

THIRTYMILE ACCIDENT PREVENTION ACTION PLAN

Preface

The attached action plan was developed from the recommendations made by the Accident Review Board. This plan seeks to prevent accidents of this type in the future. This mishap occurred on July 10, 2001 on the Okanogan National Forest. The Thirtymile fire was a human caused wildfire on National Forest lands and all the firefighters involved were U.S. Forest Service employees. However, the corrective actions in this plan will impact wildland fire management and policy on all jurisdictions and should be addressed by an interagency group. The Accident Investigation Team and the Accident Review Board were both comprised of interagency representatives.

The interagency nature of wildland fire management established a role for a coordinating group. The National Wildfire Coordinating Group, chartered in 1973, fills that role by ensuring coordination among the agencies that manage wildland fire. This group develops processes and policies that are applicable to all cooperating agencies. Coordination with and involvement of each agency's senior line officer is essential if the policies and procedures are to be effective.

The National Wildfire Coordinating Group's mission is to provide for effective coordination of each agency's fire program in a consistent manner across jurisdictions. This is done through a formalized system of standards for training, equipment, qualification and operations. NWGC has improved safety and reduced costs by the application of these standards.

There are 31 action items in this plan; 26 address issues are those that affect all wildland fire agencies. Many of the action items in this plan are assigned to the Director of Fire and Aviation Management, who is the Forest Service representative to the NWCG. The NWCG, through its interagency working teams, will address and reconcile the action items.

The U.S. Forest Service Director of Fire and Aviation Management will bring these items to the NWCG. This does not relieve senior agency line officers of their responsibility to be engaged and involved in the development of these policies and

procedures, nor does it relieve those agency representatives to the NWCG of their responsibility to keep senior management of the agencies informed and engaged.

Action Items

A-1 The Director of Fire and Aviation Management initiate changes in the Federal Wildland Fire Management Policy to include recommendations for fire suppression and for firefighter safety, in preparation for and in the transition phase between initial attack and extended attack fires.

Initiate November, 2001

A-2 The Director of Fire and Aviation Management will work with the NWCG to review current policy on preparation and direction for Fire Management Plans development, and amend the direction to ensure that these plans specifically address staffing modifications, (firefighters, crew, the supervisory span of control), management coordination, and allocation of resources as fire danger and occurrence escalates.

Initiate November, 2001

- A-3 The Director of Fire and Aviation Management will ensure there is adequate direction in Fire Management plans to trigger fire danger awareness with escalating fire potential. More Specifically:
 - **A-3-a.** Notification from forest to districts (with regional assistance) of key increases in fire danger thresholds that typically affect safety and control. At regional, forest and district levels, identify departures from historical weather patterns that will significantly influence increased fire potential or fire behavior thresholds for safety and control at the operational area.
 - **A-3-b.** District fire program managers will review fire danger indices and convey their meaning and significance to crews and incident management teams. (e.g. use pocket cards to ensure availability to firefighters)
 - **A-3-c.** Identify the thresholds at which large fires typically occur. These thresholds indicate fire danger levels that significantly compromise safety and control. When thresholds are approached, fire program mangers will request additional supervisory and suppression support.

Initiate November, 2001

A-4 The Director of Fire and Aviation Management will initiate changes to the Federal Wildland Fire Policy to ensure there are defined indicators for the need to transition from initial attack to extended attack. An example that might be considered is establishing a fire-specific perimeter limit trigger point.

- A-5 The Directors of Human Resources and Fire and Aviation Management should review policy, procedures and performance expectations to reduce firefighter fatigue. Work with NWCG to coordinate the effort. Consider:
 - **A-5-a**. Requiring Agency Administrators to periodically review Time and Attendance records for compliance with work-rest guidelines (including local agency administrators, fire program manager, fire support and firefighters.
 - **A-5-b.** Work to build electronic review options in the existing automated payroll systems.
 - **A-5-c.** Setting a daily duty hour limitation.
 - **A-5-d**. Review S-200 and S-300 courses to ensure that there is adequate emphasis on the IC's responsibility in managing fatigue.
 - **A-5-e.** Review S-200 and S-300 courses to ensure that there is adequate emphasis on the IC's responsibility in managing fatigue.

A-6 The Director of Human Resources will evaluate existing training in fatigue awareness, and other associated management training and make it available to all employees.

Initiate December 2001

A-7 The Director of Human Resources and the Director of Fire and Aviation will develop protocols for the accident investigation process to evaluate fatigue as a factor in all ground and aviation incidents, including entrapments, and accidents. This should include a 72-hour work rest history with quantitative analysis.

Initiate December 2001

- **A-8** The Director of Fire and Aviation will issue direction that:
 - **A-8-a.** Requires forest fire management organizations, including the Agency Administrators, fire program managers, and Incident Commanders meet annually to review the responsibilities, expectations, and authorities of the Type 3-5 Incident Commanders in fire suppression operations and Incident Operations Protocols.
 - **A-8-b.** Establish procedures to ensure positive contact with Incident Commander, Operations Section Chief or other appropriate Incident Management Personnel upon arrival at the assigned incident location.

- 1. Provide for the safety and welfare of all personnel and public civilians.
- 2. Develop and implement viable strategies and tactics for the incident.
- 3. Monitor effectiveness of the planned strategy and tactics.
- 4. Disengage suppression activities immediately if strategies and tactics cannot be implemented safely.
- 5. Maintain command and control of the incident.

A-9 The Director of Fire and Aviation Management will review all existing fire-training courses ensure the course content adequately teaches the management skills necessary for the successful transition from initial attack through a Type I incident.

Initiate November, 2001

A-10 The Director of Fire and Aviation Management will evaluate current training courses for Type 3-5 Incident Commanders to seek opportunities to strengthen competencies.

Initiate November, 2001

A-11 The Director of Fire and Aviation Management will develop a standardized briefing format for Type 3 to Type 5 incidents