, certifies that the  
29 required documentation is on file and no further documentation is required  
30 for pay purposes.

31  
32 The work/rest guidelines do not apply to aircraft pilots assigned to an incident.  
33 Pilots must abide by applicable Federal Aviation Administration (FAA)  
34 guidelines, or agency policy if more restrictive.  
35

#### 36 **Length of Assignment**

##### 37 **Assignment Definition**

38 An assignment is defined as the time period (days) between the first full  
39 operational period at the first incident or reporting location on the original  
40 resource order and commencement of return travel to the home unit.  
41  
42

##### 43 **Length of Assignment**

44 Standard assignment length is 14 days, exclusive of travel from and to home  
45 unit, with possible extensions identified below. Time spent in staging and

1 reposition status counts toward the 14-day limit, regardless of pay status, for all  
2 personnel, including Incident Management Teams.

3

#### 4 **Days Off**

5 After completion of a 14 day assignment and return to the home unit, two  
6 mandatory days off will be provided (2 after 14). Days off must occur on the  
7 calendar days immediately following the return travel in order to be charged to  
8 the incident. (See Section 12.1-2) (5 U.S.C. 6104, 5 CFR 610.301-306, and 56  
9 Comp. Gen. Decision 393 (1977). If the next day(s) upon return from an  
10 incident is/are a regular work day(s), a paid day(s) off will be authorized.  
11 Regulations may preclude authorizing this for non-NWCG and state/local  
12 employees.

13

14 Pay entitlement, including administrative leave, for a paid day(s) off cannot be  
15 authorized on the individual's regular day(s) off at their home unit. Agencies  
16 will apply holiday pay regulations, as appropriate. A paid day off is recorded on  
17 home unit time records according to agency requirements. Casuals (AD) are not  
18 entitled to paid day(s) off upon release from the incident or at their point of hire.

19

20 Contract resources are not entitled to paid day(s) off upon release from the  
21 incident or at their point of hire.

22

23 Home unit agency administrators may authorize additional day(s) off with  
24 compensation to further mitigate fatigue. If authorized, home unit program  
25 funds will be used. All length of assignment rules apply to aviation resources,  
26 including aircraft pilots, notwithstanding the FAA and Agency day off  
27 regulations.

28

#### 29 **Assignment Extension**

30 Prior to assigning incident personnel to back-to-back assignments, their health,  
31 readiness, and capability must be considered. The health and safety of incident  
32 personnel and resources will not be compromised under any circumstance.

- 33 • Assignments may be extended when:
  - 34 ➤ life and property are imminently threatened,
  - 35 ➤ suppression objectives are close to being met,
  - 36 ➤ a military battalion is assigned,
  - 37 ➤ replacement resources are unavailable, or have not yet arrived.

38

39 Upon completion of the standard 14 day assignment, an extension of up to an  
40 additional 14 days may be allowed (for a total of up to 30 days, inclusive of  
41 mandatory days off, and exclusive of travel). Regardless of extension duration,  
42 two mandatory days off will be provided prior to the 22<sup>nd</sup> day of the assignment.

43

44 Contracts and Emergency Equipment Rental Agreements (EERA) should be  
45 reviewed for appropriate pay requirements and length of assignment. If the  
46 contract or EERA do not address this, the incident Finance/Administration

1 Section Chief or the procurement official should be consulted as to whether  
2 compensation for a day off is appropriate.

3

#### 4 **Single Resource/Kind Extensions**

5 The Section Chief or Incident Commander will identify the need for assignment  
6 extension and will obtain the affected resource's concurrence. The Section  
7 Chief and affected resource will acquire and document the home unit  
8 supervisor's approval.

9

10 The Incident Commander approves the extension. If a convened geographic or  
11 national multi-agency coordinating group (GMAC/NMAC) directs, the Incident  
12 Commander approves only after GMAC/NMAC concurrence.

13

14 If the potential exists for reassignment to another incident during the extension,  
15 the home unit supervisor and affected resource will be advised and must concur  
16 prior to reassignment.

17

#### 18 **Incident Management Team Extensions**

19 Incident management team extensions are to be negotiated between the incident  
20 agency administrator, the Incident Commander, and the GMAC/NMAC (if  
21 directed).

22

23 Upon release from the assignment, regardless of extension duration, two  
24 mandatory days off will be provided immediately following the return to the  
25 home unit, and are chargeable to the incident. (See above for compensation and  
26 days off guidelines).

27

#### 28 **Management Directed Days Off at Home Unit**

29 Supervisors must manage work schedules for initial attack, dispatch and incident  
30 support personnel during extended incident situations. During periods of non-  
31 routine or extended activity, these employees will have a minimum of 1 day off  
32 in any 21-day period.

33

#### 34 **Driving Standard**

35 All employees driving motor vehicles are responsible for the proper care,  
36 operation, maintenance and protection of the vehicle. The use of government-  
37 owned, rented, or leased motor vehicles is for official business only.  
38 Unauthorized use is prohibited.

39

#### 40 **General Driving Policy**

- 41 • Employees must have a valid state driver's license in their possession for  
42 the appropriate vehicle class before operating the vehicle. Operating a  
43 government-owned or rental vehicle without a valid state driver's license is  
44 prohibited.

- 1 • All drivers whose job duties require the use of a motor vehicle will receive  
2 initial defensive driver training within three months of entering on duty  
3 and refresher driver training every three years thereafter.
- 4 • The operator and all passengers are required to wear seat belts and obey all  
5 federal and state laws.
- 6 • All traffic violations or parking tickets will be the operator's responsibility.
- 7 • All driving requiring a CDL will be performed in accordance with  
8 applicable Department of Transportation regulations.
- 9 • Seat belts must be available and used in agency motor vehicles. Without  
10 exception, seat belts must be worn at all times by motor vehicle operators  
11 and passengers, regardless of the distance to be traveled or the time  
12 involved. If any employee fails to fasten their seat belt while riding in a  
13 vehicle on official business, they are subject to disciplinary action as  
14 determined by local management.
- 15 • Employees operating any motor vehicle with a GVWR of 26,000 pounds  
16 or more, towing a vehicle 10,000 pounds GVWR or more, hauling  
17 hazardous material requiring the vehicle to be placarded, or transporting,  
18 16 or more persons, including the driver, must possess a valid Commercial  
19 Drivers License (CDL) with all applicable endorsements.
- 20 • **BLM** - *All employees operating a Government motor vehicle will be*  
21 *required to submit Form DI-131 (Application for U.S. Government Motor*  
22 *Vehicle Operator's Identification Card) and OF-345 (Physical Fitness*  
23 *Inquiry for Motor Vehicle Operators). When the supervisor signs the DI-*  
24 *131, the employee is authorized to operate Government-owned or leased*  
25 *vehicles, or privately-owned vehicles on official business. Individual office*  
26 *forms equivalent to the OF-345 and DI-131 are acceptable.*
- 27 • **FS** - *Policy requires all operators of government owned, or leased vehicles*  
28 *to have a Forest Service issued identification card indicating the type of*  
29 *vehicles or equipment the holder is authorized and qualified to operate.*
- 30 • **BLM/FWS/NPS** - *The DOI has granted wildland fire agencies a waiver to*  
31 *allow employees between the ages of 18 and 21 to operate agency*  
32 *commercial fire vehicles using a state issued CDL under the specific*  
33 *conditions as stated below:*
  - 34 ➤ *Drivers with a CDL may only drive within the state that has issued*  
35 *the CDL and must comply with the state's special requirements and*  
36 *endorsements.*
  - 37 ➤ *These drivers must only drive vehicles that are equipped with visible*  
38 *and audible signals, and are easily recognized as fire fighting*  
39 *equipment. This excludes, but is not limited to, school buses used for*  
40 *crew transport and "low-boy" tractor trailers used for construction*  
41 *equipment transport.*
  - 42 ➤ *Supervisors must annually establish and document that these drivers*  
43 *have a valid license (i.e. that the license has not been suspended,*  
44 *revoked, canceled, or that the employee has not been otherwise*  
45 *unqualified from holding a license - 485 DM 16.3.B (1), ensure that*

1            *the employee has the ability to operate the vehicle(s) safely in the*  
2            *operational environment assigned (485 DM 16.3.B (2), and review*  
3            *and validate the employee's driving record (485 DM 16.3.B(4)).*  
4

#### 5 **Non-Incident Operations Driving**

6 Refer to the current Driving Standards for each individual agency.  
7

#### 8 **Incident Operations Driving**

9 This policy addresses driving by personnel actively engaged in wildland fire  
10 suppression or all-risk activities; including driving while assigned to a specific  
11 incident (check-in to check-out) or during initial attack fire response (includes  
12 time required to control the fire and travel to a rest location).

- 13 • Agency resources assigned to an incident or engaged in initial attack fire  
14 response will adhere to the current agency work/rest policy for determining  
15 length of duty day.
- 16 • No driver will drive more than 10 hours (behind the wheel) within any  
17 duty-day.
- 18 • Multiple drivers in a single vehicle may drive up to the duty-day limitation  
19 provided no driver exceeds the individual driving (behind the wheel) time  
20 limitation of 10 hours.
- 21 • A driver shall drive only if they have had at least 8 consecutive hours off  
22 duty before beginning a shift. Exception to the minimum off-duty hour  
23 requirement is allowed when essential to:
  - 24 > Accomplish immediate and critical suppression objectives.
  - 25 > Address immediate and critical firefighter or public safety issues.
- 26 • As stated in the current agency work/rest policy, documentation of  
27 mitigation measures used to reduce fatigue is required for drivers who  
28 exceed 16 hour work shifts. This is required regardless of whether the  
29 driver was still compliant with the 10 hour individual (behind the wheel)  
30 driving time limitations.
- 31 • To manage fatigue, every effort should be made to conduct off unit  
32 (excluding IA response) mobilization and demobilization travel between  
33 0500 hrs and 2200 hrs.
- 34 • ***FWS/NPS** - Program funds are authorized to pay for the cost of CDL*  
35 *licensing fees and exams, necessary for employees to operate fire*  
36 *equipment, with one exception. That exception involves those cases where*  
37 *a test has been failed and must be retaken, in which case the employee will*  
38 *be responsible for costs associated with additional testing.*  
39

#### 40 **Fire Vehicle Operation Standards**

41 Operators of all vehicles must abide by state traffic regulations. Operation of all  
42 vehicles will be conducted within the limits specified by the manufacturer.  
43 Limitations based on tire maximum speed ratings and Gross Vehicle Weight  
44 restrictions must be followed. It is the vehicle operator's responsibility to  
45 ensure vehicles abide by these and any other limitations specified by agency or  
46 state regulations.

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1 **Personal Protective Equipment (PPE)**

2 All personnel are required to use Personal Protective Equipment (PPE)  
3 appropriate for their duties and/or as identified in JHAs. Employees must be  
4 trained to use safety equipment effectively. PPE devices will be used only when  
5 equipment guards, engineering controls, or management control do not  
6 adequately protect employees.

- 7 • *NPS - No required personal protective equipment will be purchased that*  
8 *does not meet or exceed USDA-Forest Service or National Fire Protection*  
9 *Association Standards.*

10  
11 **Required Fireline PPE includes:**

- 12 • 8-inch high, lace-type exterior leather work boots with non-slip, Vibram-  
13 type, melt-resistant soles. The 8-inch height requirement is measured from  
14 the bottom of the heel to the top of the boot. Alaska is exempt from the  
15 Vibram-type sole requirement. All boots that meet the footwear standard  
16 as described above are authorized for firefighting.
- 17 • fire shelter
  - 18 • hard hat with chinstrap
  - 19 • goggles/safety glasses
  - 20 • ear plugs/hearing protection
  - 21 • yellow aramid shirts
  - 22 • aramid trousers
  - 23 • leather gloves
  - 24 • Wear additional PPE as identified by local conditions, material safety data  
25 sheet (MSDS), or JHA.

26  
27 Polyester, polypropylene, nylon, and silk materials are not to be worn, as they  
28 melt and stick to the skin when exposed to flame or heat. Because most  
29 synthetic fibers melt when exposed to flame or extreme radiant heat, personnel  
30 should wear only undergarments made of 100 percent cotton or wool, aramid, or  
31 other fire resistant materials.

32  
33 Aramid clothing should be cleaned or replaced whenever soiled, especially  
34 when soiled with petroleum products. Aramid clothing will be replaced when  
35 the fabric is so worn as to reduce the protection capability of the garment or is so  
36 faded as to significantly reduce the desired visibility qualities. Any modification  
37 to personal protective equipment that reduces the fire protection capability such  
38 as iron-on logos, and staggng of pants, is an unacceptable practice and will not  
39 be allowed on fires.

40  
41 **Head Protection**

42 Personnel must be equipped with hard hats and wear them at all times while on  
43 the fireline. Hard hats must be equipped with a chinstrap, which must be  
44 fastened while riding in, or in the vicinity of, helicopters.

45

1 Acceptable helmets for fireline use are “Helmet, Safety, Plastic” (NFES #0109,  
2 NSN 8415-01-055-2265) listed in NWCG *National Fire Equipment System*  
3 *Catalog: Fire Supplies and Equipment*, or equivalent helmets meeting the  
4 *National Fire Protection Association (NFPA) Standard 1977, Standard on*  
5 *Protective Clothing and Equipment for use in Wildland Firefighting and*  
6 *American National Standards Institute (ANSI) Z89.1-1986.*

7  
8 Hard hats consist of two components - the shell and the suspension - which work  
9 together as a system. Both components require periodic inspection and  
10 maintenance. Specific inspection and maintenance instructions are found in  
11 Missoula Technology and Development Center (MTDC) Tech Tip publication,  
12 *Your Hardhat: Inspection and Maintenance* (0267-2331-MTDC).

#### 13 14 **Eye and Face Protection**

15 The following positions require the wearing of eye protection:

- 16 • nozzle operator
- 17 • chainsaw operator/faller
- 18 • helibase and ramp personnel
- 19 • retardant mixing crews
- 20 • other duties may require eye protection as identified in a specific JHA.

21  
22 In addition to goggles full face protection in the form of a face shield in  
23 compliance with ANSI Z87.1 shall be worn when working in any position where  
24 face protection has been identified as required in the job specific JHA/risk  
25 assessment: Terra-Torch®, power sharpener operators, etc.

#### 26 27 **Hearing Protection**

28 Personnel who are exposed to a noise level in excess of 85db must be provided  
29 with, and wear, hearing protection. This includes, but is not limited to:

- 30 • chainsaw operators/fallers
- 31 • pump operators
- 32 • helibase and aircraft ramp personnel
- 33 • retardant mixing personnel
- 34 • any other personnel exposed on a regular basis to damaging noise levels.

35  
36 Other duties may require hearing protection as identified in a specific JHA /Risk  
37 Assessment.

38  
39 Employees may be required to be placed under a hearing conservation program  
40 as required by *29 CFR 1910.95*. Employees may also be required to be placed  
41 under a hearing conservation program as identified in approved Medical  
42 Standards Program waivers with restrictions. Consult with local safety & health  
43 personnel for specifics regarding unit hearing conservation program.

44  
45

**1 Neck Protection**

2 Face and neck shrouds are not required PPE. However, if used, face and neck  
3 shrouds shall meet the requirements of FS specification 5100-601 or *NFPA 1977*  
4 *Standard on Protective Clothing and Equipment for Wildland Fire Fighting*.

5  
6 Shrouds should be positioned in a manner that allows for immediate use. For  
7 additional information see MTDC Tech Tip *Improved Face and Neck Shroud*  
8 *for Wildland Firefighters, 2004 (0451-2323-MTDC)*.

9  
10 Shrouds should not be routinely worn throughout the operational period, due to  
11 increases in physiological heat stress.

**12 Leg Protection**

13 All chainsaw operators will wear chainsaw chaps meeting the NFPA 1977  
14 *Standards Protective Clothing and Equipment for Wildland Firefighting*, or the  
15 FS 6170-4 specification. Chainsaw chaps shall be maintained in accordance  
16 with MTDC Publication, *Inspecting and Repairing Your Chainsaw Chaps User*  
17 *Instructions (0567-2816-MTDC)*.

**18 Foot Protection**

19  
20 Personnel assigned to fires must wear 8-inch high, lace-type exterior leather  
21 work boots with non-slip, Vibram-type, melt-resistant soles. The 8-inch height  
22 requirement is measured from the bottom of the heel to the top of the boot.  
23 Alaska is exempt from the Vibram-type sole requirement. All boots that meet  
24 the footwear standard as described above are authorized for firefighting.

25  
26  
27 The boots are a condition of employment for firefighting positions and are  
28 purchased by the employee prior to employment.

- 29 • **FWS** - *Red carded fireline permanent, temporary and seasonal Fish and*  
30 *Wildlife personnel will be provided with these boots from station funds not*  
31 *more often than every three years. Emergency or casual firefighters will*  
32 *provide their own boots. Some refuge situations may require special*  
33 *footwear such as waders, hip boots, snake boots, etc.*
- 34 • **NPS** - *Government funds will be utilized for purchase of wildland fire*  
35 *boots for those employees currently red carded/certified in positions which*  
36 *require wildland and prescribed fireline duties. The individual employee*  
37 *must be available to perform those duties when assigned; if not routinely*  
38 *available for park fire assignments, FIREPRO funds should not be used to*  
39 *purchase boots for that employee.*
- 40 • **NPS** - *FIREPRO funds, not to exceed \$100 a pair, may be used to*  
41 *purchase or repair boots. Other government funds, such as from safety,*  
42 *protection or maintenance accounts, may also be used for purchase or to*  
43 *augment FIREPRO funds, dependent on local management direction.*  
44 *Costs to repair boots not damaged on fire should be charged to other*  
45 *appropriate accounts.*



- 1 • *NPS - It is the responsibility of the local FMO to determine those*  
2 *employees requiring boots as personal protective equipment, and the*  
3 *frequency of necessary replacement or repair. Boots will be considered*  
4 *similar to uniform items and will not be subject to cache item return, due*  
5 *to health, sanitation, and individual sizing considerations.*  
6

### 7 **Respiratory Protection**

8 The use of respiratory protection (e.g., dust masks, half-mask respirators) must  
9 be in compliance with agency safety and health regulations and OSHA's  
10 *Respiratory Protection Standard 29 CFR 1910.134.*

- 11 • *BLM/FWS/NPS - Managers and supervisors will not knowingly place*  
12 *wildland firefighters in positions where exposure to noxious gases or*  
13 *chemicals would require the use of self-contained breathing apparatus.*  
14 • *FS - FSM - 5135.3 - Self-Contained Breathing Apparatus - Wildland*  
15 *firefighters may use only an open-circuit, self-contained breathing*  
16 *apparatus (SCBA) of the positive pressure type when smoke from vehicle,*  
17 *dump, structure, or other non-wildland fuel fire cannot be avoided while*  
18 *meeting wildland fire suppression objectives (29 CFR 1910.134,*  
19 *Respiratory Protection). If such an apparatus is not available, avoid*  
20 *exposure to smoke from these sources.*  
21 • *FS - The acquisition, training, proper use, employee health surveillance*  
22 *programs, inspection, storage, and maintenance of an SCBA must comply*  
23 *with the National Fire Protection Association Standard, NFPA-1981 and*  
24 *29 CFR 1910.134I, and be justified by a Job Hazard Analysis. Where an*  
25 *SCBA is approved, it may be carried only on a fire engine and its use must*  
26 *be consistent with FSM 5130.2 and FSM 5130.3.*  
27

### 28 **Fire Shelters**

29 Fire shelters will be issued and carried in a readily accessible manner by all line  
30 personnel. Firefighters will inspect their fire shelters at the beginning of each  
31 fire season and periodically throughout the year, to ensure they are serviceable.  
32 New Generation fire shelters will replace existing stock of old fire shelters by  
33 the end of calendar year 2008 for all federal wildland firefighters and by the end  
34 of calendar year 2009 for all other firefighters. Training in the deployment of  
35 new generation fire shelters will be provided prior to issuance.  
36

37 Training Shelters will be deployed at required Annual Fireline Safety Refresher  
38 Training. No live fire exercises for the purpose of fire shelter deployment  
39 training will be conducted.  
40

41 The deployment of shelters is to be viewed as a last resort, and will not be used  
42 as a tactical tool. Supervisors and firefighters must never rely on fire shelters  
43 instead of using well-defined escape routes and safety zones. When deployed  
44 on a fire, fire shelters will be left in place and not be removed pending approval  
45 of authorized investigators.  
46

1 **Specialized or Non Standard PPE**

2 Specialized Personal Protective Equipment not routinely supplied by the agency  
3 required to perform a task safely must be ordered in accordance with agency  
4 direction.

5  
6 A JHA/risk assessment must be completed and reviewed by the Unit Safety  
7 Officer and the supervisor's approval is required. Items must meet agency and  
8 industry standards for specific intended use. Cold weather flame resistant outer  
9 wear shall be in compliance with NFPA 1977, *Standard on Protective Clothing*  
10 *and Equipment for Wildland Firefighting*. All cold weather inner wear should  
11 be composed of 100% cotton/wool, or of aramid and other flame resistant  
12 materials.

13  
14 **Fireline Safety**

15  
16 **Incident Briefings**

17 Fire managers must ensure that safety briefings are occurring throughout the fire  
18 organization, and that safety factors are addressed through the IC and  
19 communicated to all incident personnel at operational briefings. The  
20 identification and location of escape routes and safety zones must be stressed. A  
21 briefing checklist can be found in the *Incident Response Pocket Guide (IRPG)*.

22  
23 **LCES - A System for Operational Safety**

24 LCES will be used in all operational briefings and tactical operations as per the  
25 *Incident Response Pocket Guide (IRPG)*.

- 26 • L - Lookout(s)
- 27 • C - Communication(s)
- 28 • E - Escape Route(s)
- 29 • S - Safety Zone(s)

30  
31 **Incident Safety Oversight**

32 Agency administrators must be actively involved in the management of wildland  
33 fires, and personally visit an appropriate number of escaped fires each year.

34  
35 Agency Administrators and/or Fire Managers may request additional safety  
36 oversight may be requested when:

- 37 • A fire escapes initial attack or when extended attack is probable.
- 38 • There is complex or critical fire behavior.
- 39 • There is a complex air operation.
- 40 • The fire is in an urban intermix/interface.

41  
42 Every individual has the right to turn down unsafe assignments. When an  
43 individual feels an assignment is unsafe they also have the obligation to identify,  
44 to the degree possible, safety alternatives for completing that assignment. The  
45 *IRPG* contains process for *How to Properly Refuse Risk*.

- 1 • **FS - Location of Fire Camps and Sheltering in Place**  
2 *Fire camps should be located in areas that will service the incident for the*  
3 *long term without having to relocate. It is recognized that such factors as*  
4 *accessibility to the incident, size of the area required and cost efficiency*  
5 *play key roles in determining locations.*  
6  
7 *Due to such factors as extreme fire behaviors, fire camp locations maybe*  
8 *compromised. Incident Commanders are to be especially vigilant to*  
9 *quickly identify situations that may put their fire camp(s) or any other*  
10 *adjacent fire camps in jeopardy. As such, planning for evacuation and/or*  
11 *shelter in place actions should be considered. Evacuation plans at a*  
12 *minimum shall include:*  
13 ➤ *Trigger points*  
14 ➤ *Egress routes*  
15 ➤ *Transportation for all personnel*  
16 ➤ *Accountability for all personnel*  
17 • **FS - Shelter in Place plans, at a minimum shall include:**  
18 ➤ *Trigger points*  
19 ➤ *ICP protection strategy and commensurate IAP*  
20 ➤ *Live-ability standards including air quality, functionality of location*  
21 *and facilities, and safety considerations for post burn conditions.*  
22 ➤ *Monitoring plan for carbon monoxide levels before, during and after*  
23 *the fire moves through the camp. (Plan to adhere to OSHA standard*  
24 *of 50ppm per 8hr period.)*  
25 ➤ *Conditions that exceed OSHA standards must be mitigated (ie:*  
26 *moving to a location that meets the standards for CO*  
27 ➤ *Only those individuals who meet 310-1 fireline qualifications will*  
28 *remain in place during the time the fire moves through the camp area*  
29

### 30 **Unit/Area Closures**

31 Threats to public safety may require temporary closure of a unit/area, or a  
32 portion of it. When a fire threatens escape from the unit/area, adjacent  
33 authorities must be given as much advance notice as possible in order to achieve  
34 orderly evacuation.  
35

### 36 **Standard Safety Flagging**

37 The NWCG recommends the following Safety Zone/Escape Route flagging for  
38 wildland fire activities:

- 39 • Hot-pink flagging marked “Escape Route” (NFES 0566). Crews with  
40 colorblind members may wish to carry and utilize fluorescent chartreuse  
41 flagging (NFES #2396).  
42 • Hazards. Yellow with black diagonal stripes, 1 inch wide (NFES 0267).  
43 If the above recommendation is not utilized on an incident, the incident  
44 will need to identify the selected color and it make known to all  
45 firefighters.  
46

### 1 **Unexploded Ordnance (UXO)**

2 General guidance is as follows: If UXO is suspected, do not enter the area.  
3 Small arms (rifle and shotgun) munitions areas should be flagged and avoided  
4 by fire personnel. For suspected larger munitions, the area must be avoided by  
5 fire personnel and contact local law enforcement bomb squad or nearest  
6 Department of Defense agency. Each unit will determine which employees are  
7 authorized to enter known or potential hazardous substance release sites, and the  
8 responsibility for these determinations remains with each agency administrator.  
9 For additional UXO safety information, see current IRPG.

10

### 11 **Hazardous Materials**

12 Employees that discover any unauthorized waste dump or spill site that contains  
13 indicators of potential hazardous substances (e.g, containers of unknown  
14 substances, pools of unidentifiable liquids, piles of unknown solid materials,  
15 unusual odors, or any materials out of place or not associated with an authorized  
16 activity) should take the following precautions:

- 17 • Follow the procedures in the IRPG.
- 18 • Treat each site as if it contains harmful materials.
- 19 • Do not handle, move, or open any container, breathe vapors, or make  
20 contact with the material.
- 21 • Move a safe distance upwind from the site.
- 22 • Contact appropriate personnel. Generally, this is the Hazardous Materials  
23 Coordinator for the local office.
- 24 • *BLM/FWS/NPS - Agencies require that all field personnel complete a*  
25 *First Responder Awareness training. Firefighters are required to take an*  
26 *annual refresher for Hazardous Material protocol.*

27

28 The following general safety rules shall be observed when working with  
29 chemicals:

- 30 • Read and understand the Material Safety Data Sheets.
- 31 • Keep the work area clean and orderly.
- 32 • Use the necessary safety equipment.
- 33 • Label every container with the identity of its contents and appropriate  
34 hazard warnings.
- 35 • Store incompatible chemicals in separate areas.
- 36 • Substitute less toxic materials whenever possible.
- 37 • Limit the volume of volatile or flammable material to the minimum needed  
38 for short operation periods.
- 39 • Provide means of containing the material if equipment or containers should  
40 break or spill their contents.

41

### 42 **Heat Stress**

43 There are three forms of heat stress. The mildest is heat cramps. Heat stress can  
44 progress to heat exhaustion and eventually heat stroke. Heat stroke is a medical  
45 emergency. Delayed treatment can result in brain damage and even death. At

1 the first sign of heat stress, stop work, get into the shade, and begin drinking  
2 fluid. See *Chapter 05 of Fitness and Work Capacity, 2nd ed. (1997)*.

3

#### 4 **Smoke and Carbon Monoxide**

5 For information of this subject call USDA Forest Service, Technology and  
6 Development Program, Publications, (406) 329-3978, and ask for *Health*  
7 *Hazards of Smoke, Recommendations of the Consensus Conference, April 1997*  
8 *(item Number 97512836)*. Copies are available free of charge in limited  
9 numbers.

10

#### 11 **Six Minutes for Safety Training**

12 It is recommended that daily “Six Minutes for Safety” training be conducted that  
13 focuses on high-risk, low frequency activities that fire personnel may encounter  
14 during a fire season. A daily national “Six Minutes for Safety” briefing can be  
15 found at:

16 [http://www.nifc.gov/sixminutes/dsp\\_sixminutes.php](http://www.nifc.gov/sixminutes/dsp_sixminutes.php) and in the National  
17 Situation Report.

18

#### 19 **Safety for Non-Operational Personnel Visiting Fires**

20 A wide variety of personnel such as agency administrators, other agency  
21 personnel, dignitaries, members of the news media, etc may visit incidents. The  
22 following standards apply to all visitors.

23

#### 24 **Visits to an Incident Base**

25 The minimum recommendation for PPE at an incident base is the same as all  
26 field locations.

- 27 • Lace-up shoes with non-slip soles and heels
- 28 • Long trousers
- 29 • Long-sleeve shirt
- 30 • For agency personnel, the field uniform is appropriate; however for more  
31 flexibility the aramid fire shirts and trousers or flight suit may be worn.

32

#### 33 **Visits to the Fireline**

34 Visits to the fireline must have the approval of the IC.

- 35 • Visitors must maintain communications with the DIVS or appropriate  
36 fireline supervisor of the area they are visiting.
- 37 • Required PPE:
  - 38 ➤ 8-inch high, lace-type exterior leather work boots with non-slip,  
39 Vibram-type, melt-resistant soles. The 8-inch height requirement is  
40 measured from the bottom of the heel to the top of the boot. Alaska  
41 is exempt from the Vibram-type sole requirement. All boots that  
42 meet the footwear standard as described above are authorized for  
43 firefighting.
  - 44 ➤ Yellow aramid shirts
  - 45 ➤ aramid trousers
  - 46 ➤ hard hat with chinstrap

- 1       ➤ leather gloves
- 2       ➤ fire shelter
- 3       • Required equipment/supplies:
- 4       ➤ hand tool
- 5       ➤ water canteen

6  
7 Visitors to the Fireline may be “Escorted” or “Non-Escorted” depending on the  
8 following requirements:

#### 9 10 **Non-Escorted Visits**

11 Visitors must have a minimum physical fitness level of “light”.

- 12       • Must have adequate communications and radio training.
- 13       • Completed the following training:
  - 14       ➤ Introduction to Fire Behavior (S-190)
  - 15       ➤ Firefighter Training (S-130)
  - 16       ➤ Annual Fireline Safety Refresher Training.
- 17       • Deviation from this requirement must be approved by the IC for other non-  
18 escorted support personnel involved in vehicle operations or other support  
19 functions on established roadways and working in areas which pose no fire  
20 behavior threat.
- 21       • *BLM/FWS - Law Enforcement physical fitness standard is accepted as*  
22 *equivalent to a “light” WCT work category.*

#### 23 24 **Escorted Visits**

25 All non-incident, non-agency, visitors lacking the above training and physical  
26 requirements must be escorted while on the fireline.

- 27       • Visitors must receive training in the proper use of PPE.
- 28       • Requirement for handtool and water to be determined by escort.
- 29       • Visitors must be able to walk in mountainous terrain and be in good  
30 physical condition with no known limiting conditions.
- 31       • Escorts must be minimally qualified at the Single Resource Boss. Any  
32 deviation from this requirement must be approved by the IC.

#### 33 34 **Helicopter Observation Flights**

35 Visitors who take helicopter flights to observe fires must receive a passenger  
36 briefing and meet the following requirements:

- 37       • **Required PPE:**
  - 38       ➤ Flight helmet
  - 39       ➤ Leather boots
  - 40       ➤ Fire-resistant clothing
  - 41       ➤ All leather or leather and aramid gloves

42  
43 Occasional passengers/visitors have no training requirement, but a qualified  
44 flight manager must supervise loading and unloading of passengers.

45

1 **Fixed-Wing Observation Flights**

2 • **Required PPE**

- 3 > No PPE is required for visitors and agency personnel who take fixed-  
4 wing flights to observe fires. However, a passenger briefing is  
5 required, and the flight level must not drop below 500 feet AGL.  
6

7 **SAFENET**

8 SAFENET is a form, process, and method for reporting and resolving safety  
9 concerns encountered in any aspect (e.g., preparedness, training, etc.) of  
10 wildland fire or all risk incident management. The information provided on the  
11 form will provide important, safety-related data to the National Interagency Fire  
12 Center, and determine long-term trends and problem areas.

13 The objectives of the form and process are:

- 14 • To provide immediate reporting and correction of unsafe situations or close  
15 calls in wildland fire.  
16 • To provide a means of sharing safety information throughout the fire  
17 community.  
18 • To provide long-term data that will assist in identifying trends.  
19 • Primarily intended for wildland and prescribed fire situations, however,  
20 SAFENET can be used for training and all-risk events.  
21

22 Individuals who observe or who are involved in an unsafe situation shall initiate  
23 corrective actions if possible, and then report the occurrence using SAFENET.

24 You are encouraged, but not required, to put your name on the report.

25 Prompt replies to the originator (if name provided), timely action to correct the  
26 problem, and discussion of filed SAFENETs at local level meetings encourage  
27 program participation and active reporting.  
28

29 SAFENET is not the only way to correct a safety-related concern and it does not  
30 replace accident reporting or any other valid agency reporting method. It is an  
31 efficient way to report a safety concern. It is also a way for front line  
32 firefighters to be involved in the daily job of being safe and keeping others safe,  
33 by documenting and helping to resolve safety issues. SAFENETs may be filed:

- 34 • electronically at <http://safenet.nifc.gov>  
35 • postage paid mail-in form (PMS 405-2, NFES 2633)  
36 • verbally by telephone at 1-888-670-3938.  
37

38 **Accident/Injury Reporting**

39 The Occupational Safety and Health Administration (OSHA) mandate that all  
40 accidents and injuries be reported in a timely manner. This is important for the  
41 following reasons:

- 42 • To protect and compensate employees for incidents that occur on-the-job.  
43 • To assist supervisors and safety managers in taking corrective actions and  
44 establish safer work procedures.

- 1 • To determine if administrative controls or personal protective equipment
- 2 are needed to prevent a future incident of the same or similar type.
- 3 • To provide a means for trend analysis.
- 4
- 5 Employees are required to immediately report to their supervisor every job-
- 6 related accident. Managers and supervisors shall ensure that an appropriate
- 7 level of investigation is conducted for each accident and record all personal
- 8 injuries and property damage. Coordinate with your human resources office or
- 9 administrative personnel to complete appropriate Officer of Worker's
- 10 Compensation (OWCP) forms.
- 11 • Reporting is the responsibility of the injured employee's home unit
- 12 regardless of where the accident or injury occurred.
- 13 • DOI employees will report accidents using the Safety Management
- 14 Information System (SMIS) at <https://www.smis.doi.gov/>. Supervisors
- 15 shall complete SMIS report within six working days after the accident.
- 16 • Forest Service employees will use the Safety and Health Information Portal
- 17 System (SHIPS) through the Forest Service Dashboard.
- 18

### 19 **DOI Required Treatment for Burn Injuries**

20 The following procedures will be used when DOI employees sustain burn  
21 injuries, regardless of agency jurisdiction. These procedures will also apply to  
22 federal employees, casuals, and other personnel covered by the Federal  
23 Employee's Compensation Act who are burned during a wildland fire operation  
24 within DOI jurisdiction.

25  
26 After on-site medical response, initial medical stabilization, and evaluation are  
27 completed, agency administrator will coordinate with the attending physician to  
28 ensure that an employee whose injuries meet any of the following burn injury  
29 criteria (identified by the American Burn Association as warranting immediate  
30 referral to an accredited burn center) is immediately referred to the nearest  
31 regional burn center. A list of possible burn care facilities can be found at:  
32 <http://www.blm.gov/nifc/st/en/prog/fire/im.html>.

33  
34 The decision to refer the employee to a regional burn center will be made  
35 directly by the attending physician or may be requested of the physician by the  
36 agency administrator.

### 37 **Burn Injury Criteria**

- 39 • Partial thickness burns (second degree) involving greater than 5% Total
- 40 Body Surface Area (TBSA).
- 41 • Burns involving the face, hands, feet, genitalia, perineum, or major joints.
- 42 • Third-degree burns of any size are present.
- 43 • Electrical burns, including lightning injury are present.
- 44 • Inhalation injury is suspected.
- 45 • Burns are accompanied by traumatic injury (such as fractures).



- 1 • Individuals are unable to immediately return to full duty.

2

3 It is imperative that action is expeditious, as burn injuries are often difficult to  
4 evaluate and may take 72 hours to manifest themselves. When there is any  
5 doubt as to the severity of the injury, the required action is to immediately refer  
6 and transport the employee to a regional burn center.

7

### 8 **Critical Incident Management**

9 The National Wildfire Coordinating Group has published the *Agency*  
10 *Administrator's Guide to Critical Incident Management* (PMS 926, NFES  
11 1356). The guide is a series of subject-area checklists designed to be reviewed in  
12 detail before a critical incident occurs, during the actual management of the  
13 incident, and after the incident has taken place. It is a compilation of lessons  
14 learned and suggestions that are designed to assist an agency administrator in the  
15 management of a critical incident. The guide is not intended to replace local  
16 emergency plans or other specific guidance that may be available, but should be  
17 used in conjunction with existing SOPs. It is available through the Publications  
18 Management System website [http://www.nwccg.gov/pms/pubs/PMS926-](http://www.nwccg.gov/pms/pubs/PMS926-DRAFT.pdf)  
19 [DRAFT.pdf](http://www.nwccg.gov/pms/pubs/PMS926-DRAFT.pdf)

20

21 Human Resource Specialist (HRSP) are trained to provide Critical Incident  
22 Stress Management (CISM) support. The HRSP may provide defusing for  
23 affected incident personnel. A defusing is an informal, initial debriefing which  
24 can provide initial intervention and assist in determining whether or not a formal  
25 debriefing, other CISM or counseling services are appropriate.

26

27 Once the decision is made by the local Management in conjunction with the  
28 IMT to order CISM, the HRSP assists with resource ordering, logistical support,  
29 coordinating CISM needs, and liaison between CISM and the IMT. The CISM  
30 process should not circumvent or be separate from the Incident Command  
31 system.

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## Chapter 08

### Interagency Coordination & Cooperation

#### Introduction

Fire management planning, preparedness, prevention, suppression, fire use, restoration and rehabilitation, monitoring, research, and education will be conducted on an interagency basis with the involvement of cooperators and partners. The same capabilities used in wildland fire management will also be used, when appropriate and authorized, on non-fire incidents in the United States and on both wildland fires and non-fire incidents internationally.

#### National Wildland Fire Cooperative Agreements

##### USDOJ and USDA Interagency Agreement for Fire Management

The objectives of the *Interagency Agreement for Fire Management Between the Bureau of Land Management (BLM), Bureau of Indian Affairs (BIA), National Park Service (NPS), Fish and Wildlife Service (FWS) of the United States Department of the Interior (DOI) and the Forest Service (FS) of the United States Department of Agriculture* are:

- To provide a basis for cooperation among the agencies on all aspects of wildland fire management and as authorized in non-fire emergencies.
- To facilitate the exchange of personnel, equipment (including aircraft), supplies, services, and funds among the agencies.

##### DOI, USDA, and DOD Interagency Agreement

The purpose of the *Interagency Agreement for the Provision of Temporary Support During Wildland Firefighting Operations among the United States Department of the Interior, the United States Department of Agriculture, and the United States Department of Defense* is

- To establish the general guidelines, terms and conditions under which NIFC will request, and DOD will provide, temporary support to NIFC in wildland fire emergencies occurring within all 50 States, the District of Columbia, and all U.S. Territories and Possessions, including fires on State and private lands. It is also intended to provide the basis for reimbursement of DOD under the Economy Act.

These and other agreements pertinent to interagency wildland fire management can be found in their entirety in the *National Interagency Mobilization Guide* (NFES #2092).

#### National Wildland Fire Oversight Structure

##### Wildland Fire Leadership Council (WFLC)

The Council is a cooperative, interagency organization dedicated to achieving consistent implementation of the goals, actions, and policies in the National Fire Plan and the Federal Wildland Fire Management Policy. The Council provides

1 leadership and oversight to ensure policy coordination, accountability and  
2 effective implementation of the National Fire Plan and the Federal Wildland  
3 Fire Management Policy.

4  
5 The Council consists of the Department of Agriculture's Undersecretary for  
6 Natural Resources and the Environment and the Chief of the U.S. Forest  
7 Service, the Department of the Interior's Directors of the National Park Service,  
8 Fish and Wildlife Service, Bureau of Land Management, the Assistant Secretary  
9 of Indian Affairs and the Chief of Staff to the Secretary of the Interior. Staffing  
10 the Council will be coordinated by the Department of Agriculture's Office of  
11 Fire and Aviation Management and the Department of the Interior's Office of  
12 Wildland Fire Coordination.

#### 13 14 **Office of Wildland Fire Coordination (OWFC)**

15 The Office of Wildland Fire Coordination (OWFC) is a Department of the  
16 Interior organization responsible for managing, coordinating and overseeing the  
17 Department's wildland fire management programs and policies. They include:  
18 smoke management, preparedness, suppression, emergency stabilization and  
19 rehabilitation, rural fire assistance, prevention, biomass, hazardous fuels, budget  
20 and financial initiatives, and information technology. The OWFC also  
21 coordinates with interagency partners including government and non-  
22 government groups.

#### 23 24 **National Wildfire Coordinating Group (NWCG)**

25 The National Wildfire Coordinating Group (NWCG) is made up of the USDA  
26 Forest Service (FS); four Department of the Interior agencies: Bureau of Land  
27 Management (BLM), National Park Service (NPS), Bureau of Indian Affairs  
28 (BIA), and the Fish and Wildlife Service (FWS); and State forestry agencies  
29 through the National Association of State Foresters (NASF). The mission of the  
30 NWCG is to provide leadership in establishing and maintaining consistent  
31 interagency standards and guidelines, qualifications, and communications for  
32 wildland fire management. Its goal is to provide more effective execution of  
33 each agency's fire management program. The group provides a formalized  
34 system to agree upon standards of training, equipment, qualifications, and other  
35 operational functions.

#### 36 37 **Multi-Agency Management and Coordination**

##### 38 39 **National Multi-Agency Coordinating Group**

40 National multi-agency coordination is overseen by the National Multi-Agency  
41 Coordination (NMAC) Group, which consists of one representative each from  
42 the following agencies: BLM, FWS, NPS, BIA, FS, NASF, and the Federal  
43 Emergency Management Agency - United States Fire Administration (FEMA-  
44 USFA), who have been delegated authority by their respective agency directors  
45 to manage wildland fire operations on a national scale when fire management  
46 resource shortages are probable. The delegated authorities include:

- 1 • Provide oversight of general business practices between the National Multi-  
2 Agency Coordination (NMAC) group and the Geographic Area Multi-  
3 Agency Coordination (GMAC) groups.
- 4 • Establish priorities among geographic areas.
- 5 • Direct, control, allocate, and reallocate resources among or between  
6 geographic areas to meet NMAC priorities.
- 7 • Implement decisions of the NMAC.

8

### 9 **Geographic Area Coordinating Groups**

10 Geographic area multi-agency coordination is overseen by GMAC Groups,  
11 which are comprised of geographic area (State, Region) lead administrators or  
12 fire managers from agencies that have jurisdictional or support responsibilities,  
13 or that may be significantly impacted by resource commitments. GMAC  
14 responsibilities include:

- 15 • Establish priorities for the geographic area.
- 16 • Acquire, allocate, and reallocate resources.
- 17 • Issue coordinated and collective situation status reports.

18

### 19 **Sub-Geographic/Local Area Multi-Agency Coordinating Groups**

20 Sub-geographic or local area multi-agency coordination is overseen by Sub-  
21 Geographic/Local Area Multi-Agency Coordinating Groups, which are  
22 comprised of local area lead administrators or fire managers from agencies that  
23 have jurisdictional or support responsibilities, or that may be significantly  
24 impacted by resource commitments. Local MAC responsibilities include:

- 25 • Establish priorities for the local area.
- 26 • Acquire, allocate, and reallocate resources.
- 27 • Issue coordinated and collective situation status reports.

28

29 For additional information on MAC Groups see Chapter 30 of the *National*  
30 *Interagency Mobilization Guide* or pertinent Geographic Area Mobilization  
31 Guides.

32

### 33 **National Dispatch/Coordination System**

34 The wildland fire dispatch system in the United States has three levels (tiers):

- 35 • National
- 36 • Geographic
- 37 • Local

38

39 Logistical dispatch operations occur at all three levels, while initial attack  
40 dispatch operations occur primarily at the local level. Any geographic area or  
41 local dispatch center using a dispatch system outside the three-tier system must  
42 justify why a non-standard system is being used.

- 43 • **BLM** - Any geographic area or local dispatch center using a dispatch  
44 structure outside the approved three-tier system must annually request  
45 written authorization from the Director, Office of Fire and Aviation.

- 1 • **FS** - Any geographic area or local dispatch center using a dispatch  
2 structure outside the approved three-tier system must annually request  
3 written authorization from the Forest Service Regional Director of Fire  
4 and Aviation.  
5

#### 6 **National Interagency Mobilization Guide**

7 The *National Interagency Mobilization Guide* (NFES 2092) identifies standard  
8 procedures which guide the operations of multi-agency logistical support  
9 activity throughout the coordination system. The guide is intended to facilitate  
10 interagency dispatch coordination, ensuring timely and cost effective incident  
11 support. Local and Geographic Area Mobilization Guides should be used to  
12 supplement the *National Interagency Mobilization Guide*.  
13

#### 14 **Interagency Incident Business Management Handbook**

15 All federal agencies have adopted the *National Wildfire Coordinating Group*  
16 *(NWCG) Interagency Incident Business Management Handbook (IIBMH)* as the  
17 official guide to provide execution of each agency's incident business  
18 management program. Unit offices, geographic areas, or NWCG may issue  
19 supplements, as long as policy or conceptual data is not changed.  
20

#### 21 **Policy**

22 Since consistent application of interagency policies and guidelines is essential,  
23 procedures in the *IIBMH* will be followed. Agency manuals provide a bridge  
24 between manual sections and the *IIBMH* so that continuity of agency manual  
25 systems is maintained and all additions, changes, and supplements are filed in a  
26 uniform manner.

- 27 • **BLM** - The *IIBMH* replaces *BLM Manual Section 1111*.  
28 • **FWS** - Refer to *Service Manual 095 FW 3 Wildland Fire Management*.  
29 • **NPS** - Refer to *RM-18*.  
30 • **FS** - Refer to *FSH 5109.34*.  
31

#### 32 **National Interagency Coordination Center (NICC)**

33 The National Interagency Coordination Center (NICC) is located at the National  
34 Interagency Fire Center (NIFC), Boise, Idaho. The principal mission of the  
35 NICC is the cost-effective and timely coordination of land management agency  
36 emergency response for wildland fire at the national level. This is accomplished  
37 through planning, situation monitoring, and expediting resources orders between  
38 the BIA Areas, BLM States, NASF, FWS Regions, FS Regions, NPS Regions,  
39 National Weather Service (NWS) Regions, Federal Emergency Management  
40 Agency (FEMA) Regions through the United States Fire Administration  
41 (USFA), and other cooperating agencies.  
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1 NICC supports non-fire emergencies when tasked by an appropriate agency,  
2 such as FEMA, through the National Response Plan. NICC collects and  
3 consolidates information from the GACCs and disseminates the *National*  
4 *Incident Management Situation Report* through the NICC website at  
5 <http://www.nifc.gov/nicc/sitreprt.pdf>

#### 6 7 **Geographic Area Coordination Centers (GACCs)**

8 There are 11 GACCs, each of which serves a specific geographic portion of the  
9 United States. Each GACC interacts with the local dispatch centers, as well as  
10 with NICC and neighboring GACCs. Refer to the *National Interagency*  
11 *Mobilization Guide* for a complete directory of GACC locations, addresses, and  
12 personnel.

13  
14 The principal mission of each GACC is to provide the cost-effective and timely  
15 coordination of emergency response for all incidents within the specified  
16 geographic area. GACCs are also responsible for determining needs,  
17 coordinating priorities, and facilitating the mobilization of resources from their  
18 areas to other geographic areas.

19  
20 Each GACC prepares an intelligence report that consolidates fire and resource  
21 status information received from each of the local dispatch centers in its area.  
22 This report is sent to NICC and to the local dispatch centers, caches, and agency  
23 managers in the geographic area.

#### 24 25 **Local Dispatch Centers**

26 Local dispatch centers, are located throughout the country as dictated by the  
27 needs of fire management agencies. The principal mission of a local dispatch  
28 center is to provide safe, timely, and cost-effective coordination of emergency  
29 response for all incidents within its specified geographic area. This most often  
30 entails the coordination of initial attack responses and the ordering of additional  
31 resources when fires escape initial attack.

32  
33 Local dispatch centers are also responsible for supplying intelligence  
34 information relating to fires and resource status to their GACC and to their  
35 agency managers and cooperators. Local dispatch centers may work for or with  
36 numerous agencies, but should only report to one GACC.

37  
38 Some local dispatch centers are also tasked with law enforcement and agency  
39 administrative workloads for non-fire operations; if this is the case, a  
40 commensurate amount of funding and training should be provided by the  
41 benefiting activity to accompany the increased workload. If a non-wildland fire  
42 workload is generated by another agency operating in an interagency dispatch  
43 center, the agency generating the additional workload should offset this  
44 increased workload with additional funding or personnel.

45  
46

1 **Standards for Cooperative Agreements**

2

3 **Agreement Policy**

4 Agreements will be comprised of two components: the actual agreement and an  
5 operations plan. The agreement will outline the authority and general  
6 responsibilities of each party and the operations plan will define the specific  
7 operating procedures.

8 Any agreement which obligates federal funds or commits anything of value  
9 must be signed by the appropriate warranted contracting officer. Specifications  
10 for funding responsibilities should include billing procedures and schedules for  
11 payment.

12

13 Any agreement that extends beyond a fiscal year must be made subject to the  
14 availability of funds. Any transfer of federal property must be in accordance  
15 with federal property management regulations.

16

17 All agreements must undergo periodic joint review; and, as appropriate,  
18 revision.

19

20 Assistance in preparing agreements can be obtained from local or state office  
21 fire and/or procurement staff.

22

23 All appropriate agreements and operating plans will be provided to the servicing  
24 dispatch center. The authority to enter into interagency agreements is extensive.

25 • **BLM** - *BLM Manual 9200, Departmental Manual 620 DM, the Reciprocal*  
26 *Fire Protection Act, 42 U.S.C. 1856, and the Federal Wildland Fire*  
27 *Management Policy and Program Review.*

28 • **FWS** - *Service Manual, Departmental Manual 620 DM, and Reciprocal*  
29 *Fire Protection Act, 42 U.S.C. 1856.*

30 • **NPS** - *Chapter 2, Federal Assistance and Interagency Agreements*  
31 *Guideline (DO-20), and the Departmental Manual 620 (DM-620). NPS-*  
32 *RM-18, Interagency Agreements, Release Number 1, 02/22/99.*

33 • **FS** - *FSM 1580, 5106.2 and FSH 1509.11.*

34

35 **Elements of an Agreement**

36 The following elements should be addressed in each agreement:

- 37 • The authorities appropriate for each party to enter in an agreement.  
38 • The roles and responsibilities of each agency signing the agreement.  
39 • An element addressing the cooperative roles of each participant in  
40 prevention, pre-suppression, suppression, fuels, and prescribed fire  
41 management operations.  
42 • Reimbursements/Compensation - All mutually approved operations that  
43 require reimbursement and/or compensation will be identified and agreed  
44 to by all participating parties through a cost-share agreement. The

- 1 mechanism and timing of the funding exchanges will be identified and  
2 agreed upon.
- 3 • Appropriation Limitations - Parties to this agreement are not obligated to  
4 make expenditures of funds or reimbursements of expenditures under  
5 terms of this agreement unless the Congress of the United States of  
6 America appropriates such funds for that purpose by the Counties of -  
7 \_\_\_\_\_, by the Cities of \_\_\_\_\_, and/or the Governing Board of Fire  
8 Commissioners of \_\_\_\_\_.
  - 9 • Liabilities/Waivers - Each party waives all claims against every other party  
10 for compensation for any loss, damage, personal injury, or death occurring  
11 as a consequence of the performance of this agreement unless gross  
12 negligence on any part of any party is determined.
  - 13 • Termination Procedure - The agreement shall identify the duration of the  
14 agreement and cancellation procedures.
  - 15 • A signature page identifying the names of the responsible officials should  
16 be included in the agreement.
  - 17 • *NPS - Refer to DO-20 for detailed instructions and format for developing*  
18 *agreements.*

### 19 **Annual Operating Plans (AOPs)**

20 Annual Operating Plan, shall be reviewed, updated, and approved prior to the  
21 fire season. The plan may be amended after a major incident as part of a joint  
22 debriefing and review.

- 23 • The plan shall contain detailed, specific procedures which will provide for  
24 safe, efficient, and effective operations.

### 25 **Elements of an AOP**

26 The following items shall be addressed in the AOP:

- 27 • **Mutual Aid**  
28 The AOP should address that there may be times when cooperators are  
29 involved in emergency operations and unable to provide mutual aid. In  
30 this case other cooperators may be contacted for assistance.
- 31 • **Command Structure**  
32 Unified command should be used, as appropriate, whenever multiple  
33 jurisdictions are involved, unless one or more parties request a single  
34 agency incident commander (IC). If there is a question about jurisdiction,  
35 fire managers should mutually decide and agree on the command structure  
36 as soon as they arrive on the fire; agency administrators should confirm  
37 this decision as soon as possible. Once this decision has been made, the  
38 incident organization in use should be relayed to all units on the incident as  
39 well as dispatch centers. In all cases, the identity of the IC must be made  
40 known to all fireline and support personnel.

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- 1 • **Communications**  
2 In mutual aid situations, a common designated radio frequency identified  
3 in the AOP should be used for incident communications. All incident  
4 resources should utilize and monitor this frequency for incident  
5 information, tactical use, and changes in weather conditions or other  
6 emergency situations. In some cases, because of equipment availability/  
7 capabilities, departments/agencies may have to use their own frequencies  
8 for tactical operations, allowing the “common” frequency to be the link  
9 between departments. It is important that all department /agencies change  
10 to a single frequency or establish a common communications link as soon  
11 as practical. Clear text should be used. Avoid personal identifiers, such as  
12 names. This paragraph in the Annual Operating Plan shall meet Federal  
13 Communications Commission (FCC) requirements for documenting shared  
14 use of radio frequencies.
- 15 • **Distance/Boundaries**  
16 Responding and requesting parties should identify any mileage limitations  
17 from mutual boundaries where “mutual aid” is either pay or non-pay status.  
18 Also, for some fire departments, the mileage issue may not be one of initial  
19 attack “mutual aid,” but of mutual assistance. In this situation, you may  
20 have the option to make it part of this agreement or identify it as a situation  
21 where the request would be made to the agency having jurisdiction, which  
22 would then dispatch the fire department.
- 23 • **Time/Duration**  
24 Responding and requesting parties should identify time limitations (usually  
25 24 hours) for resources in a non-reimbursable status, and “rental rates”  
26 when the resources are in a reimbursable status. Use of geographic area  
27 interagency equipment rates is strongly encouraged.
- 28 • **Qualifications/Minimum Requirements**  
29 Agencies, under the National Interagency Incident Management System  
30 (NIIMS) concept, have agreed to accept cooperator’s standards for fire  
31 personnel qualifications and equipment during initial attack. Once  
32 jurisdiction is clearly established, then the standards of the agency(s) with  
33 jurisdiction prevail. This direction may be found in the documents *NWCG*  
34 *Clarification of Qualifications Standards - Initial Attack 6/20/01*.
- 35 • **Reimbursement/Compensation**  
36 Compensation should be “standard” for all fire departments in the  
37 geographic area. The rates identified shall be used. Reimbursements  
38 should be negotiated on a case-by-case basis, as some fire departments  
39 may not expect full compensation, but only reimbursement for their actual  
40 costs. Vehicles and equipment operated under the federal excess property  
41 system will only be reimbursed for maintenance and operating costs.
- 42 • **Cooperation**  
43 The annual operating plan will be used to identify how the cooperators will  
44 share expertise, training, and information on items such as prevention,  
45 investigation, safety, and training.
- 46

- 1 • **Dispatch Center**  
2 Dispatch centers will ensure all resources know the name of the assigned  
3 IC and announce all changes in incident command. Geographic Area  
4 Mobilization Guides, Zone Mobilization Guides and Local Mobilization  
5 Guides should include this procedure as they are revised for each fire  
6 season.

7  
8 **Types of Agreements**

9  
10 **National Interagency Agreements**

11 The national agreement, which serves as an umbrella for interagency assistance  
12 among federal agencies is the interagency agreement between the Bureau of  
13 Land Management, Bureau of Indian Affairs, National Park Service, Fish and  
14 Wildlife Service of the United States Department of the Interior, and the Forest  
15 Service of the United States Department of Agriculture. This and other national  
16 agreements give substantial latitude while providing a framework for the  
17 development of state and local agreements and operating plans.

18  
19 **Regional/State Interagency Agreements**

20 Regional and state cooperative agreements shall be developed for mutual aid  
21 assistance. These agreements are essential to the fire management program.  
22 Concerns for area-wide scope should be addressed through these agreements.

23  
24 **Local Interagency Agreements**

25 Local units are responsible for developing agreements or contracts with local  
26 agencies and fire departments to meet mutual needs for suppression and/or  
27 prescribed fire services.

28  
29 **Emergency Assistance**

30 Approved, established interagency emergency assistance agreements are the  
31 appropriate and recommended way to provide emergency assistance. If no  
32 agreements are established, refer to your agency administrator to determine the  
33 authorities delegated to your agency to provide emergency assistance.

34  
35 **Contracts**

36 Contracts may be used where they are the most cost-effective means of  
37 providing for protection commensurate with established standards. A contract,  
38 however, does not absolve an agency administrator of the responsibility for  
39 managing a fire program. The office's approved fire management plan must  
40 define the role of the contractor in the overall program.

41  
42 Contracts should be developed and administered in accordance with federal  
43 acquisition regulations. In particular, a contract should specify conditions for  
44 abandonment of a fire in order to respond to a new call elsewhere.

45  
46

1 **Domestic Non-Wildland Fire Coordination and Cooperation**

2

3 **Homeland Security Act**

4 The Homeland Security Act of 2002 (Public Law 107-296) established the  
5 Department of Homeland Security with the mandate and legal authority to  
6 protect the American people from the continuing threat of terrorism. In the act,  
7 Congress also assigned DHS as the primary focal point regarding natural and  
8 manmade crises and emergency planning.

9

10 **Stafford Act Disaster Relief and Emergency Assistance**

11 The Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public  
12 Law 93-288, as amended) establishes the programs and processes for the Federal  
13 Government to provide disaster and emergency assistance to states, local  
14 governments, tribal nations, individuals, and qualified private non-profit  
15 organizations. The provisions of the Stafford Act cover all hazards including  
16 natural disasters and terrorist events. In a major disaster or emergency as  
17 defined by the act, the President “may direct any federal agency, with or without  
18 reimbursement, to utilize its authorities and the resources granted to it under  
19 federal law (including personnel, equipment, supplies, facilities, managerial,  
20 technical, and advisory services) in support of state and local assistance efforts.”

21

22 **Homeland Security Presidential Directive-5**

23 HSPD-5, Management of Domestic Incidents, February 28, 2003, is intended to  
24 enhance the ability of the United States to manage domestic incidents by  
25 establishing a single, comprehensive national incident management system.  
26 HSPD-5 designates the Secretary of Homeland Security and the Principal  
27 Federal Official (PFO) for domestic incident management and empowers the  
28 Secretary to coordinate Federal resources used in response to or recovery from  
29 terrorist attacks, major disasters, or other emergencies in specific cases.

30

31 **National Incident Management System (NIMS)**

32 HSPD-5 directed that the DHS Secretary develop and administer a National  
33 Incident Management System (NIMS) to provide a consistent, nationwide  
34 approach for Federal, State, and local governments to work effectively and  
35 efficiently together to prepare for, respond to, and recover from domestic  
36 incidents, regardless of cause, size, or complexity. To provide for  
37 interoperability and compatibility among federal, state, and local capabilities,  
38 the NIMS will include a core set of concepts, principles, terminology, and  
39 technologies covering the incident command system; multi-agency coordination  
40 systems; unified command; training; identification and management of resources  
41 (including systems for classifying types of resources); qualifications and  
42 certification; and the collection, tracking, and reporting of incident information  
43 and incident resources.

44

45

46

1 **National Response Plan**  
 2 Federal disaster relief and emergency assistance are managed under the  
 3 Department of Homeland Security/Emergency Preparedness and  
 4 Response/Federal Emergency Management Agency (DHS/EPR/FEMA) using  
 5 the National Response Plan (NRP). The NRP, using the NIMS, is an all-hazards  
 6 plan that establishes a single, comprehensive framework for the management of  
 7 domestic incidents. The NRP provides the structure and mechanisms for the  
 8 coordination of Federal support to State, local, and tribal incident managers; and  
 9 for exercising direct Federal authorities and responsibilities.

11 **Emergency Support Function (ESF) Annexes**  
 12 The NRP includes 15 Emergency Support Function (ESF) Annexes, which are a  
 13 component of the NRP that detail the mission, policies, structures, and  
 14 responsibilities of Federal agencies for coordinating resource and programmatic  
 15 support to the States, tribes, and other federal agencies or other jurisdictions and  
 16 entities during Incidents of National Significance. Each ESF Annex identifies  
 17 the ESF coordinator and the primary and support agencies pertinent to the ESF.  
 18 The primary agency serves as a Federal executive agent under the Federal  
 19 Coordinating Officer to accomplish the ESF mission. Support agencies, when  
 20 requested by the DHS or the designated ESF primary agency, are responsible for  
 21 conducting operations using their own authorities, subject-matter experts,  
 22 capabilities, or resources. USDA-FS is the coordinator and primary agency for  
 23 ESF #4 – Firefighting. Other USDA-FS and DOI responsibilities are:

25 <b>ESF Support Annex</b>	<b>USDA-FS Role</b>	<b>DOI Role</b>
26 #01 Transportation	Support	Support
27 #02 Communications	Support	Support
28 #03 Public Works and Engineering	Support	Support
29 #04 Firefighting	Coord. & Primary	Support
30 #05 Emergency Management	Support	Support
31 #06 Mass Care, Housing, and Human Services	Support	Support
32 #07 Resource Support	Support	
33 #08 Public Health and Medical Services	Support	
34 #09 Urban Search and Rescue	Support	
35 #10 Oil and HazMat Response	Support	Support
36 #11 Agriculture and Natural Resources		Primary
37 #12 Energy		Support
38 #13 Public Safety and Security	Support	Support
39 #14 Long-term Community Recovery and Mitigation		Support
40 #15 External Affairs		Support

42 **Non-Stafford Act Non-Wildland Fire Coordination and Cooperation**  
 43 In an actual or potential Incident of National Significance that is not  
 44 encompassed by the Stafford Act, the President may instruct a Federal  
 45 department or agency, subject to any statutory limitations on the department or  
 46 agency, to utilize the authorities and resources granted to it by Congress. In

1 accordance with Homeland Security Presidential Directive-5, Federal  
2 departments and agencies are expected to provide their full and prompt support,  
3 cooperation, available resources, consistent with their own responsibilities for  
4 protecting national security.

5

## 6 **International Wildland Fire Coordination and Cooperation**

7

### 8 **U.S. - Mexico Cross Border Cooperation on Wildland Fires**

9 In June of 1999, the Department of Interior and the Department of Agriculture  
10 signed a Wildfire Protection Agreement with Mexico. The agreement has two  
11 purposes:

- 12 • To enable wildfire protection resources originating in the territory of one  
13 country to cross the United States-Mexico border in order to suppress  
14 wildfires on the other side of the border within the zone of mutual  
15 assistance (10 miles/16 kilometers) in appropriate circumstances.
- 16 • To give authority for Mexican and U.S. fire management organizations to  
17 cooperate on other fire management activities outside the zone of mutual  
18 assistance.

19

20 National Operational Guidelines for this agreement are located in Chapter 40 of  
21 the *National Interagency Mobilization Guide*. These guidelines cover issues at  
22 the national level and also provide a template for those issues that need to be  
23 addressed in local operating plans. The local operating plans identify how the  
24 agreement will be implemented by the GACCs (and Zone Coordination Centers)  
25 that have dispatching responsibility on the border. The local operating plans  
26 will provide the standard operational procedures for wildfire suppression  
27 resources that could potentially cross the U.S. border into Mexico.

28

### 29 **U.S. - Canada, Reciprocal Forest Firefighting Arrangement**

30 Information about United States - Canada cross border support is located in  
31 Chapter 40 of the *National Interagency Mobilization Guide*. This chapter  
32 provides policy guidance, which was determined by an exchange of diplomatic  
33 notes between the U.S. and Canada in 1982. This chapter also provides  
34 operational guidelines for the Canada - U.S. Reciprocal Forest Fire Fighting  
35 Arrangement. These guidelines are updated yearly.

36

### 37 **U.S. - Australia/New Zealand Wildland Fire Arrangement**

38 Information about United States - Australia/New Zealand support is located in  
39 Chapter 40 of the *National Interagency Mobilization Guide*. This chapter  
40 provides a copy of the arrangements signed between the U.S. and the states of  
41 Australia and the country of New Zealand for support to one another during  
42 severe fire seasons. It also contains the Annual Operating Plan that provides  
43 more detail on the procedures, responsibilities, and requirements used during  
44 activation.

45

46

**1 International Non-Wildland Fire Coordination and Cooperation**

2

**3 International Disasters Support**

4 Federal wildland fire employees may be requested through the Forest Service, to  
5 support the U.S. Government's (USG) response to international disasters by  
6 serving on Disaster Assistance Response Teams (DARTs). A DART is the  
7 operational equivalent of an ICS team used by the U.S. Agency for International  
8 Development's Office of Foreign Disaster Assistance (OFDA) to provide an on-  
9 the-ground operational capability at the site of an international disaster. Prior to  
10 being requested for a DART assignment, employees will have completed a  
11 weeklong DART training course covering information about:

- 12 • USG agencies charged with the responsibility to coordinate USG responses  
13 to international disaster.
- 14 • The purpose, organizational structure, and operational procedures of a  
15 DART.
- 16 • How the DART relates to other international organizations and countries  
17 during an assignment. Requests for these assignments are coordinated  
18 through the FS International Programs, Disaster Assistance Support  
19 Program (DASP).
- 20 • DART assignments should not be confused with technical exchange  
21 activities, which do not require DART training. More information about  
22 DARTs can be obtained at the FS International Program's website:  
23 <http://www.fs.fed.us/global/aboutus/dasp/welcome.htm>.

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## Chapter 09 Fire Management Planning & Response

### Policy

Planning: Every area with burnable vegetation must have an approved Fire Management Plan (FMP). FMPs are strategic plans that define a program to manage wildland and prescribed fires based on the area's approved Resource Management Plan. FMPs must provide for firefighter and public safety; include fire management strategies, tactics, and alternatives; address values to be protected and public health issues; and be consistent with resource management objectives, activities of the area, and environmental laws and regulations. For DOI agencies, FMPs also define fuel management programs and priorities. (*2001 Federal Wildland Fire Management Policy*).

### Concepts and Definitions

#### Land/Resource Management Plan (L/RMP)

A document prepared with public participation and approved by the agency administrator that provides general guidance and direction for land and resource management activities for an administrative area. The L/RMP identifies the need for fire's role in a particular area and for a specific benefit. The objectives in the L/RMP provide the basis for the development of fire management objectives and the fire management program in the designated area. (*Interagency Strategy for the Implementation of Federal Wildland Fire Management Policy, June 2003*)

#### Fire Management Plan (FMP)

The FMP will identify and integrate all wildland fire management and related activities within the context of the approved L/RMP. It defines a program to manage wildland fires (wildfire, prescribed fire, and wildland fire use). The plan is supplemented by operations plans, including but not limited to preparedness plans, preplanned dispatch plans, prescribed fire burn plans, and prevention plans. Fire Management Plans assure that wildland fire management goals and components are coordinated. (*Interagency Strategy for the Implementation of Federal Wildland Fire Management Policy, June 2003*)

#### Purpose of the FMP

While the fire management planning process and requirements may differ among agencies, a common purpose of a fire management plan is to provide decision support to aid managers in making informed decisions on the appropriate management response (*Interagency Fire Management Planning Template, 2007*)

1 **Operational Use of Fire Management Plans**

2 Fire organizations responding to wildland fires must utilize the direction in the  
3 FMP to guide the fire management response

4  
5 **Fire Management Unit (FMU)**

6 Any land management area definable by objectives, management constraints,  
7 topographic features, access, values to be protected, political boundaries, fuel  
8 types, major fire regime groups, and so on, that set it apart from the management  
9 characteristics of an adjacent FMU. The FMU may have dominant management  
10 objectives and pre-selected strategies assigned to accomplish these objectives.  
11 (*Interagency Strategy for the Implementation of Federal Wildland Fire*  
12 *Management Policy, June 2003*)

13  
14 **Wildland Fire**

15 Any non-structure fire that occurs in the wildland. Three distinct types of  
16 wildland fire have been defined and include wildfire, wildland fire use, and  
17 prescribed fire. (*Interagency Strategy for the Implementation of Federal*  
18 *Wildland Fire Management Policy, June 2003*)

- 19 • **Wildfire** - An unplanned, unwanted wildland fire including unauthorized  
20 human-caused fires, escaped wildland fire use events, escaped prescribed  
21 fire projects, and all other wildland fires where the objective is to put the  
22 fire out. (*Interagency Strategy for the Implementation of Federal Wildland*  
23 *Fire Management Policy, June 2003*)
- 24 • **Prescribed Fire** - Any fire ignited by management action to meet specific  
25 objectives. (*Interagency Strategy for the Implementation of Federal*  
26 *Wildland Fire Management Policy, June 2003*)
- 27 • **Wildland Fire Use (WFU)** - The application of the appropriate  
28 management response to naturally-ignited wildland fires to accomplish  
29 specific resource management objectives in predefined designated areas  
30 outlined in Fire Management Plans. Operational management is described  
31 in the wildland fire implementation plan (WFIP). (*Interagency Strategy for*  
32 *the Implementation of Federal Wildland Fire Management Policy, June*  
33 *2003*)

34  
35 **Appropriate Management Response (AMR)**

36 Any specific action suitable to meet fire management unit (FMU) objectives.  
37 Typically, the AMR ranges across a spectrum of tactical operations (from  
38 monitoring to intensive management actions). The AMR is developed by using  
39 fire management unit strategies and objectives identified in the fire management  
40 plan. (*Interagency Strategy for the Implementation of Federal Wildland Fire*  
41 *Management Policy, June 2003, p. 17*). AMR encompasses all the response  
42 actions necessary to manage a wildfire or wildland fire use event for the  
43 duration of the event. In implementing the AMR, the full spectrum of tactical  
44 options, from monitoring a fire at a distance to intensive suppression actions are  
45 available to the fire manager. Beginning with the initial response to any  
46 wildland fire, decisions will reflect the goal of using available firefighting



1 resources to manage the fire for the most effective, most efficient and safest  
2 means available. The AMR strategies and tactics used to manage a wildland fire  
3 will be based on objectives identified in the Land/Resource Management Plan  
4 and/or Fire Management Plan. (*NFAEB Memo, June 20, 2007*)

5

#### 6 **Initial Action**

7 The actions taken by the first resources to arrive at a wildfire. Initial actions may  
8 be size up, patrolling, monitoring, holding actions, or aggressive initial attack  
9 (*NWCG Glossary of Wildland Fire Terminology, January 2005*)

10

#### 11 **Initial Attack**

12 A planned response to a wildfire given the wildfire's potential behavior. The  
13 objective of initial attack to stop the spread of the fire and put it out at least cost.  
14 An aggressive suppression action consistent with firefighter and public safety  
15 and values to be protected. (*NWCG Glossary of Wildland Fire Terminology,*  
16 *January 2005*)

17

#### 18 **Extended Attack**

19 Suppression activity for a wildfire that has not been contained or controlled by  
20 initial attack or contingency forces and for which more firefighting resources are  
21 arriving, en route, or being ordered by the initial attack incident commander.  
22 (*NWCG Glossary of Wildland Fire Terminology, January 2005*)

23

#### 24 **Wildfire Suppression**

25 An appropriate management response to wildfire, escaped wildland fire use or  
26 prescribed fire that results in curtailment of fire spread and eliminates all  
27 identified threats from the particular fire. (*NWCG Glossary of Wildland Fire*  
28 *Terminology, January 2005*)

29

#### 30 **Wildland Fire Management Objectives**

31 Only one management objective will be applied to wildland fire. Wildland fires  
32 will either be managed for resource benefits or suppressed. A wildfire cannot be  
33 managed for resource benefits and suppression concurrently. If two wildland  
34 fires converge they will be managed as a single wildland fire. (*2006 Federal*  
35 *Fire & Aviation Operations Action Plan*)

36

37 Human caused Wildland fires will be suppressed in every instance and will not  
38 be managed for resource benefits.

39

40 Once a Wildland fire has been managed for suppression objectives, it may never  
41 be managed for resource benefit objectives.

42

43

44

45

46

1 **Wildland Fire Responses**

2

3 **Operational Use of Fire Management Plans**

4 Fire organizations responding to wildland fires must utilize the direction in the  
5 FMP to guide the fire management response.

6

7 **Responding to a Wildland Fire**

8 Response to wildland fires is based on ecological, social, and legal  
9 consequences of the fire. The circumstances under which a fire occurs, and the  
10 likely consequences on firefighter and public safety and welfare, natural and  
11 cultural resources, and, values to be protected, dictate the appropriate response  
12 to the fire. (*Federal Wildland Fire Management Policy, January 2001*)

13

14 **Determining Type of Fire**

15 When a wildland fire is reported, the pre established fire management plan will  
16 determined whether the wildland fire is designated a wildfire or a wildland fire  
17 use fire. Pre-planned, specific prescription criteria must be established prior to  
18 fire occurrence so that the decision to designate the fire either a wildfire or a  
19 wildland fire use fire is immediate.

20

21 **Responding to a Wildfire**

22 A wildfire is defined as “an unplanned, unwanted wildland fire including  
23 unauthorized human-caused fires, escaped wildland fire use events, escaped  
24 prescribed fire projects, and all other wildland fires where the objective is to put  
25 the fire out.” (*Interagency Strategy for the Implementation of Federal Wildland  
26 Fire Management Policy, June 2003*). When the objective is to put the fire out,  
27 initial attack suppression is generally the safest and most effective response  
28 option.

29

30 **Escaped Initial Attack**

31 A fire has escaped initial attack when:

- 32 • The fire has not been contained by the initial attack resources dispatched to  
33 the fire and there is no estimate of containment or control and;
- 34 • The fire will not have been contained within the initial attack management  
35 objectives established for that zone or area.

36

37 **Wildland Fire Situation Analysis (WFSA)**

38 A WFSA is a decision making process that evaluates alternative wildfire  
39 suppression strategies against selected environmental, social, political, and  
40 economic criteria and provides a record of those decisions. (*Interagency  
41 Strategy for the Implementation of Federal Wildland Fire Management Policy,  
42 June 2003*). The WFSA process is used when a wildfire escapes initial attack.  
43 This includes prescribed fires and wildland fire use fires that are declared  
44 wildfires. The WFSA is used by the agency administrator or representative to  
45 describe the wildfire situation, compare several strategic wildfire management  
46 alternatives, evaluate the expected effects of the alternatives, establish objectives

1 and constraints for the management of the fire, select the preferred alternative,  
 2 and document the decision. Multi-jurisdictional incidents will require a  
 3 collaboratively developed WFSA that is approved and signed by each of the  
 4 respective agencies

- 5 • The WFSA program (WFSA Plus Version 6.6) may be found at:  
 6 <http://www.fs.fed.us/fire/wfsa/>.
- 7 • Additional information about the WFSA (as well as the Wildland Fire  
 8 Implementation Plan) is located at: <http://www.wildlandfireamr.net>.
- 9 • It is acceptable to use this version. A description of the WFSA Elements  
 10 with guidance for the completion can be found in Appendix S.

11  
 12 **WFSA Approval**

13 The WFSA is always approved by the local agency administrator.

- 14 • **FS - District Rangers** have authority to develop and approve all WFSAs up  
 15 to \$2M. Forest Supervisors have the authority and responsibility to  
 16 develop and approve all WFSAs over \$2M, and to certify a WFSA up to  
 17 \$10M or with a Type I or Area Command Team activation.

18  
 19 **WFSA Daily Review**

20 The WFSA is always reviewed and validated daily by the agency administrator.  
 21 This review and validation is documented in the WFSA.

22  
 23 **WFSA Certification**

24 The WFSA is always certified by the appropriate authority. At estimated cost  
 25 levels below \$2M, the local agency administrator certifies the WFSA. At  
 26 estimated cost levels above \$2M, the local agency administrator must ensure  
 27 that the WFSA is certified by the designated certifying authority, through the  
 28 established chain of command. These estimated cost levels and designated  
 29 certifying authorities are stated by agency below.

30  
 31 **WFSA Certification Requirements, DOI Agencies**

WFSA cost estimate	BIA	BLM	FWS	NPS
\$0 - \$2M	Agency Supt.	Field/District Manager	Project Ldr./ Refuge Mgr.	Park Supt.
\$2M - \$5M	Regional Director	State Director	Regional Director	Regional Director
>\$5M	BIA Director	BLM Director	FWS Director	NPS Director

32  
 33  
 34  
 35  
 36

1 **WFSA Certification Requirements, USDA Forest Service**

WFSA cost estimate	USFS
\$0 - \$2M	District Ranger
\$2M - \$10M	Forest Supervisor
\$10M - \$50M	Regional Forester
>\$50M	Forest Service Chief

2  
 3 For multi-jurisdictional incidents, each agency’s individual cost estimate, not the  
 4 total cost estimate, will determine that agency’s certification level.

5  
 6 **WFSA Certification Checklist**

7 This checklist helps the WFSA certifying authority ensure the accuracy and  
 8 completeness of the WFSA process. Updates to this list may be made and can  
 9 be found at: <http://www.fs.fed.us/fire/wfsa/>

<b>Certification Checklist</b>	<b>Y/N</b>
Are key objectives for fire suppression identified and measurable?	
Are there a minimum of two alternatives (with identifiable differences in strategies and/or outcomes) analyzed, and an extreme case considered?	
Are the values at risk adequately displayed and analyzed?	
Do the alternatives have safety issues well documented and risk mitigation identified where needed?	
Is the rationale for the selected alternative, whether or not most cost effective, compelling?	
Were cost estimates derived with current data, are they relevant for this incident, and documented?	
Are the assigned probabilities for success in line with the current and expected situation and documented?	
Are critical resources listed and available to implement alternatives?	
Was the estimated suppression cost used for identifying the certifying official.	
Have managers/owners of adjoining jurisdictions agreed to the selected strategy if it encompasses non-agency lands.	

10  
 11 **Wildland Fire Decision Support System (WFDSS) Tools** - Modeling tools are  
 12 available to assist fire managers and agency administrators in decisions  
 13 regarding strategies and tactics.

- 14 • *FS - The Chief’s Principal Representative (CPR) will provide risk sharing*  
 15 *and decision support for Regional Foresters on large fires expected to*

1 exceed 10 million dollars in costs. The Regional Foresters Representative  
2 (RFR) will provide services comparable to the CPR at the regional scale  
3 when fires are expected to exceed 5 million dollars in cost. A Decision  
4 Support Group (DSG) may accompany either a CPR or RFR. The decision  
5 making tools are Fire Spread Probabilities (FS PRO), Stratified Cost Index  
6 (SCI), and Rapid Assessment of Values at Risk (RAVAR). FS PRO and  
7 RAVAR assessments are required on fires expected to reach or exceed \$10  
8 million. These decision making tools can also be requested for fires costing  
9 less than \$10 million.

#### 10 **Responding to a Wildland Fire Use Event**

11 When the wildland fire is determined to be a wildland fire use event, the  
12 required action is “the application of the appropriate management response to  
13 naturally-ignited wildland fires to accomplish specific resource management  
14 objectives in pre-defined designated areas outlined in the FMP”. Operational  
15 management is described in the wildland fire implementation plan (WFIP).  
16 (*Interagency Strategy for the Implementation of Federal Wildland Fire*  
17 *Management Policy, June 2003*)

#### 19 **Wildland Fire Implementation Plan (WFIP)**

20 A WFIP is a progressively developed assessment and operational management  
21 plan that documents the analysis and describes the appropriate management  
22 response for a wildland fire use activity. The WFIP is a plan that guides the  
23 management of a Wildland Fire Use fire. An approved FMP is required in all  
24 cases. The FMP identifies specific resource and fire management objectives, a  
25 predefined geographic area, and specific, required prescription criteria that must  
26 be met prior to designating a wildland fire for fire use. The WFIP is continually  
27 evaluated and tested to ensure that the objectives of the Wildland Fire Use fire  
28 are being met. If the objectives are not being met, mitigation actions identified  
29 in the WFIP are implemented. Mitigation actions are not presented formally as  
30 a distinct plan, but are integrated throughout the short term (WFIP Stage 2) and  
31 long term (WFIP Stage 3) implementation actions. If the combined set of  
32 mitigation actions is not meeting objectives, the WFU fire is converted to a  
33 wildfire, suppression action is taken and a WFSA is prepared. If the mitigation  
34 actions are successful in keeping the WFU fire within the parameters of the  
35 WFIP, the fire continues to be managed as a WFU fire.

36  
37  
38 A WFIP will be completed for all naturally ignited wildland fires that are  
39 managed for resource benefit. It is an operational plan for assessing, analyzing,  
40 and selecting strategies for wildland fire use. It is progressively developed and  
41 documents appropriate management responses for any wildland fire managed  
42 for resource benefits. The plan will be completed in compliance with the  
43 guidance found in the *Wildland Fire Use, Implementation Procedures Reference*  
44 *Guide*, May 2005 (March/April 2006 revision).

45 A WFIP consists of three distinct stages:

- 1 • **Stage I** - The initial fire assessment, or size-up, is the preliminary  
 2 information gathering stage. It compares current information to  
 3 established prescription criteria found in the FMP. This is an initial  
 4 decision making tool which assists managers in classifying fires for  
 5 resource benefit or suppression actions. Components include: Strategic  
 6 Fire Size-Up, Decision Criteria Checklist, Management Actions, and  
 7 Periodic Fire Assessment.
- 8 • **Stage II** - Defines management actions required in response to a changing  
 9 fire situation as indicated by monitoring information and the periodic fire  
 10 assessment from Stage I. This stage is used to manage larger, more active  
 11 fires with greater potential for geographic extent than Stage I. Components  
 12 include: Objectives, Fire Situation, Management Actions, Estimated  
 13 Costs, and Periodic Fire Assessment.
- 14 • **Stage III** - Defines management actions required in response to an  
 15 escalating fire situation, potential long duration, and increased need for  
 16 management activity, as indicated by the periodic assessment completed in  
 17 Stage II. Components include: Objectives and Risk Assessment  
 18 Considerations, Maximum Manageable Area Definition and Maps,  
 19 Weather Conditions and Drought Prognosis, Long-term Risk Assessment,  
 20 Threats, Monitoring Actions, Mitigation Actions, Resources Needed to  
 21 Manage the Fire, Contingency Actions, Information Plan, Estimated Costs,  
 22 Post-burn Evaluation, Signatures and Date, and Periodic Fire Assessment.

WFIP Completion Timeframes	
WFIP Stage	Maximum Completion Timeframe
Stage I	8 hours after confirmed fire detection and Strategic Fire Size-Up.
Stage II	48 hours after need indicated by Planning Needs Assessment.
Stage III	7 days after need indicated by Planning Needs Assessment
Periodic Fire Assessment	As part of all stages and on assigned frequency thereafter.

- 23 • *NPS - Wildland Fire Use Program Oversight. Regional office fire*  
 24 *management officers are responsible for appraising and surveying all*  
 25 *wildland fire use activities within their region. The regional office fire*  
 26 *staff will review implementation plans for fires with a Complex Rating.*  
 27 *Direct contact with parks may be necessary in order to stay apprised of*  
 28 *complex situations. On rare occasions, circumstances or situations may*  
 29 *exist which require the regional director to intervene in the wildland fire*  
 30 *use decision process.*
- 31 • *NPS - Review by the regional fire management officer or acting is*  
 32 *mandatory for Wildland Fire Implementation Plans with a projected cost*  
 33 *of greater than \$500,000. Review by the NPS National Fire Management*  
 34 *Officer at NIFC, or Acting, is mandatory for Wildland Fire Implementation*  
 35 *Plans with a projected cost of greater than \$1,000,000.*

36  
 37

**1 Emergency Non-Wildland Fire Response**

2

**3 Emergency Non-Wildland Fire Response-Wildland Urban Interface**

4 The operational roles of the federal agencies as a partner in the Wildland Urban  
5 Interface are wildland firefighting, hazard reduction, cooperative prevention and  
6 education, and technical assistance. Structural fire suppression is the  
7 responsibility of tribal, state or local governments. Federal agencies may assist  
8 with exterior structural fire protection activities under formal fire protection  
9 agreements that specify the mutual responsibilities of the partners, including  
10 funding. (Some federal agencies have full structural protection authority for  
11 their facilities on lands they administer and may also enter into formal  
12 agreements to assist state and local governments with structural protection.)  
13 *2001 Federal Wildland Fire Management Policy, page 23.*

14

15 Although funding is not provided to prepare for or respond to emergency non-  
16 wildland fire response activities such as structure fires, vehicle fires, dump fires,  
17 hazardous materials releases, and emergency medical responses, managers must  
18 ensure that fire management plans, interagency agreements, and annual  
19 operating plans clearly state agency and cooperator roles and responsibilities for  
20 non-wildland fire response activities that agency personnel are exposed to as a  
21 result of working in the wildland urban interface environment.

22

**23 Emergency Non-Wildland Fire Response-Management Controls to Mitigate  
24 Exposure**

25 Agency safety and health policy states that PPE devices will be used only when  
26 equipment guards, engineering controls, or management control does not  
27 adequately protect employees. To meet this requirement:

28

- 29 • Managers and supervisors will not knowingly place wildland firefighters in  
30 positions where exposure to toxic gases or chemicals would require the use  
31 of self-contained breathing apparatus.
- 32 • Managers will not sign cooperative fire protection agreements that would  
33 commit wildland firefighters to situations where exposure to toxic gases or  
34 chemicals would require the use of self-contained breathing apparatus.
- 35 • Managers will avoid giving the appearance that their wildland fire  
36 suppression resources are trained and equipped to perform structure,  
37 vehicle, and dump fire suppression, to respond to hazardous materials  
38 releases, or to perform emergency medical response.

38

**39 Emergency Non-Wildland Fire Response-Structure, Vehicle, and Landfill  
40 Fires**

41 Structure, vehicle, and dump fire suppression is not a functional responsibility of  
42 wildland fire suppression resources. These fires have the potential to emit high  
43 levels of toxic gases. Firefighters will not be dispatched to structure, vehicle, or  
44 dump fires unless there is a significant threat to lands and resources that are  
45 under agency protection, including by protection agreement. Firefighters will

- 1 not take direct suppression action on structure, vehicle, or dump fires. This  
2 policy will be reflected in suppression response plans.  
3
- 4 Should firefighters encounter structure, vehicle, or dump fires during the  
5 performance of their normal wildland fire suppression duties, firefighting efforts  
6 will be limited to areas where the fire has spread onto agency protected lands.  
7 Structure protection will be limited to exterior efforts, and only when such  
8 actions can be accomplished safely and in accordance with established wildland  
9 fire operations standards.
- 10 • **FS - FSM-5137 - Structure Fires** *Structure fire protection activities*  
11 *include suppression of wildfires that are threatening improvements.*  
12 *Exterior structure protection measures include actions such as foam or*  
13 *water application to exterior surfaces of buildings and surrounding fuels,*  
14 *fuel removal, and burning out around buildings.*
  - 15 • **FS - FSM-5137.02 - Objective for Structure Fire Protection.** *The Forest*  
16 *Service's primary responsibility is to suppress wildfire before it reaches*  
17 *structures. The Forest Service may assist state and local fire departments*  
18 *in exterior structure fire protection when requested under terms of an*  
19 *approved cooperative agreement.*
  - 20 • **FS - FSM-5137.03 - Policy for Structure Fire Suppression.** *Structure fire*  
21 *suppression, which includes exterior and interior actions on burning*  
22 *structures, is the responsibility of state, tribal, or local fire departments.*
    - 23 ➤ **FS - Forest Service officials shall avoid giving the appearance that**  
24 **the agency is prepared to serve as a structure fire suppression**  
25 **organization.**
    - 26 ➤ **FS - Forest Service employees shall limit fire suppression actions to**  
27 **exterior structure protection measures as described in Section 5137.**
  - 28 • **FS - FSM-5137.03 2 - Structure Fire Protection and Suppression for**  
29 **Forest Service Facilities.** *At those Forest Service administrative sites,*  
30 *outside the jurisdiction of state and local fire departments, limit fire*  
31 *protection measures to prevention, use of fire extinguishers on incipient*  
32 *stage fires (FSH 6709.11, Sec. 6-4c), safe evacuation of personnel,*  
33 *containment by exterior attack, and protection of exposed improvements.*
    - 34 ➤ **FS - At Forest Service administrative sites located within the**  
35 **jurisdiction of state and local structural fire departments, structure**  
36 **fire suppression responsibility must be coordinated with state and**  
37 **local fire departments.**
  - 38 • **FS - FSM-5137.033 - Vehicle and Dump Fires**
    - 39 ➤ **FS - Do not undertake direct attack on vehicle or dump fires on**  
40 **National Forest System lands unless such action is absolutely**  
41 **necessary to protect life or prevent the spread of fire to the wildlands.**
    - 42 ➤ **FS - For additional fire service and homeowner information**  
43 **regarding wildland/urban fire refer to <http://firewise.org> on the**  
44 **Internet.**
  - 45 • **NPS - Structural Fire (including Vehicle Fires) Response Requirements.**  
46 *Structural fire suppression is a functional responsibility in many NPS*



1 units. Any structural fire response shall only be by personnel who have  
2 received the required training and are properly equipped. Vehicle fires  
3 contain a high level of toxic emissions and must be treated with the same  
4 care that structural fires are treated. Firefighters must be in full structural  
5 fire personal protective clothing including self-contained breathing  
6 apparatus. Situations exist during the incipient phase of a vehicle fire  
7 where the fire can be quickly suppressed with the discharge of a handheld  
8 fire extinguisher. Discharging a handheld fire extinguisher during this  
9 phase of the fire will normally be considered an appropriate action. If the  
10 fire has gone beyond the incipient stage, employees are to protect the  
11 scene and request the appropriate suppression resources. In order to  
12 protect the health and safety of National Park Service personnel, no  
13 employee shall be directed, dispatched, (including self-dispatching) to the  
14 suppression of structural fires, including vehicle fires, unless they are  
15 provided with the required personal protective equipment, firefighting  
16 equipment and training. All employees must meet or exceed the standards  
17 and regulations identified in Director's Order and Reference Manual #58,  
18 Structural Fire.

19 • **NPS - Training Requirements for Firefighters Responding to Structural**  
20 **Fires (including Vehicle Fires).** All wildland firefighters who respond to  
21 structural fires will meet the training requirements identified in Director's  
22 Order and Reference Manual #58, Structural Fire and will be qualified at  
23 least at the Structural Firefighter level.

24 • **NPS - Medical Examination Requirements for Firefighters Responding**  
25 **to Structure Fires (including Vehicle Fires).** All wildland firefighters who  
26 respond to structural fires will meet the medical requirements identified in  
27 Director's Order and Reference Manual #58, Structural Fire. Medical  
28 requirements include respiratory testing and some other components not  
29 included in the wildland fire medical examination.

30 • **NPS - Physical Fitness for Wildland Firefighters Responding to**  
31 **Structure Fires (including Vehicle Fires).** The physical fitness  
32 requirements as the same as for wildland fire arduous duty.  
33

#### 34 **Emergency Non-Wildland Fire Response-Hazardous Materials**

35 Wildland firefighters have the potential to be exposed to hazardous materials  
36 releases while performing their jobs. Hazardous materials or waste may be  
37 found on public lands in a variety of forms (e.g. clandestine drug lab waste,  
38 mining waste, illegal dumping, and transportation accidents).  
39

40 In order to meet 29 CFR 1910.120, and to ensure familiarity with hazardous  
41 materials releases, all wildland firefighters will complete a one-time, two-hour  
42 First Responder Awareness training course and an annual refresher course  
43 thereafter (First Responders are individuals who are likely to witness or discover  
44 a hazardous substance release, and who have been trained to initiate an  
45 emergency response sequence by notifying proper authorities of the release).  
46 Awareness Class module 1703-07/11 is available from the BLM National

- 1 Training Center and may be taught in the field office by the Hazardous  
2 Materials Coordinator.  
3  
4 Firefighters who discover any unauthorized waste dump or spill site that  
5 contains indicators of potential hazardous substances should take the following  
6 precautions:
- 7 • Follow the procedures in the *Incident Response Pocket Guide*.
  - 8 • Treat each site as if it contains harmful materials.
  - 9 • Do not handle, move, or open any container, breathe vapors, or make  
10 contact with the material.
  - 11 • Move a safe distance upwind from the site.
  - 12 • Contact appropriate personnel. Generally, this is the Hazardous Materials  
13 Coordinator for the local office.
  - 14 • ***FS - FSM-5135.2 - Hazardous Materials*** Limit actions of Forest Service  
15 personnel on incidents involving hazardous material to those emergency  
16 measures necessary for the immediate protection of themselves and the  
17 public. If the material is a health and safety hazard requiring special  
18 measures for control and abatement, promptly notify the appropriate  
19 public safety agencies. Provide training in hazardous materials  
20 recognition and avoidance to employees whose exposure to such materials  
21 is likely (FSM 2160).

### 23 **Emergency Non-Wildland Fire Response-Emergency Medical Response**

24 Medical emergency response is not a functional responsibility of wildland fire  
25 suppression resources. Wildland firefighters are not trained and equipped to  
26 perform emergency medical response duties, and should not be part of a  
27 preplanned response that requires these duties. When wildland firefighters  
28 encounter emergency medical response situations, their efforts should be limited  
29 to immediate care (e.g. first aid, first responder) actions that they are trained and  
30 qualified to perform.

- 31 • ***NPS - Emergency Medical Response Requirements.*** NPS employees who  
32 provide emergency medical services will adhere to the requirements  
33 contained in Director's Order and Reference Manual #51, *Emergency*  
34 *Medical Services*, once these directives receive final approval.

### 36 **Roadside Response**

37 Positioning of vehicles and employee awareness is paramount when responding  
38 to incidents in close proximity to roadways. Refer to Appendix V, "Roadside  
39 Incident Response" which highlights tactical considerations for roadway  
40 responses.

## Chapter 10 Preparedness

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### Preparedness

Preparedness is the result of activities that are planned and implemented prior to wildland fire ignitions. Preparedness is a continuous process that includes developing and maintaining unit, state/regional, and national level firefighting infrastructure, predicting fire activity, hiring, training, equipping, and deploying firefighters, evaluating performance, correcting deficiencies, and improving overall operations. The preparedness process includes routine pre-season actions as well as incremental in-season actions conducted in response to increasing fire danger.

Preparedness actions are based on operational plans such as fire danger rating operating plans, which use information from decision support tools such as the National Fire Danger Rating System (NFDRS), the Canadian Forest Fire Danger Rating System (CFFDRS, used in interior Alaska), the Palmer Drought Index, live fuel moisture data, Monthly or Seasonal Wildland Fire Outlooks, Seasonal Climate Forecasts, and Wildland Fire Risk Analyses.

### Fire Danger Rating Operating Plan

A Fire Danger Rating Operating Plan is a fire danger applications guide for agency users at the local level. A Fire Danger Rating Operating Plan documents the establishment and management of the local unit fire weather station network and describes how fire danger ratings are applied to local unit fire management decisions. Fire danger rating operating plans may be packaged as either stand-alone documents or as part of a larger planning effort; such as a fire management plan. Fire danger rating operating plans include, but are not limited to, the following components:

- **Roles and Responsibilities**  
Defined for those responsible for maintenance and daily implementation of the plan, program management related to the plan, and associated training. Training for development of fire danger rating areas is available through NWCG-sponsored NFDRS courses.
- **Operational Procedures**  
This section establishes the procedures used to gather and process data in order to integrate fire danger rating information into decision processes. The network of fire weather stations whose observations are used to determine fire danger ratings is identified. Station maintenance schedules are defined as appropriate.
  - NFDRS offers several choices of fuel model and output to the user. Distinct selections of fuel model and index/component are appropriate for different management decisions (such as internal readiness or industrial and public restrictions). The choice of NFDRS

- 1 fuel model and index or component used to determine fire danger  
2 ratings to support particular decisions is explained in this section.
- 3 ➤ NFDRS requires periodic management in order to produce  
4 appropriate results that are applied in a timely manner. Some daily  
5 observation variables (such as state of the weather, fuels, red flags)  
6 are entered manually. This procedure (often called “taking the  
7 weather”) also initiates the calculation of daily and forecasted outputs  
8 in the Weather Information Management System (WIMS) and  
9 ensures data storage in the National Interagency Fire Management  
10 Integrated Database (NIFMID). These efforts are coordinated with  
11 the local National Weather Service fire weather meteorologists and  
12 Geographic Area Coordination Center (GACC) predictive services  
13 meteorologists to provide timely forecasted NFDRS outputs.  
14 Observed (afternoon) and forecasted (tomorrow) NFDRS outputs are  
15 communicated daily. Live fuel moisture model inputs (such as  
16 herbaceous vegetation stage, season code, greenness factor) are  
17 adjusted seasonally in WIMS (<http://fam.nwcg.gov/fam-web/>) at  
18 appropriate times. Decision points (such as percentiles discussed  
19 below) are determined in FireFamily Plus and reviewed and adjusted  
20 annually or more often as appropriate in WIMS and/or other fire  
21 danger platforms.
- 22 • **Fire Danger Rating Inventory**  
23 Identifies basic components of the operating plan such as dispatch response  
24 areas, protection units, administrative units, fire history, land management  
25 planning direction, standards, and guidelines, etc. Aggregates NFDRS fuel  
26 models, slope classes (topography), and weather/climatology into fire  
27 danger rating areas; validates the existing weather station network and  
28 identifies any additional stations to support fire danger rating needs.
  - 29 • **Climatic Breakpoints and Fire Business Thresholds**  
30 Climatological breakpoints and fire business thresholds are established to  
31 provide NFDRS-based decision points for all appropriate management  
32 responses in a fire danger rating area. Climatological breakpoints are  
33 points on the cumulative distribution of one fire weather/danger index  
34 computed from climatology without regard for associated fire  
35 occurrence/business. For example, the value of the 90th percentile ERC is  
36 the climatological breakpoint at which only 10 percent of the ERC values  
37 are greater in value. The percentiles for climatological breakpoints  
38 predetermined by agency directive are shown below.
    - 39 ➤ ***BLM - 80th and 95th percentiles***
    - 40 ➤ ***FWS - 90th and 97th percentiles***
    - 41 ➤ ***NPS - 90th and 97th percentiles***
    - 42 ➤ ***FS - 90th and 97th percentiles***

43  
44 It is equally important to identify the period or range of data analysis used  
45 to determine the agency percentiles. The percentile values for 12 months

1 of data will be different from the percentile values for the fire season. Year  
2 round data should be used for percentiles for severity type decisions, and  
3 percentiles based on fire season data for staffing levels and adjective fire  
4 danger.

5  
6 Fire business thresholds are values of one or more fire weather/fire danger  
7 indexes that have been statistically related to occurrence of fires (fire  
8 business). Generally the threshold is a value or range of values where  
9 historical fire activity has significantly increased or decreased. Assuming  
10 historical climate and occurrence patterns can be applied today, fire  
11 business thresholds are expected to more closely predict significant fire  
12 occurrence than climatological breakpoints.

13  
14 Climatological breakpoints or fire business thresholds are used to compute  
15 staffing levels and adjective fire danger ratings.

### 16 **Staffing Level**

17 The Staffing Level is used to make daily internal fire operations decisions. A  
18 unit can operate with anywhere from 3 to 9 levels of staffing. Most units  
19 typically use 5 (1,2,3,4,5) or 6 (1,2,3L,3H,4,5). Staffing Level is a direct output  
20 of the danger rating processor and is based on one of the following:

- 21 • NFDRS (Burning Index, Energy Release Component, Spread Component,  
22 or Ignition Component)
- 23 • Keetch-Byram Drought Index

24  
25 Additional Considerations:

- 26 • Palmer Drought Index or other drought index
- 27 • Live Fuel Moisture (calculated or sampled)
- 28 • Canadian Forest Fire Danger Rating System
- 29 • Soil Moisture

### 30 **Adjective Fire Danger Rating**

31  
32 Adjective Fire Danger Rating (low, moderate, high, very high, extreme) is based  
33 on the NFDRS index or component used to compute staffing level and the  
34 ignition component. It is a general description of fire danger for the purpose of  
35 informing the public. Adjective ratings are computed automatically in the  
36 Weather Information Management System (WIMS) based on NFDRS  
37 parameters provided by local fire managers.

38  
39 Climatic breakpoints and fire business thresholds are developed with NFDRS  
40 software, such as FIREFAMILY PLUS, and are applied to appropriate NFDRS  
41 processors, such as WIMS, to determine daily staffing levels and adjective  
42 ratings. Training for the FIREFAMILY PLUS program is available at local,  
43 regional, and national NFDRS courses.

### 1 **Fire Danger Pocket Card for Firefighter Safety**

2 The Fire Danger Pocket Card is used to communicate information on fire danger  
3 to firefighters. The prime objective of fire danger rating is to provide a measure  
4 of the seriousness of local burning conditions. The Pocket Card provides a  
5 visual reference of those conditions and how they compare to previous fire  
6 seasons. Pocket Cards are developed and implemented according to NWCG  
7 guidelines posted at <http://famweb.nwcg.gov/pocketcards/>. Fire Danger Pocket  
8 Cards are recommended at each local unit where weather data exists.

- 9 • **BLM/FS** - *Fire Danger Pocket Cards are developed for and implemented*  
10 *at each local unit.*

### 12 **Preparedness Plan**

13 Preparedness plans provide management direction given identified levels of  
14 burning conditions, fire activity, and resource commitment, and are required at  
15 national, state/regional, and local levels. Preparedness Levels (1-5) are  
16 determined by incremental measures of burning conditions, fire activity, and  
17 resource commitment. Fire danger rating is a critical measure of burning  
18 conditions. Refer to the *National Interagency Mobilization Guide* for more  
19 information on preparedness plans.

### 21 **Preparedness Level/Step-up Plans**

22 Preparedness Level/Step-up Plans are designed to direct incremental  
23 preparedness actions in response to increasing fire danger. Those actions are  
24 delineated by “staffing levels.” Each Step-Up Plan should address the five  
25 preparedness levels (1, 2, 3, 4, and 5) and the corresponding planned actions that  
26 are intended to mitigate those fire danger conditions. Several assessment tools  
27 are available to measure fire danger.

29 Outputs from the fire danger rating operating plan process, such as staffing  
30 levels, are used to support the decisions found in staffing plans, step-up staffing  
31 plans, preparedness levels, dispatch response plans, dispatch response levels,  
32 etc. Increasing fire danger results in increasing staffing levels, suggesting a  
33 corresponding increase in preparedness actions intended to mitigate those fire  
34 danger conditions.

36 The Staffing Plan describes escalating responses that are pre-approved in the fire  
37 management plan. Mitigating actions are designed to enhance the unit’s fire  
38 management capability during short periods (one burning period, Fourth of July  
39 or other pre-identified events) where normal staffing cannot meet initial attack,  
40 prevention, or detection needs. The difference between preparedness level/step-  
41 up and severity is that preparedness level/step-up actions are established in the  
42 unit fire management plan, and implemented by the unit when those pre-  
43 identified conditions are experienced. Severity is a longer duration condition  
44 that cannot be adequately dealt with under normal staffing, such as a killing frost

1 converting live fuel to dead fuel or drought conditions. Severity is discussed  
2 later in this chapter.

3

4 Mitigating actions identified in the fire management plan should include, but are  
5 not limited to, the following items:

- 6 • Management direction and considerations
- 7 • Fire prevention actions, including closures/restrictions, media messages,  
8 signing, and patrolling
- 9 • Prepositioning suppression resources
- 10 • Cooperator discussion and/or involvement
- 11 • Safety considerations: safety message, safety officer
- 12 • Augmentation of suppression forces
- 13 • Support function: consideration given to expanded dispatch activation,  
14 initial attack dispatch staffing, and other support needs (procurement,  
15 supply, ground support, and communication)
- 16 • Support staff availability outside of fire organization
- 17 • Communication of Fire Weather Watch and Red Flag Warning conditions
- 18 • Fire danger/behavior assessment
- 19 • Briefings for management and fire suppression personnel
- 20 • Fire information - internal and external
- 21 • Multi-agency coordination groups/area command activation
- 22 • Prescribed fire direction and considerations
- 23 • Increased detection activities

24

#### 25 **Seasonal Risk Analysis**

26 A Seasonal Risk Analysis requires fire managers to review current and predicted  
27 weather and fuels information, compare this information with historic weather  
28 and fuels records, and predict the upcoming fire season's severity and duration  
29 for any given area. It is important to incorporate drought indices into this  
30 assessment.

31

32 Information from a Seasonal Risk Analysis can be used to modify the Annual  
33 Operating Plan (AOP), step-up and pre-attack plans. It provides the basis for  
34 actions such as prepositioning critical resources, requesting additional funding,  
35 or modifying Memoranda of Understanding (MOU) to meet anticipated needs.

36

37 Each unit selects, and compares to normal, the current value and seasonal trend  
38 of one or more of the following indicators which are most useful in predicting  
39 fire season severity and duration in its area:

- 40 • NFDRS (or CFFDRS) index values (ERC, BI)
- 41 • Temperature levels
- 42 • Precipitation levels
- 43 • Humidity levels

- 1 • Palmer Drought or Standardized Precipitation Index
  - 2 • 1000-hour fuel moisture (timber fuels)
  - 3 • Vegetation moisture levels
  - 4 • Live fuel moisture (brush fuels)
  - 5 • Curing rate (grass fuels)
  - 6 • Episodic wind events (moisture drying days)
  - 7 • Unusual weather events (early severe frost)
  - 8 • Fires to date
  - 9
- 10 The seasonal trend of each selected indicator is graphically compared to normal  
11 and all-time worst. This comparison is updated regularly and posted in dispatch  
12 and crew areas.

13

14 If the Seasonal Risk Analysis suggests an abnormal fire season might be  
15 anticipated, a unit should notify the state/regional office and request additional  
16 resources commensurate with the escalated risk.

17

18 Seasonal Risk Analyses are prepared, issued, and updated each year by GACC  
19 Predictive Service Units. Seasonal Assessment Workshops are conducted to  
20 facilitate these seasonal outlook reports. Local risk analyses should be compiled  
21 at the state/regional office to determine the predicted fire season severity within  
22 the state/region, and then forwarded to the respective national office for use in  
23 determining national fire preparedness needs. Risk analysis is ongoing. It  
24 should be reviewed periodically and revised when significant changes in key  
25 indicators occur. All reviews of seasonal risk analysis, even if no changes are  
26 made, should be documented.

27

### 28 **Fire Severity Funding**

29 Fire severity funding is the authorized use of suppression operations funds  
30 (normally used exclusively for suppression operations, and distinct from  
31 preparedness funds) for extraordinary preparedness activities that are required  
32 due to:

- 33 • an abnormal increase in fire potential or danger.
- 34 • fire seasons that either start earlier or last longer than planned in the fire  
35 management plan.

36 The fire danger rating operating plan or annual operating plan should identify  
37 thresholds for identifying the need for severity resources.

38

39 The objective of fire severity funding is to mitigate losses by improving  
40 suppression response capability.

41

42 When suppression resources that were acquired through the approved fire  
43 planning process (e.g. NFMAS, IIAA, FPA) are insufficient to meet the  
44 extraordinary need, suppression resources may be requested through the severity



1 funding process. Fire severity funding is not intended to raise preparedness  
2 funding levels to cover differences that may exist between funds actually  
3 appropriated and those identified in the fire planning process.

#### 4 5 **Typical Uses**

6 Severity funds are typically used to:

- 7 • Increase prevention activities
- 8 • Temporarily increase firefighting staffing
- 9 • Pay for standby
- 10 • Preposition initial attack suppression forces
- 11 • Provide additional aerial reconnaissance
- 12 • Provide for standby aircraft availability

#### 13 14 **Authorization**

15 Authorization to use severity funding is provided in writing based on a written  
16 request with supporting documentation. Authorization is on a line item basis  
17 and comes with a severity cost code. Agencies will follow their administrative  
18 procedures for issuing severity cost codes. Authorization is provided for a  
19 maximum of 14 days per request; however, regardless of the length of the  
20 authorization, use of severity funding must be terminated when abnormal  
21 conditions no longer exist. If the fire severity situation extends beyond the 14  
22 day authorization, the State/Region must prepare a new severity request.

#### 23 24 **State/Regional Level Severity Funding**

25 Each fiscal year the national office will provide each state/region with \$300,000  
26 and a severity cost code for state/regional short-term severity needs (e.g., wind  
27 events, cold dry front passage, lightning events, and unexpected events such as  
28 off road rallies that are expected to last less than one week). Expenditure of  
29 these funds is authorized by the state/regional directors at the written request of  
30 the agency administrator. State/regional directors are responsible and  
31 accountable for ensuring that these funds are used only to meet severity funding  
32 objectives and that amounts are not exceeded. The national office will notify the  
33 state/regional director, state/regional budget officer, and the state/regional FMO  
34 when the severity cost code is provided.

- 35 • **FWS** - Short-term severity or "step-up" cost codes are established yearly  
36 (at the Regional level) as PE01, PE02, etc (numeric value indicates the  
37 specific region utilizing short-term severity funding).
- 38 • **NPS** - Parks have the authority to approve "Step-up" actions only, as  
39 defined in their fire management plan. Regional offices approve severity  
40 (long term - up to 30 days) for parks up to \$100,000 per severity event.
- 41 • **FS** - Severity funding direction is found in FSM 5190.

42  
43  
44

**1 National Level Severity Funding**

2 National Agency Fire Directors or their delegates are authorized to allocate fire  
3 severity funding under specific conditions stated or referenced in this chapter.  
4 Expenditure of these funds is authorized by the appropriate approving official at  
5 the written request of the state/regional director. Approved severity funding will  
6 be used only for the preparedness activities and timeframes specifically outlined  
7 in the authorization, and only for the objectives stated above.

- 8 • *NPS - National office approves all requests over \$100,000.*

**10 Appropriate Severity Funding Charges****12 Labor**

13 Appropriate labor charges include:

- 14 • Regular pay for non-fire personnel
- 15 • Regular pay for seasonal/temporary fire personnel outside their normal fire  
16 funded activation period
- 17 • Overtime pay for all fire and non-fire personnel
- 18 • Severity funded personnel and resources must be available for immediate  
19 initial attack regardless of the daily task assignment
- 20 • Severity funded personnel and resources will not use a severity cost code  
21 while assigned to wildfires. The wildfire firecode number will be used.
- 22 • Overtime pay for severity funded personnel will be paid by severity funds,  
23 unless the personnel are assigned to a wildfire.

**25 Vehicles and Equipment**

- 26 • GSA lease rate and mileage
- 27 • Hourly rate or mileage for Agency owned vehicles
- 28 • Commercial rentals and contracts
- 29 • *FWS - Repair and maintenance of Fish and Wildlife vehicles and  
30 equipment; FWS does not have a Use Rate covering these charges.*

**32 Aviation**

33 This includes:

- 34 • Contract extensions
- 35 • The daily minimum for call when needed (CWN) aircraft
- 36 • Preposition flight time
- 37 • Support expenses necessary for severity funded aircraft (facility rentals,  
38 utilities, telephones, etc.)

**40 Travel and Per Diem**

41 Severity funded personnel in travel status are fully subsisted by the government  
42 in accordance with their agency regulations. Costs covered include:

- 43 • Lodging
- 44 • Government provided meals (in lieu of per diem)

- 1 • Airfare (including returning to their home base)
- 2 • Privately owned vehicle mileage (with prior approval)
- 3 • Other miscellaneous travel and per diem expenses associated with the
- 4 assignment

5

### 6 **Prevention Activities**

7 These include:

- 8 • Funding Prevention Teams (Preventions teams will be mobilized as
- 9 referred in the *National Mobilization Guide*, Chapter 20)
- 10 • Implementing local prevention campaigns, to include community risk
- 11 assessment, mitigation planning, outreach, and education
- 12 • Augmenting patrols
- 13 • Note: Non-fire funded prevention team members should charge base 8 and
- 14 overtime to the severity cost code for the length of the prevention activities
- 15 assignment. Fire funded personnel should charge overtime only to the
- 16 severity cost code for the length of the prevention activities assignment.

17

### 18 **Inappropriate Fire Severity Funding Charges**

- 19 • To cover differences that may exist between funds actually appropriated
- 20 (including rescissions) and those identified in the fire planning process
- 21 • Administrative surcharges, indirect costs, fringe benefits
- 22 • Equipment purchases
- 23 • Purchase, maintenance, repair, or upgrade of vehicles
- 24 • Purchase of radios
- 25 • Purchase of telephones
- 26 • Purchase of pumps, saws, and similar suppression equipment
- 27 • Aircraft availability during contract period
- 28 • Cache supplies which are normally available in fire caches
- 29 • Fixed ownership rate vehicle costs

30

### 31 **Emergency Equipment Rental Agreements**

32 Emergency Equipment Rental Agreements (EERAs) are used during emergency  
33 incidents under authorities that allow for direct, non-competitive ordering using  
34 established procedures in the event of immediate threat to life and property.  
35 EERAs will not be used for non-emergency activities, including severity  
36 activities, rehabilitation projects, and hazardous fuels projects.

37

### 38 **Interagency Requests**

39 Agencies working cooperatively in the same geographic area should work  
40 together to generate and submit joint requests, and to utilize severity funded  
41 resources in an interagency manner. However, each agency should request  
42 funds only for its own agency specific needs. The joint request should be routed  
43 simultaneously through each agency's approval system, and the respective

1 approving official will issue an authorization that specifies allocations by  
 2 agency.

3

4 **Requesting Fire Severity Funding**

5 Fire severity funding requests should be submitted on the Interagency Severity  
 6 Funding Request Form found at the website listed below. The completed and  
 7 signed request is submitted from the state/regional director to the appropriate  
 8 approving official as per the sequence of action outlined below. Authorizations  
 9 will be returned in writing.

10

11 The interagency standard format for fire severity funding requests may be found  
 12 at: <http://www.blm.gov/nifc/st/en/prog/fire/fireops/severity.html>

13

14 **Sequence of Action and Responsible Parties for Severity Funding Requests**

Action	Responsible Party
Identify and develop severity funding request.	Unit FMO
Review, modify, and approve (or reject) request. Forward to state/regional office.	Unit agency administrator
Review, modify, and approve (or reject) unit request. Add state/regional needs and consolidate. Forward to state/regional director for approval within 48 hours.	State/Regional FMO
Review, modify, and approve (or reject) request. Forward to the appropriate National Fire Director/approving official within 48 hours. Notify the fire budget staff.	State/Regional Director
Review, modify, and approve (or reject) the request within 48 hours. Issue written authorization with a severity cost code.	Appropriate National Fire Director/Approving Official
Establish severity cost code in the appropriate finance system within 24 hours.	Applicable National Finance System
Notify unit office(s) and state/regional budget lead upon receipt of authorization.	State/Regional FMO
Execute severity cost code. Ensure that project expenditures are only used for authorized purposes.	Unit Office
Maintain severity files, including requests, authorizations, and summary of expenditures and activities.	Unit/State/Regional/ National Offices

15

16 **Labor Cost Coding For Severity Funded Personnel**

17 Fire personnel outside their normal activation period, employees whose regular  
 18 salary is not fire funded, and Administratively Determined (AD) employees  
 19 hired under an approved severity request should charge regular time and

1 approved non-fire overtime to the severity suppression operations subactivity  
2 and the requesting office's severity cost code.

3  
4 Fire funded personnel should charge their regular planned salary (base-eight) to  
5 their budgeted subactivity using their home unit's location code. Overtime  
6 associated with the severity request should be charged to the severity  
7 suppression operations subactivity and the requesting office's severity cost code.

8  
9 Regular hours worked in suppression operations will require the use of the  
10 appropriate fire subactivity with the appropriate firecode number. Overtime in  
11 fire suppression operations will be charged to the suppression operations  
12 subactivity with the appropriate firecode number.

13  
14 Employees from non-federal agencies should charge their time in accordance  
15 with the approved severity request and the appropriate local and statewide  
16 agreements. A task order for reimbursement will have to be established and is  
17 authorized under the Interagency Agreement for Fire Management.

- 18 • **FS - Labor Cost Coding.** *Forest Service severity funding direction in FSM*  
19 *5190 provides agency specific direction.*

#### 20 21 **Documentation**

22 The state/regional and national office will document and file accurate records of  
23 severity funding activity. This will include complete severity funding requests,  
24 written authorizations, and expenditure records.

#### 25 26 **Severity Funding Audits**

27 State/regional and national offices should ensure appropriate usage of severity  
28 funding and expenditures. This may be done as part of their normal agency fire  
29 program review cycle. The severity funding audit checklist may be used as a  
30 guide for this process. Interagency Preparedness Review checklists can be  
31 found at: [http://www.nifc.gov/references/prep\\_review.html](http://www.nifc.gov/references/prep_review.html)

- 32 • **BLM - Severity funding is not a reviewed item of the BLM national**  
33 **Preparedness Review.** *BLM Preparedness Review Checklists can be found*  
34 *at:*  
35 *<http://www.blm.gov/nifc/st/en/prog/fire/fireops/preparedness/preparedness>*  
36 *[\\_review/checklists.html](http://www.blm.gov/nifc/st/en/prog/fire/fireops/preparedness/preparedness)*

#### 37 38 **Fire Prevention/Mitigation**

#### 39 40 **Wildland Fire Cause Determination & Fire Trespass**

41 Agency policy requires any wildfire to be investigated to determine cause,  
42 origin, and responsibility.

43

1 For all human-caused fires where the guilty party has been determined, actions  
2 must be taken to recover the cost of suppression activities, land rehabilitation,  
3 and damages to the resources and improvements.

4

#### 5 **Wildland Fire Mitigation and Prevention**

6 Fire programs are required to fund and implement unit level Fire Prevention  
7 Plans by completing a wildland mitigation/prevention assessment. The purpose  
8 of this is to reduce undesirable human caused ignitions, to reduce damages and  
9 losses caused by unwanted wildland fires, and to reduce the suppression costs of  
10 wildland fires. Wildland fire mitigation/prevention programs based on the Risk  
11 Assessment and Mitigation Strategies (RAMS) process can reduce damages and  
12 losses during periods of average weather, fuels, and human activity. As weather  
13 and fuel conditions move from average to above average or severe, and/or  
14 human activity increases, mitigation and prevention activities must be  
15 strengthened to maintain effectiveness.

16

17 Prevention includes education (sign posting plans, school programs, radio and  
18 news releases, recreation contacts, local business contacts, exhibits), industrial  
19 program monitoring (timber, mining, power line maintenance operations),  
20 reconnaissance patrols, and other activities to prevent and mitigate wildfire  
21 damage, and loss.

- 22 • *NPS - Only units that experience more than an average 26 human caused*  
23 *fires per ten-year period are required to develop a fire prevention plan,*  
24 *based upon a prevention analysis such as RAMS; however, use of this*  
25 *software is not required.*
- 26 • *FS - Forest Service direction for wildland prevention and investigation is*  
27 *found in FSM 5110 and 5300.*

## Chapter 11 Incident Management

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### **National Interagency Incident Management System (NIIMS)**

The National Interagency Incident Management System (NIIMS) is sponsored by the National Wildfire Coordinating Group (NWCG). It provides a universal set of structures, procedures, and standards for agencies to respond to all types of emergencies. NIIMS is compliant with the National Incident Management System (NIMS). NIIMS will be used to complete tasks assigned to the interagency wildland fire community under the National Response Plan.

### **Incident Command System (ICS)**

The Incident Command System is the on-site management system used in NIIMS/NIMS. The ICS is a standardized emergency management construct specifically designed to provide for an integrated organizational structure that reflects the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries. ICS is the combination of facilities, equipment, personnel, communications, and procedures operating within a common organizational structure to manage incidents. ICS will be used by the agencies to manage wildland fire operations.

### **Wildland Fire Complexity Analysis**

Wildland fires are typed by complexity, from Type 5 (least complex) to Type 1 (most complex). The ICS organizational structure develops in a modular fashion based on the complexity of the incident. Complexity is determined by performing an Incident Complexity Analysis - (Refer to samples in Appendix F & G). Units may develop their own Complexity Analysis format to replace Appendix G. It is the Incident Commander's responsibility to continually reassess the complexity level of the incident. When the complexity analysis indicates a higher complexity level, the IC must ensure that suppression operations remain within the scope and capability of the existing organization. Incident Commanders must continually reassess incident complexity to ensure the appropriate command organization is either in place or on order.

### **Fire Management Organization Assessment**

The Fire Management Organization Assessment is a short checklist that agency administrators may use to identify conditions associated with heavy fire activity that may overload the local fire staff, reducing its effectiveness to manage the situation. Identifying these conditions may help the agency administrator determine whether increasing staffing levels might be an appropriate action to take. See Appendix K.

1 **Incident Management and Coordination Components of NIIMS**

2 Effective incident management requires:

- 3 • Command Organizations to manage on-site incident operations.  
 4 • Coordination and Support Organizations to provide direction and supply  
 5 resources to the on-site organization.

<b>On Site Command Organizations</b>	<b>Off Site Coordination and Support</b>
Type 5 Incident Command	Initial Attack Dispatch
Type 4 Incident Command	Expanded Dispatch
Type 3 Incident Command	Buying /Payment Teams
Type 2 Incident Command	Coordination Centers (Geographic or National)
Type 1 Incident Command	
Fire Use Management Teams	Multi-Agency Coordinating Groups
Unified Command	(Local, Geographic, or National)
Area Command	

6

7 **Command Organization**

8

9 **Incident Command**

10 All fires, regardless of complexity, will have an Incident Commander (IC). The  
 11 IC is a single individual responsible to the agency administrator(s) for all  
 12 incident activities; including the development of strategies and tactics, and the  
 13 ordering, deployment, and release of resources. The IC develops the  
 14 organizational structure necessary to manage the incident. ICS Command Staff  
 15 (Safety Officer and Information Officer) and General Staff (Operations Section  
 16 Chief, Planning Section Chief, Logistics Section Chief, and Finance Section  
 17 Chief) are established as required to perform key functional responsibilities for  
 18 the IC.

19

20 For purposes of initial attack the first Incident Commander (IC) on scene,  
 21 qualified at any level, will assume the duties of initial attack incident  
 22 commander. The initial attack incident commander will assume the duties and  
 23 responsibility (ies) for all suppression efforts on the incident, up to their level of  
 24 qualification, until relieved by an IC, qualified at a level commensurate with  
 25 incident complexity, arrives on scene.

26

27 **Type 4 and 5 Incident Command**

28 Type 4 and 5 Incident Commanders (ICs) are qualified according to the *NWCG*  
 29 *Wildland Fire Qualifications Systems Guide PMS 310-1 (NFES # 310-1)*. The  
 30 Type 4 or 5 IC may assign personnel to any combination of ICS functional area  
 31 duties in order to operate safely and effectively. ICS functional area duties  
 32 should be assigned to the most qualified or competent individuals available.

33

34

35

36



1 **Type 5 Incident Characteristics**

- 2 • Ad hoc organization managed by a Type 5 Incident Commander.  
3 • Primarily local resources used.  
4 • ICS command and general staff positions are not activated.  
5 • Resources vary from two to six firefighters.  
6 • Incident is generally contained within the first burning period and often  
7 within a few hours after resources arrive on scene.  
8 • Additional firefighting resources or logistical support are not usually  
9 required.

10  
11 **Type 4 Incident Characteristics**

- 12 • Ad hoc organization managed by a Type 4 Incident Commander.  
13 • Primarily local resources used.  
14 • ICS command and general staff positions are not activated.  
15 • Resources vary from a single resource to multiple resource task forces or  
16 strike teams.  
17 • Incident is usually limited to one operational period in the control phase.  
18 Mopup may extend into multiple operational periods.  
19 • Written incident action plan (IAP) is not required. A documented  
20 operational briefing will be completed for all incoming resources. Refer to  
21 the *Incident Response Pocket Guide* for a briefing checklist.

22  
23 **Type 3 Incident Command**

24 Type 3 Incident Commanders (ICT3s) are qualified according to the *310-1*.  
25 ICT3s are required to manage the incident. They must not have concurrent  
26 responsibilities that are not associated with the incident, and they must not  
27 concurrently perform single resource boss duties. It is important to note that not  
28 all Type 3 complexity incidents require a full complement of individuals at the  
29 command and general staff positions. A Type 3 Incident Commander (ICT3) is  
30 expected to exercise their authority and establish the appropriate organizational  
31 structure for each incident as based on complexity, and span of control.

32  
33 As an incident escalates, a continuing assessment of the complexity level should  
34 be completed to validate the continued Type 3 effort or the need for a higher  
35 level of incident management.

36  
37 The following chart illustrates the minimum qualifications required for  
38 individuals performing Type 3 complexity functions:

39  
40  
41  
42  
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44  
45

Type 3 Functional Responsibility	Specific 310-1 or equivalent qualification standards required to perform ICS functions at Type 3 level
Incident Command	Incident Commander Type (ICT3)
Safety	Line Safety Officer
Operations	Strike Team Leader or Task Force Leader
Division	Single Resource Boss
Plans	Local entities can establish level of skill to perform function.
Logistics	Local entities can establish level of skill to perform function.
Information	Local entities can establish level of skill to perform function.
Finance	Local entities can establish level of skill to perform function.

- 1 • **FS** - Refer to *FSM 5109.17* for Additional standards.

2

3 Type 3 experience that is input into the Incident Qualification and Certification  
4 System (IQCS) will not exceed an individual's current Incident Qualification  
5 Card.

6

### 7 **Type 3 Incident Characteristics**

- 8 • Ad hoc or pre-established Type 3 organization managed by a ICT3.
- 9 • The IC develops the organizational structure necessary to manage the  
10 incident. Some or all of ICS functional areas are activated, usually at the  
11 division/group supervisor and/or unit leader level.
- 12 • The Incident Complexity Analysis process is formalized and certified daily  
13 with the jurisdictional agency. It is the IC's responsibility to continually  
14 reassess the complexity level of the incident. When the complexity  
15 analysis indicates a higher complexity level the IC must ensure that  
16 suppression operations remain within the scope and capability of the  
17 existing organization, and that span of control is consistent with  
18 established ICS standards.
- 19 • Local and non-local resources used.
- 20 • Resources vary from several resources to several task forces/strike teams.
- 21 • May be divided into divisions.
- 22 • May require staging areas and incident base.
- 23 • May involve low complexity aviation operations.
- 24 • May involve multiple operational periods prior to control, which may  
25 require a written Incident Action Plan (IAP).
- 26 • Documented operational briefings will occur for all incoming resources  
27 and before each operational period. Refer to the *Incident Response Pocket  
28 Guide* for a briefing checklist.
- 29 • ICT3's will not serve concurrently as a single resource boss or have any  
30 non incident related responsibilities.

31

32

33

**1 Type 1 and 2 Incident Command**

2 Type 1 and 2 Incident Commanders are qualified according to the *310-1*. These  
3 ICs command pre-established Incident Management Teams that are configured  
4 with ICS Command Staff, General Staff, and other leadership and support  
5 positions. Personnel performing specific Type 1 or Type 2 command and  
6 general staff duties must be qualified at the Type 1 or Type 2 level according to  
7 the 310-1 standards.

**9 Type 2 Incident Characteristics**

10 Type 2 teams are managed by Geographic Area Multi-Agency Coordinating  
11 Groups, and are coordinated by the Geographic Area Coordination Centers.

- 12 • Pre-established incident management team managed by Type 2 Incident  
13 Commander.
- 14 • ICS command and general staff positions activated.
- 15 • Many ICS functional units required and staffed.
- 16 • Geographic and functional area divisions established.
- 17 • Complex aviation operations involving multiple aircraft.
- 18 • Incident Command Post, base camps, staging areas established.
- 19 • Incident extends into multiple operational periods.
- 20 • Written incident action plan required for each operational period.
- 21 • Operations personnel often exceed 200 per operational period and total  
22 personnel may exceed 500.
- 23 • Requires a Wildland Fire Situation Analysis (WFSA).
- 24 • Requires a written Delegation of Authority to the Incident Commander.

**26 Type 1 Incident Characteristics**

27 Type 1 teams are managed by Geographic Area Multi-Agency Coordinating  
28 Groups, and are coordinated by the Geographic Area Coordination Centers. At  
29 national preparedness levels 4 and 5 these teams are coordinated by the National  
30 Interagency Coordination Center.

- 31 • Pre-established incident management team managed by Type 1 Incident  
32 Commander.
- 33 • ICS command and general staff positions activated.
- 34 • Most ICS functional units required and staffed.
- 35 • Geographic and functional area divisions established.
- 36 • May require branching to maintain adequate span of control.
- 37 • Complex aviation operations involving multiple aircraft.
- 38 • Incident command post, incident camps, staging areas established.
- 39 • Incident extends into multiple operational periods.
- 40 • Written incident action plan required for each operational period.
- 41 • Operations personnel often exceed 500 per operational period and total  
42 personnel may exceed 1000.
- 43 • Requires a Wildland Fire Situation Analysis. (WFSA)
- 44 • Requires a written Delegation of Authority to the Incident Commander.

**1 Fire Use Management Teams (FUMT)**

2 Fire Use Management Teams provide land managers with skilled and mobile  
3 personnel to assist with the management of Wildland Fire Use (WFU) fires and  
4 with prescribed fires. Fire Use Management Teams are available as an  
5 interagency resource for assignment to all agencies and units. FUMTs consist of  
6 the following positions:

- 7 • Incident Commander Type 2 (ICT2)
- 8 • Safety Officer 2 (SOF2)
- 9 • Public Information Officer 2 (POI2)
- 10 • Operations Sections Chief Type 2 (OSC2)
- 11 • Planning Section Chief Type 2 (PSC2)
- 12 • Long Term Fire Behavior Analyst (LTAN)
- 13 • Logistics Section Chief Type 2 (LSC2)
- 14 • Three additional positions

15

**16 National Incident Management Organization Teams**

17 Two National Incident Management Organization (NIMO) teams are configured  
18 as short Type I incident management teams. Each team has a full-time Incident  
19 Commander and six full-time Command & General Staff. One NIMO team is  
20 mobilized from Atlanta and the other from Boise. NIMO teams will be assigned  
21 to incidents as appropriate.

22

**23 Area Command**

24 Area Command is an Incident Command System organization established to  
25 oversee the management of multiple incidents that are each being managed by  
26 an ICS organization or to oversee the management of large or multiple incidents  
27 to which several Incident Management teams have been assigned. Area  
28 Command may become Unified Area Command when incidents are multi-  
29 jurisdictional. The determining factor for establishing area command is the span  
30 of control of the agency administrator.

31

**32 Area Command Functions**

- 33 • Establish overall strategy, objectives, and priorities for the incident(s)  
34 under its command.
- 35 • Allocate critical resources according to priorities.
- 36 • Ensure that incidents are properly managed.
- 37 • Coordinate demobilization.
- 38 • Supervise, manage, and evaluate Incident Management Teams under its  
39 command.
- 40 • Minimize duplication of effort and optimize effectiveness by combining  
41 multiple agency efforts under a single Area Action Plan.

42

43

44

45

**1 Area Command Teams**

2 National Area Command teams are managed by National Multi-Agency  
3 Coordinating (NMAC) and are comprised of the following:

- 4 • Area Commander (ACDR)
- 5 • Assistant Area Commander, Planning (AAPC)
- 6 • Assistant Area Commander, Logistics (AALC)
- 7 • Area Command Aviation Coordinator (ACAC)
- 8 • Area Command Trainees (2, as identified by the Area Commander)

9 Depending on the complexity of the interface between the incidents, specialists  
10 in other areas such as aviation safety or information may also be assigned.

11

**12 Unified Command**

13 Unified Command is an application of the Incident Command System used  
14 when there is more than one agency with incident jurisdiction or when incidents  
15 cross political jurisdictions. Under Unified Command, agencies work together  
16 through their designated incident commanders at a single incident command  
17 post to establish common objectives and issue a single Incident Action Plan.  
18 Unified Command may be established at any level of incident management or  
19 area command. Under Unified Command all agencies with jurisdictional  
20 responsibility at the incident contribute to the process of:

- 21 • Determining overall strategies.
- 22 • Selecting alternatives.
- 23 • Ensuring that joint planning for tactical activities is accomplished.
- 24 • Maximizing use of all assigned resources.

25

**26 Advantages of Unified Command are:**

- 27 • A single set of objectives is developed for the entire incident.
- 28 • A collective approach is used to develop strategies to achieve incident  
29 objectives.
- 30 • Information flow and coordination is improved between all jurisdictions  
31 and agencies involved in the incident.
- 32 • All involved agencies have an understanding of joint priorities and  
33 restrictions.
- 34 • No agency's legal authorities will be compromised or neglected.

35

**36 Coordination and Support Organizations**

37

**38 Initial Attack Dispatch**

39 Initial Attack is the planned response to a wildfire, given the wildfire's potential  
40 fire behavior. The command decision to move suppression resources is made by  
41 an authorized person at a local Initial Attack Dispatch Center.

42

43

44

45

**1 Expanded Dispatch**

2 Expanded Dispatch is the organization needed to support an incident which  
3 expands along with the Incident Command System. Expanded dispatch is  
4 established when a high volume of activity indicates that increased dispatch and  
5 coordination capability is required.

**7 Expanded Dispatch Organization**

8 An Expanded Dispatch operations center may be established. The Expanded  
9 Dispatch coordinator facilitates accomplishment of goals and direction of the  
10 Agency administrator and, when activated, the Multi Agency Coordinating  
11 Group. The position may be filled by the person normally managing the day-to-  
12 day operations of the center or an individual from a higher level of management.

13 The Expanded Dispatch center coordinator is responsible for:

- 14 • Filling and supervising necessary positions, if they are necessary, in  
15 accordance with coordination complexity.
- 16 • Implementing decisions made by the Multi-Agency Coordination (MAC)  
17 group.

**19 Expanded Dispatch Facilities and Equipment**

20 Expanded Dispatch facilities and equipment should be pre-identified, procured,  
21 and available for immediate setup. The following key items should be provided  
22 for:

- 23 • Work space separate from, but accessible to, the initial attack organization.
- 24 • Adequate office space (lighting, heating, cooling, security).
- 25 • Communications equipment (telephone, fax, computer hardware with  
26 adequate data storage space, priority use, and support personnel).
- 27 • Area suitable for briefings (agency administrators, media).
- 28 • Timetable/schedule should be implemented and adhered to (operational  
29 period changes, briefings, strategy meetings).
- 30 • A completed and authorized Continuation of Operations Plan (COOP).
- 31 • Qualified personnel on site to staff operations for the entire operational.

**33 Buying/Payment Teams**

34 Buying/Payment Teams support incidents by procuring services and supplies  
35 and renting land and equipment. These teams may be ordered when incident  
36 support requirements exceed local unit capacity. These teams report to the  
37 agency administrator or the local unit administrative officer. See the *Interagency*  
38 *Incident Business Management Handbook* for more information.

**40 Multi-Agency Coordination (MAC) Group**

41 Multi-Agency Coordination Groups are part of the National Interagency  
42 Incident Management System (NIIMS) and are an expansion of the off-site  
43 coordination and support system. MAC Groups are activated by the Agency  
44 administrator(s) when the character and intensity of the emergency situation  
45 significantly impacts or involves other agencies. A MAC Group may be

1 activated to provide support when only one agency has incident(s). The MAC  
2 Group is made up of agency representatives who are delegated authority by their  
3 respective agency administrators to make agency decisions and to commit  
4 agency resources and funds. The MAC Group relieves the incident support  
5 organization (dispatch, expanded dispatch) of the responsibility for making key  
6 decisions regarding prioritization of objectives and allocation of critical  
7 resources. The MAC Group makes coordinated agency administrator level  
8 decisions on issues that affect multiple agencies. The MAC Group is supported  
9 by situation, resource status, and intelligence units who collect and assemble  
10 data through normal coordination channels.

11

### 12 **MAC Group Direction**

13 MAC Group direction is carried out through dispatch and coordination center  
14 organizations. When Expanded Dispatch is activated, the MAC Group direction  
15 is carried out through the expanded dispatch organization. The MAC Group  
16 organization does not operate directly with Incident Management Teams or with  
17 Area Command teams, which are responsible for on-site management of the  
18 incident.

19

### 20 **MAC Group Activation Levels**

21 MAC groups may be activated at the local, state, regional, or national level.  
22 National level and Geographic Area level MAC Groups should be activated in  
23 accordance with the preparedness levels criteria established in the National and  
24 Geographic Area Mobilization Guides.

25

### 26 **MAC Group Coordinator**

27 The MAC Group coordinator facilitates organizing and accomplishing the  
28 mission, goals, and direction of the MAC Group. The MAC Group coordinator:

- 29 • Provides expertise on the functions of the MAC Group and on the proper  
30 relationships with dispatch centers and incident managers.
- 31 • Fills and supervises necessary unit and support positions as needed, in  
32 accordance with coordination complexity.
- 33 • Arranges for and manages facilities and equipment necessary to carry out  
34 the MAC Group functions.
- 35 • Facilitates the MAC Group decision process. Implements decisions made  
36 by the MAC Group.

37

### 38 **MAC Group Functions**

39 Activation of a MAC Group improves interagency coordination and provides for  
40 allocation and timely commitment of multi-agency emergency resources.

41 Participation by multiple agencies in the MAC effort will improve:

- 42 • Overall situation status information.
- 43 • Incident priority determination.
- 44 • Resource acquisition and allocation.
- 45 • State and Federal disaster coordination.

- 1 • Political interfaces.
- 2 • Consistency and quality of information provided to the media and involved
- 3 agencies.
- 4 • Anticipation of future conditions and resource needs.

## 6 **Managing the Incident**

### 8 **Agency Administrator Responsibilities**

9 The agency administrator (AA) manages the land and resources on their  
10 organizational unit according to the established land management plan. Fire  
11 management is part of that responsibility. The AA establishes specific  
12 performance objectives for the Incident Commander (IC), and delegates the  
13 authority to the IC to take specific actions to meet those objectives.  
14 AA responsibilities to a Type 1 or 2 Incident Management Team (IMT) or Fire  
15 Use Management Team (FUMT) include:

- 16 • Conduct an initial briefing to the Incident Management Team (Appendix  
17 D).
- 18 • Provide an approved and certified Wildland Fire Situation Analysis  
19 (WFSA) or Wildland Fire Implementation Plan (WFIP). The WFSA is  
20 validated daily and the WFIP is validated as required.
- 21 • Complete an Incident Complexity Analysis (Appendix F & G) to  
22 accompany the WFSA.
- 23 • Issue a written Delegation of Authority (Appendix H) to the Incident  
24 Commander and to other appropriate officials (agency administrator  
25 Representative, Resource Advisor, and Incident Business Advisor). For  
26 Type 3, 4, or 5 Incidents, delegations may be written or oral. The  
27 delegation should:
  - 28 ➤ State specific and measurable objectives, priorities, expectations,  
29 constraints, and other required direction.
  - 30 ➤ Establish the specific time for transfer of command.
  - 31 ➤ Assign clear responsibilities for initial attack.
  - 32 ➤ Define your role in the management of the incident.
  - 33 ➤ Assign a resource advisor(s) to the IMT.
  - 34 ➤ Define public information responsibilities.
  - 35 ➤ If necessary, assign a local government liaison to the IMT.
  - 36 ➤ Assign an Incident Business Advisor (IBA) to provide incident  
37 business management oversight commensurate with complexity.
  - 38 ➤ Direct IMT to address rehabilitation of areas affected by suppression  
39 activities.
- 40 • Coordinate Mobilization with the Incident Commander:
  - 41 ➤ Negotiate filling of mobilization order with the IC.
  - 42 ➤ Establish time and location of agency administrator briefing.
  - 43 ➤ Consider approving support staff additional to the IMT as requested  
44 by the IC.
  - 45 ➤ Consider authorizing transportation needs as requested by the IC.



1 In situations where one agency provides fire suppression service under  
2 agreement to the jurisdictional agency, both jurisdictional and protecting  
3 agencies will be involved in the development of, and signatories to, the  
4 delegation of authorities and the WFSA to the incident management teams.

5

#### 6 **Agency Administrator Representative Responsibilities**

7 The agency administrator representative (the on-scene agency administrator) is  
8 responsible for representing the political, social, and economic issues of the  
9 agency administrator to the Incident Commander. This is accomplished by  
10 participating in the agency administrator briefing, in the IMT planning and  
11 strategy meetings, and in the operational briefings. Responsibilities include  
12 representing the agency administrator to the IMT regarding:

- 13 • Compliance with the Delegation of Authority and the WFSA.
- 14 • Public Concerns (air quality, road or trail closures, smoke management,  
15 threats)
- 16 • Public Safety (evacuations, access/use restrictions, temporary closures)
- 17 • Public Information (fire size, resources assigned, threats, concerns, appeals  
18 for assistance)
- 19 • Socioeconomic, Political, or Tribal Concerns
- 20 • Land and Property Ownership Concerns
- 21 • Interagency and Inter-governmental Issues
- 22 • Wildland Urban Interface Impacts
- 23 • Media Contacts

24

#### 25 **Resource Advisor Responsibilities**

26 The Resource Advisor is responsible for anticipating the impacts of fire  
27 operations on natural and cultural resources and for communicating protection  
28 requirements for those resources to the Incident Commander. The Resource  
29 Advisor should ensure IMT compliance with the Land Management Plan and  
30 Fire Management Plan direction, and provide the Incident Commander with  
31 information, analysis, and advice on these areas:

- 32 • Rehabilitation requirements and standards
- 33 • Land Ownership
- 34 • Hazardous Materials
- 35 • Fuel Breaks (locations and specifications)
- 36 • Water Sources and Ownership
- 37 • Critical Watersheds
- 38 • Critical Wildlife Habitat
- 39 • Noxious Weeds
- 40 • Special Status Species (threatened, endangered, proposed, sensitive)
- 41 • Fisheries
- 42 • Poisonous Plants, Insects, and Snakes
- 43 • Mineral Resources (oil, gas, mining activities)
- 44 • Archeological Site, Historic Trails, Paleontological Sites
- 45 • Riparian Areas

**Release Date: January 2008**

- 1 • Military Issues
- 2 • Utility Rights-of-way (power, communication sites)
- 3 • Native Allotments
- 4 • Grazing Allotments
- 5 • Recreational Areas
- 6 • Special Management Areas (Wilderness Areas, Wilderness Study Areas,  
7 Recommended Wilderness, National Monuments, National Conservation  
8 Areas, National Historic Landmarks, Areas Of Critical Environmental  
9 Concern, Research Natural Areas, Wild And Scenic Rivers)

10

11 The Resource Advisor and agency administrator representative positions are  
12 generally filled by local unit personnel. These positions may be combined and  
13 performed by one individual. Duties are stated in the *Resource Advisor's Guide*  
14 *for Wildland Fire* (NWCG PMS 313, NFES 1831, Jan 2004).

15

#### 16 **Incident Action Plan**

17 When a written Incident Action Plan is required, suggested components may  
18 include objectives, organization, weather forecast, fire behavior forecast,  
19 division assignments, air operations summary, safety message, medical plan,  
20 communications plan, and incident map.

21

#### 22 **Incident Status Reporting**

23 The Incident Status Summary (ICS-209), submitted to the GACC, is used to  
24 report large wildland fires, and any other significant events on lands under  
25 federal protection or federal ownership. Lands administered by states and other  
26 federal cooperators may also report in this manner.

27

28 Large fires are classified as 100 acres or larger in timber fuel types, 300 acres or  
29 larger in grass fuel types, or when a Type 1 or 2 Incident Management Team is  
30 assigned. A report should be submitted daily until the incident is contained.

31 The agency administrator may require additional reporting times. Refer to local,  
32 zone, and/or GACC guidance for additional reporting requirements.

33

#### 34 **Incident History and Financial Records**

35 Wildland fire incidents on Federal lands managed by the FS and DOI (except  
36 BIA) require creation of an Incident History File (IHF) to document significant  
37 events, actions taken, lessons learned and other information with long-term  
38 value for managing natural resources. IHF contents and instructions and tools  
39 for creating the IHF are found at [www.nifc.gov](http://www.nifc.gov).

40

41 For incidents involving use of wildland fire for resource benefit, include  
42 Wildland Fire Implementation Plans (Stages I, II, and III) or equivalents with  
43 the records shown above.

44

1 The ordering host unit will be responsible for retaining the incident  
2 documentation package including the Incident History File (IHF) and financial  
3 records.

4

#### 5 **Transfer of Command**

6 The following guidelines will assist in the transfer of incident command  
7 responsibilities from the local unit to incoming Type 1 or 2 Incident  
8 Management Team, and back to the local unit.

- 9 • The local team or organization already in place remains in charge until the  
10 local representative briefs their counterparts on the incoming team, a  
11 delegation of authority has been signed, and a mutually agreed time for  
12 transfer of command has been established.
- 13 • The ordering unit will specify times of arrival and transfer of command,  
14 and discuss these timeframes with both the incoming and outgoing  
15 command structures.
- 16 • Clear lines of authority must be maintained in order to minimize confusion  
17 and maintain operational control.
- 18 • Transfers of command should occur at the beginning of an operational  
19 period, whenever possible.
- 20 • All operational personnel will be notified on incident command  
21 frequencies when transfer of command occurs.

22

#### 23 **Release of Teams**

24 The release of a Type 1 or 2 IMT should follow an approved transfer of  
25 command process. The agency administrator must approve the date and time of  
26 the transfer of command. The transition plan should include the following  
27 elements:

- 28 • Remaining organizational needs and structure
- 29 • Tasks or work to be accomplished
- 30 • Communication systems and radio frequencies
- 31 • Local safety hazards and considerations
- 32 • Incident Action Plan, including remaining resources and weather forecast
- 33 • Facilities, equipment, and supply status
- 34 • Arrangement for feeding remaining personnel
- 35 • Financial and payment processes needing follow-up
- 36 • Complexity Analysis

37

#### 38 **Team Evaluation**

39 At completion of assignment, Incident Commanders will receive a written  
40 performance evaluation from the agency administrators prior to the teams  
41 release from the incident. Certain elements of this evaluation may not be able to  
42 be completed at the closeout review. These include; accountability and property  
43 control; completeness of claims investigation/documentation; and completeness  
44 of financial and payment documentation. The final evaluation incorporating all

- 1 of the above elements should be sent to the Incident Commander within 60 days.  
2 See Appendix J for the IMT evaluation form.  
3  
4 The Delegation of Authority, the WFSA, and agency administrator's direction  
5 will serve as the primary standards against which the IMT is evaluated.  
6  
7 The agency administrator will provide a copy of the evaluation to the IC, the  
8 state/regional FMO, and retain a copy for the final fire package.  
9  
10 The state/regional FMO will review all evaluations and will be responsible for  
11 providing a copy of evaluations documenting performance to the geographic  
12 area board managing the IMT.  
13

#### 14 **Post Wildfire Activities**

15 Each wildland fire management agency is responsible for taking prompt action  
16 to determine the need for and to prescribe and implement emergency treatments  
17 to minimize threats to life or property or to stabilize and prevent unacceptable  
18 degradation to natural and cultural resources resulting from the effects of a fire  
19 on the lands they manage.  
20

21 Damages resulting from wildland fires are addressed through four activities:

- 22 • **Wildfire Suppression Activity Damage Repair** - Planned actions taken  
23 to repair the damages to resources, lands, and facilities resulting from  
24 wildfire suppression actions and documented in the Incident Action Plan.  
25 These actions are usually implemented immediately after containment of  
26 the wildfire by the Incident Management Team before demobilization.
- 27 • **Emergency Stabilization** - Planned actions to stabilize and prevent  
28 unacceptable degradation to natural and cultural resources, to minimize  
29 threats to life or property resulting from the effects of a wildfire, or to  
30 repair/replace/construct physical improvements necessary to prevent  
31 degradation of land or resources. Emergency stabilization actions must be  
32 taken within one year following containment of a wildland fire and  
33 documented in a Burned Area Emergency Response Plan.
- 34 • **Rehabilitation** - Efforts taken within three years of containment of a  
35 wildland fire to repair or improve wildfire-damaged lands unlikely to  
36 recover naturally to management approved conditions, or to repair or  
37 replace minor facilities damaged by wildfire. These efforts are  
38 documented in a separate Burned Area Rehabilitation Plan.
- 39 • **Restoration** - Continuing the rehabilitation beyond the initial three years  
40 or the repair or replacement of major facilities damaged by the wildfire.  
41  
42  
43  
44  
45  
46

1

**BAER Components Table**

	<b>Suppression Rehabilitation</b>	<b>Emergency Stabilization</b>	<b>Rehabilitation</b>	<b>Restoration</b>
<b>Objective:</b>	Repair suppression damages	Protect life and property	Repair damages	Long Term Ecosystem Restoration
<b>Damage due to:</b>	Suppression activities	Post-fire events	Fire	Fire
<b>Urgency:</b>	Before incident closeout	1-12 months	1-3 years	3 + years
<b>Responsibility</b>	Incident commander	Agency Administrator	Agency Administrator	Agency Administrator
<b>Funding type:</b>	Suppression (fire)	Emergency Stabilization	Rehabilitation	Regular program

2

3

**Approval Authorities Table**

	BIA	BLM	FWS	NPS	FS
Local Approval Level	\$100,000 Agency Superintendent	\$0 Field/District Manager	\$0 Refuge Manager	\$0 Park Superintendent	\$0 District Ranger
					\$0 Forest Supervisor
Regional/State Approval Level	\$100,000/\$250,000 Regional Director	<\$100,000 State Director	<\$500,000 Regional Director with Regional Fire Management Coordinator concurrence	<\$500,000 Regional Director	\$500,000 Western Regional Foresters
					\$100,000 Eastern Regional Foresters
National Approval Level	>\$500,000 Director of Fire Management	>\$100,000 Director	>\$500,000 Chief, Branch of Fire Management	>\$500,000 National Fire Management Officer	>\$100,000 or \$500,000 Chief

4

**Burned Area Emergency Response (BAER) Teams**

5 BAER Teams are a standing or ad hoc group of technical specialists (e.g.,  
6 hydrologists, biologists, soil scientists, etc.) that develop and may implement  
7 portions of the Burned Area Emergency Response Plans. They will meet the  
8 requirements for unescorted personnel found in Chapter 07 under “Visitors to  
9 the Fireline” when working within the perimeter of an uncontrolled wildfire.  
10 The team’s skills and size should be commensurate with the size and complexity  
11 of the wildfire.  
12

- 1 • It is the agency administrator's (not the Incident Commander's)  
2 responsibility to designate an interdisciplinary BAER team. However,  
3 BAER teams must coordinate closely with IC and Incident Management  
4 teams to work safely and efficiently. Initial requests for funding for BAER  
5 should be submitted to the appropriate agency administrator for approval  
6 within 7 calendar days after the total containment of the fire. If additional  
7 time is needed, extensions may be negotiated with those having approval  
8 authority.
- 9 • *DOI - The Department of the Interior maintains one standing National*  
10 *BAER Team with pre-identified positions listed in the National Interagency*  
11 *Mobilization Guide and are comprised of personnel from the Bureau of*  
12 *Indian Affairs, Bureau of Land Management, National Park Service, Fish*  
13 *and Wildlife Service, and Forest Service. The DOI-BAER Team is*  
14 *dispatched by the National Interagency BAER Team Dispatch*  
15 *Prioritization Criteria Evaluation. The DOI-BAER Teams should be*  
16 *requested at least 10 days prior to expected date of wildfire containment.*
- 17 • *FS - The Forest Service utilizes BAER Teams through a pool of resources*  
18 *with the skills identified by the receiving unit. When needed, BAER*  
19 *personnel from other units can either be contacted directly or through*  
20 *dispatch. Placing a general fire resource order for BAER team members*  
21 *via dispatch is not appropriate for ad hoc Forest Service teams. See FSM*  
22 *2523 and FSH 2509.13 for agency specific policy and direction for BAER*  
23 *team.*

## 24

### 25 Incident Business Management

#### 26

#### 27 Cost Containment

28 The primary criteria for choosing suppression strategies are to minimize costs  
29 without compromising safety. Planned and actual suppression costs must be  
30 commensurate with the values to be protected. They must be included and  
31 displayed in the Wildland Fire Situation Analysis. Even though resource  
32 benefits may result in some areas of a fire, it is inappropriate to expend  
33 suppression dollars with the explicit objective of achieving resource benefit.  
34 Indirect containment strategies are appropriate only if they are the safest or least  
35 cost option. Selection of these strategies must be carefully scrutinized when fire  
36 danger trends are rising. Long duration wildfires need to be closely evaluated  
37 by cost containment teams to ensure that operations are not occurring beyond  
38 the point of diminishing returns.

39  
40 An Incident Business Advisor (IBA1) must be assigned to any fire with  
41 suppression costs of more than \$5 million. An IBA2 is advised for fires with  
42 suppression costs of \$1-5 million. If a certified IBA is not available, the  
43 approving official will appoint a financial advisor to monitor expenditures.

44  
45 Incident suppression cost objectives will be included as a performance measure  
46 in Incident Management Team evaluations.

**1 Cache Management**

2 The DOI-BLM manages two National Interagency Support Caches (NISC), and  
3 USDA-Forest Service manages nine national caches. Agencies often serve as  
4 interagency partners in local area support caches, and operate single agency  
5 initial attack caches. All caches will maintain established stocking levels,  
6 receive and process orders from participating agencies, and follow ordering and  
7 fire replenishment procedures as outlined by the national and geographic area  
8 cache management plans and mobilization guides.

- 9 • *FS - Refer to FSM 5160 for specific requirements.*

10

**11 National Interagency Support Caches**

12 The eleven national caches are part of the National Fire Equipment System  
13 (NFES). Each of these caches provides incident support in the form of  
14 equipment and supplies to units within their respective geographic areas. The  
15 NFES cache system may support other emergency, disaster, fire-related or land  
16 management activities, provided that such support is permitted by agency  
17 policies and does not adversely affect the primary mission. These national  
18 caches do not provide supplies and equipment to restock local caches for non-  
19 incident requests. Non-emergency (routine) orders should be directed to the  
20 source of supply, e.g., GSA or private vendors. The Great Basin Cache at NIFC  
21 provides publications management support to the National Wildfire  
22 Coordinating Group (NWCG). Reference the NWCG, *National Fire Equipment*  
23 *System Catalog (NFES 0362)* for more detailed information.

24

25 Forest Service National Symbols Program distribution is through the Northeast  
26 Area National Interagency Support Cache. This material is coordinated by the  
27 USDA Forest Service, under advisement of the National Association of State  
28 Foresters' (NASF) Cooperative Forest Fire Prevention Committee (CFFP), and  
29 the DOI Bureau of Land Management. Materials include Smokey Bear  
30 prevention items, and Junior Forest Ranger environmental educational materials.  
31 Northeast Area National Interagency Support Cache also distributes DOI Fire  
32 Education materials and provides resource kits for National Fire Prevention  
33 Teams. The website at [www.symbols.gov](http://www.symbols.gov) contains the catalog of these materials  
34 and offers information having to do with these programs.

35

**36 Local Area Interagency Support Caches**

37 These caches directly support more than one agency, and generally cover more  
38 than one administrative unit. They will maintain stocking levels to meet the  
39 identified needs of the multiple agencies for whom service is provided.

40

**41 Initial Response Caches**

42 Numerous caches of this level are maintained by each agency. These caches  
43 will establish and maintain stocking levels to meet the initial response needs of  
44 the local unit(s).

45

46

**1 Inventory Management**

2

**3 System Implementation**

4 Each fire cache, regardless of size, should initiate and maintain a cache  
5 inventory management system. Agency management systems provide a check  
6 out/return concept that incorporates a debit/crediting for all items leaving the  
7 cache. This system is strictly followed in the NISC's. Inventory management  
8 processes should be implemented for all local interagency support and initial  
9 action caches.

10

**11 Reporting Requirements**

12 By April 1st of each year, all local interagency support and initial action caches  
13 will submit inventories to their servicing NISC.

14

15 All items reported will conform to refurbishment standards set forth in *NFES*  
16 *2249, Fire Equipment Storage and Refurbishment Standards*. Those items not  
17 identified in *NFES 2249* will not be refurbished.

18

**19 Accountability**

20 Fire loss/use rate is defined as all property and supplies lost, damaged or  
21 consumed on an incident. It is reported as a percentage that is calculated in  
22 dollars of items issued compared to items returned. The reasonable anticipated  
23 fire loss/use rate for all items issued to an incident is 15 percent of trackable and  
24 durable items. Consumable items are not included in this total. All items  
25 stocked in agency fire caches will be categorized for return (loss tolerance/use  
26 rate) and accountability purposes.

27

**28 Trackable Items**

29 Include items that a cache may track due to dollar value, sensitive property  
30 classification, limited quantities available, or other criteria set by each NISC.  
31 Items that are considered trackable are usually engraved or tagged with a cache  
32 identification number. These items must be returned to the issuing cache at the  
33 end of the incident use, or documentation must be provided to the issuing cache  
34 as to why it was not returned. All trackable items are also considered durable.  
35 100 percent accountability is expected on trackable items.

36

**37 Durable Items**

38 Include cache items considered to have a useful life expectancy greater than one  
39 incident. High percentages of return for these items are expected. These items  
40 are not specifically cache identified/tagged/engraved. Acceptable loss tolerance/  
41 use rates for the following durable goods have been established:

- 42 • 10% for water handling accessories, helicopter accessories, tents, and camp  
43 items such as heaters, lights, lanterns, tables, and chairs.
- 44 • 20% for hose, tools, backpack pumps, sleeping bags, pads, and cots.
- 45 • 30% for personal protective equipment.

46



1 **Consumable Items**

2 Include items normally expected to be consumed during incident use.  
3 Consumable items returned in unused condition are credited to the incident.  
4 Examples of consumable items are: batteries, plastic canteens, cubitainers,  
5 forms, MREs, fusees, hot food containers, petroleum products, and medical  
6 supplies.

7  
8 **Incident to Incident Transfer of Supplies and Equipment**

9 Transfer of supplies and equipment between incidents is not encouraged, due to  
10 the increased possibility of accountability errors. In instances when it is  
11 determined to be economically feasible and operationally advantageous, the  
12 following must be accomplished by the Supply Unit Leader from the incident  
13 that is releasing the items.

14  
15 Documentation will be completed on the *Interagency Incident Waybill (NFES*  
16 *#1472)*, and must include the following:

- 17 • NFES Number
- 18 • Quantity
- 19 • Unit of Issue
- 20 • Description
- 21 • Property number, if item is trackable
- 22 • Receiving incident name, incident number and resource request number
- 23 • The Supply Unit Leader will send the waybill transfer information to the  
24 servicing NISC to maintain proper accountability recording.

25  
26 Upon request, the servicing NISC can provide the Supply Unit Leader with and  
27 Outstanding Items Report to facilitate accurate waybill documentation.

28  
29 **Fire Loss Tolerance Reporting for Type 1 and 2 Incidents**

30 In order to help managers keep incident-related equipment and supply loss to a  
31 minimum, incident management teams (IMT)'s are required to maintain  
32 accountability and tracking of these items. Guidelines and procedures to assist  
33 with this accountability are provided in Chapter 30 of the *IIBMH*. To further  
34 facilitate these procedures and provide oversight, a fire loss report has been  
35 developed that provides detailed information regarding used and trackable item  
36 use. This report has been accepted by NWCG for all wildland fire agencies and  
37 will be compiled for all Type 1 and Type 2 incidents. Investigations may be  
38 conducted in those cases where loss/use tolerances rates may have been  
39 exceeded.

40  
41 These reports are compiled by the NISC servicing the particular incident.  
42 Reports will then be forwarded to the responsible local office, with a copy to the  
43 state/regional FMO, within 60 days of the close of the incident to meet these  
44 time limits. The following steps must be followed to insure accurate reports:

- 1 • At the close of each incident, all property must be returned to the servicing  
2 NFES cache.
- 3 • If accountable property has been destroyed or lost, appropriate  
4 documentation must be provided to the cache for replacement and updating  
5 property records.
- 6 • All property purchased with emergency fire funds for an incident must be  
7 returned to the NFES cache system.
- 8 • All unused consumable and/or durable NFES items must be returned to the  
9 servicing NFES cache within 30 days of control of the incident.
- 10 • Agency administrators/fire management officers must review the fire loss  
11 report and recommend appropriate follow-up action if losses are excessive.  
12 Those actions and recommendations should be documented and filed in the  
13 final incident records.

14

#### 15 **Incident Supply and Equipment Return Procedures**

16 Supplies and equipment ordered with suppression funds will be returned to the  
17 ordering unit at the close of the incident and dispersed in one of three ways:

- 18 • Items meeting NFES standards will be returned to the local or geographic  
19 area cache for reuse within the fire supply system.
- 20 • Items not meeting the prescribed NFES standards will either be purchased  
21 with project funds by the local unit if the items are needed for program use.
- 22 • Items will be delivered to the unit's excess property program for disposal.

23

#### 24 **Cache Returns and Restock Procedures**

25 All returns for credit and restock of caches to specific incident charges should be  
26 made within 30 days after the close of the incident. If that timeframe cannot be  
27 met, it is required that returns and restock be made during the same calendar  
28 year as items were issued. All returns should be tagged with appropriate  
29 incident number, accompanied by an interagency waybill identifying the  
30 appropriate incident number, or accompanied by issue documents to ensure  
31 proper account credit is given. Any items returned after the calendar year of  
32 issue will be returned to multiple-fire charges, unless specific incident charge  
33 documentation (issues) can be provided with the return.

34

#### 35 **Incident Replacement of Government Property**

36 Refer to the *IIBM*H, *Chapter 30* for procedures governing property management  
37 relating to incident activities. The agency administrator is responsible for  
38 providing agency property management guidelines and/or procedures to incident  
39 personnel.

40

41 Damage or Loss for assigned property is addressed under *IIBM*H *Chapter 30*,  
42 35.4. Specialty or non-cache items originally provided by the home unit through  
43 the use of preparedness funds will be replaced by home unit funds if the loss is  
44 due to normal wear and tear. If the government property is damaged on the  
45 incident due to a specific event, eg., wind event damages tent, the incident may,

- 1 upon receipt of required documentation and proof of damage, authorize
- 2 replacement using the *Incident Replacement Requisition (OF315)*. Cache items
- 3 will be replaced at the incident if available. Cache items that are not available at
- 4 the incident may be authorized for restocking at the home unit via an authorized
- 5 *Incident Replacement Requisition*.

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## Chapter 12 Suppression Chemicals & Delivery Systems

### Policy for Use of Fire Chemicals

Use only products qualified and approved for intended use. Follow safe handling procedures and use personal protective equipment recommended on the product label and *Material Safety Data Sheet* (MSDS).

A current list of qualified products and approved uses can be found on the Wildland Fire Chemical Systems website:

- <http://www.fs.fed.us/rm/fire/wfcs/index.htm>
- Click on Wildland Fire Chemicals
- Click the appropriate Qualified Products List

Refer to local jurisdictional policy and guidance related to use of wildland fire chemicals for protection of historic structures.

### Retardant Policy

Using approved long-term retardants in wildland fire suppression efforts is standard in fire management and planning. The retardants are most often delivered by fixed or rotor-wing aircraft. Some products are formulated specifically for delivery from ground sources.

### Foam Policy

Standard operating procedures for fire management and suppression activities involving water as the suppression or protection agent delivered by engines and portable pumps, may include the use of Class A fire suppressant to improve the efficiency of water. The exception is near watercourses where accidental spillage or over spray of the chemical could be harmful to the aquatic ecosystem (see Environmental Guidelines page 12-03). Helicopters and Single Engine Airtankers (SEATs) can also deliver foam. Some agencies also allow application of foam from fixed-wing water scoopers.

### Water Enhancer Policy

These products may be used in structure protection within the wildland interface or on wildland fuels. These products are qualified for use in helicopter buckets and ground engines.

### Types of Fire Chemicals

#### Long-Term Retardant

Long-term retardants contain fertilizer salts that change the way fuels burn. They are effective even after the water has evaporated.

Principles of application and coverage levels are outlined in *Recommended Retardant Coverage Levels NFES 2048, PMS 440-2*. Retardant mixing,

Release Date: January 2008

1 blending, testing, and sampling requirements can be found in *Lot Acceptance,*  
2 *Quality Assurance and Field Quality Control for Fire Retardant Chemicals,*  
3 *NFES 1245, PMS 444-1.*

#### 4 5 **Fire Suppressant Foam**

6 Fire suppressant foams are combinations of wetting and foaming agents added  
7 to water to improve the effectiveness of the water. They are not effective once  
8 the water has evaporated.

9  
10 Technical guidelines for equipment operations and general principles of foam  
11 application are discussed in *Foam vs. Fire, Class A Foam for Wildland Fires,*  
12 *NWCG, PMS 446-1, NFES 2246, 2nd ed., October 1993, and Foam vs. Fire,*  
13 *Aerial Applications, NWCG, PMS 446-3, NFES 1845, October 1995.*

#### 14 15 **Water Enhancers for Wildland Fire Suppression**

16 Water enhancers, such as fire fighting gels, are products added to water to  
17 improve one or more of the physical properties of water. They are not effective  
18 once the water has evaporated. Water enhancers are typically applied from  
19 ground equipment and are especially suited to exposure protection for vertical  
20 surfaces. They are fully approved for use in helicopter bucket and engine  
21 application. See the Qualified Product List for updated uses.

#### 22 23 **General Safety Criteria**

24 All wildland fire chemicals must meet minimum requirements with regard to  
25 aquatic and mammalian toxicity, which includes acute oral toxicity, acute  
26 dermal toxicity, primary skin irritation, and primary eye irritation. *Current-*  
27 *Specifications for Wildland Fire Chemicals [Long-Term Retardants, Fire*  
28 *Suppression Foams, and Water Enhancers],* June 2007. See the Wildland Fire  
29 Chemical Systems website: [www.fs.fed.us/rm/fire](http://www.fs.fed.us/rm/fire)

30  
31 Personnel involved in handling, mixing, and applying fire chemicals or solutions  
32 shall be trained in proper procedures to protect their health and safety, as well as  
33 that of the environment.

34  
35 Personnel must follow the manufacturer's recommendations, including use of  
36 PPE (i.e. goggles, gloves, eyewash kits on site) as found on the product label  
37 and product Material Safety Data Sheet (MSDS). Approved fire chemicals can  
38 be irritating to the eyes. Anyone involved with or working in the vicinity of fire  
39 chemical concentrates should use protective splash goggles.

40  
41 Human health risk from accidental drench with retardant can be mitigated by  
42 removing any residue from exposed skin by washing with water.

43  
44 Containers of any fire chemical, including backpack pumps and engine tanks,  
45 should be labeled to alert personnel that they do not contain plain water, and that  
46 the contents must not be used for drinking purposes. Slickness is a hazard at

1 storage areas and unloading and mixing sites. Because all fire chemical  
2 concentrates and solutions contribute to slippery conditions, all spills must be  
3 cleaned up immediately, preferably with a dry absorbent pad or granules.

4  
5 Personnel applying foam should stand in untreated areas. A foam blanket can be  
6 dangerous to walk through because it conceals ground hazards. Foam readily  
7 penetrates and deteriorates leather boots, resulting in wet feet and potentially  
8 ruined leather.

9  
10 All safety precautions associated with ground crews near retardant drops also  
11 apply to aerial foam drops.

### 12 **Aerial Application Safety**

13 Persons downrange, but in the flight path of intended retardant drops, should  
14 move to a location that will decrease the possibility of being hit with a drop.

15  
16  
17 Persons near retardant drops should be alert for objects (tree limbs, rocks, etc.)  
18 that the drop could dislodge.

19  
20 During training or briefings, inform field personnel of environmental guidelines  
21 and requirements for fire chemicals application and to avoid contact with natural  
22 bodies of water.

23  
24 Notify incident or host authorities promptly of any fire chemicals applied within  
25 300 feet of, or spilled into, a body of water. The incident or host authorities  
26 must immediately contact appropriate regulatory agencies and specialists within  
27 the local jurisdiction. Spills must immediately be reported to Wildland Fire  
28 Chemicals Systems in Missoula, Montana at phone 406-329-3900 or to  
29 individuals listed in the website: [www.fs.fed.us/rm/fire](http://www.fs.fed.us/rm/fire)

30  
31 Avoid dipping from rivers or lakes with a helicopter bucket containing residual  
32 fire chemicals. Set up an adjacent reload site and manage the fire chemicals in  
33 portable tanks, or terminate the use of chemicals for that application.

34  
35 Quality control maintenance and safety requirements dictate that mixing or  
36 blending of retardants be accomplished by standard approved methods.  
37 Powdered or liquid retardants must be blended or mixed at the proper ratio prior  
38 to being loaded into the aircraft.

### 39 **Environmental Guidelines for Delivery of Fire Chemicals near Waterways**

#### 40 **Definition**

41  
42 *Waterway* - Any body of water including lakes, rivers, seeps, intermittent  
43 streams and ponds whether or not they contain aquatic life.

44  
45  
46

**1 Aerial Application Guidelines**

2 Avoid aerial or ground application of fire chemicals within 300 feet of  
3 waterways.

4  
5 These guidelines do not require the pilot-in-command to fly in such a way as to  
6 endanger his or her aircraft, other aircraft, structures, or compromise ground  
7 personnel safety.

**9 Exceptions**

10 When alternative line construction tactics are not available due to terrain  
11 constraints, congested area, life and property concerns, or lack of ground  
12 personnel, it is acceptable to anchor the fire chemical application to the  
13 waterway. When anchoring a fire chemical line to a waterway, use the most  
14 accurate method of delivery in order to minimize placement of retardant or foam  
15 in the waterway.

16  
17 Deviations from these guidelines are acceptable when life or property is  
18 threatened, and the use of fire chemicals can be reasonably expected to alleviate  
19 the threat. When potential damage to natural resources outweighs possible loss  
20 of aquatic life, the agency administrator may approve a deviation from these  
21 guidelines.

**23 Environmental Procedures for Application of Fire Chemicals****25 Threatened and Endangered (T&E) Species**

26 The following provisions are guidance for complying with the emergency  
27 Section 7 consultation procedures of the Endangered Species Act (ESA) with  
28 respect to aquatic species. These provisions do not alter or diminish an agency's  
29 responsibilities under (ESA).

30  
31 Where aquatic T&E species or their habitats are potentially affected by aerial  
32 application of retardant or foam, the following additional procedures apply:

- 33 • As soon as practical after the aerial application of fire chemicals near  
34 waterways, determine whether the aerial application has caused any  
35 adverse effect on T&E species or their habitat using the following criteria:
  - 36 ➤ Aerial application of fire chemicals outside 300 feet of a waterway is  
37 presumed to avoid adverse effects to aquatic species and no further  
38 consultation for aquatic species is necessary.
  - 39 ➤ Aerial application of fire chemicals within 300 feet of a waterway  
40 requires that the unit administrator determine whether there have been  
41 any adverse effects to T&E species within the waterway.
  - 42 ➤ If the action agency determines that there were adverse effects on  
43 T&E species or their habitats, then the agency must consult with Fish  
44 and Wildlife Service (FWS) or National Marine Fisheries Service  
45 (NMFS) as required by 50 CFR 402.05 (Emergencies). Procedures  
46 for emergency consultation are described in the *Interagency*

- 1            *Consultation Handbook*, Chapter 8 (March 1998). In the case of a  
2            long duration incident, emergency consultation should be initiated as  
3            soon as practical during the event. Otherwise, post-event consultation  
4            is appropriate. The initiation of the consultation is the responsibility  
5            of the unit administrator. These procedures shall be documented in a  
6            Biological Assessment (BA). All occurrences of adverse effects will  
7            be immediately reported to Wildland Fire Chemicals Systems in  
8            Missoula, Montana at phone 406-329-3900 or to individuals listed in  
9            website referenced below: [www.fs.fed.us/rm/fire](http://www.fs.fed.us/rm/fire)  
10          ➤ Each agency is responsible for ensuring that their appropriate agency  
11          specific guides and training manuals reflect these standards.

## 13 **Ground Application of Fire Suppressant Foams**

### 15 **Proportioners**

16 Proportioners are designed to provide an appropriate mix of foam concentrate  
17 and water during pumping operations, rather than relying on batch mixing to  
18 prepare foam solutions. Both manual and automatic proportioner systems are  
19 available. Specific agency standards may require the use of a specific type of  
20 system. Proportioners should be flushed after every operational period of use.

22 Agency standards for foam proportioners on engines are an automatically  
23 regulated proportioners, such as Robwen Flowmix 500, or FoamPro 1600.  
24 These devices are available as a foam kit for use with portable pumps.  
25 Automatic proportioners are required for compressed air foam systems to  
26 prevent slug flow.

- 27 • *FS - Manually regulated proportioners, such as around-the-pump*  
28 *proportioners, in-line and by-pass eductors, and suction-side regulators,*  
29 *are acceptable for remote portable pump use when the operator*  
30 *understands the device limitations.*

### 32 **Wet Water**

33 Using foam concentrates at a mix ratio of 0.1 percent will produce a wet water  
34 solution.

### 36 **Conventional Nozzles and Backpack Pumps**

37 Mix ratio is 0.1 - 0.3%. Hydraulic considerations are the same as water.

### 39 **Aspirating Nozzles**

40 Mix ratio is 0.2 - 1.0%. But generally 0.5%, depending on nozzle, “foaminess”  
41 of concentrate used, and type of application. Adjust the ratio to best meet needs  
42 and objectives. Foam production and delivery should occur as readily as water  
43 delivery.

### 44 **Compressed Air Foam Systems (CAFS) Operating Standards**

- 45 • Keep static air and water pressures equal.
- 46 • Start with a 0.3% mix ratio; adjust if necessary.

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- 1 • Typical operation with 1 cfm of air for every gpm of water; adjust if  
2 necessary.
- 3 • Employ a motionless mixer or 100 feet of hose to develop foam in the  
4 hose.
- 5 • Foam production and delivery should occur as readily as water delivery.
- 6 • Recommended minimum hose diameter is 1.5 inches when using foam on  
7 wildland/urban interface and vehicle fires.
- 8 • CAFS Safety - Mandatory training for personnel operating a CAFS  
9 includes: operating the nozzle, working around charged hoselays, and how  
10 to prevent slug flow.

## Chapter 13

## Firefighter Training and Qualifications

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**Introduction**

National Wildfire Coordinating Group (NWCG) sanctioned firefighters are trained and qualified according to the NWCG and other standards, as outlined below.

**Policy**

Firefighters must meet standards identified in the NWCG publication *PMS 310-1 National Interagency Incident Management System Wildland Fire Qualifications Guide*. The *310-1* may be found at <http://www.nwcg.gov/pms/docs/PMS310-1.pdf>

- *FS - See 5109.17 for additional requirements.*

Certain firefighters must meet standards identified in the *Interagency Fire Program Management Qualifications Standards and Guide*. The *Interagency Fire Program Management Qualification Standards and Guide* may be found at <http://www.ifpm.nifc.gov>

Agency standards for training and qualifications which may exceed the minimum standards established by National Wildfire Coordinating Group (NWCG) are coordinated through the National Fire and Aviation Executive Board. Such additional standards will be approved by the Fire Directors, and implemented through the Incident Qualifications and Certification System (IQCS).

- *BLM - Standards which may exceed the minimum standards established by NWCG are identified in the BLM Fire and Aviation Training Information Job Aid which can be found at : [http://www.blm.gov/nifc/st/en/prog/fire/training/fire\\_training/publications/job\\_aid.html](http://www.blm.gov/nifc/st/en/prog/fire/training/fire_training/publications/job_aid.html)*
- *FS - Standards which may exceed the minimum standards established by NWCG are identified in FSH 5109.17. AD hires sponsored by the Forest Service will meet FSH 5109.17 position qualification standards.*
- *NPS - L380 Fireline Leadership is recommended training for single resource bosses; L-381 Incident Leadership is recommended training for RXB1.*

**Incident Qualifications and Certification System (IQCS)**

The Incident Qualifications and Certification System (IQCS) is the fire qualifications and certification record keeping system. The Responder Master Record report provided by the IQCS meets the agency requirement for maintaining fire qualification records. The system is designed to provide managers at the local, state/regional, and national levels with detailed qualification, experience, and training information needed to certify employees in wildland fire positions. The IQCS is a tool to assist managers in certification

1 decisions, however, it does not replace the manager's responsibility to validate  
2 that Employees meet all requirements for position performance based on their  
3 agency standards.

4  
5 A hard copy file folder will be kept for each employee. The contents will  
6 include, but are not limited to: training records for all agency required courses,  
7 evaluations from assignments, position task book verification, yearly updated  
8 IQCS forms, and the Responder Master Record (RPTC028) from IQCS. All  
9 records will be stored and/or destroyed in accordance with agency policies.

- 10 • **BLM** - *These policies can be found at*  
11 *<http://www.blm.gov/nhp/records/blmgrs/toc.html>*

#### 12 13 **Certification of Non-Agency Personnel**

14 Non-agency firefighters will be certified by state or local fire departments, or  
15 private training providers are approved by a Memorandum of Understanding  
16 (MOU) through their local GACC. Agencies will not assist in the  
17 administration, or sponsor the Work Capacity Test (WCT), as the certifying  
18 agency.

#### 19 20 **Incident Qualification Card**

21 The agency administrator (or delegate) is responsible for annual certification of  
22 all agency and Administrative Determined (AD) personnel serving in wildland  
23 and prescribed fire positions. Agency certification is issued annually in the form  
24 of an Incident Qualification Card (formerly the Red Card) certifying the  
25 individual is qualified to perform in a specified position. The Incident  
26 Qualification Card must be reviewed for accuracy and signed by the agency  
27 administrator or delegated official. The agency administrator, fire manager, and  
28 individual are responsible for monitoring medical status, fitness, training,  
29 performance, and for taking appropriate action to ensure the employee meets all  
30 position performance requirements.

31  
32 Training, medical screening, and successful completion of the appropriate WCT  
33 must be properly accomplished. All Incident Qualification Cards issued to  
34 agency employees, with the exception of Emergency Firefighter (EFF-paid or  
35 temporary employees at the FFT2 level), will be printed using the IQCS.  
36 Incident Qualification Cards issued to EFF or temporary employees at the FFT2  
37 level may be printed at the local level without use of the IQCS.

38  
39 Each agency will designate employees at the national, regional/state, and local  
40 levels as Fire Qualifications Administrators, who ensure all incident experience,  
41 incident training, and position Task Books for employees within the agency are  
42 accurately recorded in the IQCS. All records must be updated annually or  
43 modified as changes occur.

- 44 • **NPS** - *Certification for Area Command and Type 1 Command and General*  
45 *Staff (C&GS) position task books will be done at the national office level;*  
46 *Type 2 C&GS and FUM1 position task books, and any position task books*

1        *issued to park fire management officers will be certified at the regional*  
2        *office level. All other position task books may be certified at the local unit*  
3        *level.*

#### 5 **Incident Qualifications Card Expiration Dates**

6 Red Card positions requiring Work Capacity Tests (WCT) are valid through the  
7 fitness expiration date listed on the card. Incident Qualification Card positions  
8 that do not require WCT for issuance are valid for 12 months from the date the  
9 card was signed by a certifying official.

#### 11 **Universal Training Requirements**

12 All personnel filling Incident Command System (ICS) positions on the fireline  
13 must have completed:

- 14 • S-130 Firefighter Training
- 15 • S-190 Introduction to Wildland Fire Behavior
- 16 • L-180 Human Factors on the Fireline
- 17 • I-100 Introduction to ICS
- 18 • *NPS - It is NPS policy that two or more assignments be accomplished after*  
19 *completing a Position Task Book, and receiving certification, before an*  
20 *individual begins movement to the next higher level. It is also NPS policy*  
21 *to require two or more qualified assignments be accomplished in a*  
22 *position before an individual may become a position performance*  
23 *evaluator. Exceptions to this should be rare and well founded. The only*  
24 *exceptions to this policy are unit leader positions leading to Planning*  
25 *Section Chief, Logistics Section Chief, or Finance Section Chief.*  
26 *Subordinate unit leader positions require a minimum of one assignment*  
27 *after the PTB completion and position certification.*
- 28 • **FS - Forest Service direction is found in FSH 5109.17.**

#### 30 **Annual Fireline Safety Refresher Training**

31 Annual Fireline Safety Refresher Training is required for all personnel  
32 participating in wildland fire who may be subject to assignments on the fireline.  
33 Any unescorted visitors must meet the requirements specified in Chapter 7 of  
34 this volume. Annual Fireline Safety Refresher Training must include the  
35 following core topics

- 36 • **Avoiding Entrapments** - Use training and reference materials to study the  
37 risk management process as identified in the *Incident Response Pocket*  
38 *Guide* and rules of engagement as appropriate to the participants, e.g.,  
39 LCES, Standard Firefighting Orders, Eighteen Watch Out Situations,  
40 Wildland Fire Situation Analysis (WFSA) direction, Fire Management  
41 Plan priorities, etc.
- 42 • **Current Issues** - Review and discuss identified “hot topics” as found on  
43 the current *Wildland Fire Safety Training Annual Refresher (WFSTAR)*  
44 website. Review forecasts and assessments for the upcoming fire season  
45 and discuss implications for firefighter safety.

- 1 • **Fire Shelter** - Review and discuss last resort survival. Conduct “hands-on”  
2 fire shelter inspections. Practice shelter deployments in applicable  
3 crew/module configurations. No “live fire” exercises for the purpose of fire  
4 shelter deployment training will be conducted.
- 5 • **Other Hazards and Safety Issues** - Choose additional hazard and safety  
6 subjects, which may include SAFENET, current safety alerts, site/unit  
7 specific safety issues and hazards.

8  
9 These core topics must be sufficiently covered to ensure that personnel are  
10 aware of safety concerns and procedures and can demonstrate proficiency in fire  
11 shelter deployment. The minimum refresher training hour requirements for each  
12 agency is identified below. Training time may be extended in order to  
13 effectively complete this curriculum or to meet local training requirements.

- 14 • **BLM** - 4 hours  
15 • **FWS** - 8 hours  
16 • **NPS** - 8 hours  
17 • **FS** - No minimum time requirement. Content dictated by National Fire  
18 Program Managers.

19  
20 Annual Fireline Safety Refresher Training will have a 12-month currency.  
21 Firefighters who receive initial fire training are not required to take Annual  
22 Fireline Safety Refresher Training in the same calendar year. A web site,  
23 <http://www.nifc.gov/wfstar/index.htm>, titled *Wildland Fire Safety Training*  
24 *Annual Refresher* (WFSTAR) is available to assist in this training.

- 25 • **BLM** - The “Do What’s Right” training is required annual training but is  
26 not a prerequisite for issuance of a Incident Qualification Card.

27  
28 Entrapment avoidance and deployment protocols are identified in the *Incident*  
29 *Response Pocket Guide (IRPG)* (PMS No. 461/NFES No.1077). The guide  
30 contains a specific “Risk Management Process” and “Last Resort Survival  
31 Checklist”.

32  
33 An *IRPG* will be issued to every fireline supervisor.

#### 34 **Qualification and Certification Process**

35 Each unit with fire management responsibilities will establish an Incident  
36 Qualification Card qualification and certification process. In areas cooperating  
37 with other federal, state, or local agencies, an interagency qualification and  
38 certification committee should include representatives from each unit. These  
39 qualification and certification committees provide management oversight and  
40 review of the wildland and prescribed fire positions under their jurisdiction. The  
41 committee also:

- 42  
43 • Ensures that qualifications generated by IQCS or other agency systems for  
44 employees are valid by reviewing the training and experience of each  
45 employee.

- 1 • Determines whether each employee possesses the personal characteristics  
2 necessary to perform the wildland and prescribed fire positions in a safe  
3 and efficient manner.
- 4 • Makes recommendations to the appropriate agency administrator or  
5 designee who is responsible for final certification signature.
- 6 • Develops interagency training needs and sponsors courses that can be  
7 offered locally.
- 8 • Ensures training nominees meet minimum requirements for attending  
9 courses.

10

#### 11 **Non-NWCG Agency Personnel Qualifications**

12 Personnel from non-NWCG agencies meeting NWCG 310-1, prerequisites, can  
13 participate in and receive certificates for successful completion of agency taught  
14 courses. Agency employees can complete the Task Blocks, Evaluation Record  
15 and Verification/ Certification sections of a cooperating organizations employee  
16 Position Task Book. Agency employees will not initiate or complete the  
17 Agency Certification sections of Position Task Book for non-agency employees.

18

19 Personnel from agencies that do not subscribe to the NWCG qualification  
20 standards may be used on agency managed fires. Agency fire managers must  
21 ensure these individuals are only assigned to duties commensurate with their  
22 competencies agency qualifications, and equipment capabilities.

23

#### 24 **Non-NWCG Agency Personnel Use On Prescribed Fire**

25 For prescribed fires evaluated to have low complexity, the agency and its local  
26 cooperators will jointly agree on qualification requirements. An agency can also  
27 establish its own qualifications for higher complexity prescribed fires where the  
28 resources of other agencies are not utilized. For prescribed fires which are of  
29 moderate complexity or higher and on which resources of more than one agency  
30 are utilized, the minimum qualifications established in *NWCG 310-1* are  
31 required. (*NWCG PMS 310-1*)

32

#### 33 **Physical Fitness**

34

##### 35 **Physical Fitness and Conditioning**

36 Agency administrators are responsible for ensuring the overall physical fitness  
37 of firefighters. Employees serving in wildland fire positions that require a  
38 fitness rating of arduous as a condition of employment are authorized one hour  
39 of duty time each work day for physical fitness conditioning. Employees  
40 serving in positions that require a fitness rating of moderate or light may be  
41 authorized up to three hours per week.

42

43 Fitness conditioning periods may be identified and structured to include aerobic  
44 and muscular exercises. Team sports are not authorized for fitness conditioning.  
45 Chapters 7, 8, and 9 of *Fitness and Work Capacity, 2nd ed.* (1997) and the  
46 FireFit Program (<http://www.nifc.gov/FireFit/index.htm>) provide excellent

- 1 guidance concerning training specifically for the pack test, aerobic fitness  
2 programs, and muscular fitness training.
- 3 • **FS** - Forest Service direction is found in FSH 5109.17
  - 4 • **FS** - NFFE Partnership bargaining unit employees may only be required  
5 to successfully complete the WCT once per year.
  - 6 • **FWS** - Specific information as outlined in a Director's memo dated  
7 September 11, 2007 is as follows: Employees serving in wildland fire  
8 positions that require a fitness rating of arduous as a condition of  
9 employment are authorized one hour of duty time each work day for  
10 physical fitness conditioning. Employees not having a fitness rating of  
11 arduous as a condition of employment, but who are required by a Critical  
12 Performance element or other written agreement to maintain an arduous  
13 level, will be authorized three hours per week of duty time for physical  
14 fitness condition. All other wildland firefighting personnel holding  
15 qualifications requiring ratings of moderate or arduous may be authorized,  
16 by their supervisor, up to three hours per week of duty time for fitness  
17 conditioning. Prior to any duty time being allowed for physical fitness  
18 conditioning, employees and supervisors must agree, in writing, what  
19 physical conditioning activities the employee will engage in, and when and  
20 where they will occur. Activities outside of the agreement will not be  
21 authorized or allowed. A combination of activities designed to increase  
22 both physical strength and aerobic fitness, while minimizing the possibility  
23 of physical injury, should be utilized.

#### 25 **Medical Examinations**

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

29  
30 Established medical qualification programs, as stated in 5 CFR 339, provide  
31 consistent medical standards in order to safeguard the health of employees  
32 whose work may subject them or others to significant health and safety risks due  
33 to occupational or environmental exposure or demand.

34  
35 Information on any medical records is considered confidential and must be kept  
36 in the employee's medical file.

- 37 • **FS** - MSP records will be maintained in individual Employee Development  
38 File

#### 40 **Federal Interagency Wildland Firefighter Medical Qualification Standards 41 Program (MSP)**

42 The Federal Interagency Wildland Firefighter Medical Qualification Standards  
43 has been fully implemented by the DOI agencies and continues to be  
44 implemented throughout the FS. Those units who have not yet implemented the  
45 new standards must continue to comply with the current agency standards as  
46 stated under Agency Specific Medical Examinations section below until

1 implementation of the new standards is accomplished. Additional information  
2 regarding the MSP can be obtained at [www.nifc.gov/medical\\_standards](http://www.nifc.gov/medical_standards).

3  
4 All permanent, career-seasonal, temporary, Student Career Experience Program  
5 (SCEP) employees, and AD/EFF who participate in wildland fire activities  
6 requiring a fitness level of arduous must participate in the MSP at the  
7 appropriate level (see Medical Examination Requirements Appendix N) and  
8 must be medically cleared prior to attempting the WCT.

9  
10 Under the MSP the *Health Screen Questionnaire* (HSQ) will only be required  
11 for arduous duty AD/EFF hires less than 45 years of age. If the AD/EFF  
12 answers “yes” to a HSQ question and is determined to be “agency mission  
13 critical” (e.g. single resource boss) an annual exam may be requested through  
14 the medical standards program. The HSQ is not required prior to taking the  
15 WCT for all other employment categories (e.g. permanent, seasonal/temporary,  
16 term).

17  
18 Employees or applicants including AD/EFF, who fail to meet the Federal  
19 Interagency Wildland Firefighter Medical Qualification Standards as a  
20 permanent, seasonal/temporary, or term employee may not perform as an  
21 AD/EFF for arduous duty positions.

### 22 23 **Agency Specific Medical Examinations**

24 This section applies only to those units who have not yet implemented the MSP  
25 for arduous duty and for all employees and AD/EFF who participate in wildland  
26 fire activities requiring a fitness level of moderate or light.

27  
28 The *Health Screen Questionnaire* (HSQ) will be utilized as a means to identify  
29 individuals who may be at risk in taking the Work Capacity Test (WCT) and  
30 recommend an exercise program and/or medical examination prior to taking the  
31 WCT.

32  
33 If any “Yes” answer is indicated on the HSQ, a medical examination is required  
34 prior to the employee taking the WCT. If there is a known pre-existing medical  
35 condition that is already being monitored under medical care (e.g., high blood  
36 pressure), a medical clearance statement will be provided by the physician in  
37 lieu of a medical examination prior to taking WCT.

38  
39 Medical examinations will be performed utilizing the U.S. Civil Service  
40 *Commission Certificate of Medical Examination Form*, SF-78. Stress EKGs are  
41 not required as part of the medical examination and will only be approved if  
42 recommended and administered by the medical examining physician. Cost for  
43 exams will be borne by the home unit. If medical findings during exam require  
44 further evaluation, then the cost of any further evaluation or treatment is borne  
45 by the employee/applicant.

46



- 1 The examining physician will submit the completed SF-78 (and applicable  
2 supplements) to the employee's servicing human resources office, where it will  
3 be reviewed and retained in the employee's medical file.
- 4 • **NPS** - *"Wildland Firefighter" Defined: Those employees who perform*  
5 *duties of a hazardous and/or strenuous nature are targeted. Therefore,*  
6 *within this section, "wildland firefighter" hereinafter refers to an*  
7 *employee whose wildland fire position(s) qualifications require an*  
8 *"Arduous" fitness level, as defined in the current PMS 310-1 "Wildland*  
9 *and Prescribed Fire Qualifications System Guide"*
  - 10 • **NPS** - *For health and fitness purposes, those who are fire-qualified at less*  
11 *than the Arduous fitness level are not required to meet the mandatory*  
12 *fitness program requirements of DO-57 for wildland fire management.*  
13 *However, they are strongly encouraged to participate in the voluntary*  
14 *fitness program, and must still meet physical fitness/work capacity*  
15 *requirements as outlined in 310-1 "Wildland and Prescribed Fire*  
16 *Qualification System Guide" for positions with Moderate and Light fitness*  
17 *requirements.*
    - 18 ➤ *The law enforcement medical exam for NPS rangers, who are*  
19 *collateral duty wildland firefighters, will suffice for MSP clearance*

### 21 **Health Screen Questionnaire (HSQ)**

22 Title 5 CFR Part 339 - Medical Qualification Determinations, which provides a  
23 determination of an individual's fitness-for-duty, authorizes solicitation of this  
24 information.

25  
26 The HSQ can be found in Appendix L.

27  
28 The information on the HSQ is considered confidential and once reviewed by  
29 the test administrator to determine if the WCT can be administered, it must be  
30 kept in the employee's medical file (EMF). This file may only be viewed by  
31 Human Resource Management (HRM) or Safety personnel.

- 32 • **FS** - *See Work Capacity Test Implementation Guide, see website:*  
33 *<http://www.fs.fed.us/fire/>*

### 34 35 **Work Capacity Test (WCT) Administration**

36 The Work Capacity Test (WCT) is the official method of assessing wildland  
37 firefighter fitness levels. See *"Work Capacity Tests for Wildland Firefighters,*  
38 *Test Administrator's Guide"* PMS 307, NFES 1109.

39  
40 WCT Administrators must ensure that WCT participants have been medically  
41 cleared, either through *Wildland Firefighter Medical Qualification Standards* or  
42 agency specific medical examination.

43  
44 WCTs are administered annually to all employees, including AD/EFF who will  
45 be serving in wildland fire positions that require a fitness level. The currency for  
46 the WCT is 12 months.

1 The WCT Record (see Appendix M) captures information that is covered under  
2 the Privacy Act and should be maintained in accordance with agency Freedom  
3 of Information Act (FOIA) guidelines.

4  
5 Administration of the WCT of non-federal firefighters is prohibited for liability  
6 reasons. Potential emergency firefighters who would be hired under Emergency  
7 Hire authority by the agency must be in AD pay status or sign an agency  
8 specific volunteer services agreement the WCT.

9  
10 A Job Hazard Analysis (JHA) shall be developed and approved for each field  
11 unit prior to administrating the WCT. See the sample JHA found in Appendix  
12 U. Administer the test using the JHA as a briefing guide.

13  
14 Document using the WCT Record (see Appendix M). This document must be  
15 retained until the next testing. Units may also be requested to provide data from  
16 these records to assist in the evaluation of the WCT process.

17  
18 Personnel taking the WCT will only complete the level of testing (Pack, Field,  
19 Walk) required by the highest fitness level identified for a position on their  
20 Incident Qualification Card. To further clarify, employees shall not take the  
21 WCT unless they have a Incident Qualification Card qualification that requires  
22 it, and only at the fitness level required by that position as identified in the  
23 NWCG 310-1 or agency specific guidance or policy.

24  
25 Test results must also be entered in the IQCS annually to update the fitness level  
26 and date that will appear on the Incident Qualification Card. Physical fitness  
27 dates entered in IQCS will reflect the date the employee passed the fitness test.

28 • *NPS - For those parks that experience severe winter conditions and must  
29 test personnel during those conditions, work capacity testing may be  
30 conducted using industrial grade treadmills. This least-preferred option  
31 should only be considered when all other indoor facilities are unavailable  
32 (gyms, indoor tracks, malls, etc.), and requires Regional Fire Management  
33 Officer approval. For safety reasons, these treadmills must have suitable  
34 handrails and kill-switches, preferably switches physically attached to the  
35 user via a cord. The Job Hazard Analysis must address all possible  
36 balance/fall mitigations. Specific questions are answered in the "Work  
37 Capacity Administrators Guide" (PMS 307,NFES 1109).*

### 38 39 **WCT Retesting**

40 Those who do not pass the WCT will be provided another opportunity to retest.  
41 Employees will have to wait at least 48 hours before retaking the WCT. If an  
42 employee sustains an injury (verified by a licensed medical provider) during a  
43 test, the test will not count as an attempt. Once an injured employee has been  
44 released for full duty, the employee will be given time to prepare for the test (not  
45 to exceed 4 weeks). The numbers of retesting opportunities that will be allowed  
46 include:

**Release Date: January 2008**

- 1 • Three opportunities for 1 permanent employees required to pass a test for
- 2 duties in the fire program.
- 3 • One opportunity for temporary employees required to pass a test (a second
- 4 chance maybe provided at the discretion of fire management).
- 5 • *FS - The Forest Service also uses the WCT as the official method of*
- 6 *assessing wildland firefighter fitness levels. The specific direction,*
- 7 *Implementation Guide, Health Screen Questionnaire, and required*
- 8 *processes can be found at the following web site: <http://www.fs.fed.us/fire/>*

9  
10 **WCT Categories**

11 The *NWCG Wildland Fire Qualification System Guide, 310-1* identifies fitness  
12 levels for specific positions. There are three fitness levels - Arduous, Moderate,  
13 and Light - which require an individual to demonstrate their ability to perform  
14 the fitness requirements of the position. Positions in the “no fitness level  
15 required” category are normally performed in a controlled environment, such as  
16 an incident base.

- 17 • *BLM/FWS - Law Enforcement physical fitness standard is accepted as*
- 18 *equivalent to a “light” WCT work category.*

19  
20 **Work Capacity Test Categories**

21 <u>WCT Category</u>	22 <u>Distance</u>	23 <u>Weight</u>	24 <u>Time</u>
25 Arduous Pack Test	3 miles	45 lb.	45 min.
26 Moderate Field Test	2 miles	25 lb.	30 min.
27 Light Walk Test	1 mile	None	16 min.

- 28 • **Arduous** - Duties involve field work requiring physical performance with
- 29 above average endurance and superior conditioning. These duties may
- 30 include an occasional demand for extraordinarily strenuous activities in
- 31 emergencies under adverse environmental conditions and over extended
- 32 periods of time. Requirements include running, walking, climbing,
- 33 jumping, twisting, bending, and lifting more than 50 pounds; the pace of
- 34 the work typically is set by the emergency conditions.
- 35 • **Moderate** - Duties involve field work requiring complete control of all
- 36 physical faculties and may include considerable walking over irregular
- 37 ground, standing for long periods of time, lifting 25 to 50 pounds,
- 38 climbing, bending, stooping, twisting, and reaching. Occasional demands
- 39 may be required for moderately strenuous activities in emergencies over
- 40 long periods of time. Individuals usually set their own work pace.
- 41 • **Light** - Duties mainly involve office type work with occasional field
- 42 activity characterized by light physical exertion requiring basic good
- 43 health. Activities may include climbing stairs, standing, operating a
- 44 vehicle, and long hours of work, as well as some bending, stooping, or
- 45 light lifting. Individuals can usually govern the extent and pace of their
- physical activity.

1 **Minimum Age Requirements for Hazardous Duty Assignments on Federal**  
2 **Incidents**

3 Persons under 18 years old will not perform hazardous duties during wildland  
4 fire management operations on federal jurisdictions.

5  
6 **Engine Modules**

7 Staffing levels and specific requirements for engine personnel may be found in  
8 Chapter 14, Fire Fighting Equipment.

9  
10 **Helicopter Modules**

11 Staffing levels and specific requirements for helicopter personnel may be found  
12 in Chapter 16, Aviation.

13  
14 **Smokejumpers (SMJ)**

15 Smokejumpers provide professional and effective fire suppression, fuels  
16 reduction, and fire management services to help land managers meet objectives.

17  
18 **SMJ Policy**

19 Smokejumper operations are guided by direction in the *Interagency*  
20 *Smokejumper Operations Guide (ISMOG)*.

21  
22 Each base will comply with smokejumper operations standards. The arduous  
23 duties, specialized assignments, and operations in a variety of geographic areas  
24 require smokejumpers to have uniform training, equipment, communications,  
25 organization, and operating procedures.

26  
27 **SMJ Smokejumper Organization**

28 The operational unit for smokejumpers is “one load.”  
29 A load is typically 8-20 smokejumpers and varies as per aircraft type.

30  
31 **SMJ Coordination & Dispatch**

32 Smokejumpers are a national resource and are ordered according to geographic  
33 area or national mobilization guides.

34  
35 **SMJ Communications**

36 All smokejumpers carry programmable radios and are proficient in their use and  
37 programming procedures.

38  
39 **SMJ Transportation**

40 Smokejumper retrieval is accomplished by coordinating with the requesting  
41 dispatch center. More detailed information can be found in the guides  
42 mentioned above.

43  
44 **SMJ Safety**

45 All aviation and parachute operations will be accomplished in accordance with  
46 standard operating procedures and regulations.

1 **SMJ Training**

2 To ensure proficiency and safety, smokejumpers complete annual training that  
3 covers aspects of aviation, parachuting, fire suppression tactics, administrative  
4 procedures, and safety, related to the smokejumper mission and fire operations.

5 The training program for first-year smokejumpers is four weeks long.

6 Candidates are evaluated to determine:

- 7 • Level of physical fitness
- 8 • Ability to learn and perform smokejumper skills
- 9 • Ability to work as a team member
- 10 • Attitude
- 11 • Ability to think clearly and remain productive in a stressful environment

12  
13 **SMJ Qualifications**

Smokeyumper Position	Target ICS Qualification
Department Managers	T2 & T1 Command & General Staff, FUMA
Spotter	ICT3, DIVS ATGS, RXB2, SOFR
Lead Smokejumper	STLD, TFLD, FOBS
Smokejumper	ICT4, CRWB, FIRB
Rookie Smokejumper	ICT5, FFT1, FEMO

14

15 **SMJ Physical Fitness Standards**

16 The national minimum standards for smokejumpers are:

- 17 • 1.5 mile run in 11:00 minutes or less
- 18 • 45 sit-ups
- 19 • 25 pushups
- 20 • 7 pull-ups
- 21 • 110 lb. packout over 3 miles/level terrain/90 minutes
- 22 • Successful completion of the WCT at the arduous level.

23

24 **Interagency Hotshot Crews (IHC)**

25 Interagency Hotshot Crews provide an organized, mobile, and skilled hand crew  
26 for all phases of wildfire suppression.

27

28 **IHC Policy**

29 IHC standards provide consistent planning, funding, organization, and  
30 management of the agency IHCs. The sponsoring unit will ensure compliance  
31 with the established standards. The arduous duties, specialized assignments, and  
32 operations in a variety of geographic areas required of IHCs dictate that training,  
33 equipment, communications, transportation, organization, and operating  
34 procedures are consistent for all agency IHCs.

35

36 As per agency policy all IHCs will be managed under the *National Interagency*  
37 *Hotshot Crew Operations Guide* (NIHCOG).

- 1 • *BLM/NPS - BLM Preparedness Review Checklist #12 (Hotshot Crew)*  
2 *supersedes the checklist found in the NIHCOG.*  
3

#### 4 **IHC Certification**

5 Annual certification of IHCs is required prior to being made available for  
6 assignment as an IHC. For certification the crew superintendent will:

- 7 • Submit a completed NIHCOG Appendix C to the local unit Fire  
8 Management Officer for approval.  
9 • Upon approval, the local unit Fire Management Officer will submit the  
10 signed Appendix C to the State/Regional Fire Management Officer.  
11 • Upon approval, the State/Regional Fire Management Officer will notify the  
12 Geographical Coordinating Committee and NICC of the crew's status.  
13

#### 14 **IHC Organization**

15 Individual crew structure will be based on local needs using the following  
16 standard positions: Superintendent, Assistant Superintendent, Squad Leader,  
17 Skilled Firefighter, and Crewmember.  
18

#### 19 **IHC Availability Periods**

20 All IHCs must be certified annually prior to initial assignment. Submit a  
21 completed Appendix C from the *NIHCOG* prior to the crew being made  
22 available for any incident assignment as an IHC. The Crew Superintendent is  
23 responsible to inform local supervisor and the local GACC of any required  
24 changes in the crew's typing. IHCs will be available to meet or exceed  
25 availability periods specified in *NIHCOG* 2001 (Revised 2004).

- 26 • *BLM - IHC crewmembers will receive 40 hours of basic or refresher*  
27 *training before their first fire assignment in a fire season. Refresher*  
28 *training will include, but is not limited to, crew safety, risk management,*  
29 *firefighter safety, fire behavior, communications, and organization. The*  
30 *final responsibility for crew availability will rest with the Superintendent's*  
31 *certification to local unit management that all training is complete. The*  
32 *minimum tour of availability excluding required training periods for BLM*  
33 *IHCs will be 130 calendar days for crews in the lower 48 states and 90*  
34 *calendar days for crews in Alaska.*  
35 • *NPS/FS - IHCs follow the NIHCOG, including minimum tours. In some*  
36 *regions, tours may exceed the minimum based on preparedness and fuels*  
37 *funding levels, or non-fire funding for these resources.*  
38

#### 39 **IHC Communications**

40 IHCs will provide a minimum of five programmable multi-channel radios per  
41 crew as stated in the *NIHCOG*.  
42

#### 43 **IHC Transportation**

44 Crews will be provided adequate transportation. The number of vehicles used to  
45 transport a crew should not exceed five. All vehicles must adhere to the  
46 certified maximum Gross Vehicle Weight (GVW) limitations.

**Release Date: January 2008**

1 **Other Hand Crews**

2

3 **Policy**

4 All crews must meet minimum crew standards as defined in Appendix T as well  
5 as any additional agency, state, or contractual requirements. Typing will be  
6 identified at the local level with notification made to the local GACC.

7

8 **Crew Types**

9 • **Agency Crews**

10 Agency hand crews consist of qualified agency personnel and are  
11 organized on a local basis. These crews are designated as Type 2 or Type  
12 2 IA.

13 • **State Crews**

14 State crews are organized under the auspices of individual states. These  
15 crews may be designated as Type 1, Type 2, or Type 2 IA. These crews  
16 include organized state inmate crews.

17 • **Emergency Firefighter Crews (EFF)**

18 These crews are usually Type 2 crews consisting of agency sponsored on  
19 call personnel who meet the requirements for Type 2 IA or Type 2 as  
20 defined in Appendix T.

21 • **Contract Crews**

22 These organized crews consist of personnel trained, equipped, and certified  
23 by a private contractor and must meet the contractual specifications as  
24 stated in their state or national crew contracts.

25 • **FS** - *The FS endorses the National Minimum Standards for crews and*  
26 *applies FSH 5109.17 for training requirements.*

27

28 **Fire Use Modules**

29 • **NPS** - *The National Park Service has Fire Use Modules. The primary*  
30 *mission and priority of the modules is to provide skilled and mobile*  
31 *personnel to assist with Wildland Fire Use (WFU) in the areas of*  
32 *planning, fire behavior monitoring, ignition, and holding. Secondary*  
33 *priorities follow in the order below:*

34 ➤ *Support burn unit preparation.*

35 ➤ *Assist with fire effect plot work.*

36 ➤ *Support mechanical hazardous fuel reduction projects.*

37 • **NPS** - *As an interagency resource, the modules are available nationally*  
38 *throughout the fire season. Each module is comprised of a module leader,*  
39 *assistant leader and three to eight module members. See the Fire Use*  
40 *Module Operation Guide for specifics. Modules are mobilized and*  
41 *demobilized through established ordering channels through the GACCs.*

42

43 **Agency Certified Positions**

44 As a supplement to the qualifications system, certain agencies have identified  
45 the additional positions of Prescribed Fire Burn Boss 3 (RXB3) - see Chapter

1 17; Engine Operator (ENOP) - see Chapter 2; and Chainsaw Operators and  
2 Fallers listed below.

3

#### 4 **Chainsaw Operators and Fallers**

5 The agencies have established the following minimum qualification and  
6 certification process for Chainsaw Operators (Incident Qualification Card  
7 certified as Faller A):

- 8 • Successful completion of S-212, including the field exercise, or those  
9 portions of S-212 appropriate for Faller A duties.
- 10 • Agency administrator (or delegate) certification of qualifications after  
11 verification that training is successfully completed.
- 12 • Documentation must be maintained for individuals.
- 13 • The individual tasks required for completion of the “A” Task Book and the  
14 final evaluation for the “A” level saw operators must be verified or signed  
15 by a qualified “B or C” level saw operator.
- 16 • The individual tasks required for completion of the “B” Task Book must be  
17 evaluated by a qualified “B” or “C” level operator. The Final Evaluator  
18 Verification for “B” level operators must be signed by a “C” level saw  
19 operator.
- 20 • The individual tasks required for completion of the “C” Task Book must be  
21 evaluated by a qualified “C” level operator. The Final Evaluator  
22 Verification for “C” level operators must be signed by a state approved  
23 “C” level certifier.
- 24 • Each of the states/regions will certify and maintain a list of their current  
25 “C” class saw operators who they approve to be “C” class certifiers.
- 26 • The certification of “C” class certifiers will remain the responsibility of the  
27 agency administrator or delegate.
- 28 • All fire related (Incident Qualification Carded) saw operation  
29 qualifications are maintained through the IQCS system and will have a  
30 currency of five years.
- 31 • **BLM/FWS/NPS** - Position task book found at:  
32 *<http://www.fire.blm.gov/training/blmtrng/PDFs/Faller/PTBFallerABC.pdf>*
- 33 • **FS** - FS direction can be found in FSH 5109.17 and FSH 6709.11.
- 34 • **FWS/NPS** - Reference the BLM/FWS/NPS position task book. Found at:  
35 *<http://www.fire.blm.gov/training/blmtrng/PDFs/Faller/PTBFallerABC.pdf>*
- 36 • **FWS/NPS** - Exceptions to the above policy are:
  - 37 ➤ *The individual tasks required for completion of the “B” Task Book*  
38 *and the final evaluation for the Class “B” saw operations must be*  
39 *verified by a qualified Class “B” or “C” saw operator.*
  - 40 ➤ *The individual tasks required for completion of the “C” Task Book*  
41 *and the final evaluation for the Class “C” saw operators must be*  
42 *verified by a region approved Class “C” Final Evaluator.*
  - 43 ➤ *Each of the regions will certify and maintain a list of current,*  
44 *qualified Class “B” and “C” saw operators, approved as Class “B”*  
45 *or “C” Final Evaluators.*



- 1       ➤ *The certification of "C" class evaluators will remain the*  
2       *responsibility of the regional agency administrator or delegate.*

## Chapter 14 Firefighting Equipment

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### Introduction

The agency wildland fire program equipment resources include engines, dozers, water tenders, and other motorized equipment for fire operations.

### Policy

Each state/region will comply with established standards for training, equipment, communications, organization, and operating procedures required to effectively perform arduous duties in multi-agency environments and various geographic areas.

Approved foam concentrate may be used to improve the efficiency of water, except near waterways where accidental spillage or over spray of the chemical could be harmful to the aquatic ecosystem, or other identified resource concerns.

### Driving Standard

Refer to driving standards in Chapter 07.

### Firefighting Engines

#### Operational Procedures

All engines will be equipped, operated, and maintained within guidelines established by the Department of Transportation (DOT), regional/state/local operating plans, and procedures outlined in *BLM Manual H-9216, Fire Equipment and Supply Management*, or agency equivalent. All personnel assigned to agency fire engines will meet all gear weight, cube, and manifest requirements specified in the *National Mobilization Guide*.

#### Fire Engine Staffing

An ENGB will be with every engine, and the minimum staffing is two individuals for Type 6 and Type 7 engines.

For Type 3, 4, and 5 engines, minimum staffing is three individuals, including an Engine Boss.

- **FWS Fire Engine Staffing**

- *Minimum staffing for Type 3 engine is one ENGB and two FFT2s.*
- *Minimum staffing for Type 4, 5, 6 and 7 engines is one ENGB and one FFT2 (off Refuge).*
- *Target staffing for Type 4, 5 and 6 engines is one ENGB, one ENOP and one FFT2.*
- *Minimum staffing for Type 4, 5, 6 and 7 engines (on Refuge lands) is one ENOP and one FFT2.*

- **NPS - Staffing levels** - *Engines of any type when responding to off-park assignments, will be staffed by an ENGB and the appropriate number of*

- 1        *Module Members. Type 6 or 7 engines may be supervised by an ENOP on*  
2        *in-park fires only. For an engine supervised by an ENOP when used for*  
3        *initial attack (on in-park fires only), the ENOP must also be minimally*  
4        *ICT5 qualified. Type 3, 4, or 5 engines, regardless of assignment location,*  
5        *will be minimally supervised by an ENGB.*
- 6        • *NPS - Type 6 and 7 engines will have a minimum crew of two – an ENGB*  
7        *or ENOP (in-park only), and an Engine Module Member.*
  - 8        • *NPS - Type 3, 4, or 5 engines will have a minimum crew size of three, an*  
9        *ENGB, an ENOP and one Engine Module Member; or an ENGB and two*  
10       *Engine Module Members.*
  - 11       • ***NPS - Working Capital Fund (WCF)/Non-WCF, Additional***  
12       ***requirements***
  - 13       • *NPS - WCF engines are identified below.*
  - 14       • *NPS - All engines will be typed in accordance with the specifications*  
15       *identified in the 410-1. Minimum engine staffing requirements:*
    - 16       ➤ *Approved WCF Type 6 or 7 engines during the defined fire season is*  
17       *3 personnel effective 7 days per week.*
    - 18       ➤ *Approved Working Capital Fund (WCF) Type 3, 4, or 5 engines*  
19       *during the defined fire season is 5 personnel effective 7 days per*  
20       *week.*
    - 21       ➤ *Non-WCF engines (or WCF engines outside defined fire season),*  
22       *Type 6 or 7 engines is a minimum of 2.*
    - 23       ➤ *Non-WCF engines (or WCF engines outside defined fire season),*  
24       *Type 3, 4, or 5 engines is a minimum of 3.*
  - 25       • ***FS - A Single Resource Boss may supervise a type 6 or 7 engine.***

### 27 **Engine Typing**

28 Engine Typing and respective standards are identified in the *NWCG Fireline*  
29 *Handbook, 410-1.*

### 31 **Engine Water Reserve**

32 Engine Operators will maintain at least 10 percent of the pumpable capacity of  
33 the water tank for emergency engine protection and drafting.

### 35 **Chocks**

36 At least one chock will be carried on each engine and will be properly utilized  
37 whenever the engine is parked or left unattended. This includes engine  
38 operation in a stationary mode without a driver “in place.”

### 40 **Fire Extinguisher**

41 All engines will have at least one 5 lb. ABC-rated (minimum) fire extinguisher,  
42 either in full view or in a clearly marked compartment.

**1 Nonskid Surfaces**

2 All surfaces will comply with National Fire Protection Association (NFPA)  
3 1906 Standards for Wildland Fire Apparatus (6.4.3.) guidelines.

**5 First Aid Kit**

6 Each engine shall carry, in a clearly marked compartment, a fully equipped 10-  
7 person first aid kit.

**9 Gross Vehicle Weight (GVW)**

10 Each engine will have an annually certified weight slip in the vehicle at all  
11 times. Operators of engines and water tenders must ensure that the maximum  
12 certified GVW is never exceeded, including gear, personnel and fuel. If the  
13 proper number of personnel are not available during the weighing. The NFPA  
14 1906 standard of 250 pounds for each person and their personal gear may be  
15 used to calculate the loaded weight.

- 16 • *FS - Supervisors must ensure that the maximum allowable weight of the*  
17 *vehicle is not exceeded. For commercially designed highway vehicles used*  
18 *in off-highway applications, the Cargo Load (CL) must not exceed 90% of*  
19 *the difference between the Gross Vehicle Weight Rating (GVWR) and the*  
20 *vehicle's Curb Weight (CW). In numerical form: Max CL = .90 (GVWR -*  
21 *CW) - DP The curb weight (CW) is defined as the actual weight of a*  
22 *vehicle including all permanently attached items and a full tank of fuel. It*  
23 *does not include the cargo (water, tools, supplies, gear, etc), the driver, or*  
24 *passengers. DP is the driver and passengers riding in the vehicle. GVWR*  
25 *is the maximum weight at which the vehicle is certified to operate. The*  
26 *maximum allowable vehicle operating weight is therefore the curb weight*  
27 *plus the allowable cargo load. The Gross Axle Weight Ratings (GAWR)*  
28 *shall not be exceeded under any circumstances.*

**30 Speed Limits**

31 Posted speed limits will not be exceeded.

**33 Lighting**

34 All new orders for fire engine apparatus will include an overhead lighting  
35 package in accordance with agency standards. Lighting packages will meet  
36 NFPA 1906 standards. Engines currently in service may be equipped with  
37 overhead lighting packages. Lighting packages containing blue lights are not  
38 allowed. Blue lights have been reserved for law enforcement and must not be  
39 used on fire vehicles. A red, white, and amber combination is the accepted color  
40 scheme for fire.

**42 Emergency Light Use**

43 Headlights and taillights will be illuminated at all times while the vehicle is in  
44 motion. Emergency lighting will be used only during on site wildland fire  
45 operations or to mitigate serious safety hazards. Overhead lighting and other  
46 emergency lighting must meet state code requirements, and will be illuminated

1 whenever the visibility is reduced to less than 300 feet. Blue lights are not  
2 acceptable for wildland fire operations.

3

#### 4 **Light Use Visibility**

5 Headlights and taillights shall remain illuminated at all times while the vehicle is  
6 in operation. Overhead lighting (or other appropriate emergency lights) shall be  
7 illuminated whenever visibility is reduced to less than 300 feet.

- 8 • *NPS - Vehicle Color and Marking. Vehicles dedicated to wildland fire*  
9 *activities shall be white in color and have a single four-inch wide red*  
10 *reflective stripe placed according to NFPA 1906 (NFPA 1906 7-6.2 1995*  
11 *edition). The word "FIRE" red with white background color will be*  
12 *centered on the front fenders. "FIRE" may also be placed on the front and*  
13 *rear of the vehicle. The NPS Arrowhead will be placed on the front doors.*  
14 *The size and placement of the arrowhead will be as specified in RM-9. An*  
15 *identifier will be placed on the vehicle according to local zone or GACC*  
16 *directions. Roof numbers will be placed according to local zone*  
17 *procedures.*

18

#### 19 **Fuel Use, Storage and Transportation**

20 Guidance and direction for the use, storage, and transportation of fuel can be  
21 found in the interagency interim policy "*Interagency Fuel Transportation*  
22 *Guide*" at:

23 <http://www.fs.fed.us/t-d/fueltran/> (Use t-d as user and password logins)

24

#### 25 **Fire Engine Maintenance Procedure and Record**

26 Apparatus safety and operational inspections will be accomplished either on a  
27 post-fire or daily basis. Offices are required to document these inspections.  
28 Periodic maintenance (as required by the manufacturer) shall be performed at  
29 the intervals recommended and properly documented. All annual inspections  
30 will include a pump gallons per minute (GPM) test to ensure the pump/plumbing  
31 system is operating at desired specifications.

32

#### 33 **Engine Inventories**

34 An inventory of supplies and equipment carried on each vehicle is required to  
35 maintain accountability and to obtain replacement items lost or damaged on  
36 incidents. The standard inventory for engines is found in Appendix R

37

#### 38 **Water Tenders**

39

#### 40 **Water Tender Operators Performance Standards**

##### 41 **Water Tender Operator (Support)**

- 42 • **Qualifications:** CDL (tank endorsement).
- 43 • **Staffing:** A water tender (Support) may be staffed with a crew of one  
44 driver/operator when it is used in a support role as a fire engine refill unit  
45 or for dust abatement. These operators do not have to pass the Work  
46 Capacity Test (WCT) but are required to take annual refresher training.

1 **Water Tender Operator (Tactical)**

2 Tactical use is defined as “direct fire suppression missions such as pumping  
3 hoselays, live reel use, running attack, and use of spray bars and monitors to  
4 suppress fires.”

- 5 • **Qualifications:** ENOP, CDL (tank endorsement)
- 6 • **Staffing:** Tactical water tenders will carry a minimum crew of two:
  - 7 > One ENOP
  - 8 > One Engine Module Member

9  
10 **Dozers/Tractor Plows**

11  
12 **Dozer/Tractor Plow Training and Qualifications**

13 Agency personnel assigned as dozer/tractor plow operators will meet the  
14 training standards for a Firefighter 2 (FFT2). This includes all safety and annual  
15 refresher training. While on fire assignments, all operators and support crew  
16 will meet PPE requirements including the use of aramid fiber clothing, hard  
17 hats, fire shelters, boots, etc.

- 18 • *FWS - Dozer/tractor plow Operators must complete Intermediate Fire  
19 Behavior (S-290) and the FWS Heavy Equipment Safety Training course  
20 SAF2002 for dozer and/ or SAF2000 for Agriculture Tractor. Additional  
21 training which supports development of knowledge and skills includes S-  
22 232 and S-233 respectively, other positions that meet currency  
23 requirements is none.*

24  
25 **Dozer/Tractor Plow Physical Fitness Standards**

- 26 • *BLM/FWS - All employee dozer/tractor plow operators will meet the WCT  
27 requirements at the Moderate level before accepting fire assignments.*
- 28 • *FS - FS dozer operators refer to 5134.32.*

29  
30 **Dozer/Tractor Plow Operational Procedures**

- 31 • Agency owned and operated dozer/tractor plows will be equipped with  
32 programmable two-way radios, configured to allow the operator to  
33 monitor radio traffic.
- 34 • Agency dozer/tractor plows with non-red carded operators and all contract  
35 dozer/tractor plows will have agency supplied supervision when assigned  
36 to any suppression operations.
- 37 • Contract or offer-for-hire dozers must also be provided with radio  
38 communications, either through a qualified dozer/tractor plow boss or an  
39 agency-supplied radio. Contract dozer/tractor plows will meet the  
40 specifications identified in their agreement/contract.
- 41 • Operators of dozer/tractor plows and transport equipment will meet DOT  
42 certifications and requirements regarding the use and movement of heavy  
43 equipment, including driving limitations, CDL requirements, and pilot car  
44 use.

45

1 **All Terrain Vehicles (ATV)/Utility-Terrain Vehicles (UTV)**

2 The operation of ATV/UTV is high risk and should be utilized only when their  
3 use is essential to accomplishment of the mission and not as a matter of  
4 convenience. Because of the high risk nature, agencies have developed specific  
5 operational policy as highlighted below:

- 6 • Specific authorization for ATV/UTV use is required. Refer to current  
7 agency policy.
- 8 • All personnel authorized to operate an ATV must first complete agency  
9 specific or manufacturer training in safe operating procedures and  
10 appropriate PPE.
- 11 • Refer to agency specific guidelines on required frequency of ATV  
12 refresher training.
- 13 • Required PPE includes:
  - 14 ➤ Helmet (DOT, ANSI-90, or SNELL M-95 approved). Use of half  
15 “shorty” helmets require a JHA for fireline use and must include  
16 justification for its use. Refer to MTDC Tech Tip publication, *A*  
17 *Helmet for ATV Operators with Fireline Duties (0651-2350-MTDC)*.
  - 18 ➤ eye protection (goggles, face shield, or safety glasses)
  - 19 ➤ gloves
  - 20 ➤ long sleeves
  - 21 ➤ long pants
- 22 • and leather boots (minimum 8” height).
- 23 • The standard wildland hardhat will not be worn while operating an ATV.
- 24 • Except in emergency situations, no passengers will be carried unless  
25 vehicle is designed by the manufacturer to carry operator and passengers.
- 26 • Operating speed will be appropriate for the conditions and terrain.
- 27 • ATV training shall include safe operation while carrying loads.
- 28 • Loads shall be mounted and secured as to not affect the vehicle’s center of  
29 gravity.
- 30 • Load weights shall not exceed manufacturer’s recommendations.
- 31 • A risk assessment must be completed and approved by the supervisor prior  
32 to vehicle operation.
- 33 • **BLM** - Refer to *BLM Interim Policy - Utilization of Off-Road Vehicles*  
34 *(ORVs) IM 2005-148*.
- 35 • **BLM** - All operators shall be re-evaluated by an ASI Certified Trainer  
36 every three years.
- 37 • **FWS/NPS** - Exceptions to the above policy are:
  - 38 ➤ *SPH-4, SPH-5, or other comparable flight helmets meet the DOT*  
39 *requirements and may be used in lieu of the helmets described above.*
- 40 • **NPS** - All personnel authorized to operate an ATV must first complete  
41 training in safe operating procedures from a nationally recognized source  
42 such as the *ATV Safety Institute ATV Rider Course*  
43 *<http://www.atvsafety.org> or as required by state statute.*
- 44 • **NPS** - Annual refresher training must be conducted in accordance with an  
45 approved JHA.

- 1 • **FS** - Refer to *Health and Safety Code Handbook 6709.11*.  
2 • **FWS** - Refer to *Service Manual 243 FW 6 Off Road Utility Vehicle Safety*.

3

#### 4 **Vehicle Cleaning/Noxious Weed Prevention**

5 To reduce the transport, introduction, and establishment of noxious weeds or  
6 other biological contaminants on the landscape due to fire suppression activities,  
7 fire suppression and support vehicles should be cleaned at a designated area  
8 prior to arriving and leaving the incident. Onsite fire equipment should be used  
9 to thoroughly clean the undercarriage, fender wells, tires, radiator, and exterior  
10 of the vehicle. The cleaning area should also be clearly marked to identify the  
11 area for post fire control treatments, as needed.

12

#### 13 **Fire Remote Automated Weather Stations**

14 Fire Remote Automated Weather Stations (FRAWS) are portable weather  
15 stations that pack up into a single container and may be utilized in any location  
16 to monitor local weather conditions. FRAWS are intended for use on or near the  
17 fireline and are rapidly relocated to points desired by Fire Behavior Analyst  
18 (FBAN) for real time weather data.

19

20 National resource FRAWS systems are cached at National Interagency Fire  
21 Center (NIFC) and may be ordered through standard equipment resource  
22 ordering systems. Maintenance and recalibration of these stations must be  
23 coordinated with the NIFC Remote Sensing/Fire Weather Support Unit  
24 (RSFWSU).

25

#### 26 **Fuel Use, Storage and Transportation**

27 Guidance and direction for the use, storage, and transportation of fuel can be  
28 found in the interagency interim policy "*Interagency Fuel Transportation*  
29 *Guide*" at: <http://www.fs.fed.us/t-d/fueltran/> (Use t-d as user and password  
30 logins)

31

#### 32 **Aerial Ignition Devices**

33 Information on types of aerial ignition devices, operational guidelines and  
34 personnel qualifications may be found in the *Interagency Aerial Ignition Guide*.

35

#### 36 **Ground Ignition Devices**

- 37 • **BLM** - *Guidance and direction for use and procurement of approved*  
38 *ground ignition equipment and the transportation and dispensing of drip*  
39 *torch fuel can be found in: Instruction Memorandum No. OF&A 2005-030,*  
40 *7/20/05, Drip Torch Fuel Transportation and Dispensing Direction.*  
41 • **NPS** - *Agency direction may be found in the 04/04/03 Memorandum Y14*  
42 *(9560) Aerial and Ground Ignition Equipment.*  
43 • **FWS** - *specific information on ignition devices may be found in the*  
44 *January 28, 2003 Memorandum: "Direction for Use and Purchase of*  
45 *Aerial and Ground Ignition Equipment."*  
46 • **FS** - *direction is found in FSH 5109.32a and 6709.11.*

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14-7



## Chapter 15 Communications

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### Radio Communications

Radio communications provide for the flow of tactical information needed for the command/control of personnel and resources.

### Policy

Agency specific policies for radio communications may be found in:

- *Department of Interior, Department Manual, Radio Communications Handbook (377 DM).*
- *USDA Forest Service Handbook (FSH 6609.14 chapters 10-40 and Forest Service Manual (FSM) 6600 Systems Management Chapter 6640 - Telecommunications.*

### Radio Contracts

Contracts specifying the requirements for radios have been let and may be found for the:

- *DOI - Department of Interior Project 25 Digital Radio contract at <http://www.blm.gov/natacq/IDIQ/index.html>*
- *FS - USDA Forest service National Radio Contract at <http://www.fs.fed.us/business/2002%20awards/index.html>*
- *BLM - Fire equipment will be tested through a collaborative effort between the National Interagency Fire Center and the DOI Technical Support Center in Denver to verify that the radios will withstand the rugged work environments specific to fire operations and that the radios have operational features and programmability options to meet fires needs.*
- *FS/FWS/NPS - The Thales Racal, EF Johnson 5100, Motorola XTS5000, Relm/Bendix King DPH, and Datron Guardian handhelds have all been approved for fire use by the National Interagency Incident Communications Division (NIICD).*

For information on software and hardware requirements and approved radios, contact the National Radio Communications Division (NRCD) at (208) 387-5830.

### Dispatch Recording Devices

- *BLM - Recording devices will be used by BLM dispatch offices or any interagency office dispatching BLM resources.*

### Radio Frequency Management

- FM frequency assignments for normal operations or initial attack ground operations are made on a permanent basis and are requested through the state office ISO frequency manager to the Washington Office frequency manager.

- 1 • The NIFC Communications Duty Officer (CDO) coordinates and assigns  
2 incident frequencies at the national level. They will also assign  
3 Communications Coordinators (COMC) when necessary to support  
4 specific Geographic Area. See the National Mobilization Guide for  
5 additional information.
- 6 • Mutual-aid agreements for frequency sharing can be made at the local  
7 level.
- 8 • A mutual-aid frequency sharing agreement is valid only in the specific  
9 locale it originates in. These agreements do not authorize the use of a  
10 shared frequency in any other area. NIFC national fire frequencies are not  
11 to be used for these agreements.
- 12 • Do not use a frequency unless authorized to do so by communications  
13 personnel at the local, state, regional or national level.
- 14 • Initial attack AM air operations frequencies will be assigned by the NIFC  
15 CDO and FM air operations frequencies will be facilitated/assigned by the  
16 NIFC CDO. These assignments will be on an interagency basis and  
17 coordinated with the GACCs.
- 18 • On Type 1 or 2 incidents, the Communications Unit Leader (COML) will  
19 request, assign, and report all frequencies used on the incident to the NIFC  
20 CDO/COMC. This would include the request and assignment of aircraft  
21 frequencies. The ICS-205 and ICS-220 are always a part of the Incident  
22 Action Plan (IAP) and distributed at every operational period briefing.
- 23 • The COML will contact the NIFC CDO, or the COMC if assigned, for  
24 additional FM and AM frequencies. Requests for aviation frequencies will  
25 be placed through established ordering channels through NICC and will be  
26 filled by the NIFC CDO or COMC. COML's will ensure that the host  
27 agency Aviation Dispatcher and the NIFC CDO or COMC has the current  
28 ICS-220 for their incident.
- 29 • Frequencies for Type 1 and Type 2 incidents are assigned through the  
30 National Interagency Incident Communications Division (NIICD) located  
31 at NIFC. The CDO is responsible for this function.
- 32 • During severe situations and/or when there are significant numbers of large  
33 incidents, additional frequencies can be assigned. These are temporary  
34 assignments, and are requested by the NIFC CDO from the Washington  
35 Office (Spectrum) managers and given by the CDO to the incident. This  
36 applies to frequencies for command, ground tactical, and aviation  
37 operations.
- 38 • Additional frequencies are provided in the following circumstances:
  - 39 ➤ The NIICD national frequencies are all committed within a specific  
40 geographic area.
  - 41 ➤ The requests continue for frequencies to support new incidents within  
42 a specific complex.
  - 43 ➤ The fire danger rating is extreme and the potential for additional new  
44 incidents is high.

1 **Pre-assigned National Frequencies**

2 National Air Guard - 168.625 MHz - A National Interagency Air Guard  
3 frequency for government aircraft will be used for emergency aviation  
4 communications. Continuous monitoring of this frequency in narrowband mode  
5 is mandatory by agency dispatch centers. Transmitters on this frequency must be  
6 equipped with an encoder on 110.9 Hz. 168.625 is restricted to the following  
7 use:

- 8 • Air-to-air emergency contact and coordination.
- 9 • Ground-to-air emergency contact.
- 10 • Initial call, recall, and re-direction of aircraft when no other contact  
11 frequency is available.

12  
13 **National Flight Following - 168.650 MHz**

14 The National Interagency Air Net frequency is used for flight following of  
15 official aircraft. The intent is not to use this frequency for incident operations.  
16 All dispatch centers/offices will monitor the national flight following frequency  
17 at all times. 168.650 is restricted to the following use:

- 18 • Flight following, dispatch, and/or re-direction of aircraft.
- 19 • Air-to-ground and ground-to-air administrative traffic.
- 20 • Not authorized for ground-to-ground traffic.

21  
22 **National Interagency Air Tactics - 166.675 MHz, 167.950 MHz, 169.150**  
23 **MHz, 169.200 MHz, 170.000 MHz**

- 24 • Frequencies used to support air-to-air or ground-to-air communications on  
25 incidents west of the 95th meridian. These frequencies shall be used for  
26 air-to-air and ground-to-air communications only.
  - 27 ➤ Exception: Pacific Southwest Geographic Area: 166.675 MHz,  
28 169.150 MHz, and 169.200 MHz will be used for air-to-air only;  
29 170.000 MHz will be used for ground-to-air only.
- 30 • Interagency geographic area coordination centers assign these frequencies.  
31 Assignment must be coordinated through the NIFC CDO.
- 32 • Transmitter power output of radios installed in aircraft operating on these  
33 frequencies shall be limited to 10 watts.

34  
35 Base stations and repeaters are prohibited on these frequencies.

36  
37 **National Interagency Airtanker Initial Call - 123.975 MHz**

38 The national interagency frequency assigned to all airtanker bases for their  
39 exclusive use. No other use outside of airtanker bases is authorized.

40  
41 **National Government All-Call Frequencies - 163.100 MHz and 168.350**  
42 **MHz**

43 For use anywhere, anytime. They are good choices as travel frequencies for  
44 strike teams moving between assignments. They are available for ground

1 tactical frequencies during initial attack or incident operations. They are not to  
2 be used for air-to-ground operations.

- 3 • **NOTE:** When you are traveling between incidents, be sure to monitor for  
4 incident radio traffic in the area before using these frequencies.

#### 6 **Incident Radio Support**

7 All NIRS cache communications equipment shall be returned to NIICD at NIFC  
8 immediately after the incident is turned over to the jurisdictional agency.

9  
10 No cache communication equipment shall be moved from one incident to  
11 another without being first returned to NIFC for refurbishment. However,  
12 equipment unused and red-sealed may be moved, if approval is given by the  
13 NIFC CDO or COMC.

#### 15 **Military Communications on an Incident**

16 Military units assigned to an incident already have radios. Each battalion is  
17 assigned 80 handheld radios. Sixteen of these radios are used by military crew  
18 liaisons. Intercrew communications within a military unit is provided by the  
19 military on its radios using its frequencies. All frequency assignments at the  
20 incident will be made by the COML in accordance with the ICS-205.

21 Some active military and guard units have aviation VHF-FM radios compatible  
22 with civilian systems. Other units are adapting their aircraft for the civilian  
23 radios and can be easily outfitted prior to dispatch to an incident. A limited  
24 number of wiring harnesses are available at NIFC for those military aircraft that  
25 do not have civilian VHF-FM capability. The wiring harnesses and radios will  
26 be resource ordered by the incident. The resource order will include a request  
27 for trained personnel from NIICD to perform the installation of the equipment.  
28 Equipment will not be sent without trained and qualified personnel to install it.

#### 30 **Cellular Communications/Satellite Phone Communication**

31 Cellular/satellite telephones will not be used to communicate tactical operations  
32 unless they are the only means possible. Cellular/satellite telephones are not to  
33 be used for flight following in lieu of normal flight-following protocols.

34  
35 Phone communication can be used for logistical purposes.

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## Chapter 16 Aviation Operations/Resources

### **Purpose and Scope**

Aviation resources are one of a number of tools available to accomplish fire related land management objectives.

Aviation use must be prioritized based on management objectives and probability of success.

The effect of aviation resources on a fire is directly proportional to the speed at which the resource(s) can initially engage the fire, the effective capacity of the aircraft, and the employment of ground resources.

These factors are magnified by flexibility in prioritization, mobility, positioning, and utilization of the versatility of many types of aircraft.

Risk management is a necessary requirement for the use of any aviation resource. That risk management process must include the risk to ground resources, and the risk of not performing the mission, as well as the risk to the aircrew.

### **Organizational Responsibilities**

#### **National Office**

##### **DOI**

##### **Aviation Management Directorate (AMD)**

The Aviation Management Directorate, of the National Business Center, is responsible for the coordination of aviation policy development, aircraft acquisition, financial services, and maintenance management within the agencies of the Department of the Interior (DOI). AMD has no operational responsibility. AMD provides aviation safety program oversight, accident investigation, aircraft, pilot inspection and approval for DOI use.

- *BLM - National Aviation Office (NAO) - NAO develops BLM policy, procedures, standards, maintains functional oversight, and facilitates interagency coordination for all aviation activities. The principal goals are safety and cost-effectiveness. The NAO supports BLM aviation activities and missions, including fire suppression, through strategic program guidance, managing aviation programs of national scope, coordination with AMD, and interagency partners. National Office of Fire and Aviation Management (OF&A) has the responsibility and authority, after consultation with State FMOs, for funding and acquisition of all fire aircraft, prioritizing the allocation of BLM aircraft on a Bureau wide basis, and approving State Office requests to acquire supplemental aircraft*

1       resources. Refer to BLM Manual 9400 for aviation policy and guides.  
2       (Refer to 112 DM 12 for a list of responsibilities.)

3

#### 4 **Forest Service**

5 The US Forest Service has responsibility for all aspects of its aviation program,  
6 including aviation policy development, aircraft acquisition, and maintenance  
7 management. In addition, the USFS has operational responsibility including  
8 development of aviation procedures and standards, as well as functional  
9 oversight of aviation assets and facilities, accident investigation, and aircraft and  
10 pilot inspection.

11

12 The National Aviation Officer (NAO) is responsible to the Director of Fire and  
13 Aviation Management (Aviation) for the management and supervision of the  
14 National Headquarters Office in Washington DC, and the detached Boise  
15 Aviation Unit. The NAO provides leadership, support and coordination for  
16 national and regional aviation programs and operations. (Refer to FSM 5704.22  
17 for list of responsibilities.) The National Aviation Operations Officer (NAOO)  
18 reports to the NAO, and oversees the detached Boise Aviation Unit, and is  
19 responsible for all operational aspects of the aviation program.

20

#### 21 **State/Regional Office**

- 22 • **BLM** - State FMOs are responsible for providing oversight for aircraft  
23 hosted in their state. State FMOs have the authority and responsibility to  
24 approve, with National Office concurrence, acquisition of supplemental  
25 aircraft resources within their state. State FMOs have the authority to  
26 prioritize the allocation, pre-positioning and movement of all aircraft  
27 assigned to the BLM within their state. State Offices will coordinate with  
28 the National Office on movement of their aircraft outside of their State. A  
29 State Aviation Manager (SAM) is located in each state office. SAMs are  
30 delegated as the Contracting Officers Representative (COR) for all  
31 exclusive use aircraft hosted by their state. SAMs implement aviation  
32 program objectives and directives to support the agency mission and state  
33 objectives. A state aviation plan is required to outline the state aviation  
34 program objectives and to identify state specific policy and procedures.
- 35 • **NPS/FWS** - A Regional Aviation Manager (RAM) is located in each  
36 regional office. RAMs implement aviation program objectives and  
37 directives to support the agency mission and region objectives. Several  
38 regions have additional support staff, and/or pilots assigned to support  
39 aircraft operations and to provide technical expertise. A regional aviation  
40 operations and management plan is required to outline the region's  
41 aviation program objectives and to identify region-specific policy and  
42 procedures.
- 43 • **FS** - Regional Aviation Officers (RAOs) are responsible for directing and  
44 managing Regional aviation programs in accordance with the National  
45 and Regional Aviation Management Plans, and applicable agency policy  
46 direction. (Refer to FSM 5720.47c for list of responsibilities.). RAOs

1 report to Director of Fire and Aviation for their specific Region. Regional  
2 Aviation Safety Managers (RASMs) are responsible for aviation safety in  
3 their respective Regions, and work closely with the RAO to ensure aviation  
4 safety is an organizational priority. Most Regions have additional aviation  
5 technical experts and pilots who help manage and oversee the Regional  
6 aviation programs. Most Regions also have Aviation Maintenance  
7 Inspectors, Airtanker Program Managers, Helicopter Program Managers,  
8 Helicopter Operations Specialists, Inspector Pilots, etc.

### 10 Local Office

11 Some areas have interagency aviation programs that utilize an Aviation Manager  
12 for multiple units. Duties are similar as other local level managers.

- 13 • **BLM** - Unit Aviation Managers (UAMs) serve as the focal point for the  
14 Unit Aviation Program by providing technical expertise and management  
15 of aviation resources to support Field Office/District programs.  
16 Field/District Offices are responsible for hosting, supporting, providing  
17 daily management, and dispatching all aircraft assigned to their unit.  
18 Field/District Offices have the authority to request additional resources; to  
19 establish priorities, and make assignments for all aircraft assigned to the  
20 BLM within their unit or zone.
- 21 • **NPS** - Organizational responsibility refer to DO-60, RM-60.
- 22 • **FS** - Unit Aviation Officers (UAOs)/Forest Aviation Officers (FAOs) have  
23 the responsibility for aviation activities at the local level, including  
24 aviation mission planning, safety measures, supervision, and evaluation.  
25 UAOs/FAOs assist Line Officers with risk assessment/management and  
26 cost analysis. (Refer to FSH 5709.16\_10.42)

### 28 Aviation Information Resources

29 Aviation reference guides and aids for agency aviation management are listed  
30 for policy, guidance, and specific procedural requirements.

- 31 • **BLM** - 9400 Manual Appendix 1, BLM Fixed Wing Standard Operations  
32 Procedures, National Aviation Plan, State and Unit Aviation Plans (In all  
33 cases DOI policy Department Manuals [DMs], Operational Procedural  
34 Memoranda [OPMs], and BLM policy will take precedence.)
- 35 • **FWS** - Service Manual 330-339, Aviation Management and IHOG.
- 36 • **NPS** - RM-60 Aviation Management Reference Manual and IHOG.
- 37 • **FS** - FSM 5700, ISMOG, FSH 5709.16 and IHOG.

39 Safety alerts, operational alerts, instruction memoranda, information bulletins,  
40 incident reports, and other guidance or information are issued as needed.

42 An up-to-date library with aviation policy and procedural references will be  
43 maintained at all permanent aviation bases, dispatch, and aviation management  
44 offices.

1 **Aviation Safety**

2

3 **Risk Assessment and Risk Management**

4 The use of Risk Management will help to ensure a safe and successful operation.

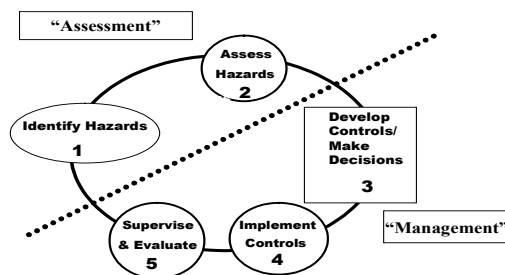
5 Risk is the probability that an event will occur. Assessing risk identifies the  
6 hazard, the associated risk, and places the hazard in relationship to the mission.7 A decision to conduct a mission requires weighing the risk against the benefit of  
8 the mission and deciding whether the risks are acceptable.

9

10 Aviation missions always have some degree of risk. The four sources of hazards  
11 are methods, medium, man, and machine. Managing risk is a 5-step process:

- 12 • Identify hazards associated with all specified and implied tasks for the  
13 mission.
- 14 • Assess hazards to determine potential of occurrence and severity of  
15 consequences.
- 16 • Develop controls to mitigate or remove risk, and make decisions based on  
17 accepting the least risk for the best benefit.
- 18 • Implement controls - (1) education controls, (2) physical controls, and (3)  
19 avoidance controls.
- 20 • Supervise and Evaluate - enforce standards and continuously re-evaluate  
21 their effectiveness in reducing or removing risk. Ensure that controls are  
22 communicated, implemented, and enforced.

23

*THE RISK MANAGEMENT PROCESS*

24

25 **Aviation Safety Support**

26 During high levels of aviation activity it is advisable to request a Safety and Technical  
27 Assistance Team (STAT). A STAT's purpose is to assist and review helicopter and/or  
28 fixed wing operations on wildland fires. They should be requested through the  
29 agency chain of command and operate under a Delegation of Authority from the  
30 appropriate State/Regional Aviation Manager(s) or Multi Agency Coordinating  
31 Group. Formal written reports will be provided to the appropriate manager(s) as  
32 outlined at the in-brief. A team should consist of the following:

- 33 • Aviation Safety Manager



- 1 • Operations Specialist (helicopter and/or fixed wing)
- 2 • Pilot Inspector
- 3 • Maintenance Inspector (optional)
- 4 • Avionics Inspector (optional)

5

### 6 **Military or National Guard Aircraft and Pilots**

7 The *Military Use Handbook* (NFES 2175) will be used when planning or  
8 conducting aviation operations involving regular military aircraft. Ordering  
9 military resources is done through National Interagency Coordination Center  
10 (NICC); National Guard resources are utilized through local or state  
11 Memorandum of Understanding (MOU).

12

### 13 **Aviation Safety Briefing**

14 Every passenger must receive a briefing prior to each flight. The briefing is the  
15 responsibility of the Pilot in Command (PIC) but may be conducted by the pilot,  
16 flight manager, helicopter manager, fixed-wing base manager, or an individual  
17 with the required training to conduct an aviation safety briefing. Refer to the  
18 *Incident Response Pocket Guide* (IRPG) and IHOG Chapter 10.

19

### 20 **Aviation Hazard**

21 An aviation hazard is any condition, act, or circumstance that compromises the  
22 safety of personnel engaged in aviation operations. Pilots, flight crew personnel,  
23 aviation managers, incident air operations personnel, and passengers are  
24 responsible for hazard identification and mitigation. Aviation hazards may  
25 include but are not limited to the following:

- 26 • Deviations from policy, procedures, regulations, and instructions
- 27 • Improper hazardous materials handling and/or transport
- 28 • Airspace conflicts/flight following deviation
- 29 • Deviation from planned operations
- 30 • Failure to utilize PPE or Aviation Life Support Equipment (ALSE)
- 31 • Failure to meet qualification standards or training requirements
- 32 • Extreme environmental conditions
- 33 • Improper ground operations
- 34 • Improper pilot procedures
- 35 • Fuel contamination
- 36 • Unsafe actions by pilot, air crew, passengers, or support personnel

37

38 Aviation hazards also exist in the form of wires, low-flying aircraft, and  
39 obstacles protruding beyond normal surface features. Each office will post,  
40 maintain, and annually update a "Known Aerial Hazard Map" for the local  
41 geographic area where aircraft are operated, regardless of agency jurisdiction.  
42 This map will be posted and used to brief flight crews. Unit Aviation Managers  
43 are responsible for ensuring the development and updating of Known Aerial;  
44 Hazard Maps (IHOG Ch 3.V.J.1.c page 3-20)

45

**1 SAFECOM**

2 The Department of the Interior (DOI) and the US Forest Service (FS) have an  
3 incident/hazard reporting form called The Aviation Safety Communiqué  
4 (SAFECOM). The database, available at [www.safecom.gov](http://www.safecom.gov), fulfills the Aviation  
5 Mishap Information System (AMIS) requirements for aviation mishap reporting  
6 for the DOI agencies and the US Forest Service. Categories of reports include  
7 incidents, hazards, maintenance, and airspace. The system uses the SAFECOM  
8 Form OAS-34 or FS-5700-14 to report any condition, observation, act,  
9 maintenance problem, or circumstance with personnel or aircraft that has the  
10 potential to cause an aviation-related mishap. The SAFECOM system is not  
11 intended for initiating punitive actions. Submitting a SAFECOM is not a  
12 substitute for "on-the-spot" correction(s) to a safety concern. It is a tool used to  
13 identify, document, track and correct safety related issues. A SAFECOM does  
14 not replace the requirement for initiating an accident or incident report.

15  
16 Any individual (including cooperators) with knowledge of an incident/hazard  
17 should complete a SAFECOM. The SAFECOM form should be entered directly  
18 on the internet at [www.safecom.gov](http://www.safecom.gov) or can be faxed to the Department of the  
19 Interiors Aviation Management Directorate, Aviation Safety (208)433-5069 or  
20 to the Forest Service at (208) 387-5735 ATTN: SAFETY. Electronic cc copies  
21 are automatically forwarded to the National, Regional, and State and Unit  
22 Aviation Managers.

23  
24 The agency with operational control of the aircraft at the time of the  
25 hazard/incident/accident is responsible for completing the SAFECOM and  
26 submitting it through agency channels.

**27 Aircraft Incidents/Accidents**

28 Notify FS or AMD and DOI agency Aviation Safety Managers of any aircraft  
29 mishap involving damage or injury. Use the hotline (888) 464-7427 or the most  
30 expeditious means possible. Initiate the appropriate unit Aviation Mishap  
31 Response Plan.

**32 Aviation Assets**

33  
34 Typical agency aviation assets are: Helitack and Rappel crews, Smokejumpers,  
35 Large Airtankers, Single Engine Air Tankers, Water Scoopers, Helitankers, Air  
36 Attack, Aerial Supervision Modules, Lead Planes, Airtanker Bases, SEAT  
37 Bases, Helibases, Smokejumper Bases.

- 38 • *BLM - All BLM acquired aircraft, exclusive use and CWN, are available*  
39 *to move to areas of greatest Bureau need, thereby maximizing efficiency*  
40 *and effectiveness. Specific authorities and responsibilities for Field/State*  
41 *and National Offices are outlined earlier in this chapter. Offices are*  
42 *expected to adhere to procedures established in the National Aviation Plan*  
43 *for both acquisition and use reporting.*

1 **Interagency Interim Flight and Duty Limitations**

2 **Phase 1 - Standard Flight and Duty Limitations (Abbreviated Summary)**

- 3 • Fourteen (14) hour maximum duty day.  
4 • Eight (8) hours maximum daily flight time for mission flights.  
5 • Ten (10) hours for point-to-point, with a two (2) pilot crew.  
6 • Maximum cumulative flight hours of thirty-six (36) hours, up to forty-two  
7 (42) hours in six (6) days.  
8 • Minimum of ten (10) hours uninterrupted time off (rest) between duty  
9 periods.

10 This does not diminish the authority or obligation of any individual COR  
11 (Contracting Officer Representative) or Aviation Manager to impose shorter  
12 duty days or additional days off at any time for any flight crew members for  
13 fatigue at their discretion, as is currently provided for in agency direction and  
14 contract specifications.

15  
16 **Interim Flight and Duty Limitations Implementation**

17 During extended periods of a high level of flight activity or maximum 14-hour  
18 days, fatigue factors must be taken into consideration by Fire and Aviation  
19 Managers. Phase 2 and/or Phase 3 Duty Limitations will be implemented for  
20 specific Geographic Area's Aviation resources. The minimum scope of  
21 operation should be by Geographic Area, i.e., Northwest, Great Basin, etc.  
22

23 Implementation decisions will be made on a coordinated, interagency basis,  
24 involving the GACC, NICC, NMAC and National Aviation Representatives at  
25 NIFC.

26  
27 Official notification of implementation should be made by the FS Regional  
28 Aviation Officer (RAO) and DOI Aviation Managers through the GACC and,  
29 for broader scope implementations, by National Aviation Management through  
30 NIFC.

31  
32 **Phase 2 - Interim Duty Limitations**

33 When Phase 2 is activated, pilots shall adhere to the flight and day-off  
34 limitations prescribed in Phase 1 and the duty limitations defined under Phase 2.  
35

36 Each flight crew member shall be given an additional day off each fourteen (14)  
37 day period. Crews on a twelve (12) and two (2) schedule shall have three (3)  
38 consecutive days off (11 and 3). Flight crews on six (6) and one (1) schedules  
39 shall work an alternating weekly schedule of five (5) days on, two (2) days off,  
40 then six (6) days on and one (1) day off.

41  
42 Aircraft fixed daily rates and special rates, when applicable, shall continue to  
43 accrue during the extra day off. Contractors may provide additional approved  
44 crews to maximize utilization of their aircraft. All costs associated with  
45 providing the additional crew will be at the contractor's expense, unless the  
46 additional crew is requested by the Government.

**Release Date: January 2008**

1 **Phase 3 - Interim Duty Limitations**

2 When Phase 3 is activated, pilots shall adhere to the flight limitations of Phase 1  
3 (standard), the additional day off of Phase 2, and the limitations defined under  
4 Phase 3.

5  
6 Flight crew members shall have a minimum of twelve (12) consecutive hours of  
7 uninterrupted rest (off duty) during each duty day cycle. The standard duty day  
8 shall be no longer than twelve (12) hours, except a crew duty day extension shall  
9 not exceed a cumulative fourteen (14) hour duty day. The next flight crew rest  
10 period shall then be adjusted to equal the extended duty day, i.e., thirteen (13)  
11 hour duty day, thirteen (13) hours rest; fourteen (14) hour duty day, fourteen  
12 (14) hours rest. Extended duty day applies only to completion of a mission. In  
13 no case may standby be extended beyond the twelve (12) hour duty day.

14  
15 Double crews (two (2) complete flight crews assigned to an aircraft), augmented  
16 flight crews (an additional pilot-in-command assigned to an aircraft), and  
17 aircraft crews that work a rotating schedule, i.e., two (2) days on, one (1) day  
18 off, seven (7) days on, seven (7) days off, or twelve (12) days on, twelve (12)  
19 days off, may be exempted from Phase 2 Limitations upon verification that their  
20 scheduling and duty cycles meet or exceed the provisions of Paragraph a. of  
21 Phase 2 and Phase 1 Limitations.

22  
23 Exemptions of Phase 3 provisions may be requested through the local Aviation  
24 Manager or COR, but must be approved by the FS RAO or DOI Area Aviation  
25 Manager.

26  
27 **Helitack**

28 Helitack crews perform suppression and support operations to accomplish fire  
29 and resource management objectives.

30  
31 **Organization - Crew Size**

- 32 • **BLM** - *The standard BLM exclusive-use helitack crew is a minimum of*  
33 *seven personnel (PFT supervisor, long-term assistant, long-term lead, and*  
34 *four temporaries). BLM helicopters operated in Alaska need only be*  
35 *staffed with a qualified Helicopter Manager (HMGR). Exception to these*  
36 *minimum crew staffing standards must be exempted by the National*  
37 *Aviation Office.*
- 38 • **NPS** - *NPS exclusive use modules will consist of a minimum of 8*  
39 *personnel.*
- 40 • **FS** - *Regions may establish minimum crew size and standards for their*  
41 *exclusive use helitack crews. Experience requirements for exclusive-use*  
42 *helicopter positions are listed in FSH 5109.17, Chapter 40.*
- 43  
44  
45  
46

1 **Operational Procedures**

2 The *Interagency Helicopter Operations Guide* (IHOG) is policy for helicopter  
3 operations whether in support of wildland fire or natural resource missions, and  
4 provides guidance for helitack and helicopter operations.

- 5 • **FWS** - *IHOG does not serve as policy for natural resource missions.*

6

7 **Communication**

8 The helitack crew standard is one handheld programmable multi-channel FM  
9 radio per every 2 crew persons, and one multi-channel VHF-AM programmable  
10 radio in the primary helitack crew (chase) truck. Each helitack crew (chase)  
11 vehicle will have a programmable VHF-FM mobile radio. Each permanent  
12 helibase will have a permanent programmable FM radio base station.

13

14 **Transportation**

15 Dedicated vehicles with adequate storage and security will be provided for  
16 helitack crews. The required Gross Vehicle Weight (GVW) of the vehicle will  
17 be dependent upon the volume of equipment carried on the truck and the number  
18 of helitack crewmembers assigned to the crew.

- 19 • **BLM** - Minimum vehicle configuration for a seven person crew will  
20 consist of one Class 661 Helitack Support Vehicle and one Class 156, 6-  
21 Pack pickup or Class 166 carryall.

22

23 **Training and Experience Requirements**

24 All helitack members will meet fire qualifications as prescribed by the National  
25 Wildfire Coordinating Group (NWCG) *310-1* and their agency manual  
26 requirements. The following chart establishes experience and training  
27 requirements for FS, BLM, NPS, and FWS Exclusive Use, Fire Helicopter Crew  
28 Positions.

29

1

Exclusive Use Fire Helicopter Position Requisites			
POSITION <sup>1</sup>	MINIMUM PREREQUISITE EXPERIENCE <sup>2</sup>	MINIMUM REQUIRED TRAINING <sup>3</sup>	CURRENCY REQUIREMENTS
Fire Helicopter Crew Supervisor	One season <sup>4</sup> as an Assistant Fire Helicopter Crew Supervisor, ICT4, HMGR, HEB2		RT-372 <sup>5</sup>
Assistant Fire Helicopter Crew Supervisor	One season as a Fire Helicopter Squad Leader, ICT4, HMGR, HEB2 (T)	I-200, S-200, S-215, S-230, S-234, S-260, S-270, S-290, S-371, S-372	RT-372
Fire Helicopter Squad Leader	One season as a Fire Helicopter Crewmember, FFT1, ICT5	S-131, S-133, S-211, S-212	S-271 <sup>6</sup>
Fire Helicopter Crewmember	One season as a FFT2, HECM Taskbook	I-100, S-130, S-190, S-271	S-271 <sup>6</sup>

<sup>1</sup> All Exclusive use Fire Helicopter positions require an arduous fitness rating.

<sup>2</sup> Minimum experience and qualifications required prior to performing in the Exclusive use position. Each level must have met the experience requirements of the previous level(s).

<sup>3</sup> Minimum training required to perform in the position. Each level must have met the training requirements of the previous level(s).

<sup>4</sup> A "season" is continuous employment on a full-time wildland fire helicopter crew for a period of 90 days or more.

<sup>5</sup> After completing S-372, must attend Interagency Helicopter Manager Workshop (RT-372) every three years.

<sup>6</sup> Must receive S-271 or serve as S-271 instructor, once every three years.

**Note:** Exceptions to the above position standards and staffing levels may be granted, on a case-by-case basis by the BLM National Aviation Office, NPS Regional Office FWS Regional Office, or FS Regional Office as appropriate.

- Some positions may be designated as COR/Alternate-COR. If so, see individual Agency COR training & currency requirements.
- Fire Helicopter Managers (HMGR) are fully qualified to perform all the duties associated with Resource Helicopter Manager.

20

### 21 Helicopter Rappel & Cargo Let-Down

22 Any rappel or cargo let-down programs must be approved by the Directors, Fire  
23 and Aviation Management.

- 24 • **BLM** - BLM personnel involved in an Interagency Rappel Program must  
25 have SAM approval.
- 26 • **NPS** - Approval is required by the National Office.
- 27 • **FS** - Approval is required by the Regional Office.

1 All rappel and cargo let-down operations will follow the *Interagency Helicopter*  
2 *Rappel Guide* (IHRG), as policy. Any exemption to the guide must be requested  
3 by the program through the state/region for approval by the National Aviation  
4 Office.

5

#### 6 **Aerial Ignition**

7 The *Interagency Aerial Ignition Guide (IAIG)* is policy for all aerial ignition  
8 activities. Any exemption to the *IAIG* must be requested through the  
9 state/region for approval by the National Aviation Office.

10

#### 11 **Airtankers**

12 Airtankers are a national resource. Geographic areas administering these aircraft  
13 will make them available for initial attack and extended attack fires on a priority  
14 basis. All airtanker services are obtained through the contracting process  
15 (except the MAFFS, which are military aviation assets and used to supplement  
16 the contract fleet when needed).

17

18 Airtankers are operated by commercial vendors in accordance with *FAR Part*  
19 *137*. The management of Large Airtankers is governed by:

- 20 • **BLM** - *The requirements of the DM' and BLM Manual 9400*
- 21 • **FS** - *Forest Service operates Large Airtankers under FSM 5703 and Grant*  
22 *of Exemption 392 as referenced in FSM 5714.*

23

#### 24 **Categories**

25 Airtanker types are distinguished by their retardant load:

- 26 • Type 1 - 3,000 gallons
- 27 • Type 2 - 1,800 to 2,999 gallons
- 28 • Type 3 - 800 to 1,799 gallons
- 29 • Type 4 - 799 gallons (single engine airtankers)

30

#### 31 **Airtanker Base Operations**

32 Certain parameters for the operation of airtankers are agency-specific. For  
33 dispatch procedures, limitations, and times, refer to geographic area  
34 mobilization guides and the *Interagency Airtanker Base Operations Guide*  
35 (*IATBOG*).

36

#### 37 **Airtanker Base Personnel**

38 There is no identified training for the positions at airtanker bases; the *IATBOG*  
39 contains a chart of recommended training for each position. It is critical that  
40 reload bases staff up commensurate with the need during periods of moderate or  
41 high fire activity at the base. All personnel conducting airtanker base operations  
42 should review the *IATBOG* and have it available.

43

44

45

46

**1 Startup/Cutoff Time for Multi Engine Airtankers**

2 These limitations apply to the time the aircraft arrives over the fire.

- 3 • Normally airtankers shall be dispatched to arrive over the fire not earlier  
4 than 30 minutes after official sunrise and not later than 30 minutes before  
5 official sunset.
- 6 • Airtankers may be dispatched to arrive over a fire as early as 30 minutes  
7 prior to official sunrise, or 30 minutes after official sunset, provided:
  - 8 ➤ A qualified ATGS, ASMI, or ATCO is on the scene; and
  - 9 ➤ Has determined visibility and other safety factors are suitable for  
10 dropping retardant; and
  - 11 ➤ Notifies the appropriate dispatcher of this determination.
- 12 • An airtanker, crewed by an initial attack-rated captain, may be dispatched  
13 to arrive over a fire without aerial supervision provided the airtanker's  
14 arrival and drop activities are conducted between 30 minutes after official  
15 sunrise and 30 minutes before official sunset in the lower 48 states. In  
16 Alaska, an airtanker pilot will not drop retardant during periods outside  
17 civil twilight.

**19 Single Engine Airtankers****21 Single Engine Airtanker (SEAT) Operations, Procedures and Safety**

22 The *Interagency SEAT Operating Guide (ISOG) (NFES #1844)* defines  
23 operating standards and is policy for both the DOI and FS.

**25 SEAT Manager Position**

26 In order to ensure adherence to contract regulations, safety requirements, and  
27 fiscal accountability, a qualified SEAT Manager (SEMG) will be assigned to  
28 each operating location. The SEMG's duties and responsibilities are outlined in  
29 the *ISOG*.

**31 Operational Procedures**

32 Using SEATs in conjunction with other aircraft over an incident is standard  
33 practice. Agency or geographical area mobilization guides may specify  
34 additional procedures and limitations.

35  
36 Depending on location, operator, and availability, SEATs are capable of  
37 dropping suppressants, water, or approved chemical retardants. Because of the  
38 load capacities of the SEATs (400 to 800 gallons), quick turn-around times  
39 should be a prime consideration. SEATs are capable of taking off and landing  
40 on dirt, gravel, or grass strips (pilot must be involved in selection of the site); a  
41 support vehicle reduces turn-around times.

42  
43 Reloading at established airtanker bases or reload bases is authorized. (SEAT  
44 operators carry the required couplings). All BLM and Forest Service Airtanker  
45 base operating plans will permit SEAT loading in conjunction with Large  
46 Airtankers.



**1 Communication**

2 All SEATs must have two VHF-AM and one VHF-FM (programmable) multi-  
3 channel radios. (See contract specifications.)

**5 Aerial Supervision**

6 Aerial supervision resources will be dispatched, when available, for initial and  
7 extended attack to enhance efficiency and safety of ground and aerial operations.  
8 During initial response operations, aerial supervision priority order with regard  
9 to safety and efficiency are as follows:

- 10 • ASM
- 11 • ATGS
- 12 • ATCO (Leadplane)
- 13 • HLCO Helicopter Coordinator
- 14 • Smokejumper Spotter
- 15 • HEGR (Helicopter Manager)

16  
17 If aerial operations continue beyond initial response, an ASM, ATGS, or ATCO  
18 will be ordered. Aerial supervision response will be commensurate with  
19 expected complexity.

**21 Reconnaissance or Patrol flights**

22 The purpose of aerial reconnaissance or detection flights is to locate and relay  
23 fire information to fire management. In addition to detecting, mapping and  
24 sizing up new fires, this resource may be utilized to provide ground resources  
25 with intelligence on fire behavior, provide recommendations to the IC when  
26 appropriate, and describe access routes into and out of fire areas for responding  
27 units. Only qualified Aerial Supervisors (ATGS, ASM, HLCO and LEAD) are  
28 authorized to coordinate incident airspace operations and give direction to  
29 aviation assets. Flights with a "Recon, Detection or Patrol" designation should  
30 communicate with tactical aircraft only to announce location, altitude and to  
31 relay their departure direction and altitude from the incident.

**33 Low-level Flight Operations**

34 The only fixed-wing aircraft missions authorized for low-level fire operations  
35 are:

- 36 • Para-cargo.
- 37 • Aerial Supervision Module (ASM) and leadplane operations.
- 38 • Retardant, water and foam application.

**40 Operational Procedures:**

- 41 • A high-level recon will be made prior to low-level flight operations.
- 42 • All flights below 500 feet will be contained to the area of operation.
- 43 • All resource flights below 500 feet must have an approved plan.

- 1 • PPE is required for all fixed-wing, low-level flights. Helmets are not  
2 required for multi-engine airtanker crews, smokejumper pilots and ASM  
3 flight/aircrew members.  
4

#### 5 **Congested Area Flight Operations**

6 Airtankers can drop retardant in congested areas under DOI authority given in  
7 *FAR Part 137*. FS authority is granted under exemption 392, from *FAR 91.119*  
8 as referenced in *FSM 5714*. When such operations are necessary, they may be  
9 authorized subject to these limitations:

- 10 • Airtanker operations in congested areas may be conducted at the request of  
11 the city, rural fire department, county, state, or federal fire suppression  
12 agency.  
13 • An ASM/leadplane is ordered to coordinate aerial operations.  
14 • The air traffic control facility responsible for the airspace is notified prior  
15 to or as soon as possible after the beginning of the operation.  
16 • A positive communication link must be established between the airtanker  
17 coordinator or aerial supervision module (ASM), airtanker pilot(s), and the  
18 responsible fire suppression agency official.  
19 • The Incident Commander (IC) for the responsible fire agency or designee  
20 will advise the ASM/leadplane/airtanker that all non-essential people and  
21 movable property have been cleared prior to commencing retardant drops.  
22

#### 23 **Aerial Supervision Module (ASM)**

24 The Aerial Supervision Module is crewed with both a “lead” qualified Air  
25 Tactical Pilot (ATP) and an Air Tactical Supervisor (ATS). These individuals  
26 are specifically trained to operate together as a team. The resource is primarily  
27 designed for providing both functions (lead and Air Attack) simultaneously from  
28 the same aircraft, but can also provide single role service, as well.  
29

30 The Air Tactical Pilot is primarily responsible for aircraft coordination over the  
31 incident. The Air Tactical Supervisor develops strategy in conjunction with the  
32 Operations Section Chief.

- 33 • **BLM** - *The Interagency Aerial Supervision Guide is policy for BLM. The*  
34 *Interagency Aerial Supervision Guide is available online at*  
35 *<http://www.blm.gov>*  
36

#### 37 **Operational Considerations**

38 The ASM is a shared national resource. Any operation that limits the national  
39 resource status must be approved by the agency program manager. Aerial or  
40 incident complexity and environmental considerations will dictate when the  
41 ASM ceases low level operations. The ASM flight crew has the responsibility  
42 to determine when the complexity level of the incident exceeds the capability to  
43 perform both ATGS and leadplane functions from one aircraft. The crew will  
44 request additional supervision resources, or modify the operation to maintain  
45 mission safety and efficiency.  
46

1 **Policy**

2 Only those individuals certified and authorized by the BLM - National Aviation  
3 Office, or the FS - National Aviation Operations Officer, will function as an Air  
4 Tactical Supervisor (ATS) in an ASM mission profile.

5  
6 **Aerial Supervision Module Program Training and Qualifications**

7 Training and qualification requirements for ASM crewmembers are defined in  
8 the *Interagency Aerial Supervision Guide*.

9  
10 **Air Tactical Group Supervisor (ATGS)**

11 The ATGS manages incident airspace and controls incident air traffic. Specific  
12 duties and responsibilities are outlined in the *Fireline Handbook (PMS 410-1)*  
13 and the *Interagency Aerial Supervision Guide*. The ATGS reports to the Air  
14 Operations Branch Director (AOBD), or in the absence of the AOBD, to the  
15 Operations Section Chief (OSC), or in the absence of the OSC, to the IC.

16  
17 The following PPE is required for all interagency ATGS operations:

- 18 • Leather shoes or boots
- 19 • Full length cotton or nomex pants or flight suit.

20  
21 **Operational Considerations**

22 Relief aerial supervision should be ordered for sustained operations to ensure  
23 continuous coverage over an incident. Personnel who are performing aerial  
24 reconnaissance and detection will not perform aerial supervision duties unless  
25 they are fully qualified as an ATGS. Air tactical aircraft must meet the avionics  
26 typing requirements listed in the *Interagency Aerial Supervision Guide* and the  
27 pilot must be carded to perform the air tactical mission.

28  
29 **Leadplane**

30 A leadplane is a national resource. The *Interagency Aerial Supervision Guide* is  
31 agency policy and is available online at <http://www.blm.gov>. Agency policy  
32 requires an ASM/leadplane to be on order prior to retardant drops over a  
33 congested area. Operations may proceed before the ASM/leadplane arrives, if  
34 communications are established with on-site resources, authorization is granted  
35 from the IC, and the line is cleared prior to commencing retardant operations.

36  
37 **Smokejumper Pilots**

38 The *Interagency Smokejumper Pilot Operations Guide (ISPOG)* serves as policy  
39 for smokejumper pilots' qualifications, training and operations.

40  
41 **Airspace Coordination**

42 The Interagency Airspace Program is an aviation safety program designed to  
43 enhance aviation safety and reduce the risk of a mid-air collision. Guidance for  
44 this program is found in the *Interagency Airspace Coordination Guide (IACG)*,  
45 which has been adopted as policy by the DOI and USDA Forest Service.

1 Additional guidance may be found in the *National Interagency Mobilization*  
2 *Guide* and supplemented by local Mobilization Guides.

3  
4 All firefighting aircraft are required to have operative transponders and will use  
5 a setting of 1255 when engaged in, or traveling to, firefighting operations  
6 (excluding ferry flights), unless given a discrete code by Air Traffic Control  
7 (ATC).

8  
9 Flight planning and Temporary Flight Restriction (TFR) information on World  
10 Aeronautical, Sectional and Global Navigational Charts has been made available  
11 at the National Interagency Airspace System website <http://airspace.nifc.gov>.  
12 TFRs are updated every 30 minutes during normal business hours 7 days a  
13 week. A tactical chart with TFR specific information with incident names,  
14 frequencies and altitudes are available. These charts can be found at  
15 <http://airspace.nifc.gov/mapping/nifc/index.cfm>

16 Additional references can be found by contacting:

- 17 • **BLM** - *State Aviation Managers, Regional Airspace Coordinator and the*  
18 *BLM National Aviation Office Airspace Coordinator.*
- 19 • **NPS** - *Regional Aviation Managers*
- 20 • **FS** - *Regional Aviation Safety Officers, Regional Airspace Coordinators*  
21 *and the FS Airspace Program Manager.*
- 22 • **FWS** - *National Aviation Safety and Operations*

#### 23 24 **Flight Request and Approval**

- 25 • **BLM** - *The 9400-1a, Aircraft Flight Request/Schedule Form, will be used*  
26 *for approval and flight planning. This form will be completed between the*  
27 *aircraft dispatcher and flight manager for missions not requested on a Fire*  
28 *Resource Order. The fixed-wing or helicopter manager will use this form*  
29 *to brief the pilot on the mission.*
- 30 • **NPS** - *Reference RM 60, Appendix 3 & 4.*
- 31 • **FS** - *Refer to FSM 5700 for administrative use, FSM 5705 for point-to-*  
32 *point and mission use for types of Forest Service flights. All non tactical*  
33 *flights require a flight schedule to be completed with a flight following*  
34 *method identified prior to departure; with information passed to all*  
35 *responsible dispatch centers.*

36  
37 **Point-to-point flights** typically originate at one developed airport or permanent  
38 helibase, with the direct flight to another developed airport or permanent  
39 helibase. These flights require approved pilots, aircrew, and aircraft.

- 40 • A point-to point flight is conducted higher than 500 feet above ground  
41 level (AGL).

42  
43 Agency policy requires designating a Flight Manager for point-to-point flights  
44 transporting personnel. The Flight Manager ensures compliance with contract  
45 requirements and is responsible for coordinating the given flight. They must

- 1 have received approved Agency Specified training within the last three years.
- 2 Duties include:
- 3 • Briefs pilots on missions, frequencies, flight routes, hazards, flight
  - 4 following, passenger briefing requirements, and any other related
  - 5 information required.
  - 6 • Checks the pilots' qualification cards and aircraft data cards for approval
  - 7 and currency.
  - 8 • Ensures that flights are safely conducted and do not deviate from filed
  - 9 Flight Plans or mission profiles without prior authorization.
  - 10 • Initials the flight invoices and routes them according to procedures
  - 11 specified in the contract.
  - 12 • **BLM** - *All agency flights shall be approved using an aircraft request/flight*
  - 13 *schedule, USDI form 9400-1a. This form is used to authorize, plan and*
  - 14 *brief the pilot on non-fire flights.*
  - 15 • **NPS** - *Reference RM-60, Appendix 3 for agency specific policy.*
  - 16 • **FS** - *Refer to FSM 5710.5 for administrative use, FSM 5705 for point-to-*
  - 17 *point and mission use for types of Forest Service flights.*

### 19 **Mission Flights**

20 Mission flights are defined as flights not meeting the definition of point-to-point  
21 flight. A mission flight requires work to be performed in the air (retardant or  
22 water delivery, fire reconnaissance, smokejumper delivery), or through a  
23 combination of ground and aerial work (delivery of personnel and/or cargo from  
24 helibases to helispots or unimproved landing sites, rappelling or cargo let-down,  
25 horse herding).

- 26 • PPE is required for any fixed wing mission flight conducted within
- 27 500' AGL.
- 28 • The use of PPE is required for all helicopter flight (point to point and
- 29 mission) and associated ground operations. The specific items to be worn
- 30 are dependent on the type of flight, the function an individual is
- 31 performing, or the ground operation being conducted. Refer to the tables
- 32 in Chapter 9 of the *IHOG* for specific requirements.
- 33 • All personnel will meet training and qualification standards required for
- 34 the mission.
- 35 • All passengers must be authorized and all personnel onboard must be
- 36 essential to the mission.

37  
38 Mission flights for fixed-wing aircraft include but are not limited to the  
39 following:

- 40 • Water or retardant application
- 41 • Parachute delivery of personnel or cargo
- 42 • Airtanker coordinator operations
- 43 • Takeoff or landing requiring special techniques due to hazardous terrain,
- 44 obstacles, pinnacles, or surface conditions
- 45 • Fire reconnaissance (PPE recommended but not required)

- 1 Mission helicopter flights include but are not limited to the following:
- 2 • Flights conducted within 500 feet AGL
  - 3 • Water or retardant application
  - 4 • Helicopter coordinator and ATGS operations
  - 5 • Aerial ignition activities
  - 6 • External load operations
  - 7 • Rappelling
  - 8 • Takeoff or landing requiring special techniques due to hazardous terrain,  
9 obstacles, pinnacles, or surface conditions
  - 10 • Free-fall cargo
  - 11 • Fire reconnaissance

12

### 13 **Flight-Following All Aircraft**

14 Flight-Following is mandatory for all flights. Mission Flights are required to  
15 utilize agency flight following (radio or AFF), point-to-point, non-mission  
16 flights can utilize Agency or FAA flight following. Refer to the *National*  
17 *Interagency Mobilization Guide, section 24.3* for specific direction.

- 18 • Aircraft Managers, Pilots and Dispatchers are responsible for coordinating  
19 and confirming the method of flight following to be utilized.
- 20 • Flight-following reports from the aircraft are the responsibility of the pilot-  
21 in-command (PIC) in accordance with 14 CFR.
- 22 • All dispatch centers designated for fire support shall have the ability to  
23 monitor AFF as well as the capability to transmit and receive “National  
24 Flight Following” and Air Guard” in all areas where they are flight  
25 following aircraft.
- 26 • If AFF becomes inoperable the aircraft will normally remain available for  
27 service, utilizing radio/voice system for flight following. Each occurrence  
28 must be evaluated individually and decided by the COR/CO.
- 29 • The default standard for lower-48 interagency fire operations is for all  
30 aircraft to maintain positive radio contact with 15 minute check-ins.
- 31 • Agency FM radio capability is required for all mission flights.
- 32 • Periodic radio transmissions are acceptable when utilizing AFF.
- 33 • Helicopters conducting Mission Flights shall check-in prior to and  
34 immediately after each takeoff/landing per IHOG 4.II.E.2
- 35 • Aircraft operating under certain contracts may not be required to be  
36 equipped with AFF and/or FM radios. Consult the appropriate  
37 procurement document for the aircraft in question to determine  
38 applicability.
- 39 • Violation of flight-following standards requires submission of a  
40 SAFECOM.

41

### 42 **Sterile Cockpit All Aircraft**

43 Sterile cockpit rules apply within a 5-mile radius of the airport. The flight crew  
44 will perform no radio or cockpit communication during that time that is not  
45 directly related to safe flight of the aircraft from taxi to 5 miles out and from 5

1 miles out until clearing the active runway. This would consist of reading  
2 checklists, communication with Air Traffic Control (ATC), Flight Service  
3 Stations, Unicom, or other aircraft with the intent of ensuring separation or  
4 complying with ATC requirements. Communications can be accomplished  
5 when the audio panels can be isolated and do not interfere with flight operations  
6 of the pilot.

7  
8 Exception: When conducting firefighting missions within 5 miles of an  
9 uncontrolled airport, maintain sterile cockpit until departing the traffic pattern  
10 and reaching final altitude. Monitor CTAF frequency if feasible while engaged  
11 in firefighting activities. Monitor CTAF as soon as practical upon leaving the  
12 fire and returning to the uncontrolled airport. When conducting firefighting  
13 missions within Class B, C, or D airspace, notify dispatch that ATC  
14 communications will have priority over dispatch communications.

## Chapter 17 Prescribed Fire

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### **Introduction**

The *Interagency Prescribed Fire Planning and Implementation Procedures Reference Guide (IA RX Fire Guide)* was signed by the National Fire and Aviation Executive Board (NFAEB) on September 1, 2006. The IA RX Fire guide provides consistent interagency policy, establishes common terms and definitions, and identifies planning and implementation processes for prescribed fire. These procedures meet all policy requirements described in the *2003 Interagency Strategy for the Implementation of Federal Wildland Fire Management Policy*. The 2006 guide provides unified direction and guidance for prescribed fire planning and implementation for the Department of the Interior's Bureau of Indian Affairs (BIA), Bureau of Land Management (BLM), the National Park Service (NPS), the United States Fish and Wildlife Service (USFWS), and the United States Department of Agriculture Forest Service (USDA FS).

The guide can be obtained electronically at the National Fire and Aviation Executive Boards (NFAEB) website: [http://www.nifc.gov/fire\\_policy/](http://www.nifc.gov/fire_policy/) and at the National Interagency Fuels Management Website: <http://www.nifc.gov/fuels/index.html>. Access the 'Direction and Guidance' link.

The IA RX Fire Guide describes what is minimally acceptable for prescribed fire planning and implementation. All personnel involved in the prescribed fire planning and implementation process must ensure that specific agency additional standards and or supplemental guidance are followed.

### **Purpose**

The purpose of this guide is to provide consistent interagency policy, establish common terms and definitions, and identify planning and implementation processes for prescribed fire.

The guide describes what is minimally acceptable for prescribed fire planning and implementation. Agencies may choose to provide more restrictive standards and policy direction, but must adhere to these minimums.

### **Scope**

This guide provides policy and direction to implement existing federal policy and has been developed with tribal, state, county, and local cooperators in mind. While some of these guidelines will not fit all non-federal cooperators, the intent is to include everyone by establishing a planning and implementation guide that might result in that outcome.



**1 Prescribed Fire Program Goals**

2 Interagency Prescribed Fire Program goals are to:

- 3 • Provide for firefighter and public safety as the first priority.
- 4 • Ensure that risk management is incorporated into all prescribed fire  
5 planning and implementation.
- 6 • Use prescribed fire in a safe, carefully planned, and cost-efficient manner.
- 7 • Reduce wildfire risk to communities, municipal watersheds and other  
8 values and to benefit, protect, maintain, sustain, and enhance natural and  
9 cultural resources.
- 10 • Utilize prescribed fire to restore natural ecological processes and functions,  
11 and to achieve land management objectives.

12

**13 Authorities**

14 All use of prescribed fire will be supported by a Land/Resource Management  
15 Plan (L/RMP) and/or Fire Management Plan (FMP). Prescribed fire projects  
16 can only be implemented through an approved Prescribed Fire Plan. Specific  
17 authorities exist for each agency to utilize prescribed fire (See Appendix A of  
18 the *Interagency Prescribed Fire Planning and Implementation Procedures*  
19 *Reference Guide*). All project decisions to use prescribed fire are subject to the  
20 agency's analysis, documentation, and disclosure requirements for complying  
21 with the National Environmental Policy Act (NEPA).

22

23 During prescribed fire planning and operations, all federal agencies will accept  
24 each other's standards for qualifications. The minimum qualifications standard  
25 is the National Wildland Fire Coordinating Group (NWCG) *Wildland and*  
26 *Prescribed Fire Qualifications System Guide, 2000* (PMS 310-1). State, local  
27 cooperators, and contractors working on federal agency prescribed fires must  
28 meet the NWCG PMS 310-1 standards unless local agreements specify  
29 otherwise.

30

31 The main reference glossary for this guide is the NWCG glossary, which is  
32 updated periodically: <http://www.nwcg.gov/>.

33

34 This guide is not intended to address interagency business rules. Reference  
35 individual agency's business rules for direction.

36

**37 Prescribed Fire Planning Process**

38 Common planning documents to ensure quality prescribed fire plans include:

- 39 • Land/Resource Management Plan (L/RMP)
- 40 • Overall direction is provided to the Wildland Fire Management Program  
41 by L/RMP. These plans serve as the document to initiate, analyze, and  
42 provide the basis for using prescribed fire to meet resource management  
43 objectives.

44

45

46

1 **Fire Management Plan (FMP)**

2 All burnable acres will be covered by a Fire Management Plan (FMP). The FMP  
 3 is the cornerstone plan for managing a Wildland Fire Management Program and  
 4 should flow directly from the L/RMP. FMPs may be developed for a Fire  
 5 Planning Unit (FPU) that crosses jurisdictional boundaries. Where the Wildland  
 6 Fire Management Program crosses jurisdictional boundaries, or where program  
 7 coordination is essential, the FMP will require interagency coordination. Most  
 8 FMPs are anticipated to fall into this category.

9  
 10 **National Environmental Policy Act (NEPA)**

11 Resource and prescribed fire objectives for specific prescribed fire projects are  
 12 derived from the NEPA analysis. The entire prescribed fire project area must be  
 13 analyzed under NEPA. NEPA documents that identify and analyze the effects  
 14 of using or not using prescribed fire treatment projects may include  
 15 Environmental Impact Statements (EIS), Environmental Assessments (EA), and  
 16 Categorical Exclusion (CE).

17  
 18 Other authorities that may be utilized to guide analysis and determination of  
 19 NEPA compliance are the Healthy Forest Restoration Act (HFRA), the Healthy  
 20 Forest Initiative (HFI), and the Tribal Forest Protection Act (TFPA).

21  
 22 Prescribed fire planning and related NEPA analysis should always occur at the  
 23 largest possible spatial and temporal scales.

24  
 25 **Implementation Organization and Qualifications**

26 During prescribed fire planning and operations, all federal agencies will accept  
 27 each other's standards for qualifications. The minimum qualifications standard  
 28 is the National Wildland Fire Coordinating Group (NWCG) *Wildland and*  
 29 *Prescribed Fire Qualifications System Guide, 2000 (PMS 310-1)*. State, local  
 30 cooperators, and contractors working on federal agency prescribed fires must  
 31 meet the NWCG PMS 310-1 standards unless local agreements specify  
 32 otherwise. No less than the organization described in the approved Prescribed  
 33 Fire Plan may be used for implementation. The complexity of each prescribed  
 34 fire or phase of fire(s) determines the organization(s) needed to safely achieve  
 35 the objectives specified in the Prescribed Fire Plan.

36  
 37 **Minimum Supervisory Qualifications Determined By Prescribed Fire**  
 38 **Complexity:**

Position	Complexity		
	High	Moderate-low	Low
RXM1	Optional	Optional	Optional
RXM2	Not Allowed	Optional	Optional
RXB1	Required	Optional	Optional
RXB2	Not Allowed	Required	Optional
RXB3	Not Allowed	Not Allowed	Required
FIRB	Optional	Optional	Optional

1 **Holding Specialist**

2 Holding functions will be managed by personnel qualified at the appropriate ICS  
 3 wildland fire operations position as required by complexity, assigned resources  
 4 and operational span of control. For some projects, there may be no holding  
 5 requirements or the holding duties are assumed by the Burn Boss.

6  
 7 High, Moderate, and Low complexity prescribed fires are determined through  
 8 the required NWCG *Prescribed Fire Complexity Rating System Guide*.

9  
 10 **Prescribed Fire Burn Boss Type 3 (RXB3)**

11 Adoption of the RXB3 position is up to each agency. Non-federal RXB3s must  
 12 meet the qualifications as listed in the table below unless local agreements  
 13 specify otherwise.

14  
 15 An RXB3 will only be allowed to implement low complexity prescribed fires  
 16 where the possibility of spread or spotting outside the project area is negligible  
 17 to non-existent; multiple fuel models are not involved; and aerial operations are  
 18 not involved.

19  
 20 **Requirements for Prescribed Fire Burn Boss Type 3**

Training	Required: S-290 Intermediate Wildland Fire Behavior Suggested: S-234 Ignition Operations
Prerequisite Experience	Incident Commander, Type 5 OR Advanced Firefighter/Squad Boss AND Satisfactory position performance as a Prescribed Fire Burn Boss Type 3
Physical Fitness	Moderate
Other Position Assignments that will Maintain Currency	Prescribed Fire Burn Boss Type 2 Prescribed Fire Burn Boss Type 1 Fire Use Manager Prescribed Fire Manager Type 1 Prescribed Fire Manager Type 2

21  
 22 **Responsibilities**

23 Prior to prescribed fire implementation, thorough planning and review processes  
 24 must be conducted. All prescribed fire actions must be developed from  
 25 resource/fire management objectives carried forward from FMP's and L/RMP's.  
 26 A specific implementation plan for each prescribed fire must be completed,  
 27 reviewed, and approved before ignition can begin.

28  
 29 The agency administrator has final approval authority for all Prescribed Fire  
 30 Plans, unless special circumstances warrant higher review and concurrence

1 (such as may occur during higher Preparedness Levels or for extremely large,  
2 complex projects). Although the agency administrator has final approval  
3 authority for the Prescribed Fire Plan and the Agency Administrator Pre-Ignition  
4 Approval Checklist, the Prescribed Fire Burn Boss has the responsibility to  
5 make the on-site tactical "GO/NO-GO" decision. The Prescribed Fire Burn  
6 Boss ensures that all prescription, staffing, equipment, and other plan  
7 specifications are met before, during, and after the prescribed fire.

8  
9 Every Prescribed Fire Plan must receive a technical review. The Technical  
10 Reviewer and Prescribed Fire Plan Preparer must be qualified or have been  
11 previously qualified as a Prescribed Fire Burn Boss at an experience level equal  
12 to or higher than the complexity being reviewed. Either the Prescribed Fire Plan  
13 Preparer or Technical Reviewer must be currently qualified.

14  
15 Only a RXB1 can review plans at high complexity. An RXB2 can review plans  
16 of moderate to low complexity. An RXB3 is not allowed to function as a  
17 Prescribed Fire Plan Preparer (see Chapter 3, section C of the *Interagency  
18 Prescribed Fire Planning and Implementation Procedures Reference Guide*) or  
19 Technical Reviewer.

20  
21 Agency or individual unit policy may dictate additional reviews. Interagency  
22 Prescribed Fire Plans require approval from all appropriate agency  
23 administrators and a technical review. Listed below are the prescribed fire and  
24 implementation position roles and responsibilities.

#### 25 26 **Agency Administrator**

27 For the purposes of this document, the agency administrator is defined as the  
28 Line Officer (or designee) of the agency or jurisdiction that has responsibility  
29 for the prescribed fire. These usually include the: NPS Park Superintendent,  
30 BIA Agency Superintendent, USFS Forest Supervisor, BLM District/Field  
31 Office Manager, FWS Project Leader, State Forest Officer, and/or Fire Chief.

32  
33 The agency administrator is responsible to:

- 34 • Approve Prescribed Fire Plans. When approving a plan, understand the  
35 risks associated with it. Ensure that the plan has been reviewed and  
36 recommended for approval by the Technical Reviewer who was not the  
37 primary preparer of the plan.
- 38 • Ensure that only trained and qualified personnel participate in the  
39 implementation portion of the prescribed fire.
- 40 • Ensure that projects are monitored, evaluated, and documented in the  
41 project file.
- 42 • Sign, date, and provide an expiration date for the approval to burn on the  
43 agency administrator Pre-Ignition Approval Checklist (Reference Burn  
44 Plan Template, Appendix B of the *Interagency Prescribed Fire Planning  
45 and Implementation Procedures Reference Guide*).

- 1 • Understand and approve the Complexity Analysis (PMS 424 January  
2 2004).
- 3 • Ensure that all prescribed fires are conducted in accordance with the  
4 approved implementation plan and established standards and guidelines.
- 5 • Ensure that periodic reviews and inspections of the Prescribed Fire  
6 Program are completed.
- 7 • Determine if and when the agency administrator is to be notified that  
8 contingency actions are being taken.
- 9 • Report all wildfires resulting from prescribed fires through the chain of  
10 command.
- 11 • Declare an escaped prescribed fire a wildfire (if responsibility is assigned  
12 in the plan).
- 13 • Ensure that escaped prescribed fires are reviewed according to established  
14 guidelines.

15

**16 Technical Reviewer**

17 The Technical Reviewer is responsible for reviewing each Prescribed Fire Plan  
18 element for content, evaluating the risk, and completing a Complexity Analysis  
19 to ensure that the stated goals and objectives can be safely and successfully  
20 achieved when properly implemented. The Technical Reviewer shall be  
21 qualified or previously qualified as a Burn Boss at or above the level of project  
22 complexity. At a minimum, NWCG qualifications will be accepted. The  
23 Technical Reviewer should have local knowledge of the area, experience  
24 burning in similar fuel types, and/or conduct an on-site review. The Technical  
25 Reviewer must be someone other than the primary preparer of the plan. An off-  
26 unit technical review is encouraged to provide an additional independent  
27 perspective. It is acceptable for other specialists to review certain portions of  
28 the plan however; a primary Technical Reviewer must be designated as  
29 technical review signatory. For example, a fire behavior analyst may review the  
30 fire behavior calculations; the aviation manager may review the air operations  
31 plan; and/or a resource specialist may review impacts to their resource of  
32 interests. It is recommended that at least once every year, each unit should send  
33 a moderate or high complexity Prescribed Fire Plan off-unit for technical  
34 review. The Technical Reviewer is responsible to:

- 35 • Ensure that Prescribed Fire Plans meet agency policy and direction.
- 36 • Ensure that the Complexity Analysis accurately represents the project, so  
37 the agency administrator understands the identified risks and the mitigating  
38 measures enacted. This may require on-site review in Wildland Urban  
39 Interface (WUI) or high complexity situations by the Technical Reviewer.
- 40 • Check the prescription parameters against the fuel types to ensure that the  
41 project as planned has a reasonable chance of meeting the resource  
42 management objectives.
- 43 • Ensure that the fire behavior calculations and/or prescription parameters  
44 are appropriate and within the acceptable range.

- 1 • Ensure that the ignition, holding and contingency plans are consistent with  
2 the predicted fire behavior.
- 3 • Complete and sign the Technical Review Checklist (See Burn Plan  
4 Template, Appendix B of the *Interagency Prescribed Fire Planning and*  
5 *Implementation Procedures Reference Guide*) and the Prescribed Fire Plan  
6 signature page.

7

### 8 **Prescribed Fire Plan Preparer**

9 For the purpose of this document, the Prescribed Fire Plan Preparer is defined as  
10 the individual responsible for the preparation of the Prescribed Fire Plan.

11 Several people may be involved in the preparation of the Prescribed Fire Plan,  
12 but the Prescribed Fire Plan Preparer is responsible for the final plan content.

13 The primary preparer of the Prescribed Fire Plan will sign the signature page.

14 The preparer is responsible to:

- 15 • Prepare the Prescribed Fire Plan in accordance with this guide's policy and  
16 direction.
- 17 • Coordinate with the resource management and/or technical specialists to  
18 ensure that the plan meets management and operational objectives.
- 19 • Interact with the Technical Reviewer to ensure that all plan elements are  
20 adequately addressed.
- 21 • Complete and sign the Complexity Analysis.

22

### 23 **Prescribed Fire Burn Boss (RXB1/RXB2/RXB3)**

24 The Prescribed Fire Burn Boss is responsible to the agency administrator,  
25 Prescribed Fire Manager, or FMO/local fire management organization for  
26 implementing the Prescribed Fire Plan. The Prescribed Fire Burn Boss is  
27 responsible to:

- 28 • Review the Prescribed Fire Plan prior to implementation and ensure all  
29 required elements and objectives are addressed.
- 30 • Inspect the burn unit to validate Prescribed Fire Plan elements including  
31 areas of special concern as well ensuring that holding/contingency plans  
32 adequately address expected fire behavior outside the unit(s).
- 33 • Obtain current weather and smoke management forecasts, updates, and  
34 special advisories from a meteorologist.
- 35 • Maintain communication with the agency administrator, Prescribed Fire  
36 Manager, or FMO/local fire management organization.
- 37 • Ensure that the Agency Administrator Pre-Ignition Approval Checklist is  
38 valid (See Burn Plan Template, Appendix B of the *Interagency Prescribed*  
39 *Fire Planning and Implementation Procedures Reference Guide*)
- 40 • Take to the field those portions of the Prescribed Fire Plan necessary for  
41 completing the briefing and safe project implementation.
- 42 • Complete and sign the Prescribed Fire GO/NO-GO Checklist (See Burn  
43 Plan Template, Appendix B of the *Interagency Prescribed Fire Planning*  
44 *and Implementation Procedures Reference Guide*).

- 1 • Ensure availability of any contingency resources and management of those  
2 resources if deployed.
- 3 • Ensure that all operations are conducted in a safe manner and in  
4 accordance with the approved plan and established standards and  
5 guidelines.
- 6 • Verify qualifications of all assigned personnel. Conduct the personnel  
7 /safety briefing to ensure a safe operation.
- 8 • Conduct the test fire and document the results.
- 9 • Supervise assigned personnel and direct the ignition, holding and  
10 monitoring operations. The Prescribed Fire Burn Boss will be responsible  
11 for implementation including mop-up and patrol unless otherwise assigned  
12 to other qualified personnel.
- 13 • Declare the prescribed fire out unless the responsibility for it is formally  
14 passed to another Prescribed Fire Burn Boss, Prescribed Fire Manager or  
15 the local fire management organization.
- 16 • Determine when the prescribed fire is not within prescription parameters  
17 (both short and long term) or is not meeting objectives.
- 18 • Declare an escaped prescribed fire a wildfire (if responsibility is assigned  
19 in the plan).
- 20 • Manage the incident or oversee the transition to another Incident  
21 Commander if an escape occurs.
- 22 • Ensure that reports are completed.
- 23 • Coordinate with adjacent landowners, cooperators and permittees as  
24 designated in the Prescribed Fire Plan.

#### 25 **Fire Management Officer (FMO)/ Fire Program Manager**

26 The Fire Management Officer (FMO)/Fire Program Manager is responsible to  
27 the agency administrator for planning, implementing and monitoring of the  
28 Prescribed Fire Program in accordance with policy and direction. The  
29 FMO/Fire Program Manager is responsible to:

- 31 • Ensure compliance with national, regional, tribal and local fire policy and  
32 direction, as well as applicable state and local laws.
- 33 • Ensure that Preparedness Level Restrictions are adhered to. At National  
34 Preparedness Levels Four and Five, prescribed fire implementation is  
35 restricted. See the *National Interagency Mobilization Guide* for details.
- 36 • Ensure that both the Prescribed Fire Plan Preparer and the Technical  
37 Reviewer are qualified or qualified less currency at the level of complexity  
38 or higher.
- 39 • Ensure that trained and qualified personnel are available to participate in  
40 the Prescribed Fire Program.
- 41 • Assign the Prescribed Fire Burn Boss.
- 42 • Ensure a Prescribed Fire Plan with written approval exists for each  
43 prescribed fire project.
- 44 • Review the Prescribed Fire Plan to assess the impact of the project on the  
45 unit's workload; include the project in the unit's Annual Work Plan; assess

- 1 the unit's ability to implement the project; and assess the need for  
2 additional implementation resources.
- 3 • Ensure that all prescribed fires are conducted in accordance with the  
4 approved Prescribed Fire Plan and established standards and guidelines.
  - 5 • Declare an escaped prescribed fire a wildfire (if responsibility is assigned  
6 in the plan).
  - 7 • Act as liaison/coordinator to the agency administrator, Prescribed Fire  
8 Manager and/or Prescribed Fire Burn Boss, local dispatch office, other  
9 units, other agencies, air quality authorities, news media, transportation  
10 agencies, and safety officials.
  - 11 • Ensure that projects are reported through the local office and comply with  
12 national reporting guidelines.
  - 13 • Ensure that fuels management projects and interagency support actions are  
14 reported through the proper reporting systems.
  - 15 • Ensure that periodic reviews and inspections of the Prescribed Fire  
16 Program are completed.
  - 17 • Update agency administrator on the progress of the prescribed fire (as  
18 necessary).
  - 19 • Ensure that projects are monitored, evaluated and documented as a part of  
20 the project file.

21

**22 Prescribed Fire Manager (RXM1/RXM2)**

23 The Prescribed Fire Manager is responsible for implementing and coordinating  
24 assigned prescribed fire activities. A Prescribed Fire Manager may be assigned  
25 during periods when multiple simultaneous prescribed fires are being conducted;  
26 when multiple prescribed fires will be conducted within a short time frame; or  
27 where there is complex interagency involvement. The Prescribed Fire Manager  
28 is responsible to:

- 29 • Review Prescribed Fire Plans prior to implementation.
- 30 • Monitor all prescribed fire operations.
- 31 • Ensure that all operations are conducted in a safe manner and in  
32 accordance with the approved plan(s) and established standards and  
33 guidelines.
- 34 • Act as coordinator/liaison between the burn organization(s) and other  
35 offices, agencies, air quality authorities, news media, transportation  
36 agencies, safety officials, and interested public.
- 37 • Declare an escaped prescribed fire a wildfire (if responsibility is assigned  
38 in the plan).
- 39 • Obtain and interpret long-term weather information.
- 40 • Brief the Burn Bosses and direct operational assignments according to  
41 policies, priorities, and standards.
- 42 • Set priorities for allocation of resources.
- 43 • Ensure the completion of all required documentation including the  
44 evaluation and documentation of accomplishments, fire behavior and fire  
45 effects, operation procedures, and cost summaries.



**1 Firing Boss (FIRB)**

2 The Firing Boss reports to the Prescribed Fire Burn Boss and is responsible for  
3 supervising and directing ground and/or aerial ignition operations according to  
4 established standards in the Prescribed Fire Plan. The Firing Boss is responsible  
5 to:

- 6 • Review the Prescribed Fire Plan and the burn unit prior to implementation.
- 7 • Brief personnel on project objectives and ignition operations.
- 8 • Complete the test fire according to the ignition plan at the direction of the  
9 Prescribed Fire Burn Boss.
- 10 • Conduct ignition operations in a safe manner according to the ignition  
11 plan.
- 12 • Identify the impacts of ignition on the control and desired fire effects.
- 13 • Coordinate ignition operations with the Holding Specialist.

**14 Holding Specialist**

15 The supervisory position in charge of the holding forces reports to the  
16 Prescribed Fire Burn Boss. There is no specific NWCG approved prescribed  
17 fire position for this function. This position is assigned by name and title using  
18 PMS 310-1 mnemonics. Holding functions will be managed by personnel  
19 qualified at the appropriate Incident Command System (ICS) wildland fire  
20 operations standard and as required by the prescribed fire complexity, assigned  
21 resources, and operational span of control. The Holding Specialist is  
22 responsible to:

- 23 • Review the Prescribed Fire Plan and the burn unit prior to implementation.
- 24 • Brief holding personnel on project objectives and holding operations.
- 25 • Conduct holding operations in a safe manner according to the holding plan.
- 26 • Coordinate holding operations with the Firing Boss.
- 27 • Confine the fire to a predetermined area, mop up, and patrol.
- 28 • Maintain communication with Burn Boss on holding progress and/or  
29 problems.
- 30 • For some prescribed fires, there may be no holding requirements or the  
31 holding duties are assumed by the Prescribed Fire Burn Boss.

**32 Fire Effects Monitor (FEMO)**

33 The Fire Effects Monitor (FEMO) is responsible for collecting the onsite  
34 weather, fire behavior, and fire effects information needed to assess whether the  
35 fire is achieving established resource management objectives. The FEMO is  
36 responsible to:

- 37 • Review the monitoring plan prior to implementation.
- 38 • Monitor, obtain, and record weather data.
- 39 • Monitor and record fire behavior data throughout the burn operations.
- 40 • Recon the burn unit/area assigned.
- 41 • Plot the burn area and perimeter on a map.
- 42 • Monitor and record smoke management information.
- 43 • Monitor first order fire effects.

- 1 • Provide monitoring summary of the fire.
- 2 • Provide fire behavior and weather information to burn personnel as
- 3 appropriate.

4

**5 Helitorch Manager (HTMG)**

6 The Helitorch Manager is responsible to manage the helitorch operation,  
7 supervise the mixing operation, and provide technical assistance to the  
8 Prescribed Fire Burn Boss/Ignition Specialist. The HTMG may also serve as  
9 Helicopter Manager and Helitorch Manager or Helicopter Parking Tender (but  
10 not both).

11

**12 Plastic Sphere Dispenser Operator (PLDO)**

13 The Plastic Sphere Dispenser Operator (PLDO) is responsible for the  
14 preparation, operation, maintenance, and care of the dispenser. The PLDO  
15 reports to the Ignition Specialist.

16

**17 Helitorch Mixmaster (HTMM)**

18 The Helitorch Mixmaster (HTMM) is responsible for supervising the  
19 mixing/filling operations. The HTMM may also serve as Helitorch Manager or  
20 Helicopter Manager.

21

**22 Resource Specialist or Resource Advisor (READ)**

23 The Resource Specialist/READ is responsible for ensuring the prescribed fire  
24 project is planned and implemented in a manner supporting the unit's resource  
25 management goals and objectives. The Resource Specialist/READ is  
26 responsible to the agency administrator. The Resource Specialist/READ is  
27 responsible to:

- 28 • Ensure resource management representation in the preparation of the
- 29 Prescribed Fire Plan.
- 30 • Ensure a review of Prescribed Fire Plans is conducted before each plan is
- 31 submitted for approval.
- 32 • Evaluate the prescribed fire project in terms of meeting objectives.
- 33 • Provide resource information and direction to the Prescribed Fire Burn
- 34 Boss.
- 35 • Present information at briefings on resources, priorities, and issues of
- 36 concern.
- 37 • Coordinate with adjacent landowners, cooperators and permittees as
- 38 designated in the Prescribed Fire plan or by the Burn Boss.

39

**40 Amendments**

41 There may be a need to make amendments to the Prescribed Fire Plan. These  
42 are changes to the Prescribed Fire Plan that require an agency administrator  
43 signature. When changes are necessary, plans must be amended to identify the  
44 affected sections; the reason for the change(s); and have the changes clearly  
45 identified. For amendments, the same standards for Prescribed Fire Plan

1 preparation, review, and approval apply. Common reasons for amending the  
2 Prescribed Fire Plan may include:

- 3 • Changes to objectives.
- 4 • Changes to complexity.
- 5 • Changes to fire behavior prescription parameters.
- 6 • Changes to project area boundaries resulting in either an increase or  
7 decrease in area.
- 8 • Reduction in resource capabilities identified as required in the plan.
- 9 • Major changes to ignition methods including ground ignition to aerial  
10 ignition; aerial ignition to hand ignition; hand drip torch ignition to use of  
11 terra torch ignition (includes ATV mounted ignition devices); and/or hand  
12 ignition from roadways to hand ignition from boats or other watercraft.

13

14 To avoid having to amend the Prescribed Fire Plan, flexibility should be built  
15 into the plan that will allow for a range of adjustments during the prescribed fire.  
16 When building flexibility, the range of identified options must remain within the  
17 scope of the Complexity Analysis. Examples of flexibility that can be built into  
18 a prescribed fire plan:

- 19 • The Prescribed Fire Plan may state that on burn day and subsequent days  
20 of the prescribed fire, a mix of the number and kinds of hand crews and  
21 engines may be modified as long as stated production capabilities are not  
22 compromised.
- 23 • As the prescribed fire progresses from ignition to holding to mop up and  
24 patrol, specified capabilities and/or types of resources may be adjusted. If  
25 these flexibilities are built into the Prescribed Fire Plan, there must be a  
26 clear statement as to the work capability requirements of the resources at  
27 the various stages of the prescribed fire.
- 28 • Minor changes in burn unit boundaries to facilitate holding and/or ignition,  
29 as long as the area in question has been in the NEPA document, requires  
30 no change in holding or ignition resources and is within the project  
31 boundaries.
- 32 • Additional resources may be assigned to the project without amending the  
33 burn plan if the addition of these resources does not change the complexity  
34 of the burn or require additional supervisory positions. These changes  
35 must be documented in the daily briefing.

36

### 37 **Safety**

38 The Federal Wildland Fire Policy states that firefighter and public safety is first  
39 priority. Prescribed Fire Plans and activities must reflect this commitment.  
40 Every person involved in a prescribed fire is responsible for identifying safety  
41 issues and concerns. It is the responsibility of each individual participating in  
42 prescribed fire activities to notify immediate supervisor of any possible  
43 misunderstanding of assigned tasks or safety concerns related to the assignment.  
44

1 NWCG established Work/Rest Guidelines and span of control apply equally to  
2 wildland and prescribed fire operations. The management of crew, overhead,  
3 and support personnel rest to assure safe, productive fire operations is the  
4 responsibility of all supervisory fire management personnel (refer to *NWCG*  
5 *Interagency Incident Business Management Handbook, PMS 902, NFES 3139*).

6  
7 Exposure to smoke during prescribed fire operations can be a significant safety  
8 concern. Research has shown that exposure to smoke on prescribed fires,  
9 especially in holding and ignition positions, often exceeds that on wildfire. At a  
10 minimum, smoke exposure must be addressed in the Job Hazard Analysis (JHA)  
11 and smoke management element. Public safety impacts from smoke should be  
12 addressed in the Smoke Management and Air Quality Element as well as the  
13 Public, Personnel Safety, and Medical Element.

14  
15 Transportation and use of any product containing chemicals (drip torch fuel,  
16 aviation gas, sphere dispensers, fusees, fuel thickener, etc.) must be in  
17 compliance with the *Occupational Safety and Health Administration's (OSHA)*  
18 *Hazard Communication Standard (29 CFR 1910.1200)* and *Department of*  
19 *Transportation Regulations (49 CFR Part 171)*, and agency specific guidance.  
20 Material Safety Data Sheets (MSDS) for hazardous materials used on projects  
21 should be consulted in developing the JHA.

22  
23 The SAFENET form and process is designed for reporting and correcting unsafe  
24 situations and is applicable to prescribed fire applications.

25  
26 The risk management process identified in the *NWCG Incident Response Pocket*  
27 *Guide (IRPG, PMS 410-1)* helps ensure that critical factors and risks associated  
28 with prescribed fire operations are considered during decision making. This  
29 process should be applied to all prescribed fire planning and operations.

30  
31 Consider using a Safety Officer on high complexity prescribed fires and others  
32 where the complexity analysis shows the need or indicates a higher than normal  
33 hazard.

34  
35 A qualified Safety Officer is defined as a currently qualified Safety Officer, at  
36 any Type level (Types 1, 2 or Line), as defined by the NWCG, *Wildland and*  
37 *Prescribed Fire Qualification System Guide (PMS 310-1)*.

#### 38 **Prescribed Fire Plan**

39 The Prescribed Fire Plan is the site-specific implementation document. It is a  
40 legal document that provides the agency administrator the information needed to  
41 approve the plan and the Prescribed Fire Burn Boss with all the information  
42 needed to implement the prescribed fire. Prescribed fire projects must be  
43 implemented in compliance with the written plan.  
44  
45

1 Prescribed Fire Plans will vary in their degree of detail. The size and  
2 complexity of the prescribed fire project will determine the level of detail  
3 required. The Prescribed Fire Plan Template (Appendix B of the *Interagency*  
4 *Prescribed Fire Planning and Implementation Procedures Reference Guide*)  
5 must be utilized. Each element must be addressed and then assembled in the  
6 sequence identified in the template. Should an element not apply to a specific  
7 prescribed fire plan, not applicable (N/A) may be utilized. Programmatic plans  
8 for multiple units under like conditions may be appropriate. Additional  
9 information may be added as appendices.

10  
11 If an interagency mixed ownership Prescribed Fire Plan is being prepared, the  
12 development of all appropriate elements within the plan will be conducted in an  
13 interagency setting. Interagency agreements and Memorandums of  
14 Understanding (MOU) and/or private land owner agreements are required to  
15 implement prescribed fire on multiple ownerships.

16  
17 Listed below are the planning explanations of each individual element required  
18 as part of a complete Prescribed Fire Plan and implementation policy related to  
19 the element.

20

## 21 **Prescribed Fire Plan Elements**

22

### 23 **1. Signature Page**

24 The following information must be included on the signature page:

- 25 • Administrative unit name.
- 26 • Prescribed Fire Unit (burn unit)/Project name.
- 27 • At a minimum, three dated signatures are required: a Prescribed Fire Plan  
28 Preparer, a Technical Reviewer, and an agency administrator. Additional  
29 signatures may be included as required by the individual unit.
- 30 • Final determined complexity rating(s).
- 31 • If the plan needs to be amended, the signed and dated amendments must be  
32 attached to the Prescribed Fire Plan (see Chapter 4 of the *Interagency*  
33 *Prescribed Fire Planning and Implementation Procedures Reference*  
34 *Guide*).

35

### 36 **2. GO/NO-GO Checklists**

- 37 • **Agency Administrator Pre-Ignition Approval Checklist**  
38 The Agency Administrator's Pre-Ignition Approval Checklist (Burn Plan  
39 Template, Appendix B of the *Interagency Prescribed Fire Planning and*  
40 *Implementation Procedures Reference Guide*) is required to be completed.  
41 The Agency Administrator's Pre-Ignition Approval Checklist evaluates  
42 whether compliance requirements, Prescribed Fire Plan's elements, and  
43 internal and external notification(s) have been completed and expresses the  
44 agency administrator's intent to implement the Prescribed Fire Plan. The  
45 checklist establishes the expiration date for the implementation of the  
46 Prescribed Fire Plan. If ignition of the prescribed fire is not initiated prior

1 to expiration date determined by the agency administrator, a new approval  
2 is required. An 'acting' agency administrator may sign the Agency  
3 Administrator Pre-Ignition Approval Checklist if authority to do so has  
4 been delegated. If the Prescribed Fire Plan is amended, a review and re-  
5 validation of the Agency Administrator Pre-Ignition Approval Checklist  
6 would be required and included in the Project File.

7 • **Prescribed Fire GO/NO-GO Checklist**

8 Prior to all ignition operations, the assigned Prescribed Fire Burn Boss will  
9 complete and sign the Prescribed Fire GO/NO-GO Checklist (Burn Plan  
10 Template, Appendix B of the *Interagency Prescribed Fire Planning and*  
11 *Implementation Procedures Reference Guide*). This checklist is a  
12 minimum standard and agencies may elect to add questions and/or  
13 approval signatures. For each day of active ignition on a prescribed fire, a  
14 separate daily GO/NO-GO Checklist is required.  
15

16 **3. Complexity Analysis**

17 Risk management is a foundation for all prescribed fire activities. Risks and  
18 uncertainties relating to prescribed fire activities must be understood, analyzed,  
19 communicated, and managed as they relate to the cost of either doing or not  
20 doing an activity. At a minimum, those risks from the Complexity Analysis that  
21 are rated high and can not be mitigated will be identified with a discussion of the  
22 risks associated in the Summary Complexity Rating Rationale. This discussion  
23 will also be included in the Complexity Analysis Summary page (Burn Plan  
24 Template, Appendix B of the *Interagency Prescribed Fire Planning and*  
25 *Implementation Procedures Reference Guide*).  
26

27 The Prescribed Fire Complexity Rating must be completed utilizing the  
28 *Prescribed Fire Complexity Rating System Guide, NWCG, January, 2004* (or  
29 current version). The purpose of the complexity rating process is to provide:

- 30 • Assignment of a complexity rating of high, moderate, or low to the  
31 prescribed fire.
- 32 • Management and implementation personnel a relative ranking as to the  
33 overall complexity of a specific prescribed fire project.
- 34 • A process that can be used to identify Prescribed Fire Plan elements or  
35 characteristics that may pose special problems or concerns.
- 36 • A process that identifies mitigation activities needed to reduce the  
37 risk/hazard to the implementation personnel and public as well as  
38 mitigating potential resource damage.
- 39 • A preliminary rating will be completed early in the Prescribed Fire Plan  
40 development stage. This will identify potential concerns that may be  
41 mitigated during the plan preparation process. Once the Prescribed Fire  
42 Plan is near completion, the final complexity rating is made. The final  
43 complexity rating will be used as a basis for determining prescribed fire  
44 organization, Prescribed Fire Burn Boss level, and mitigation measures.  
45

1 The Summary Complexity Rating Rationale will clearly justify the summary  
2 rating for prescribed fire organization and Prescribed Fire Burn Boss level. It  
3 must also identify those risks from the Complexity Analysis that are rated high  
4 and can not be mitigated and will provide a discussion of the risks associated.  
5 The Complexity Analysis must be signed by the Prescribed Fire Plan Preparer  
6 and the agency administrator and attached as an appendix to the Prescribed Fire  
7 Plan. The Complexity Analysis Summary will be attached to the Prescribed Fire  
8 Plan following the GO/NO-GO Checklists.

9  
10 Separate prescriptions and/or burn organizations for different stages of  
11 implementation may result in multiple Complexity Analyses and ratings. For  
12 example, a plan may have separate prescriptions for spring and fall burning  
13 which may require different organizations and constitute the need for additional  
14 complexity analyses.

15  
16 If a prescribed fire complexity changes which results in different Prescribed Fire  
17 Burn Boss qualifications, a separate complexity analysis is required. For  
18 example, for certain prescribed fires conducted over time, progressive or  
19 sequential actions may reduce complexity, organization, and Prescribed Fire  
20 Burn Boss qualifications (e.g. a large scale, high complexity prescribed fire has  
21 been black-lined, portions burned and operations suspended for a period of time  
22 then resumed to continue or finish the prescribed fire). In this case, a separate  
23 Complexity Analysis will be developed to reflect the reduced complexity rating  
24 and will be included in the appendix of the Prescribed Fire Plan.

#### 25 26 **4. Description of the Prescribed Fire Area**

##### 27 28 **Physical Description**

29 This section of the plan will describe the physical features of the prescribed fire  
30 area.

- 31 • Location - Narrative description of the location of the prescribed fire  
32 project including a legal description, UTM and/or latitude/longitude  
33 (decimal degrees; NAD83 preferred), county, and state.
- 34 • Size - Area, in acres, of the prescribed fire project with a breakdown by  
35 prescribed fire unit and/or ownership if applicable.
- 36 • Topography - Identify the upper and lower range of elevation, slope(s) –  
37 maximum/minimum and average, and aspect(s) of the prescribed fire  
38 project.
- 39 • Project Boundary - The project boundary defines that area where fire will  
40 be ignited and may be allowed to burn (some agencies previously called  
41 this Maximum Management Area or Allowable Area). Describe the  
42 physical, natural and/or human made boundaries (including multiple units)  
43 of the prescribed fire project. This will be done through maps and may  
44 include narratives. The entire prescribed fire project area must be analyzed  
45 under NEPA.

46

**1 Vegetation/Fuels Description**

2 This is a description of current vegetation and fuels in the project area and  
3 should discuss history including past environmental effects or land management  
4 practices and how they have impacted the fuel characteristics. Identify any  
5 reference material used.

- 6 • Describe the structure and composition of the vegetation type(s) and fuel  
7 characteristics. This description may include natural or activity fuels, total  
8 fuel load (both live and dead) in tons/acre, dead fuel load by time-lag size  
9 classes, live fuel load (woody/herbaceous), fuel bed depth, and vertical and  
10 horizontal arrangement within the project boundary.
- 11 • Describe the percent of the unit composed of each vegetative type and the  
12 corresponding fuel model(s).
- 13 • Identify conditions (fuels, slope, and aspect) in and adjacent to boundaries  
14 that may be a potential threat for escaped fire.
- 15 • Identify any abiotic conditions like airshed, climate, soils, etc. as  
16 appropriate.

**18 Description of Unique Features and Resources**

19 List and discuss special features, hazards, regulations, issues, constraints, etc.  
20 Examples may include: fences to protect, power poles, historical/cultural sites,  
21 threatened and endangered species or habitat, etc.

**23 Maps**

24 Maps will be developed and included in the Prescribed Fire Plan. At a  
25 minimum, the plan will include a vicinity and project map. The number of  
26 maps, map size and scale, legend and level of detail should be appropriate for  
27 the complexity of the project. All maps will include the standard mapping  
28 elements: title, name of preparer(s), date, north arrow, scale, and legend.

- 29 • Vicinity Map - Shows prominent features including roads, streams, water  
30 sources, towns, structures, and the proximity of the burn unit(s) to these  
31 features. Transportation route(s) will be identified. Map scale will be such  
32 that the burn units can be located on the ground and in sufficient detail to  
33 guide implementation.
- 34 • Project Map(s) - The project map(s) identify features in sufficient detail to  
35 guide and assist in operational implementation of the prescribed fire.  
36 Topographic, vegetative, or aerial photo maps should be used as the base  
37 map. ICS map display symbols, identified in the *Fireline Handbook PMS*  
38 *410-1* will be used as appropriate. Examples of features that should be  
39 included on the project map(s) are: project boundary, individual unit  
40 boundaries, ownership, fireline locations, natural barriers, fuel model  
41 locations, proposed ignition patterns and sequence, critical holding points,  
42 hazards, safety zones, escape routes, helispots, areas of special concern,  
43 smoke management issues (predicted plume dispersion, sensitive receptors,  
44 etc), escaped fire contingency actions (primary and secondary control lines,  
45 trigger points, etc), water sources, location of treatment monitoring plots,  
46 etc., if these are significant in communicating project implementation.



**5. Goals and Objectives**

A short summary description will be developed that identifies the purpose of the prescribed fire and the resource management goals from the supporting L/RMPs and/or NEPA documents. The summary will identify desired future conditions of the prescribed fire project. This should be consistent with the appropriate land management goals. Include a discussion of future Fire Regime Condition Class (FRCC) post-treatment conditions if applicable.

Describe in clear, concise statements the specific measurable resource and fire objectives for this prescribed fire. Objectives will be measurable and quantifiable so prescription elements can be developed to meet those objectives and the success of the project can be determined following implementation.

**6. Funding**

Identify the funding source(s) and estimated cost(s) of the prescribed fire. Itemize by phase if desired.

**7. Prescription**

Prescription is defined as the measurable criteria that define a range of conditions during which a prescribed fire may be ignited and held as a prescribed fire.

The plan prescription will describe a range of low to high limits for the environmental (weather, topography, fuels, etc.) and fire behavior (flame lengths, rate of spread, spotting distance, etc.) parameters required to meet Prescribed Fire Plan objectives while meeting smoke management and control objectives. Parameters are quantitative variables expressed as a range that result in acceptable fire behavior and smoke management.

The range of prescribed fire behavior characteristics (outputs such as: flame lengths, rates of spread, scorch heights, mortality, spotting, etc.) identified in the plan will help determine the acceptable combination of environmental parameters (inputs such as: weather, topography and fuels) under which the prescribed fire can be conducted. In many cases, burning under the extremes of all prescriptive parameters would not meet or possibly exceed the desired prescribed fire behavior characteristics and are therefore out of prescription. The Prescribed Fire Burn Boss must ensure that the prescriptive parameters and fire behavior characteristics as identified in the Prescribed Fire Plan are not exceeded. Empirical evidence (historical evidence or researched data) and judgment may be utilized to identify or calibrate prescriptions. Weaknesses in modeling can be overridden, but must be justified with empirical evidence and/or verified actual fire behavior.

Separate prescriptions may be needed for multiple fuel model conditions to address seasonal differences and/or types of ignition (black lining, aerial ignition, etc). Separate prescriptions may result in multiple complexity ratings

1 and burn organizations. For example, a separate prescription is needed for  
2 black-lining operations if conditions will be significantly different from the  
3 primary prescription or if the holding resources differ from those identified for  
4 ignition and holding phases. Separate prescriptions may result in the need to  
5 identify multiple levels of management, organizational structures,  
6 implementation measures, and pre-burn considerations.

7  
8 Holding and contingency plans must be developed with the consideration of the  
9 predicted fire behavior outside the project boundary(s). Fire behavior  
10 characteristics for fuel models within the maximum spotting distance and/or  
11 adjacent to the project boundaries must be considered and modeled using worst-  
12 case fire behavior predictions. These predictions will be identified from fire  
13 behavior model runs or empirical evidence of the hottest, driest, and windiest  
14 prescription limits identified in the Prescribed Fire Plan, along with the most  
15 extreme environmental conditions (slope, aspect) identified.

16  
17 A short fire behavior narrative that summarizes the fire behavior identified in the  
18 prescription and discusses how it will achieve the desired treatment objectives  
19 may be included.

20  
21 When used, fire behavior calculations must be developed using an appropriate  
22 fire behavior modeling program. Include modeling and/or empirical evidence  
23 documentation as an appendix or in the fire behavior narrative.

## 24 **8. Scheduling**

25 Identify the general ignition time frame(s) (i.e. time of day, duration of ignition)  
26 or season(s) and note any dates when the project may not be conducted. For  
27 prescribed fires with multiple ignitions or burn days, list projected duration.  
28  
29

30 At National Preparedness Levels Four and Five, prescribed fire implementation  
31 is restricted. See *National Interagency Mobilization Guide* for details.

## 32 **9. Pre-burn Considerations**

33 Describe on and off-site actions and considerations that need to be conducted  
34 prior to implementation. Examples include clearances; line to be built;  
35 preparation of critical holding points; snags to be felled or protected; equipment  
36 to be pre-positioned; special features to be protected; warning signs to be placed;  
37 weather recording; fuels condition sampling; monitoring needs; responsibility;  
38 and timeframes.  
39

40  
41 Describe any fuel sampling and weather data that may need to be obtained (See  
42 Element 14: Test Fire). This data should be taken at the project site. If this is  
43 not possible, use the closest representative site.

44  
45 The plan will include a list of organizations (including media) and individuals  
46 that are to be notified prior to ignition, with information necessary to make the

1 contacts. Reasonable efforts will be made to notify adjacent land owners (or  
2 their agents) and other potentially impacted publics. Attempts and/or actual  
3 notifications will be documented with date and method and placed in the Project  
4 File.

5  
6 Identify in the burn plan the method and frequency for obtaining weather and  
7 smoke management forecast(s).

8  
9 Spot weather or local area forecasts are required prior to ignition, on all ignition  
10 days and any days the fire is actively spreading. A copy of the forecast will be  
11 included in the Project File. The Prescribed Fire Burn Boss or other person in  
12 charge of mop-up and patrol will also obtain and review the spot weather or area  
13 forecast to determine if mop up and patrol resources are adequate.

14

#### 15 **10. Briefing**

16 All assigned personnel must be briefed at the beginning of each operational  
17 period to ensure personnel safety considerations (including the JHA) and  
18 prescribed fire objectives and operations are clearly defined and understood.  
19 Briefing checklists are required to be included in the Prescribed Fire Plan and  
20 will include the following elements:

- 21 • Burn Organization and Assignments
- 22 • Burn Objectives and Prescription
- 23 • Description of the Prescribed Fire Area
- 24 • Expected Weather & Fire Behavior
- 25 • Communications
- 26 • Ignition Plan
- 27 • Holding Plan
- 28 • Contingency Plan and Assignments
- 29 • Wildfire Conversion
- 30 • Safety and Medical Plan

31

32 The briefing checklist should list briefing topics only, not re-state what is listed  
33 in the Prescribed Fire Plan for that element.

34

35 The Prescribed Fire Burn Boss will ensure that any new personnel arriving to  
36 the prescribed fire receives a briefing prior to assignment.

37

38 An Incident Action Plan (IAP) is optional, it is recommended for large multi-  
39 day or high complexity prescribed fires.

40

41 If aerial ignition devices will be used, include an Aerial Ignition Briefing.

42

#### 43 **11. Organization & Equipment**

44 The complexity of each prescribed fire determines the organization capabilities  
45 needed to safely achieve the objectives specified in the Prescribed Fire Plan.

1 Specify the minimum required implementation organization to meet the  
2 capabilities (line production rates, etc.) by position, equipment, and the supplies  
3 needed for all phases of the prescribed fire until declared out. At a minimum, a  
4 Prescribed Fire Burn Boss will be assigned to every prescribed fire. Positions  
5 that may not be filled as collateral duty will be identified in the organization  
6 chart of the Prescribed Fire Plan.

7  
8 Standard ICS fire management principles for span of control and length of  
9 assignments will be adhered to when developing burn implementation  
10 organization(s) and used in managing prescribed fires. On prescribed fires with  
11 large organizations, use the ICS organization and staffing commensurate with  
12 the level of complexity. Consider the use of a Prescribed Fire Manager in  
13 conducting multiple prescribed fires.

14  
15 Before implementation (all phases) of the prescribed fire, documentation in the  
16 form of an organization chart must be completed. Any changes to the  
17 organization during implementation must be documented. Any changes that  
18 reflect modification of the capabilities, equipment or supplies will require an  
19 amendment. Different organizations may be identified for different phases of  
20 implementation (i.e. holding v. mop-up and patrol, different ignition operations,  
21 different prescriptions).

22  
23 Multiple prescriptions for one Prescribed Fire Plan are permissible and in some  
24 cases required (Element 7). Multiple prescriptions may require identifying and  
25 developing multiple organizations.

26  
27 The Prescribed Fire Burn Boss is responsible for implementation including mop-  
28 up and patrol until the responsibility is formally passed to a Prescribed Fire Burn  
29 Boss, Prescribed Fire Manager or the local fire management organization.

### 30 31 **12. Communication**

32 Develop communications plan specific to the project's implementation to  
33 address safety and tactical resource management needs. Identify and assign  
34 command, tactical, and air operations frequencies as needed. Also include any  
35 required telephone numbers. Cover under an Incident Action Plan, if utilized.

### 36 37 **13. Public & Personnel Safety, Medical**

38 Describe provisions to be made for public and personnel safety. All personnel  
39 who are within the active burn area are required to wear personal protective  
40 equipment. Identify and analyze the safety hazards unique to the individual  
41 prescribed fire project and specify personnel safety and emergency procedures.  
42 Include safety hazards (including smoke exposure and impacts) and measures  
43 taken to reduce those hazards. Specify emergency medical procedures,  
44 evacuation methods, and emergency facilities to be used. A JHA is required for  
45 each prescribed fire project and will be attached to the Prescribed Fire Plan as an  
46 appendix.

**14. Test Fire**

Provisions for a test fire are required and results must be recorded. The test fire must be ignited in a representative location and in an area that can be easily controlled. The purpose of the test fire is to verify that the prescribed fire behavior characteristics will meet management objectives and to verify predicted smoke dispersion. In many applications, analysis of the initial ignitions may provide adequate test fire results. On multiple-day projects, evaluation of current active fire behavior, in lieu of a test fire, may provide a comparative basis for continuing and must be documented. If in doubt however, initiate a separate test fire and evaluate results.

Prior to ignition of both the test fire and ignition operations, compare the Prescribed Fire Plan prescription elements, both individually and collectively, against local area or spot weather forecasts, other predicted conditions, and the actual conditions onsite (See element 9: Pre-Burn Considerations) to ensure that predicted fire behavior will take place and/or weather parameters will not change to the point of the burn going out of prescription.

**15. Ignition Plan**

Describe planned ignition operations including firing methods, devices, techniques, sequences, patterns, and ignition staffing for single or multiple unit operations. Maps showing proposed firing patterns may be included. If aerial ignition (or other aerial operations) is planned, cover aviation operations, organization, and safety within the Prescribed Fire Plan, Aerial Ignition Plan, or in an agency specific Aviation Operating Plan (Refer to the *Interagency Helicopter Operations Guide*, {NFES #1885} and the *Interagency Aerial Ignition Guide* {NFES #1080} for more detailed information on this topic). Multiple prescriptions and ignition operations (blackline, primary, aerial, etc.) may require identifying and developing multiple ignition organizations.

**16. Holding Plan**

Describe general procedures to be used for operations to maintain the fire within the project area and meet project objectives until the fire is declared out. This may include mop-up and/or patrol procedures. Describe critical holding points (if any) and mitigation actions. Critical holding points will be identified on the project map. Describe minimum capabilities needed for all phases of implementation (see Element 11: Organization and Equipment). If used, attach or reference modeling outputs or worksheets (i.e. Fireline Handbook production rates, BEHAVE, etc.) and/or documented empirical evidence to justify minimum holding resources required.

Different organizations may be identified for different phases of implementation (i.e. holding, mop-up and patrol, different ignition operations, different prescriptions). Multiple prescriptions may require identifying multiple complexity ratings and developing multiple holding organizations.

1 If onsite resources are insufficient to meet the prescribed fire plan objectives,  
2 then the Burn Boss should implement the Contingency Plan or Wildfire  
3 Conversion.

#### 4 5 **17. Contingency Plan**

6 *“...If the objectives are not being met the Contingency Plan, a required*  
7 *component of the Prescribed Fire Burn Plan, is implemented. If the*  
8 *Contingency Plan is successful at bringing the project back within the scope of*  
9 *the Prescribed Fire Burn Plan the project continues. If contingency objectives*  
10 *are not met the prescribed fire is converted to a wildfire and Extended Attack is*  
11 *undertaken.”*

12 *Interagency Strategy for the Implementation of Federal Wildland Fire*  
13 *Management Policy, June 20, 2003, page 12.*

14  
15 Contingency planning is intended for more than just a response to an escaped  
16 fire. The contingency plan is the portion of the Prescribed Fire Plan that  
17 considers possible but unlikely events and the contingency resources and actions  
18 needed to mitigate those events.

19  
20 Contingency planning is the determination of initial actions and additional  
21 resources needed if the prescribed fire is not meeting, exceeds, or threatens to  
22 exceed:

- 23 • Project or unit boundary
- 24 • Objectives
- 25 • Prescription parameters
- 26 • Minimum implementation organization
- 27 • Smoke impacts
- 28 • Other Prescribed Fire Plan elements

29  
30 The contingency plan will establish trigger points or limits that indicate when  
31 additional holding resources and actions are needed.

32  
33 Contingency planning includes the additional resources required, and the  
34 maximum acceptable response time for those resources. Resource needs should  
35 be based on fire behavior outputs tied to the worst case fire behavior scenario (as  
36 modeled in Element 7: Prescription). Separate contingency plans may be  
37 necessary and appropriate to address seasonal differences, types of ignitions or  
38 phases of the burn implementation as described in the prescriptions and ignition  
39 and holding plans developed for the burn.

40  
41 Verify and document availability of identified contingency resources and  
42 response time on day of implementation. If contingency resources availability  
43 falls below plan levels, actions must be taken to secure operations until  
44 identified contingency resources are replaced.

45

1 The same contingency resource can be identified for multiple prescribed fire  
2 projects. When specific contingency resources are identified for more than one  
3 prescribed fire, the local fire management organization(s) must evaluate and  
4 document adequacy of all contingency resources within the area. This evaluation  
5 must consider:

- 6 • Local, current, and predicted fire danger
- 7 • Local and regional wildland fire activities.

8  
9 Once a contingency resource is committed to a specific wildland fire action  
10 (wildfire, wildland fire use or prescribed fire), it can no longer be considered a  
11 contingency resource for another prescribed fire project and a suitable  
12 replacement contingency resource must be identified or the ignition halted.

13  
14 The agency administrator will determine if and when they are to be notified that  
15 contingency actions are being taken.

16  
17 If the contingency actions are successful at bringing the project back within the  
18 scope of the Prescribed Fire Plan, the project may continue. If contingency  
19 actions are not successful by the end of the next burning period, then the  
20 prescribed fire will be converted to a wildfire.

21

### 22 **18. Wildfire Conversion**

23 The Prescribed Fire Plan will specify who has the authority to declare a wildfire.

24 A prescribed fire must be declared a wildfire by those identified in the plan  
25 when that person(s) determines that the contingency actions have failed or are  
26 likely to fail and cannot be mitigated by the end of the next burning period by  
27 on-site holding forces and any listed contingency resources. In addition, an  
28 escaped prescribed fire must be declared a wildfire when the fire has spread  
29 outside the project boundary, or is likely to do so, and cannot be contained by  
30 the end of the next burning period. A prescribed fire can be converted to a  
31 wildfire for reasons other than an escape.

32

33 Describe the actions to be taken when a prescribed fire is declared a wildfire  
34 (*refer to Wildland Fire and Aviation Program Management and Operations*  
35 *Guide {BIA--Blue Book} and Interagency Standards for Fire and Fire Aviation*  
36 *[Red Book]*). Description will include:

- 37 • Wildfire declaration (by whom)
- 38 • IC assignment
- 39 • Notifications: dispatch, agency administrator, adjacent land owners, etc.
- 40 • Extended attack actions and opportunities to aid in suppression efforts.
- 41 • After a wildfire declaration, an escaped prescribed fire cannot be returned  
42 to prescribed fire status. A WFSA will define appropriate future  
43 management actions.

44

45

46

1 **19. Smoke Management & Air Quality**

2 Describe how the project will comply with local community, county, state,  
3 tribal, and federal air quality regulations. Identify what permits, if any, need to  
4 be obtained. Identify smoke sensitive areas including population centers,  
5 recreation areas, hospitals, airports, transportation corridors, schools, non-  
6 attainment areas, Class I air sheds, and restricted areas that may be impacted.  
7 Include modeling outputs and mitigation strategies and techniques to reduce the  
8 impacts of smoke production, if required by State Implementation Plans (SIPs)  
9 and/or State or local regulations. Reference the *Smoke Management Guide for*  
10 *Prescribed and Wildland Fire 2001 Edition* for other smoke management  
11 planning suggestions and smoke management techniques for reducing or  
12 redistributing emissions.

13  
14 Special considerations must be taken to address smoke when the project is in a  
15 non-attainment area for a National Ambient Air Quality Standards including  
16 insuring compliance with SIP/TIP provisions and addressing Conformity.  
17 Projects which will potentially impact Class I areas should address any efforts to  
18 minimize smoke impacts on visibility. Comply with all local, state, tribal and  
19 federal pre-burn and post-burn data reporting requirements.

20  
21 **20. Monitoring**

22 Prescribed fire monitoring is defined as the collection and analysis of repeated  
23 observations or measurements to evaluate changes in condition and progress  
24 toward meeting a management objective. Describe the monitoring that will be  
25 required to ensure that Prescribed Fire Plan objectives are met. For the  
26 prescribed fire, at a minimum specify the weather, fire behavior and fuels  
27 information (forecast and observed) and smoke dispersal monitoring required  
28 during all phases of the project and the procedures for acquiring it, including  
29 who and when.

30  
31 **21. Post-burn Activities**

32 Describe the post-burn activities that must be completed. This may include a  
33 post-burn report, safety mitigation measures, and rehabilitation needs including  
34 those as a result of pre-burn activities undertaken.

35  
36 **Appendices**

37 Include all the required appendices.

- 38 • Maps
- 39 • Technical Review Checklist
- 40 • Complexity Analysis
- 41 • Job Hazard Analysis
- 42 • Fire Behavior Modeling Documentation or Empirical Documentation

43  
44 **Project File**

45 All prescribed fire project files will contain the following information. Agencies  
46 and/or administrative units may require additional information.

**Release Date: January 2008**

17-25



- 1 • Prescribed Fire Plan
- 2 • Monitoring data including weather, fire behavior, fire effects and smoke
- 3 dispersal observations
- 4 • Weather forecasts
- 5 • Notifications
- 6 • Documented prescribed fire organization(s)
- 7 • Any agreements related to implementation
- 8 • Multiple day GO/NO-GO checklist(s), if applicable
- 9 • Re-validation of the Agency Administrator Pre-Ignition Approval
- 10 Checklist

11  
12 Depending on the scope and complexity of the prescribed fire, optional  
13 information and/or further documentation that may be included in the Project  
14 File include:

- 15 • After Action Review (see Chapter 8 of the *Interagency Prescribed Fire*
- 16 *Planning and Implementation Procedures Reference Guide*)
- 17 • Incident Action Plans, Unit Logs
- 18 • Press releases, etc
- 19 • Implementation costs
- 20 • Actual ignition patterns and sequences used
- 21 • Smoke management information
- 22 • Agency individual fire occurrence form
- 23 • Detailed Post Burn Report
- 24 • NEPA documentation
- 25 • Permits

#### 26 27 **After Action Review (AAR)**

28 Each operational shift on a prescribed fire should have an informal After Action  
29 Review (AAR). Certain events or a culmination of events that may affect future  
30 prescribed fire implementation and/or policy should be submitted via the Roll-  
31 up documentation (Found at <http://www.wildfirelessons.net>). The questions to  
32 answer in conducting an AAR are:

- 33 • What did we set out to do (what was planned)?
- 34 • What actually happened?
- 35 • Why did it happen that way?
- 36 • What should be sustained? What can be improved?

#### 37 38 **Escaped Fire Reviews**

39 The agency administrator will be notified of an escaped fire. The agency  
40 administrator is required to make the proper notifications. All prescribed fires  
41 declared a wildfire will have an investigative review initiated by the agency  
42 administrator. The level and scope of the review will be determined by policy  
43 and procedures in *Wildland Fire and Aviation Program Management and*  
44 *Operations Guide (BIA--Blue Book)* or *Interagency Standards for Fire and Fire*  
45 *Aviation (Red Book)*.

1 The goal of the escaped prescribed fire review process is to guide future  
2 program actions by minimizing future resource damage and/or preventing future  
3 escapes from occurring by gathering knowledge and insight for incorporation  
4 into future resource management and prescribed fire planning. The objectives of  
5 the review are to:

- 6 • Determine if the Prescribed Fire Plan was adequate for the project and  
7 complied with policy and guidance related to prescribe fire planning and  
8 implementation.
- 9 • Determine if the prescription, actions, and procedures set forth in the  
10 Prescribed Fire Plan were followed.
- 11 • Describe and document factual information pertaining to the review.
- 12 • Determine if overall policy, guidance, and procedures relating to  
13 prescribed fire operations are adequate.
- 14 • Determine the level of awareness and the understanding of the personnel  
15 involved, in regard to procedures and guidance.

16  
17 At a minimum, the escaped fire review report will include the following  
18 elements:

- 19 • An analysis of seasonal severity, weather events, and on-site conditions  
20 leading up to the wildfire declaration.
- 21 • An analysis of the actions taken leading up to the wildfire declaration for  
22 consistency with the Prescribed Fire Plan.
- 23 • An analysis of the Prescribed Fire Plan for consistency with policy.
- 24 • An analysis of the prescribed fire prescription and associated  
25 environmental parameters.
- 26 • A review of the approving line officer's qualifications, experience, and  
27 involvement.
- 28 • A review of the qualifications and experience of key personnel involved.
- 29 • A summary of causal agents contributing to the wildfire declaration.

30  
31 Document the incident, including all actions prior to and after the escape. Set up  
32 a file that includes all pertinent information, i.e., the Prescribed Fire Plan; a  
33 chronology of events including the prescribed fire report; unit logs and  
34 individual statements; weather forecasts including any spot forecasts; weather  
35 information taken on site and Remote Automated Weather Station (RAWS) and  
36 National Fire Danger Rating System (NFDRS) data for the day of the escape  
37 from the nearest station(s); photos; and all other pertinent information. Since all  
38 prescribed fires are planned management actions, an escape may lead to a Tort  
39 Claim and liability issues. Special attention to documentation is critical.

40  
41 An independent review team is recommended for conducting escaped fire  
42 reviews. The number of individuals assigned to the team and their functional  
43 expertise should be commensurate with the scope and focus of the review.  
44 Interagency participation is highly recommended for all prescribed fire reviews.

45

- 1 **Use of Pay Plan for Hazardous Fuel Reduction**
- 2 Refer to the Department of the Interior (DOI) Pay Plan for Emergency Workers
- 3 for information regarding the use of emergency workers for hazardous fuel
- 4 reduction projects on Departmental lands. Refer to the Forest Service Pay Plan
- 5 for Emergency Workers for information regarding the use of emergency workers
- 6 for hazardous fuel reduction projects on Forest Service Lands.

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## Chapter 18 Reviews, Investigations & Analyses

### Introduction

Reviews and investigations are used by wildland fire and aviation managers to assess and improve the effectiveness and safety of organizational operations.

### Reviews

Reviews are methodical examinations of system elements such as program management, safety, leadership, operations, preparedness, training, staffing, business practices, budget, cost containment, planning, and interagency or intra-agency cooperation and coordination. Reviews do not have to be associated with a specific incident. The purpose of a review is to ensure the effectiveness of the system element being reviewed, and to identify deficiencies and recommend specific corrective actions. Established review types are described below and include:

- preparedness review
- after action review
- fire and aviation safety team review
- aviation safety assistance team review
- national cost oversight team review
- individual fire review
- lessons learned review
- escaped prescribed fire review

### Preparedness Reviews

Fire preparedness reviews assess fire programs for compliance with established fire policies and procedures as outlined in the current *Interagency Standards for Fire and Fire Aviation Operations* and other pertinent policy documents.

Reviews identify organizational, operational, procedural, personnel, or equipment deficiencies, and recommend specific corrective actions. Interagency Preparedness Review Checklists can be found at:

[http://www.nifc.gov/references/prep\\_review.htm](http://www.nifc.gov/references/prep_review.htm)

- **BLM/FS - Preparedness review functional checklists that can be found at:**  
[http://www.blm.gov/nifc/st/en/prog/fire/fireops/preparedness/preparedness\\_review/checklists.html](http://www.blm.gov/nifc/st/en/prog/fire/fireops/preparedness/preparedness_review/checklists.html)

### After Action Reviews (AAR)

An AAR is a learning tool intended for the evaluation of an incident or project in order to improve performance by sustaining strengths and correcting weaknesses. An AAR is performed as immediately after the event as possible by the personnel involved. An AAR should encourage input from participants that is focused on:

- what was planned
- what actually happened

- 1 • why it happened
- 2 • what can be done the next time

3

4 It is a tool that leaders and units can use to get maximum benefit from the  
5 experience gained on any incident or project. When possible, the leader of the  
6 incident or project should facilitate the AAR process. However, the leader may  
7 choose to have another person facilitate the AAR as needed and appropriate.  
8 AARs may be conducted at any organizational level. However, all AARs follow  
9 the same format, involve the exchange of ideas and observations, and focus on  
10 improving proficiency. The AAR should not be utilized as an investigational  
11 review. The format can be found in the *Interagency Response Pocket Guide*  
12 (*IRPG*), *PMS #461*, *NFES #1007*

13

#### 14 **Fire and Aviation Safety Team (FAST) Reviews**

15 Fire and Aviation Safety Teams assist agency administrators during periods of  
16 high fire activity by assessing policy, rules, regulations, and management  
17 oversight relating to operational issues. They can also do the following:

- 18 • Provide guidance to ensure fire and aviation programs are conducted  
19 safely.
- 20 • Assist with providing immediate corrective actions.
- 21 • Review compliance with OSHA abatement plan(s), reports, reviews and  
22 evaluations.
- 23 • Review compliance with *Interagency Standards for Fire and Fire Aviation*  
24 *Operations*.

25

26 FAST reviews can be requested through geographic area coordination centers to  
27 conduct reviews at the state/regional and local level. If a more comprehensive  
28 review is required, a national FAST can be ordered through the National  
29 Interagency Coordination Center.

30

31 FASTs include a team leader, who is either an agency administrator or fire  
32 program lead with previous experience as a FAST member, a safety and health  
33 manager, and other individuals with a mix of skills from fire and aviation  
34 management.

35

36 FASTs will be chartered by their respective Geographic Area Coordinating  
37 Group (GACG) with a delegation of authority, and report back to the GACG.

38

39 FAST reports includes an executive summary, purpose, objectives,  
40 methods/procedures, findings, recommendations, follow-up actions (immediate,  
41 long-term, national issues), and a letter delegating authority for the review. As  
42 follow-up, the team will gather and review all reports prior to the end of the  
43 calendar year to ensure identified corrective actions have been taken. FAST  
44 reports should be submitted to the geographic area with a copy to the Federal  
45 Fire and Aviation Safety Team (FFAST) within 30 days. See Appendix O for  
46 sample FAST Delegation of Authority.

**1 Aviation Safety Assistance Team (ASAT) Reviews**

2 During high levels of aviation activity it is advisable to request an Aviation  
3 Safety Assistance Team (ASAT). The team's purpose is to assist and review  
4 helicopter and/or fixed wing operations on ongoing wildland fires. An ASAT  
5 team should be requested through the agency chain of command and operate  
6 under a delegation from the appropriate state/regional aviation manager or  
7 multi-agency coordinating group. Formal written reports will be provided to the  
8 appropriate manager. An ASAT should consist of:

- 9 • Aviation Safety Manager
- 10 • Operations Specialist (helicopter and/or fixed wing)
- 11 • Pilot Inspector
- 12 • Maintenance Inspector (optional)
- 13 • Avionics Inspector (optional)

**15 National Cost Oversight Team Reviews**

16 A National Cost Oversight Team will be assigned to a fire with suppression  
17 costs of more than 5 million dollars. This team will include a Line Officer (team  
18 lead), Incident Business Specialist, Incident Management Team Specialist, and a  
19 Financial Specialist. The team lead and the receiving agency administrator can  
20 agree to add team members as needed to address issues specific to the incident,  
21 i.e., aviation, personnel, or contracting specialists.

**23 Individual Fire Reviews**

24 Individual fire reviews examine all or part of the operations on an individual  
25 fire. The fire may be ongoing or controlled. These reviews may be a local,  
26 state/regional, or national. These reviews evaluate decisions and strategies;  
27 correct deficiencies; identify new or improved procedures, techniques or tactics;  
28 determine cost-effectiveness; and compile and develop information to improve  
29 local, state/regional or national fire management programs.

**31 Lessons Learned Review (LLR)**

32 The LLR provides the wildland fire community an immediate learning  
33 opportunity in the form of a written report in an effort to identify underlying  
34 factors that could lead to future accidents and/or provide reasons for successes--  
35 all in support of organizational learning and accident prevention. This process  
36 bridges the gap between the after action review (performed on site immediately  
37 after the operation and conducted by the participants themselves) and the  
38 accident investigation (formally mandated effort to identify causes and develop  
39 control measures). LLRs provide an outside perspective with appropriate  
40 technical experts assisting involved personnel in identifying root causes and  
41 sharing findings and recommendations.

**43 Notification**

44 Near misses or successful operations should be reported to first line supervisors.  
45 Supervisors will notify unit fire management officer, who will then notify their  
46 agency administrator. In cases of entrapment near misses, notification to the

1 respective agency's national fire office is required and determination for  
2 review/investigation level will be made from the national level.

3

#### 4 **LLR Process**

5 A LLR will be led by a facilitator who was not involved in the event. A  
6 facilitator should be an appropriate fire management expert who possesses skills  
7 in interpersonal communications, organization, and be unbiased to the event.  
8 Personnel who were involved in the event will also be full participants in the  
9 review process. Depending upon the complexity of the event, the facilitator may  
10 request assistance from technical experts (e.g., fire behavior, fire operations,  
11 etc.).

12

13 The LLR facilitator will convene the participants and:

- 14 • Identify facts of the event (sand tables maybe helpful in the process) and  
15 develop a chronological narrative of the event.
- 16 • Identify underlying reasons for success or failure.
- 17 • Identify what individuals learned and what they would do differently in the  
18 future.
- 19 • Provide a final written report including the above items to the pertinent  
20 agency administrator(s) within two weeks of event occurrence. Names of  
21 involved personnel should not be included in this report (reference them by  
22 position).

23

24 A copy of the final report will be submitted to the respective agency's national  
25 fire safety lead who will provide a copy to the Wildland Fire Lessons Learned  
26 Center (WFLLC). Website: <http://wildlandfirelessons.net>

- 27 • ***FS** - The Forest Service has developed two processes for conducting  
28 Lessons Learned Reviews: the Facilitated Learning Analysis (FLA) and  
29 the Accident Prevention Analysis (APA). Guides have been produced for  
30 these processes and are available from Regional and National risk  
31 management and safety personnel.*

32

#### 33 **Escaped Prescribed Fire Reviews**

34 Escaped prescribed fire review direction is found in Chapter 18 of this document  
35 and in these agency documents:

36 *Interagency Prescribed Fire Planning and Implementation Procedures  
37 Reference Guide (September 2006)*

- 38 • ***BLM** - BLM 9214 Prescribed Fire Handbook and the 9215 BLM Fire  
39 Training Handbook.*
- 40 • ***FWS** - Fire Management Handbook*
- 41 • ***NPS** - RM-18, Chapter 7 & 17*
- 42 • ***FS** - 5140-1*

43

44

45

**1 Investigations**

2 Investigations are detailed and methodical efforts to collect and interpret facts  
3 related to an incident or accident, identify causes (organizational factors, local  
4 workplace factors, unsafe acts), and develop control measures to prevent  
5 recurrence. Established investigation types include:

- 6 • serious wildland fire accident investigation
- 7 • non-serious wildland fire accident investigation
- 8 • entrapment/ burnover investigation
- 9 • fire shelter deployment investigation
- 10 • fire trespass investigation

**12 Wildland Fire Accident and Event Definitions****14 Serious Wildland Fire Accident**

15 An unplanned event or series of events that resulted in death; injury;  
16 occupational illness; or damage to or loss of equipment or property. For  
17 wildland fire operations, a serious accident involves any of the following:

- 18 • One or more fatalities
- 19 • Three or more personnel who are inpatient hospitalized as a direct result of  
20 or in support of wildland fire operations
- 21 • Property or equipment damage of \$250,000 or more
- 22 • Consequences that the Designated Agency Safety and Health Official  
23 (DASHO) judges to warrant Serious Accident Investigation

**25 Non-Serious Wildland Fire Accident**

26 An unplanned event or series of events that resulted in injury; occupational  
27 illness; or damage to or loss of equipment or property to a lesser degree than  
28 defined in “serious wildland fire accident.”

**30 Near-miss**

31 An unplanned event or series of events that could have resulted in death; injury;  
32 occupational illness; or damage to or loss of equipment or property but did not.

**34 Entrapment**

35 A situation where personnel are unexpectedly caught in a fire behavior-related,  
36 life-threatening position where planned escape routes or safety zones are absent,  
37 inadequate, or compromised. Entrapment may or may not include deployment  
38 of a fire shelter for its intended purpose (NWCG Glossary of Fire Terminology).  
39 Entrapment may result in a serious wildland fire accident, a non-serious  
40 wildland fire accident, or a near-miss.

**42 Fire Shelter Deployment**

43 The removing of a fire shelter from its case and using it as protection against fire  
44 (NWCG Glossary of Fire Terminology). Fire shelter deployment may or may  
45 not be associated with entrapment. Fire shelter deployment may result in a



1 serious wildland fire accident, a non-serious wildland fire accident, or a near-  
 2 miss. Any time a fire shelter is deployed (other than for training purposes),  
 3 regardless of circumstances, notification to the National Fire and Aviation  
 4 Safety Office of the jurisdictional agency is required.

5  
 6 **Escaped Prescribed Fire**

7 A prescribed fire which has exceeded or is expected to exceed its prescription.

8  
 9 **Fire Trespass**

10 The occurrence of unauthorized fire on agency-protected lands where the source  
 11 of ignition is tied to some type of human activity.

12  
 13 **Review and Investigation Requirements**

Wildland Fire Event	Review/Investigation Type	Management level that determines review type and authorizes review*
Serious Wildland Fire Accident	Serious Accident Investigation (SAI)	National
Non -Serious Wildland Fire Accident	Non-Serious Accident Investigation (NSAI)	Region/State/Local
Near-miss	Lesson Learned Review (LLR)	Region/State/Local
Entrapment	SAI, NSAI, LLR, depending on severity	National
Fire Shelter Deployment	SAI, NSAI, LLR, depending on severity	National
Escaped Prescribed Fire	Escaped Prescribed Fire Review	National/Region/State
Fire Trespass	Fire Cause Determination & Trespass Investigation	Local

14 \*Management may override lower level management and request a review or  
 15 investigation regardless of the above criteria.

16  
 17 **Agency Specific Policy Documents**

18 These documents provide specific direction related to incident and accident  
 19 investigations.

	Safety	Prescribed Fire
<b>DOI</b>	485 DM Chapter 7	
<b>BLM</b>	Manual 1112-2, 1112-1	
<b>FWS</b>	Service Manual 095	
<b>NPS</b>	DO/RM-50B, RM-18 Chapter 3	RM-18, Chapter 7

	FSH-6709.11	FSM-5140
<b>FS</b>	FSM-5100 and FSH-6709.11 FSM 5720 (Aviation), FSM 5130 (Ground Operations), FSM 6730 (Specific policy), FSH 6709.12, Chapter 30 (General guidance), and most recent <i>Accident Investigation Guide</i> , for specific guidance.	
<b>Interagency</b>	Information on accident investigations may be found at: <a href="http://www.nifc.gov/safety/accident_resources.htm">http://www.nifc.gov/safety/accident_resources.htm</a> Also refer to <i>Investigating Wildland Fire Entrapments, 2001 Edition, MTDC</i> . For reporting use <i>PMS 405-1, Wildland Fire Fatality and Entrapment Initial Report, 2007</i> . <a href="http://www.nwcg.gov/pms/pms.htm">http://www.nwcg.gov/pms/pms.htm</a>	

1

2 **Serious Wildland Fire Accident Investigation Process**

3

4 **Fire Director Responsibilities**5 The Fire Director(s) or designee(s) of the lead agency, or agency responsible for  
6 the land upon which the accident occurred, will:

- 7 • Notify the agency safety manager and Designated Agency Safety and  
8 Health Official (DASHO).
- 9 • Immediately appoint, authorize, and deploy an accident investigation team.
- 10 • Provide resources and procedures adequate to meet the team's needs.
- 11 • Receive the factual and management evaluation reports and take action to  
12 accept or reject recommendations.
- 13 • Forward investigation findings, recommendations, and corrective action  
14 plan to the DASHO (the agency safety office is the "office of record" for  
15 reports).
- 16 • Convene an accident review board/ board of review (if deemed necessary)  
17 to evaluate the adequacy of the factual and management reports and  
18 suggest corrective actions.
- 19 • Ensure a corrective action plan is developed, incorporating management  
20 initiatives established to address accident causal factors.

21

22 **Agency Administrator Responsibilities**

- 23 • Develop local preparedness plans to guide emergency response.
- 24 • Identify agencies with jurisdictional responsibilities for the accident.
- 25 • Provide for and emphasize treatment and care of survivors.
- 26 • Ensure the Incident Commander secures the accident site.
- 27 • Conduct an in-briefing to the investigation team.
- 28 • Facilitate and support the investigation as requested.
- 29 • Implement Critical Incident Stress Management (CISM).
- 30 • Notify home tribe leadership in the case of a Native American fatality.
- 31 • Prepare and issue required 24 and 72 hour reports.

**1 Notification**

2 Agency reporting requirements will be followed. As soon as a serious accident  
3 is verified, the following groups or individuals should be notified:

- 4 • Agency administrator
- 5 • Public affairs
- 6 • Agency Law Enforcement
- 7 • Safety personnel
- 8 • County sheriff or local law enforcement as appropriate to jurisdiction
- 9 • National Interagency Coordination Center (NICC)
- 10 • Agency headquarters
- 11 • OSHA (within 8 hours if the accident resulted in one or more fatalities or if  
12 three or more personnel are inpatient hospitalized)

13  
14 Notification to the National Fire and Aviation Safety Office is required.

15 National Office will determine the level of investigation. Agency fire safety  
16 contacts are listed below:

17 *BLM - Michelle Ryerson*

18 *FWS - Rod Bloms*

19 *NPS - Al King*

20 *FS - Larry Sutton*

21 *FS - Forest Service protocol for multiple fatalities or 3 or more serious injuries*  
22 *requiring hospitalization investigation teams are assigned by the Office of Safety*  
23 *and Occupational Health in the WO.*

**24 Designating the Investigation Team Lead**

25 The 1995 Memorandum of Understanding between the U.S. Department of the  
26 Interior and the U.S. Department of Agriculture states that serious wildland fire-  
27 related accidents will be investigated by interagency investigation teams.

28 Following initial notification of a serious accident, the National Fire Director(s)  
29 or their designee(s) will designate a Serious Accident Investigation Team  
30 Lead(s) and provide that person(s) with a written delegation of authority to  
31 conduct the investigation and the means to form and deploy an investigation  
32 team.  
33

**34 Serious Accident Investigation Team Composition****35 Team Leader**

36 A senior agency management official, at the equivalent associate/assistant  
37 regional/state/area/division director level. The team leader will direct the  
38 investigation and serve as the point of contact to the Designated Agency Safety  
39 and Health Official (DASHO).  
40

**41 Chief Investigator**

42 A qualified accident investigation specialist is responsible for the direct  
43 management of all investigation activities. The chief investigator reports to the  
44 team leader.  
45

1 **Accident Investigation Advisor**

2 An experienced safety and occupational health specialist or manager who acts as  
3 an advisor to the team leader to ensure that the investigation focus remains on  
4 safety and health issues. The accident investigation advisor also works to ensure  
5 strategic management issues are examined.

6

7 **Interagency Representative**

8 An interagency representative will be assigned to every fire-related Serious  
9 Accident Investigation Team. They will assist as designated by the team leader  
10 and will provide outside agency perspective.

11

12 **Technical Specialists**

13 Personnel who are qualified and experienced in specialized occupations,  
14 activities, skills, and equipment, addressing specific technical issues such as  
15 arson, third-party liability, weather, and terrain.

- 16 • *BLM - Has established Serious Accident Investigation Teams (SAIT) that*  
17 *are managed on a rotational basis. Coordinating is done from the*  
18 *National Office of Fire and Aviation Safety Manager.*

19

20 **The Final Report**

21 Within 45 days of the incident, a Factual Report (FR) and a Management  
22 Evaluation Report (MER) will be produced by the investigation team to  
23 document facts, findings, and recommendations and forwarded to the  
24 Designated Agency Safety and Health Official (DASHO) through the agency  
25 Fire Director(s).

26

27 **Factual Report**

28 This report contains a brief summary or background of the event, and facts  
29 based only on examination of technical and procedural issues related to  
30 equipment and tactical fire operations. It does not contain opinions,  
31 conclusions, or recommendations. Names of injured personnel are not to be  
32 included in this report (reference them by position). Post-accident actions  
33 should be included in this report (emergency response attribute to survival of a  
34 victim, etc).

35

36 Factual Reports will be submitted to Wildland Fire Lessons Learned Center  
37 (WFLLC) by the respective agency's National Wildland Fire Safety Leads.  
38 Website: <http://www.wildfirelessons.net/Reviews.aspx>

39

40 **Management Evaluation Report (MER)**

41 The MER is intended for internal use only and explores management policies,  
42 practices, procedures, and personal performance related to the accident. The  
43 MER categorizes findings identified in the factual report and provides  
44 recommendations to prevent or reduce the risk of similar accidents. The MER  
45 includes the following sections:

- 1 • **Executive Summary:** A brief narrative of the facts involving the accident.  
2 Keep this section short. Readers can refer to the factual report if they want  
3 more detail.
- 4 • **Findings:** From the factual report.
- 5 • **Other Findings (DOI only):** Other findings not contributing to the  
6 accident but, if left uncorrected, could lead to other accidents.
- 7 • **Other Information:** This paragraph can contain opinions by the  
8 investigators, conclusions and observations, and confidential information  
9 which the team feels is relevant for management consideration. (This  
10 paragraph is not required).
- 11 • **Recommendations:** Recommendations are prevention measures  
12 management may take to prevent similar accidents. The recommendations  
13 must be reasonable, feasible, relate to the cause(s) of the accident, and  
14 allow for definitive closure. Depending upon the scope of impact the  
15 recommendations can be implemented by a local unit, the state/regional  
16 office or the national office. The team should specify who should  
17 implement the recommendations.
- 18 • **Enclosures:** Information not contained in the Factual Report, but which  
19 the team feels necessary to support their recommendations. Since this  
20 report can be obtained by the public under certain circumstances, do not  
21 include anything that is not needed to substantiate recommendations.  
22

#### 23 **Accident Review Board/Board of Review**

24 An Accident Review Board/Board of Review is used to evaluate  
25 recommendations, and develop a corrective action plan.  
26

#### 27 **Non-Serious Wildland Fire Accident Investigation Process**

##### 28 **Notification**

29 Agency specific reporting requirements shall be followed. In most instances,  
30 supervisors will notify unit fire management officer, who will then make  
31 notification through chain of command.  
32  
33

##### 34 **Investigation Team Membership**

35 Investigation team membership will depend upon the severity of the accident.  
36 At a minimum, the team should consist of a chief investigator, a safety advisor,  
37 and one technical specialist. Team members may have dual roles (e.g., chief  
38 investigator/safety advisor). More complex accidents may require the need for a  
39 Team Leader and multiple technical specialists.  
40

##### 41 **Final Report**

42 Within 45 days of the accident, a final report detailing the accident to include  
43 facts, findings, and recommendations shall be submitted to the senior manager  
44 dependent upon the level of investigation (e.g., Local agency administrator,  
45 State/Regional Director, and Agency Fire Director or their designee).  
46

1 The Final Report (minus recommendations, conclusions and observations) will  
2 be submitted to Wildland Fire Lessons Learned Center (WFLLC) by the  
3 respective agency's National Fire Safety Leads. Website:  
4 <http://www.wildfirelessons.net/Reviews.aspx>

5  
6 **Processes Common to Serious and Non-Serious Wildand Fire Investigations**

- 7 • **Site Protection** - The site of the incident should be secured immediately  
8 and nothing moved or disturbed until the area is photographed and visually  
9 reviewed. Exact locations of injured personnel, entrapments, injuries,  
10 fatalities, and the condition and location of personal protective equipment,  
11 property, and other equipment must be documented.
- 12 • **Management of Involved Personnel** - Treatment, transport, and follow-  
13 up care must be immediately arranged for injured and involved personnel.  
14 The agency administrator or delegate should develop a roster of involved  
15 personnel and supervisors and ensure they are available for interviews by  
16 the investigation team. The agency administrator should consider relieving  
17 involved supervisors from fireline duty until the preliminary investigation  
18 has been completed. Attempt to collect initial statements from the involved  
19 individuals prior to a Critical Incident Stress Management (CISM) session.
- 20 • **Critical Incident Stress Management (CISM)** - CISM is the  
21 responsibility of local agency administrators, who should have individuals  
22 re-identified for critical incident stress debriefings. The process for  
23 ordering CISM support can be found in Appendix Q. Also refer to *The*  
24 *Agency Administrator's Guide to Critical Incident Management (PMS*  
25 *926)*, available at: <http://www.nwcc.gov/pms/pubs/PMS926-DRAFT.pdf>.  
26 Individuals or teams may be available through Employee Assistance  
27 Programs (EAP's) or Geographic Area Coordination Centers (GACC's). A  
28 Critical Incident Stress Defusing should be provided no more than 8 hours  
29 after an incident, or if possible, it should be provided immediately (one to  
30 two hours) after the incident, and usually takes 30 minutes to 1 hour. A  
31 Critical Incident Stress Debriefing should occur between 24 to 72 hours  
32 after the incident, and usually takes 1-3 hours.
- 33 • **24-Hour-Preliminary Report** - This report contains only the most  
34 obvious and basic facts about the accident. It will be completed and  
35 forwarded by the agency administrator responsible for the jurisdiction  
36 where the accident occurred. Names of injured personnel are not to be  
37 included in this report (reference them by position).
- 38 • **72-Hour Expanded Report** - This report provides more detail about the  
39 accident and may contain the number of victims, severity of injuries, and  
40 information focused on accident prevention. It will be completed and  
41 forwarded by the SAIT. Names of injured personnel are not to be included  
42 in this report (reference them by position).

43  
44  
45  
46

## 1 Investigation Report Standard Format

- 2 • **Executive Summary** - A brief narrative of the facts involving the accident  
3 including dates, locations, times, name of incident, jurisdiction(s), number  
4 of individuals involved, etc.
- 5 • **Narrative** - A detailed chronological narrative of events leading up to and  
6 including the accident, as well as rescue and medical actions taken after the  
7 accident. This section should spell out in detail who, what, and where.
- 8 • **Investigation Process** - A brief narrative stating the team was assigned to  
9 investigate the accident. It should include a standard statement that  
10 human, material, and environmental factors were considered. If one of  
11 these factors is determined to be noncontributing to the accident, it should  
12 be addressed first and discounted. For example, if the investigation  
13 revealed that there were no environmental findings that contributed to the  
14 accident, simply note the fact and move on to the next factor. Human  
15 factors or material factors paragraphs should not be formulated so as to  
16 draw conclusions, nor should they contain adjectives or adverbs that  
17 describe and thus render an opinion into pertinent facts.
- 18 • **Findings** - Findings are developed from the factual information and are  
19 based on the weight of evidence, professional knowledge, good judgment  
20 and are listed in chronological order. Findings must be substantiated by  
21 the factual data within the report.
- 22 • **Discussion** - Provide a brief explanation of factual and other pertinent  
23 information that lead to the finding(s).
- 24 • **Recommendations** - Recommendations are the prevention measures that  
25 should be taken to prevent similar accidents. Provide recommendations  
26 that are consistent with the findings and identify at which level the action  
27 needs to occur.
- 28 • **Conclusions and Observations** - Investigation team's opinions and  
29 inferences may be captured in the section.
- 30 • **Maps/Photographs/Illustrations** - Graphic information used to document  
31 and visually portray facts.
- 32 • **Appendices** - Reference materials (e.g., fire behavior analysis, equipment  
33 maintenance reports, agreements).
- 34 • **Records** - factual data and documents used to substantiate facts involving  
35 the accident.

## 37 Fire Cause Determination & Trespass Investigation

### 39 Introduction

40 Agency policy requires any wildfire to be investigated to determine cause,  
41 origin, and responsibility. Accurate fire cause determination is a necessary first  
42 step in a successful fire investigation. Proper investigative procedures, which  
43 occur concurrent with initial attack, more accurately pinpoint fire causes and can  
44 preserve valuable evidence that would otherwise be destroyed by suppression  
45 activities.

1 The agency or its employees must pursue cost recovery or document why cost  
2 recovery is not initiated for all human caused fires on public and/or other lands  
3 under protection agreement.

4  
5 Fire trespass refers to the occurrence of unauthorized fire on agency-protected  
6 lands where the source of ignition is tied to some type of human activity.

7  
8 **Policy**

9 The agency must pursue cost recovery, or document why cost recovery is not  
10 required, for all human-caused fires on public lands. The agency will also  
11 pursue cost recovery for other lands under fire protection agreement where the  
12 agency is not reimbursed for suppression actions, if so stipulated in the  
13 agreement.

14  
15 For all human-caused fires where negligence can be determined, trespass actions  
16 are to be taken to recover cost of suppression activities, land rehabilitation, and  
17 damages to the resource and improvements. Only fires started by natural causes  
18 will not be considered for trespass and related cost recovery.

19  
20 The determination whether to proceed with trespass action must be made on  
21 “incident facts,” not on “cost or ability to pay.” Trespass collection is both a  
22 cost recovery and a deterrent to prevent future damage to public land. It is  
23 prudent to pursue collection of costs, no matter how small. This determination  
24 must be documented and filed in the unit office’s official fire report file.  
25 The agency administrator has the responsibility to bill for the total cost of the  
26 fire and authority to accept only full payment. On the recommendation of the  
27 State/Regional Director, the Solicitor/Office of General Counsel may  
28 compromise claims of the United States, up to the monetary limits (\$100,000)  
29 established by law 31 U.S.C. 3711[a], 4 CFR 103-104, and 205 DM 7.1 and 7.2.  
30 The Solicitor/Office of General Counsel will refer suspension or termination of  
31 the amount, in excess of \$100,000, exclusive of interest, penalties, or  
32 administrative charges, to the Department of Justice.

33  
34 Unless specified otherwise in an approved protection agreement, the agency that  
35 has the land management jurisdiction/administration role is accountable for  
36 determining the cause of ignition, responsible party, and for obtaining all  
37 billable costs, performing the billing, collection, and distribution of the collected  
38 funds. The agency with the fire protection responsibility role must provide the  
39 initial determination of cause to the agency with the land management  
40 jurisdiction/administration role. The agency providing fire protection shall  
41 provide a detailed report of suppression costs that will allow the jurisdictional  
42 agency to proceed with trespass procedures in a timely manner.

43  
44 Each agency’s role in fire trespass billing and collection must be specifically  
45 defined in the relevant Cooperative Fire Protection Agreement. The billing and  
46 collection process for federal agencies is:



- 1 • For example, a federal agency fire occurs on another federal agency's land  
2 and is determined to be a trespass fire. BLM provides assistance, and  
3 supplies costs of that assistance to the federal agency with jurisdictional  
4 responsibility for trespass billing. The responsible federal agency bills and  
5 collects trespass, and BLM then bills the federal agency and is reimbursed  
6 for its share of the collection.
- 7 • For example, where BLM administered land is protected by a state agency,  
8 the billing and collection process is:
- 9 ➤ The state bills BLM for their suppression costs. The BLM will  
10 pursue trespass action for all costs, suppression, rehabilitation, and  
11 damages, and deposits the collection per BLM's trespass guidance.
- 12
- 13 All fires must be thoroughly investigated to determine cause. Initiation of cause  
14 determination must be started with notification of an incident. The initial attack  
15 incident commander and the initial attack forces are responsible for initiating  
16 fire cause determination and documenting observations starting with their travel  
17 to the fire. If probable cause indicates human involvement, an individual trained  
18 in fire cause determination should be dispatched to the fire. Agency References:
- 19 • **BLM** - *9238-1*
- 20 • **FWS** - *Fire Management Handbook Chapter 4 or*  
21 *[www.fws.gov/fire/redbook/trespass.pdf](http://www.fws.gov/fire/redbook/trespass.pdf)*
- 22 • **NPS** - *RM-18, Chapter 8 and RM-9*
- 23 • **FS** - *FSM-5130 and FSM-5300*

**Sample Questions  
For Fire Site Visits  
By Agency Administrators**

**Management Direction**

- \_\_\_ Who is the incident commander? If the fire is being managed under Unified Command, are all commanders present? Is the incident operating smoothly?
- \_\_\_ What is the incident organization?
- \_\_\_ What is the current situation? What has been damaged or is at risk?
- \_\_\_ Have you received adequate direction for the management of the incident? Is a Wildland Fire Situation Analysis required/still valid?
- \_\_\_ What are the incident management objectives? Constraints? Probability of success?
- \_\_\_ Are the tactics in the Incident Action Plan realistic and achievable with current resources?
- \_\_\_ Is a resource advisor needed?
- \_\_\_ What are your estimates of suppression costs?
- \_\_\_ What are the incident commander's concerns?
- \_\_\_ What are the local, social, economic, and political issues?
- \_\_\_ Are there rehabilitation needs?
- \_\_\_ What can I, as the agency administrator, do to help?

**Safety**

- \_\_\_ What are your safety concerns?
- \_\_\_ Are these concerns resolved? If not, what needs to be done?
- \_\_\_ What is the general safety attitude and emphasis?
- \_\_\_ Have you assessed the potential hazardous situations and determined if the fire can be fought safely?
- \_\_\_ Have you applied the Fire Orders, Watchout Situations, Lookout, Communication, Escape Routes, Safety Zones (LCES) process in selecting safe and effective strategies and tactics?
- \_\_\_ Have you effectively briefed firefighters on hazards, safety zones, escape routes, and current and expected weather and fire behavior?
- \_\_\_ Is the safety officer position filled? If not, how is this function being addressed?
- \_\_\_ Are you monitoring work schedules to ensure adequate rest? Are you meeting the standard work/rest guidelines?
- \_\_\_ Have you provided for adequate rest, food, water, and health services for all personnel?
- \_\_\_ Are all the fire personnel qualified for the positions they hold, and are they physically able to perform?
- \_\_\_ Have you had any injuries or accidents?

**Fire Suppression Operations**

- \_\_\_ What is the fire weather forecast (present and extended)?
- \_\_\_ What is the fire behavior potential?
- \_\_\_ Are fire personnel briefed on incident objectives, strategies, tactics, organization, communications, hazards, and safety principles?
- \_\_\_ Are the strategy and tactics based on current and forecasted weather?
- \_\_\_ Are strategy and tactics safe, effective, and consistent with management's objectives and accepted fire policies and procedures?
- \_\_\_ Do you have effective communication on the incident and with dispatch?

- \_\_\_ Are you monitoring weather and fire behavior to make needed adjustments to strategy and tactics?
- \_\_\_ Are you using tactical aircraft? Do you have an assigned air tactical group supervisor?
- \_\_\_ Is aircraft use safe, effective, and efficient?
- \_\_\_ If the fire escapes initial attack, what will your role be in developing the Wildland Fire Situation Analysis?

**Administration**

- \_\_\_ Do you have any administrative concerns?
- \_\_\_ What arrangements have you made to complete time reports, accident forms, fire report, etc.?
- \_\_\_ Did all orders and procurement go through dispatch?
- \_\_\_ Do you have any outstanding obligations?
- \_\_\_ Are all rental agreements and use records properly completed?
- \_\_\_ How did the fire start? If human-caused, has an investigation been initiated to determine the cause and develop a trespass case?
- \_\_\_ Do you know of any current or potential claims?

**Dispatch Office**

- \_\_\_ Is the incident receiving fire weather and fire behavior information?
- \_\_\_ Is the incident getting the resources ordered in a timely manner?
- \_\_\_ Is dispatch adequately staffed?
- \_\_\_ What are the local, area, and National Preparedness Levels? How do they affect this fire?
- \_\_\_ Are the elements identified at the various Preparedness Levels being considered?
- \_\_\_ What are the current local, area and national fire situations?
- \_\_\_ What is the priority of existing fires and how are the priorities being determined.

**Manager's Supplement for Post Incident Review**

Incident Commander \_\_\_\_\_  
Fire Name and No. \_\_\_\_\_  
Start Date and Duration of Incident \_\_\_\_\_  
Date of Incident Debriefing \_\_\_\_\_

List of Debriefing Attendees:

Brief synopsis of fire behavior and narrative of the incident:

**Fire Size-up:**

- Gave an accurate sizeup of the fire to dispatch upon arrival?
- Managed fire suppression resources in accordance with the management objectives for the area and availability of resources?
- Did the unit support organization provide timely response and feedback to your needs? (Appendix A)
- Were there any radio communication issues?

**Provide for the Safety and Welfare of Assigned Personnel:**

- Gave operation briefing prior to firefighters being assigned to incident operations.
- How were incoming resources debriefed; via radio, personal contact?
- Were agency work/rest guidelines followed? Was adequate food and water provided to firefighters?

**Fire Suppression Operations:**

- Explain how the strategies and tactics used met management objectives, without compromising adherence to the Fire Orders, Watch Out Situations, and LCES?
- How were weather conditions monitored: daily weather briefings, spot weather forecasts or other?
- Were there adjustments needed to strategy and tactics?
- What were the potentially hazardous situations, and their mitigations?
- How were projected changes in the weather, tactics, hazards and fire behavior communicated to fire personnel?
- Were communications effective with dispatch and supervisor?
- Were all interested parties kept informed of progress, problems, and needs. Was aviation support used? If so, was it effective?
- Were there any injuries, close calls, or safety issues that should be discussed? Were these documented?

**Administrative Responsibilities:**

- Submitted complete documentation to supervisor for time, accidents, incident status, unit logs, evaluations, and other required or pertinent reports?
- Provided timely and effective notification of the fire status and unusual events or occurrences to dispatch and management.
- As requested, provided effective input into the Wildland Fire Situation Analysis (WFSA).
- If necessary, provided team transition briefing as assigned.
- Form ICS 201 was completed in accordance with local policy.

Release Date: January 2008

APPENDIX B-1

**Delegation for Field Office Fire Management Officers**

\_\_\_\_\_, Fire Management Officer  
for the \_\_\_\_\_ Field Office is delegated authority to act on my behalf for  
the following duties and actions:

1. Represent the \_\_\_\_\_ BLM in the \_\_\_\_\_  
Multi-Agency Coordinating Group in setting priorities and allocating resources for  
fire emergencies.
2. Coordinate all prescribed fire activities in the \_\_\_\_\_  
and suspending all prescribed fire and issuance of burning permits when conditions  
warrant.
3. Ensure that only fully qualified personnel are used in wildland fire operations.
4. Coordinate, preposition, send, and order fire and aviation resources in response to  
current and anticipated zone fire conditions.
5. Oversee and coordinate the \_\_\_\_\_ Interagency  
Dispatch Center on behalf of the BLM.
6. Request and oversee distribution of severity funding for Field Office Fire and  
Aviation.
7. Approve Fire Program requests of overtime, hazard pay, and other premium pay.
8. Ensure all incidents are managed in a safe and cost-effective manner.
9. Coordinate and provide all fire and prevention information needs to inform internal  
and external costumers with necessary information.
10. Coordinate all fire funding accounts with the Budget Officer to assure Field Office  
fiscal guidelines are adhered to and targets are met.
11. Approve and sign aviation request forms.
12. Approve Red Cards in accordance with State Office guidance.
13. Authorized to hire Emergency Firefighters in accordance with the Department of  
Interior Pay Plan for Emergency Workers.

\_\_\_\_\_  
Field Manager

\_\_\_\_\_  
Date

**Agency Administrator's Briefing to Incident Management Team**

<b>General Information</b>		
Incident Name		
Approx. Size @	Date	Time
Location		
Date of Start		
Overhead and Suppression Resources Currently on Incident And Present IC		
General Fire Situation in Area		
Resources Ordered		
Other Organizations Requiring Coordination (Area Command, Expanded Dispatch, MAC, Buying Team, Payment Team, Tribal Government, Other Agency Jurisdictions)		
Law Enforcement/Ongoing Investigations		
Financial Considerations/Limitations		
Fire Behavior Considerations		
Weather Situation		
Fuel Types		
Topography		
Fire Behavior		
Appropriate Management Response Considerations Established Through and for the WFSA Development Priorities		
Environmental Constraints		
Utility Corridors		

<b>Air Operations</b>
Effectiveness
Hazards
Air Space Restrictions
Airports, Heliports, Helispots
Suppression Policies
Other
<b>Environmental, Social, Political, Economic, and Cultural Resource Considerations</b>
Environmental
Social
Political
Economic
Cultural Resource
<b>Communications</b>
Radio
Telephone
Electronic (Computers)
Expanded Dispatch
<b>Procurement Arrangements</b>
Agreements
Tribal Government
Infrared Status

Security Considerations
Incident Management Direction and Considerations
Wildland Fire Situation Analysis
Delegation of Authority
Agency Administrator’s Representative
Incident Business Advisor
Resource Advisor
Suppression Priorities
Forest Supervisor/Incident Commander Contact
Time
Process
News Media and Incident Information Management
Training Considerations
Interagency/Private Property Considerations (costs, etc.)
Mop Up Standards
Rehabilitation Considerations
Initial Attack Responsibility
Support to Other Incidents
Disposition of Unit Resources on the Incident
Close Out and Debriefing



<b>Human Welfare</b>
Safety
Health
Civil Rights
Distribute Support Documents
WFSA (Common WFSA if Unified Command?)
Delegation of Authority Letter
Map & Photos
Fire Management, Pre-Attack, Land Management Plans
Weather Forecast
Special Management Area Documents
Phone Directory, Fax Number
Agreements
Incident Status Summary (ICS - 209)
Business Management Documents
Payments (Vendors and Casuals)
Claims
Injury Compensation
Incident Business Guidelines (ISOPS)

## Spot Weather Observation and Forecast Request Instruction & Notes

Spot Weather Forecasts should be requested for fires that will exceed initial attack, have potential for extreme fire behavior, or are located in areas where Red Flag Warnings or Fire Weather Watches have been issued. This form is primarily for field use documentation of weather observations and/or forecasts. Whenever possible, a copy of the actual fire Weather Forecast should be used for operational briefings and/or included in the fire documentation.

### Instructions

1. **Name of Fire/Incident:** Use incident or project name.
2. **Control Agency:** Agency with primary responsibility for managing the incident.
3. **Request Made:** Put date and time (use 24-hour clock).
4. **Location:** Use an on-site legal description specific to the nearest ¼ section.
5. **Drainage Name:** Use the closest drainage name or landmark from a topographical map.
6. **Exposure:** Use one of the 8 major cardinal points (N, SE, NW, etc.) to designate general aspect.
7. **Size of Project:** In acres.
8. **Elevation:** Designate elevation in feet; Top and Bottom refer to elevation of fire. (For a group of lightning fires specify "Concentration" then give number of fires and size of largest; request forecast for each drainage.)
9. **Fuel Type:** Use a fuel model number or a name description.
10. **Project On:** Projects may be on the ground or crowning.
11. **Weather Conditions at Project or from Nearby RAWS:** In the Place column, put On-site (which refers to the legal description used in Number 4); if the observations are taken off-site, specify the Township, Range, and Section to the nearest ¼ or the location of the RAWS used. In the Elevation column, put the actual elevation for the observations (may or may not be the same as in Number 8).
12. **Send Forecast To:** Specify how the forecast will be broadcast or sent, especially if it differs from normal radio relay or faxing procedures (i.e., having copies faxed to mobile units, office, or stations), and also the name of the contact who will be receiving the request (may differ from the person making the forecast request).
13. **Forecast and Outlook:** Document name of forecaster and office forecast originated from.
14. **Forecast Received:** Document name of person receiving forecast, date, time and location and received (to verify or update information in Number 12).

### Notes

Under the Remarks column in Number 11, put the estimated ignition time for Rx projects. For Rx projects, fire weather forecasters can work with you ahead of time and either do some "practice" forecasts or provide you with weather information for planning.

For better service, do not send a request in just prior to Rx ignition (turn-around time is typically 1 to 2 hours). Most fire weather forecasters work early shifts, and usually leave around 1600 to 1700.

If the fire weather forecaster does not hear from you, they assume the forecast was accurate. If the forecast does not match what is actually occurring, let the fire weather forecaster know. Feedback is crucial for improving forecast accuracy. Forecasts can be updated. If at anytime you do not understand what the forecast is telling you, or you have questions about its content for whatever reason, do not hesitate to call the fire weather forecaster and discuss the matter.

Spot Weather Observation and Forecast Request (See reverse for instructions)									
Requesting Agency will Furnish Information for Blocks 1-12									
1. Name of Incident or Project				2. Control Agency			3. Request Made		
							Time:		Date:
4. Location (Designate Township, Range, and Section (include ¼ section):					5. Drainage Name		6. Exposure/Aspect:		
7. Size of Incident or Project (acres):			8. Elevation		9. Fuel Type:		10. Project On:		
			Top	Bottom			<input type="checkbox"/> Ground <input type="checkbox"/> Crowning		
11. Weather Conditions at Incident or Project or from RAWS:									
Place	Elevation	Observation Time	Wind Direction/Velocity		Temperature		No entry necessary. To be completed by the Fire Weather Forecaster.		Remarks <small>(Indicate precipitation, cloud type and % cover, wind and frontal conditions, etc.)</small>
			20-Foot:	Eye Level:	Dry Bulb:	Wet Bulb:	Rh	Dp	
12. Send Forecast To (Person):			Send Forecast To (Location):			Send Forecast Via:		Send Copy To:	
The Fire Weather Forecaster will Furnish the Information for Block 13:									
13. Discussion and Outlook:								Date and Time:	
Burn Period	Sky Cover	Temperature °F	Humidity %	Wind		Indices			
				Eye Level	20-Foot				
<input type="checkbox"/> Today (sunrise to dusk) <input type="checkbox"/> This Afternoon (noon until dusk) <input type="checkbox"/> This Evening (1600 until dusk) <input type="checkbox"/> Tonight (sunset until sunset)	<input type="checkbox"/> Mostly Sunny/Clear <input type="checkbox"/> Fair <input type="checkbox"/> Partly Cloudy <input type="checkbox"/> Mostly Cloudy <input type="checkbox"/> Cloudy <input type="checkbox"/> Variable	_____ <input type="checkbox"/> High <input type="checkbox"/> Low <input type="checkbox"/> Range	_____ <input type="checkbox"/> Maximum <input type="checkbox"/> Minimum <input type="checkbox"/> Range	<input type="checkbox"/> Upslope <input type="checkbox"/> Downslope Direction _____ Velocity _____ mph Gusts _____ mph	<input type="checkbox"/> Upslope <input type="checkbox"/> Downslope Direction _____ Velocity _____ mph Gusts _____ mph	Haines:  LAL:  BI:  CI:			
<input type="checkbox"/> Today (sunrise to dusk) <input type="checkbox"/> This Afternoon (noon until dusk) <input type="checkbox"/> This Evening (1600 until dusk) <input type="checkbox"/> Tonight (sunset until sunset)	<input type="checkbox"/> Mostly Sunny/Clear <input type="checkbox"/> Fair <input type="checkbox"/> Partly Cloudy <input type="checkbox"/> Mostly Cloudy <input type="checkbox"/> Cloudy <input type="checkbox"/> Variable	_____ <input type="checkbox"/> High <input type="checkbox"/> Low <input type="checkbox"/> Range	_____ <input type="checkbox"/> Maximum <input type="checkbox"/> Minimum <input type="checkbox"/> Range	<input type="checkbox"/> Upslope <input type="checkbox"/> Downslope Direction _____ Velocity _____ mph Gusts _____ mph	<input type="checkbox"/> Upslope <input type="checkbox"/> Downslope Direction _____ Velocity _____ mph Gusts _____ mph	Haines:  LAL:  BI:  CI:			
Outlook for (Date): _____	<input type="checkbox"/> Mostly Sunny/Clear <input type="checkbox"/> Fair <input type="checkbox"/> Partly Cloudy <input type="checkbox"/> Mostly Cloudy <input type="checkbox"/> Cloudy <input type="checkbox"/> Variable	_____ <input type="checkbox"/> High <input type="checkbox"/> Low <input type="checkbox"/> Range	_____ <input type="checkbox"/> Maximum <input type="checkbox"/> Minimum <input type="checkbox"/> Range	<input type="checkbox"/> Upslope <input type="checkbox"/> Downslope Direction _____ Velocity _____ mph Gusts _____ mph	<input type="checkbox"/> Upslope <input type="checkbox"/> Downslope Direction _____ Velocity _____ mph Gusts _____ mph	Haines:  LAL:  BI:  CI:			
Name of Fire Weather Forecaster:					Fire Weather Office Issuing Forecast:				
14. Forecast Received by (Name):				Date:	Time:	Forecast Received at (Location) Via:			

**Guide to Completing the Incident Complexity Analysis.  
(Type 1, 2)**

- If positive responses exceed, or are equal to, negative responses within any primary factor (A through G), the primary factor should be considered as a positive response.
- If any three of the primary factors (A through G) are positive responses, this indicates the fire situation is or is predicted to be of Type 1 complexity.
- Factor H should be considered after numbers 1–3 are completed. If more than two of the items in factor H are answered yes, and three or more of the other primary factors are positive responses, a Type 1 team should be considered. If the composites of H are negative, and there are fewer than three positive responses in the primary factors (A-G), a Type 2 team should be considered. If the answers to all questions in H are negative, it may be advisable to allow the existing overhead to continue action on the fire.

<b>Incident Complexity Analysis Type 1 &amp; 2</b>		<b>YES</b>	<b>NO</b>
<b>A. Fire Behavior (Observed or Predicted)</b>			
1. Burning index (from on-site measurement of weather conditions) predicted to be above the 90% level using the major fuel model in which the fire is burning.			
2. Potential exists for extreme fire behavior (fuel moisture, winds, etc.).			
3. Crowning, profuse or long-range spotting.			
4. Weather forecast indicating no significant relief or worsening conditions.			
Total			
<b>B. Resources Committed</b>			
1. 200 or more personnel assigned.			
2. Three or more divisions.			
3. Wide variety of special support personnel.			
4. Substantial air operation which is not properly staffed.			
5. Majority of initial attack resources committed.			
Total			

<b>C. Resources Threatened</b>		
1. Urban interface.		
2. Developments and facilities.		
3. Restricted, threatened, or endangered species habitat.		
4. Cultural sites.		
5. Unique natural resources, special-designation areas, wilderness.		
6. Other special resources.		
Total		
<b>D. Safety</b>		
1. Unusually hazardous fireline construction.		
2. Serious accidents or fatalities.		
3. Threat to safety of visitors from fire and related operations.		
4. Restrictions and/or closures in effect or being considered.		
5. No night operations in place for safety reasons.		
Total		
<b>E. Ownership</b>		
1. Fire burning or threatening more than one jurisdiction.		
2. Potential for claims (damages).		
3. Different or conflicting management objectives.		
4. Disputes over suppression responsibility.		
5. Potential for unified command.		
Total		
<b>F. External Influences</b>		
1. Controversial fire policy.		
2. Pre-existing controversies/relationships.		
3. Sensitive media relationships.		
4. Smoke management problems.		
5. Sensitive political interests.		
6. Other external influences.		
Total		

<b>G. Change in Strategy</b>		
1. Change in strategy to control from confine or contain		
2. Large amounts of unburned fuel within planned perimeter.		
3. WFSAs invalid or requires updating.		
Total		
<b>H. Existing Overhead</b>		
1. Worked two operational periods without achieving initial objectives.		
2. Existing management organization ineffective.		
3. Overhead overextended mentally and/or physically.		
4. Incident action plans, briefings, etc. missing or poorly prepared.		
Total		

<b>Incident Complexity Analysis (Type 3, 4, 5)</b>		
<b>Fire Behavior</b>	<b>Yes</b>	<b>No</b>
Fuels extremely dry and susceptible to long-range spotting or you are currently experiencing extreme fire behavior.		
Weather forecast indicating no significant relief or worsening conditions.		
Current or predicted fire behavior dictates indirect control strategy with large amounts of fuel within planned perimeter.		
<b>Firefighter Safety</b>		
Performance of firefighting resources affected by cumulative fatigue.		
Overhead overextended mentally and/or physically.		
Communication ineffective with tactical resources or dispatch.		
<b>Organization</b>		
Operations are at the limit of span of control.		
Incident action plans, briefings, etc. missing or poorly prepared.		
Variety of specialized operations, support personnel or equipment.		
Unable to properly staff air operations.		
Limited local resources available for initial attack.		
Heavy commitment of local resources to logistical support.		
Existing forces worked 24 hours without success.		
Resources unfamiliar with local conditions and tactics.		
<b>Values to be protected</b>		
Urban interface; structures, developments, recreational facilities, or potential for evacuation.		
Fire burning or threatening more than one jurisdiction and potential for unified command with different or conflicting management objectives.		
Unique natural resources, special-designation areas, critical municipal watershed, T&E species habitat, cultural value sites.		
Sensitive political concerns, media involvement, or controversial fire policy.		

If you have checked "Yes" on 3 to 5 of the analysis boxes, consider requesting the next level of incident management support.

**Sample Delegation of Authority:  
Delegation of Authority  
Colorado State Office  
Montrose Field Office**

As of 1800, May 20, 2005, I have delegated authority to manage the Crystal River Fire, Number E353, San Juan Resource Area, to Incident Commander Bill Jones and his Incident Management Team.

The fire, which originated as four separate lightning strikes occurring on May 17, 2005, is burning in the Crystal River Drainage. My considerations for management of this fire are:

1. Provide for firefighter and public safety.
2. Manage the fire with as little environmental damage as possible. The guide to minimum impact suppression tactics (MIST) is attached.
3. Key cultural features requiring priority protection are: Escalante Cabin, and overlook boardwalks along the south rim.
4. Key resources considerations are: protecting endangered species by avoiding retardant and foams from entering the stream; if the ponderosa pine timber sale is threatened, conduct a low intensity under burn and clear fuels along road 312.
5. Restrictions for suppression actions include: no tracked vehicles on slopes greater than 20 percent on meadow soils, except where roads exist and are identified for use. No retardant will be used within 100 feet of water.
6. Minimum tools for use are Type 2/3 helicopters, chainsaws, hand tools, and portable pumps.
7. My agency Resource Advisor will be Eric Johnson (wildlife biologist).
8. The NE flank of the fire borders private property and must be protected if threatened. John Dennison of the Big Pine Fire Department will be the local representative.
9. Manage the fire cost-effectively for the values at risk.
10. Provide training opportunities for the resources area personnel to strengthen our organizational capabilities.
11. Minimum disruption of residential access to private property, and visitor use consistent with public safety.

\_\_\_\_\_  
(Signature and Title of Agency Administrator)

\_\_\_\_\_  
(Date)

**Amendment to Delegation of Authority**

The Delegation of Authority dated May 20, 2005, issued to Incident Commander Bill Jones for the management of the Crystal River Fire, number E353, is hereby amended as follows. This will be effective at 1800, May 22, 2005.

12. Key cultural features requiring priority protection are: Escalante Cabin, overlook boardwalks along the south rim, and the Ute Mountain study site.
13. Use of tracked vehicles authorized to protect Escalante Cabin.

\_\_\_\_\_  
(Signature and Title of Agency Administrator)

\_\_\_\_\_  
(Date)



**Local Incident Commander Briefing**

The Incident Briefing, ICS-201 form provides the basis for the local incident commander to brief the incoming team.

**Briefing Information**

Forms Available or Attached:		Other Attachments:
<input type="checkbox"/> ICS 201	<input type="checkbox"/> ICS 215	<input type="checkbox"/> Map of Fire
<input type="checkbox"/> ICS 207	<input type="checkbox"/> ICS 220	<input type="checkbox"/> Aerial Photos
<input type="checkbox"/> ICS 209		<input type="checkbox"/> Weather Forecast
Fire Start Date:		
Time:		
Fire Cause:		
Fuels Ahead of Fire:		
Fuels at Fire:		
Fire Behavior:		
Fire Spread:		
Natural Barriers:		
Anchor Points:		
Perimeter Secured, Control/Mitigation Efforts Taken, and Containment Status:		
Life, Improvements, Resources and Environmental Issues:		

Weather Forecast:		
	Established	Possible
ICP:	<input type="checkbox"/>	<input type="checkbox"/>
Base:	<input type="checkbox"/>	<input type="checkbox"/>
Camp(s):	<input type="checkbox"/>	<input type="checkbox"/>
Staging Area(s):	<input type="checkbox"/>	<input type="checkbox"/>
Copy Machine Available		<input type="checkbox"/> Yes <input type="checkbox"/> No
Safety Issues:		EMS in Place: <input type="checkbox"/> Yes <input type="checkbox"/> No
Air Operations Effectiveness to Date:		
Air Related Issues and Restrictions:		
Hazards (Aircraft and People):		
Access from Base to Line:		
Personnel and Equipment on Incident (Status and Condition):		
Personnel and Equipment Ordered:		
Cooperating and Assisting Agencies on Scene:		
Helibase/Helispot Location:		

Crash Fire Protection at Helibase:
Medivac Arrangement:
Communication System in Use: <input type="checkbox"/> Radio <input type="checkbox"/> Telephone <input type="checkbox"/> Cell Phone
Water Availability:
Review of Existing Plans for Control in Effect; Copy of Approved WFSAs:
Smoke Conditions:
Local Political Issues:
Damage Assessment Needs:
Security Problems:

Initial Rating

Final Rating

**Incident Management Team Evaluation**

Team IC: \_\_\_\_\_ Type: \_\_\_\_\_

Incident: \_\_\_\_\_ Fire Number: \_\_\_\_\_

1. Did the Team accomplish the objectives described in the Wildland Fire Situation Analysis (WFSA), the Delegation of Authority, and the Agency Administrator Briefing (if available)?  

Yes	No
-----	----
2. Was the Team cost effective in their management of the incident?      Yes      No
3. Was the Team sensitive to resource limits and environmental concerns?      Yes      No
4. Was the Team sensitive to political and social concerns?      Yes      No
5. Was the Team professional in the manner in which they assumed management of the incident, managed the total incident, and returned it to the hosting agency?      Yes      No
6. Did the Team anticipate and respond to changing conditions in a timely and effective manner?  

Yes	No
-----	----
7. Did the Team place the proper emphasis on safety?      Yes      No
8. Did the Team activate and manage the demobilization in a timely, cost-effective manner?  

Yes	No
-----	----
9. Did the Team attempt to use local resources and trainees, and closest available forces to the extent practical?  

Yes	No
-----	----
10. Was the IC an effective manager of the Team and its activities?      Yes      No
11. Was the IC obviously in charge of the Team and incident? Was the IC performing a leadership role?  

Yes	No
-----	----
12. Was the IC aggressive in assuming responsibility for the incident and initiating action?  

Yes	No
-----	----
13. Did the IC express a sincere concern and empathy for the hosting unit and local conditions?  

Yes	No
-----	----
14. Other comments:

\_\_\_\_\_  
 Agency Administrator or Agency Representative

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Incident Commander

\_\_\_\_\_  
 Date

**Fire Management Organization Assessment**

This Appendix is a checklist to assist line managers in evaluating operational fire program needs and complexities in fire situations. A number of factors can occur which increase the complexity and workload for the local fire staff, and depending upon staff size and availability, could overload the organization. Managers should use this checklist to evaluate the current management structure and staffing levels to determine whether or not additional staff assistance is necessary. It is recommended that the checklist be utilized early during complex situations and reviewed periodically.

<b>Safety</b>	<b>Yes</b>	<b>No</b>
Accidents/injuries have occurred.		
Multiple fixed/rotor wing operations are involved or planned.		
Fire Management Staff is in compliance with work rest guidelines.		
The current situation is expected to continue.		
<b>External Factors</b>		
Multiple jurisdictions involved.		
Larger than normal fires are occurring.		
The unit has an approved severity request.		
Severe weather conditions are occurring or forecasted.		
<b>Management</b>		
Current organization is operating at full capacity.		
IMT ordered or in place.		
Local MAC group has been activated.		
A number of critical fire positions are vacant or filled with actings.		
<b>Resource Issues</b>		
Sensitive public/media relations are apparent.		
Large loss of resources expected		
High value resources are threatened.		
<b>Personnel</b>		
Heavy commitment of local resources.		
Multiple support operations activated to assist in fire suppression effort		
A large number of resources from outside the local area are staged or involved in suppression operations.		

Form 9213-1  
(January 2004)

**Wildland Firefighter  
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 HSQ is not a medical examination. Any medical concerns you have that place you or your health at risk should be reviewed with your personal physician prior to participating in the WCT.

The information on this form may be disclosed as permitted by the Privacy Act (5USC552a(b)) to meet employment requirements.

Circle the appropriate Yes or No response to the following questions:

	Yes	No
During the past 12 months have you at any time (during physical activity or while resting) experienced pain, discomfort or pressure in your chest.		
During the past 12 months have you experienced difficulty breathing or shortness of breath, dizziness, fainting, or blackout?		
Do you have a blood pressure with systolic (top #) greater than 140 or diastolic (bottom #) greater than 90?		
Have you ever been diagnosed or treated for any heart disease, heart murmur, chest pain (angina), palpitations (irregular beat), or heart attack?		
Have you ever had heart surgery, angioplasty, or a pace maker, valve replacement, or heart transplant?		
Do you have a resting pulse greater than 100 beats per minute?		
Do you have any arthritis, back trouble, hip /knee/joint /pain, or any other bone or joint condition that could be aggravated or made worse by the Work Capacity Test?		
Do you have personal experience or doctor's advice of any other medical or physical reason that would prohibit you from taking the Work Capacity Test?		
Has your personal physician recommended against taking the Work Capacity Test because of asthma, diabetes, epilepsy or elevated cholesterol or a hernia?		

Regardless whether you are taking the Work Capacity test at the Arduous, Moderate or Light duty level, a "Yes" answer requires a determination from your personal physician stating that you are able to participate. For Arduous Duty Employees, if you do not have a personal physician determination allowing you to take the Work Capacity Test, the FMO may request an Annual Form examination through the Interagency Wildland Firefighter Medical Standards Program.

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: \_\_\_\_\_

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.

Privacy Act - No employee may disclose records subject to the Privacy Act unless the disclosure is permitted under 43 CFR 2.56 or to the individual to whom the record pertains. The Privacy Act contains a criminal penalty for unauthorized disclosure of records. (5 U.S.C. 552a)

To be completed by employee:

Name (Last, First): \_\_\_\_\_ Where employed: \_\_\_\_\_

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:

	Pack Test	Field Test	Walk Test
Pack weight	45 lbs.	25 lbs	None
Distance	3 miles	2 miles	1 mile
Time	45 minutes	30 minutes	16 minutes

To be completed by test administrator:

Test result time:

Employee passed test (circle one):                      Yes / No

I certify that the work capacity test was administered according to agency guidelines.

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

**APPENDIX N  
\*Medical Examination Requirement**

Employment Category	Fitness Requirement	Clearance Process	
		MSP	HSQ
	Arduous	X	
Permanent, Career-Seasonal & TERM	Arduous	X	
	Moderate/Light		X
Temporary Seasonal	Arduous	X	
	Moderate/Light		X
AD/EFF Under Age 45	Arduous		X
	Moderate/Light		X
AD/EFF Age 45 and Older	Arduous	X (annual)	
	Moderate/Light		X

\* This applies only to those units who have fully implemented MSP.

**Note: MSP:** Federal Interagency Wildland Firefighter Medical Qualification Standards Program

**HSQ:** Health Screen Questionnaire

**Permanent, Career-Seasonal and TERM Employees**

- Baseline exam in the first year.
- A “Periodic Exam” every 5th year when under age 45.
- A “Periodic Exam” every 3rd year when age 45 and older.
- An “Annual Exam” in intervening years.
- Exit exam upon retirement or removal/reassignment from arduous level.

**Seasonal Employees**

- Annual Exam every year when under age 45.
- Periodic Exam at age 45 and every 3<sup>rd</sup> year thereafter.
- Annual Exam in intervening years when over age 45.

**AD/EFF**

- An “Annual Exam” when age 45 and older.
- A HSQ when under age 45 or annual exam if “yes” answers on HSQ and determined as agency mission critical.



**Delegation of Authority - Template**  
**Geographic Area**  
**Fire & Aviation Safety Team (FAST)**

Situation Summary (Issues and Concerns/ Reason for ordering the FAST)

Objectives (Measurable)

Team Skills Required (Per Objectives listed above.)

The final team composition will be determined at time of dispatch and members named on the resource order.

**Mission**

The FAST is to conduct an independent assessment and evaluation of operational and managerial activities (related to the specific objectives stated above) at the following locations (mission segments):

The team may determine visits to other incidents/organizations/operations as appropriate, and may do so after coordination with the GMAC. The FAST will contact the GMAC Coordinator (describe frequency of contact):

The FAST is to provide technical or managerial assistance when requested and where necessary to immediately correct an identified, critical problem. The FAST may also provide short-term assistance in managing situations or incidents when requested by the incident, organization, or operation.

**Protocols**

The FAST will organize and conduct an entry briefing with the appropriate managers of the locations/incidents identified previously. The entry briefing will provide the objectives and operational parameters of the mission.

Once the mission segment is completed, the FAST will organize and conduct an exit briefing with the same officials or their designees, during which a draft of the mission-segment report will be presented and discussed. Components of this report will include:

- Purpose and Objectives
- Findings, Commendations, and Recommendations
- Follow-up Actions Needed
- Immediate
- Long-term
- Scope [local, area, national]
- Copy of the DoA

The FAST will contact the GMAC Coordinator\_\_\_\_\_.

FAST will provide a final written report to the GMAC Coordinator upon completion of all mission segments. This report will include:

- FAST Final Report Outline
- Executive Summary
- Purpose and Objectives
- Summary (Findings, Recommendations, Commendations, Assistance Provided)
- Critical and Immediate Follow-up Actions Required
- Introduction
- Methods and Procedures
- Mission Segments (Summary of Incidents, Organizations, Operations Reviewed. Include copies of Mission Segment Reports).
- Analysis
- Findings and Trends, Commendations, and Recommendations
- Follow-up Actions Needed
- Immediate
- Long-term
- Scope [local, area, national]
- A copy of the DoA

The \_\_\_\_\_ Multi-Agency Coordination Group hereby charters and delegates the preceding authority to \_\_\_\_\_, FAST Leader, effective on \_\_\_\_\_.

/s/  
Chair, \_\_\_\_\_ Coordinating Group

Date: \_\_\_\_\_

## **Annual Operating Plan Elements**

### **Organization**

Chain-of-command/table of organization for local agencies and cooperators  
Notification process/procedures; Roles/responsibilities, etc.

### **Dispatch Operations**

General information; Dispatcher roles and responsibilities; Dispatcher training and qualifications; Procedures for dispatch of resources off unit.

### **Daily Duties**

Check-in/out of administrative/fire personnel; Intelligence; Weather/briefings; Verify initial attack response levels; Status suppression resources; Preparedness level establishment and verification.

### **Initial Attack Response Plan Elements**

Preplanned dispatch plans, Run-cards, Dispatch procedures, Notification of a reported fire; Procedures for identifying preparedness levels ; Fire weather; Identification of fire danger; Process for assessing the appropriate response; Identification and notification of resources to respond (Local units will establish standard response times for all initial attack resources); Appropriate management notification; Cooperator support and planned response; Communications procedures; Procedures to follow when activity exceeds the initial attack plan; Aviation procedures.

### **Emergency Operations (Fire/Non-fire)**

Notification of a reported incident; Jurisdiction verification; Response plan activation; Agency and area notification; Move-up and cover procedures; Call-back procedures; Evacuation of incident area; Closing public/private roads; Ordering additional personnel, equipment, and aircraft; Fire Weather Watch and Red Flag Warning notification; Temporary Flight Restrictions (TFRs) ; Agency duty officers (roles and responsibilities) ; Aircraft pre-accident plan; Utility company notification (power and gas) ; Law enforcement dispatching procedures/requirements; HazMat/spill response notification procedures; Local government requesting all-risk assistance; Search and Rescue; Identify the incident commander.

### **Local Agreements**

Copies of all interagency or inter-unit agreements and associated annual operating plans that govern the use of fire management resources. Maps delineating areas of responsibility for fire suppression coverage.

### **Communications**

Procedures for assigning/managing local radio frequencies; Procedures for obtaining additional frequencies; maps of repeater sites; instructions for using local dispatch radio consoles, phones, computers, fax machines, paging systems, etc.

**Release Date: January 2008**

**APPENDIX P-1**

**Weather**

Processing of weather observations via Weather Information Management System (WIMS); Daily posting and briefing procedures; Broadcasts of fire weather forecasts to local fire suppression personnel; Procedures for processing spot weather forecast requests and disseminating spot forecasts to the field; Procedures for immediate notification to fire suppression personnel of Fire; Weather Watches and Red Flag Warnings.

**Fire Danger**

Remain aware of locally significant fire danger indices and record those values daily; Update and post monthly the seasonal trends of those values versus seasonal averages.

Information to be provided by Dispatch for Suppression/Support Resource availability, shortages radio frequencies to be used; burning conditions/fuel types; weather forecast updates; local fire activity; agency policies, etc. For management: fire activity, incident updates, weather updates, resource status.

**Briefings**

Time frames and frequencies/locations for daily briefings must be clearly specified in the local dispatch SOP. A method should also be identified for documenting briefings (time given, content of briefing, and person(s) conducting and receiving briefing).

**Preparedness Levels**

General information relating to the local preparedness plan  
procedures for identifying preparedness level  
notification to management  
dispatching roles and responsibilities at each preparedness level, etc.

**Trigger Points**

Specific triggers should be incorporated into preparedness plans that cause the preparedness level to move up or down. These triggers could be related to number/size of fires, amount and type of resources available/committed, regional/national fire situation, condition of local fuels, observed fire behavior, human-caused risk or predicted lightning activity level, etc. Specific actions should also be tied to each preparedness level, such as repositioning of suppression resources (crews, engines, airtankers, smokejumpers, etc.), the activation of local Multi-Agency Coordination (MAC) groups, making contact with other agencies, and hiring of call when needed (CWN) aircraft, emergency equipment rental agreements (EERA), or administratively determined (AD) pay plan crews.

**Aviation**

Ordering/scheduling requirements and procedures; special use airspace; Special use mission requirements; Incident/accident reporting and documentation procedures; flight management/tracking procedures.

**Dispatch Center Staffing Plan**

Call-out procedures for additional personnel in emergency situations; designation of duty officer for dispatch center; shift limitations and day off/EFF hiring, etc.

**Expanded Dispatch Plan**

Indicators for considering establishment of expanded dispatch; recommended organization and points of contact; overhead positions to order; location/facilities; equipment/supplies; support needs; procurement or buying unit team considerations; service and supply plan, etc.

**Administrative Items**

Funding; travel; time sheets; fire reports, etc.

**Accident/Incident**

Criteria/definitions; agency notification and documentation requirements; procedures for mobilization of critical incident stress debriefing teams, etc.

**Medical Plan**

Activation/evacuation information; medical facility locations and phone numbers; air and ground transport (Medivac) capability; burn center information, etc.

**Media Plan**

General procedures; notification requirements to agency external affairs personnel; routing for media calls.

**CRITICAL INCIDENT STRESS MANAGEMENT****Introduction**

Critical Incident Stress Management (CISM) provides an organized approach to the management of stress responses for personnel having been exposed to a traumatic event in the line of duty. The use of CISM may decrease post-traumatic stress disorder, acute stress disorder, workman's compensation claims, fatalities, injuries, and suicide. The use of CISM does not prevent an employee from seeking individual consultation through the Employee Assistance Program or a trained Peer Supporter.

**Agency Administrator Responsibilities****Identification of Event**

The agency administrator of the unit where the incident occurred is responsible for identifying an event as a critical incident. The agency administrator is the highest ranking line officer, regardless of agency, with direct responsibility for the personnel involved in the incident.

**Request CISM**

The agency administrator or designee is responsible for requesting CISM services from the CISM Coordinator as soon as possible after the event. The general accepted method for contacting a CISM Coordinator is through the local dispatch office or appropriate Coordination Center.

**Provide Information/Pay Codes**

The agency administrator or designee is responsible for providing the CISM Coordinator with information about the incident. The agency administrator is responsible for providing the CISM Coordinator with a budget code for expenses associated with CISM response.

**Local Dispatch Responsibilities****Request CISM**

When the agency administrator has deemed an incident as a Critical Incident, attempt to fill CISM Response resources locally before placing the order at the appropriate Coordination Center. In the event the local dispatch center does not have local resources available, an order for a CISM Coordinator (THSP) will be placed with the local GACC within one hour of receiving an order from the agency administrator.

**Identify a Logistic Support for CISM**

The local dispatch center will identify a person to work with the CISM Coordinator to provide logistical support such as rooms, office space, etc.

**Coordination Center Responsibilities****Request CISM**

Coordination Centers are responsible for contacting the CISM Coordinator and requesting CISM services within 1 hour of receiving the local Dispatch Center order. In the event the CISM Coordinator or qualified CISM Leader from that area is unavailable, the Coordination Center will pass the request on to another center or the National Interagency Coordination Center (NICC).

**CISM Coordinator Responsibilities**

- Decides on the size and make up of the group.
- Sets time frames for CISM activities with the CISM Leader.
- Provides follow up to the CISM Leader throughout the CISM Groups activities.
- Does an AAR with the CISM Leader at the close of CISM activities.

**Definitions**

**Critical Incident:** Any event which has a stressful impact sufficient enough to overwhelm the usually effective coping skills of either an individual or group. Critical incidents are typically sudden, powerful events which are outside the range of ordinary human experiences.

**Critical Incident Stress Debriefing (CISD):** A structured group meeting that emphasizes venting or show of emotions and other reactions to a critical incident. It also emphasizes educational and informational elements which are of assistance to employees in understanding and dealing with the stress generated by the event. Debriefings generally occur within 24 – 72 hours of the critical incident.

**Critical Incident Stress Management (CISM):** A wide range of programs and services designed to prevent and mitigate the effects of traumatic stress.

**Initial Incident Stress Defusing:** This is a shorter and less structured version of a Critical Incident Stress Debriefing (CISD) that usually occurs within a few hours of a critical incident. The main purpose of a Defusing is to stabilize the affected personnel so that they can return to work if necessary or go home without unusual stress. Defusing's allow for initial venting of reactions to the incident and provides stress related information to affected personnel. A Defusing may eliminate the need for a formal CISD or enhance a subsequent CISD.

**Individual Crisis Debriefing:** One-on-one confidential assistance with any issue by trained peer supporter or mental health professional.

**Peer Support:** Personnel trained to assist their fellow employees by listening without judgment and maintaining confidentiality. They are also trained in positive coping strategies for stress, and to help others validate their thoughts and emotions about an overwhelming trauma or loss.

The following chart shows the NUS minimum stocking levels required for agency engines.

Category	Item Description	NFES #	Type	
			3, 4, & 5	6
Fire Tools & Equip	McLeod	0296	1	
	Combination Tool	1180	1	1
	Shovel	0171	3	2
	Pulaski	0146	3	2
	Backpack Pump	1149	3	2
	Fusees (case)	0105	1	½
	Foam, concentrate, Class A (5-gallon)	1145	1	1
	Chainsaw (and chaps)		1	1
	Chainsaw Tool Kit	0342	1	1
	Drip Torch	0241	2	1
	Portable Pump		*	*
Medical	First Aid Kit, 10-person	1143	1	1
	Burn Kit		1	1
	Body Fluids Barrier Kit	0640	1	1
General Supplies	Flashlight, general service	0069	1	1
	Chock Blocks		1	1
	Tow Chain or Cable	1856	1	1
	Jack, hydraulic (comply w/GVW)		1	1
	Lug Wrench		1	1
	Pliers, fence		1	1
	Food (48-hour supply)	1842	1	1
	Rags	3309	*	*
	Rope/Cord (feet)		50	50
	Sheeting, plastic, 10' x 20'	1287	1	1
	Tape, duct	0071	1	1
	Tape, filament (roll)	0222	2	2
	Water (gallon/person) minimum		2	2
	Bolt Cutters		1	1
	Toilet Paper (roll)	0142	*	*
	Cooler or Ice Chest	0557	*	*
	Hand Primer, Mark III	0145	*	*
	Hose Clamp	0046	2	1
	Gaskets (set)		1	1
	Pail, collapsible	0141	1	1
Hose Reel Crank		*	*	



Safety	Fire Extinguisher (5 lb)	2143	1	1
	Flagging, Pink (roll)	0566	*	*
	Flagging, Yellow w/Black Stripes (roll)	0267	*	*
	Fuel Safety Can (Type 2 OSHA, metal, 5-gallon)	1291	*	*
	Reflector Set		*	*
Vehicle & Pump Support	General Tool Kit (5180-00-177-7033/GSA)		1	1
	Oil, automotive, quart		4	2
	Oil, penetrating, can		1	1
	Oil, automatic transmission, quart		1	1
	Brake Fluid, pint		1	1
	Filter, gas		1	1
	Fan Belts		1	1
	Spark Plugs		1	1
	Hose, air compressor w/adapters		1	0
	Fuses (set)		1	1
	Tire Pressure Gauge		1	1
	Jumper Cables		1	1
	Battery Terminal Cleaner		*	*
	Tape, electrical, plastic	0619	1	1
Tape, Teflon		1	1	
Personal Gear (Extra Supply)	File, mill, bastard	0060	*	*
	Head Lamp	0713	1	1
	Hard Hat	0109	1	1
	Goggles	1024	2	2
	Gloves		*	*
	First Aid Kit, individual	0067	1	1
	Fire Shirt		*	*
	Fire Shelter w/case & liner	0169	2	1
	Packsack	0744	2	1
	Batteries, headlamp (pkg)	0030	6	4
	Ear Plugs (pair)	1027	3	3
Radio	Portable		1	1
	Mobile		1	1
	Batteries (for portable radio)		2	2
Hose	Booster (feet/reel)	1220	100	100
	Suction (length, 8' or 10')		2	2
	1" NPSH (feet)	0966	300	300
	1 1/2" NH (feet)	0967	300	300
	3/4" NH, garden (feet)	1016	300	300
	1 1/2" NH, engine protection (feet)		20	20
	1 1/2" NH, refill (feet)		15	15

Nozzle	Forester, 1" NPSH	0024	3	2
	Adjustable, 1" NPSH	0138	4	2
	Adjustable, 1 1/2" NH	0137	5	3
	Adjustable, 3/4" NH	0136	4	2
	Foam, 3/4" NH	0627	1	1
	Foam 1 1/2" NH	0628	1	1
	Mopup Wand	0720	2	1
	Tip, Mopup Wand	0735	4	2
	Tip, Forester, Nozzle, fog	0903	*	*
	Tip, Forester Nozzle, straight stream	0638	*	*
Wye	1" NPSH, Two-Way, Gated	0259	2	1
	1 1/2" NH, Two-Way, Gated	0231	4	2
	3/4" NH w/Ball Valve, Gated	0739	6	4
Adapter	1" NPSH-F to 1" HN-M	0003	*	*
	1" NH-F to 1" NPSH-M	0004	1	1
	1 1/2" NPSH-F to 1 1/2" NH-M	0007	1	1
	1 1/2" NH-F to 1 1/2" NPSH-M	0006	*	*
Increaser	3/4" NH-F to 1" NPSH-M	2235	1	1
	1" NPSH-F to 1 1/2" NH-M	0416	2	1
Coupling	1" NPSH, Double Female	0710	1	1
	1" NPSH, Double Male	0916	1	1
	1 1/2" NH, Double Female	0857	2	2
	1 1/2" NH, Double Male	0856	1	1
Reducer/ Adapter	1" NPSH-F to 3/4" NH-M	0733	3	3
	1 1/2" NH-F to 1" NPSH-M	0010	6	4
	2" NPSH-F to 1 1/2" NH-M	0417	*	*
	2 1/2" NPSH-F to 1 1/2" NH-M	2229	*	*
Reducer	1 1/2" NH-F to 1" NH-M	0009	1	1
	2 1/2" NH-F to 1 1/2" NH-M	2230	1	1
Tee	1" NPSH-F x 1" NPSH-M x 1" NPSH-M, w/cap	2240	2	2
	1 1/2" NH-F x 1 1/2" NH-M x 1" NPSH-M w/cap	0731	2	2
	1 1/2" NH-F x 1 1/2" NH-M x 1" NPSH-M w/valve	0230	2	2
Valve	1 1/2" NH-F, Automatic Check and Bleeder	0228	1	1
	3/4" NH, Shut Off	0738	5	5
	1" Shut Off	1201	1	1
	1 1/2" Shut Off	1207	1	1
	Foot, w/strainer		1	1

Injector	1" NPSH x 1/12" NH, Jet Refill	7429	*	*
Wrench	Hydrant, adjustable, 8"	0688	1	1
	Spanner, 5", 1" to 1 1/2" hose size	0234	4	1
	Spanner, 11", 1 1/2" to 2 1/2" hose size	0235	2	2
	Pipe, 14"	0934	1	1
	Pipe, 20"		1	1
Engine	Fireline Handbook	0065	1	1
	GPS Unit		1	1
	Belt Weather Kit	1050	1	1
	Binoculars		1	1
	Map Case w/ maps		1	1
	Inventory List		1	1
	Current <i>Interagency Standards for Fire and Fire Aviation Operations</i>		1	1
* No minimums – carried by engines as an option, within weight limitations				
NPS – Additional or differing items recommended by NPS				
Fire Tools & Equip <sup>1</sup>	Flapper (NPS)		*	*
	Council Rake (NPS)	1807	*	*
	Leaf blower		*	*
	Shovel	0171	2	1
	Extra Quart, 2 cycle mix		2	1
	Portable Pump		1	*
General Supplies	Chock Blocks		1	1
	Tape, filament (roll)	0222	2	1
	Bolt Cutters		*	*
	Hose Clamp	0046	2	2
Safety	Reflector Set		1	1
Vehicle & Pump Support	Oil, automotive, quart		2	1
	Power steering Fluid		1	1
	Antifreeze (seasonal)		*	*
	Filter, air for engine and pump		*	*
	Filter, oil w/ wrench		*	*
Personal Gear (Extra Supply)	File, mill, bastard	0060	*	*
	Fire Shelter w/case & liner	0169	1	1
	Packsack	0744	2	1
Radio	Batteries (for portable radio)		2	2
Hose	2 1/2" Refill Hose, Water tender		*	*
Nozzle	Adjustable, 1 1/2" NH	0137	3	3
Wyes	3/4" NH w/Ball Valve, Gated	0739	6	2
Coupling	1" NPSH, Double Male	0916	2	1
	1" NH, Double Male	0856	2	2

Reducer / Adapter	1" NPSH-F to 3/4" NH-M	0733	3	2
	1 1/2" NH-F to 1 NPSH-M	0010	6	3
Tee	1" NPSH-F x 1" NPSH-M x 1" NPSH-M, w/cap	2240	2	*
Valve	1 1/2" NH-F, Automatic Check and Bleeder	0228	1	*
	3/4" NH, Shut Off	0738	4	2
Wrench	Pipe, 20"		1	*
Engine	Accident Forms (Vehicle & Personnel)		1	1
	Compass		1	1
<p><sup>1</sup> A minimum of eight tools for type 3, 4, 5 engines and a minimum of five tools for type 6 engines is required. The listed numbers of tools in each box are required to be on the engine. Beyond that, the tools listed as optional or additional required tools can make up the rest of the minimum number required for engines.</p> <p>* No minimums – carried by engines as an option, within weight limitations</p>				

**WFSA Element Descriptions****Current Situation**

This portion of the analysis provides basic information describing the fire situation at the time the analysis was conducted. It is important to clearly describe the situation that occurred at the time the decision was made.

Elements to be addressed are:

**Fire name and number****Date of analysis**

- This is the date on which the current analysis was made. Enter the month, day, and year.

**Time**

- Enter the time of day the analysis was completed. Enter the 24-hour clock time.

**Location**

- Use local terminology for point of origin. Include a legal description and latitude and longitude.

**Fire weather and behavior**

- **Current** - Briefly discuss the fire weather in terms of temperature, wind, and daily patterns. Describe the fire in non-technical terms, such as creeping, spotting, crowning, etc. Discuss the flame lengths, rates of spread, size, etc.
- **Predicted** - Describe the predicted weather patterns, and fire behavior predictions based on weather, fuels, topography, and the potential size.

**Resource availability**

- Briefly discuss the availability of suppression resources to control the fire and fire activity at the local and geographic level.

**Management objectives and constraints**

- The management objectives and constraints should be summarized to assist in the decision process.

**Social or external considerations**

- Discuss any issues that would contribute to making good suppression decisions.

**Evaluation Criteria**

- Document the criteria used to evaluate suppression alternatives: Safety (firefighter/public); land and resource management objectives; environmental considerations; social, political, economic considerations; resources availability; local, geographic, and national fire activities; and reinforcement capabilities.

**Alternatives**

- Produce WFSA alternatives that display a full range of appropriate management response options. All alternatives must be developed with strong emphasis on cost accountability based on the values to be protected, with due consideration given to a minimum cost alternative.

**Strategy**

- Briefly state the alternative strategies for management of the incident. Use geographic names, locations, etc. Roughly designate each strategy on a map.

**Management Forces Required**

- Make general estimates with enough detail to help in estimation of costs, determine if resources are available, etc.

**Estimate Date of Control**

- Estimates for each alternative should be made based on predicted weather and behavior factors, barriers, fuels etc., and the effects of suppression efforts.
- Estimated Size at Containment
- Estimates for acreage burned under each alternative should be recorded and displayed on a map.

**Estimated Cost**

- Estimate total cost of suppression alternative. Include suppression costs and rehabilitation needs. The WFSA will include the least suppression cost option. This option will serve as a way to describe the values to protect and the context surrounding a suppression decision. If the least-cost alternative is not chosen the WFSA will include a written rationale for not choosing it. Agency administrators are responsible for financial oversight. This responsibility cannot be delegated.

**Estimated Probability of Success**

- Based on estimates from 0-100 for each alternative.

**Analysis of Effects**

- Apply the above evaluation criteria to the alternatives. The results of the analysis will be the basis for selecting the appropriate alternative. The analysis of effects is based on the best estimates on the unit, resource, and fire management. The situation will determine the level of detail required. You may display the effects in dollars, or as positive or negatives, as demonstrated on the example forms. The important thing is to document your decision. Ensure that estimates of potential fire consequences are consistent with resource objectives, values, fire effects, and policy.

**Record of Decision**

- Agency administrators select an alternative that best implements the objectives and constraints for the management of the area. Agency administrators select the level of management required to successfully implement the selected alternative (Type 1, Type 2, or Type 3 Incident Management Team). Briefly provide rationale for decisions. The WFSA shall become a permanent part of the final fire record. Agency administrators are responsible for financial oversight. This responsibility cannot be delegated. See the Table following this section for approval thresholds.

**Monitoring/Evaluation/Update**

- The WFSA must be reviewed prior to each operational period to determine if the alternative is still valid. The responsible agency administrator must sign the WFSA to document the review.

**MINIMUM CREW STANDARDS FOR NATIONAL MOBILIZATION**  
(Revised 11/2003)

Minimum Standards	Type 1	Type 2/IA	Type 2	Type 3
<b>Fireline Capability</b>	Initial attack/can be broken up into squads, fire line construction, complex firing operations(backfire)	Initial attack/can be broken up into squads, fireline construction, firing to include burnout	Initial attack, fireline construction, firing to include burnout	Fireline construction, Fireline improvement, mop-up and rehab
<b>Crew Size</b>	18-20			
<b>Leadership Qualifications</b>	Permanent Supervision Supt: TFLD, ICT4 Asst Supt: STCR, ICT4 3 Squad Bosses: CRWB(T), ICT5	CRWB 3 ICT5	CRWB 3 FFT1	
<b>Bilingual Requirement</b>	CRWB and FFT1's must be bilingual (able to read and interpret) in language of crew.			
<b>Experience</b>	80% 1 season	60% 1 season	40% 1 season	20% 1 season
<b>Full Time Organized Crew</b>	Yes	No		
<b>Communications</b>	5 programmable radios	4 programmable radios		
<b>Sawyers</b>	3 agency qualified		None	
<b>Training</b>	80 hours annual training	Basic firefighter training and/or annual firefighter safety refresher		
<b>Fitness</b>	Arduous			
<b>Logistics</b>	Self-sufficient	Not self-sufficient		
<b>Maximum Weight</b>	5100 lbs			
<b>Dispatch Availability</b>	1 hour	Variable		
<b>Production Factor</b>	1.0	.08		N/A
<b>Transportation</b>	Own transportation	Transportation needed		
<b>Tools &amp; Equipment</b>	Fully equipped	Not equipped		
<b>Personal Gear</b>	Arrives with: Crew First Aid kit, personal first aid kit, headlamp, 1 qt canteen, web gear, sleeping bag			
<b>PPE</b>	Arrives with: Hardhat, fire resistant shirt/ pants, 8" leather boots, leather gloves, fire shelter, hearing/ eye protection			

Notes:<sup>1</sup> Interagency Hotshot Crews (IHC) is a Type I crew that exceeds the Type I standards as required by the National IHC Operations Guide (2001) in the following categories:

- Permanent Supervision with 7 career appointments (Superintendent, Assistant Superintendent, 3 Squad Bosses)
- IHC's work and train as a unit 40 hours per week.
- IHC's are a national resource.

<b>JOB HAZARD ANALYSIS</b>		Date:	New: <input type="checkbox"/> Revised: <input type="checkbox"/>
		Page 1 of 3	Reviewed by (Safety Mgr)
Field Office/Work Group		Supervisor:	Qual, Trng, Experience Reqd:
This JHA must be reviewed, approved, and signed by the Agency Administrator:			
Name:		Title:	Date:
Basic Job Steps	Potential Hazards	Safe Job Procedures	
Work Capacity Testing	Physical Overexertion	Provide prospective test participants information about the test course and review WCT level requirements (e.g., arduous, moderate, light).	
		Test participants complete the Health Screen Questionnaire or provide documentation of clearance for Medical Standards Program (MSP). Only appropriate responses of the prospective subjects to the Health Screen will result in administering the Work Capacity Test.	
		Test Administrators monitor subjects for distress during test. Test Administrator is to terminate test if indicated by level of subject distress.	
		Ensure test participants understand they are to discontinue the test and seek assistance from test administrator and/or on-site medical personnel if they begin to experience adverse discomfort or illness during the test.	
		Schedule tests when environmental conditions are most favorable.	
		Have a person currently qualified in first aid and CPR (with first aid supplies and equipment) onsite when testing is done.	
		Have unit medivac plan and make sure Test Administrators know how to activate it.	
		Make sure test participants do not exceed a walking pace.	
		Ensure test participants are properly hydrated.	
Work Capacity Testing	Strains and Sprains	Ensure test participants properly warm up and stretch just prior to beginning the test. This is especially important to stretch the lower legs.	
		Encourage participants to apply ice and massage to lower legs in the event of lower leg pain (shin splints).	
		Give test participants time to properly adjust packs for comfort and positioning prior to beginning the test.	
		Test administrator and on site medical personnel shall monitor test participants for indications of distress and terminate the test for them.	



		Ensure test participants have comfortable footwear and socks that provides adequate support and protection to feet and ankles.
		Have test participants cool down and stretch after the test.
		Make sure the test participants do not exceed a walking pace.
Work Capacity Testing	Heat Stress	Make sure Test Administrators understand the effects of exercising in heat, can recognize the symptoms of heat stress, and how to treat it.
		Where possible, schedule tests for the most favorable environmental conditions. Use the Heat Stress chart, Fitness and Work Capacity, 2nd Edition (p. 29). Avoid the "High" range.
		Inform prospective test participants on how to dress for the conditions and include the information in the pre-test briefing.
		Make sure test participants are aware of the need for acclimatization. Provide time for employees to become acclimatized if conditions of their employment permit.
		Test Administrators include heat stress information in the test briefing if appropriate.
		Provide water at key point along the test course if conditions dictate.
		Test Administrators monitor all test participants for signs of heat stress, terminate test if stress is indicated, and are prepared to provide treatment needed.
Work Capacity Testing	Cold Temperature	Make sure Test Administrators know symptoms of cold-related physical effects and are prepared to treat them.
		Inform prospective test participants on how to dress for the conditions and include information in the pre-test briefing.
		Locate an indoor facility suitable for testing if conditions warrant.
		Postpone testing if conditions warrant.
Work Capacity Testing	Slippery Course Conditions (ice, snow, mud)	Locate a suitable test surface. Consider indoor facility, plowed airport, plowed road or other safe area.
		Postpone testing if conditions warrant.
		Test participants should wear footwear with good traction.
Work Capacity Testing	Traffic	Select test course without traffic.
		Arrange for traffic control to eliminate traffic hazard.

		Make sure test participants are briefed about traffic hazard and controls implemented prior to the test.
Work Capacity Testing	Pack Rubbing, Chafing, or Straining Subjects	Make sure test participants have practiced with a pack and have become work hardened to carry a pack.
		Recommend upper body clothing that protects from pack rubbing.
		Make sure subjects have an opportunity prior to testing to adjust and try out pack.
		Terminate testing for subjects struggling to carry the pack or maintain a pace adequate to complete the test successfully.
		Permit subjects to use a self-provided pack that meets the applicable weight requirement.

**Roadside Incident Response****Considerations**

- Firefighter and public safety will always be the number one priority.
- Utilize L.C.E.S. in all incident activities.
- Personal Protective Equipment will be utilized on all incidents.

**Upon Arrival at the Scene**

- Size up of the incident- see *Incident Response Pocket Guide (IRPG)*
- What has happened?
- What is happening?
- What will or could happen?
- Is this a HazMat situation?

**Risk Management Process**

- Decision Point, Go/No Go. See the IRPG.

**Tactical Considerations**

- Anytime traffic flow is affected by the incident, contact the jurisdictional law enforcement agency for assistance.
- Conduct all operations as far from traffic lanes as possible to provide for crew and public safety.
- Park units on the same side of the roadway when ever possible to avoid traffic congestion.
- Personnel do not exit the fire apparatus until instructed to do so by the module leader.
- Exit the fire apparatus away from the roadway or where hazard exposure is minimized.
- Exit the fire apparatus with full personal protective equipment.
- Post a lookout to watch for and control oncoming traffic.
- Utilize forward and rear spotters when visibility is impaired or road conditions warrant.
- Utilize and place road flares or other traffic warning signs when ever possible.
- If equipment needs to be removed from the traffic side of the apparatus, one person will retrieve the equipment and a lookout will watch for oncoming traffic.
- Engine operators will operate pumps from the non-traffic side or from the cab of the apparatus when possible.
- Keep all hose, fire tools, and equipment out of traffic lanes when possible.
- During night operations utilize reflective clothing, vests and other safety equipment as necessary.
- All emergency responses on roadways will be concluded as quickly as possible to reduce personnel exposure.
- Cancel or demob unnecessary apparatus as soon as possible.

*Each agency emergency vehicle operator will follow their particular state laws and agency policies governing the operations of emergency vehicles.*

## Risk Management Process

### Step 1 Situation Awareness

Gather Information

- |                                          |                                                 |
|------------------------------------------|-------------------------------------------------|
| <input type="checkbox"/> Objective(s)    | <input type="checkbox"/> Previous Fire Behavior |
| <input type="checkbox"/> Communication   | <input type="checkbox"/> Weather Forecast       |
| <input type="checkbox"/> Who's in Charge | <input type="checkbox"/> Local Factors          |

Scout the Fire

### Step 2 Hazard Assessment

Estimate Potential Fire Behavior Hazards

- Look up/Down/Around Indicators

Identify Tactical Hazards

- Watch Outs

What other safety hazards exist?

Consider severity vs. probability?

### Step 3 Hazard Control

Fire Orders → LCES Checklist – MANDATORY

- Anchor Point
- Downhill Checklist (if applicable)

What other controls are necessary?

### Step 4 Decision Point

Are controls in place for identified hazards?

NO - Reassess situation      YES - Next question

Are selected tactics based on expected fire behavior?

NO - Reassess situation      YES - Next question

Have instructions been given and understood?

NO - Reassess situation      YES - Initiate action

### Step 5 Evaluate

Personnel: Low experience level with local factors?

Distracted from primary tasks?

Fatigue or stress reaction?

Hazardous attitude?

The Situation: What is changing?

Are strategy and tactics working?

## **Standard Firefighting Orders**

- Keep informed on fire weather conditions and forecasts.
- Know what your fire is doing at all times.
- Base all actions on current and expected behavior of the fire.
- Identify escape routes and safety zones and make them known.
- Post lookouts when there is possible danger.
- Be alert. Keep calm. Think clearly. Act decisively.
- Maintain prompt communications with your forces, your supervisor and adjoining forces.
- Give clear instructions and insure they are understood.
- Maintain control of your forces at all times.
- Fight fire aggressively, having provided for safety first.

## **Watch out Situations**

- Fire not scouted and sized up.
- In country not seen in daylight.
- Safety zones and escape routes not identified.
- Unfamiliar with weather and local factors influencing fire behavior.
- Uninformed on strategy, tactics, and hazards.
- Instructions and assignments not clear.
- No communication link with crew members/supervisor.
- Constructing fireline without safe anchor point.
- Building fireline downhill with fire below.
- Attempting frontal assault on fire.
- Unburned fuel between you and fire.
- Cannot see main fire, not in contact with anyone who can.
- On a hillside where rolling material can ignite fuel below.
- Weather is getting hotter and drier.
- Wind increases and/or changes direction.
- Getting frequent spot fires across line.
- Terrain and fuels make escape to safety zones difficult.
- Taking nap near fireline.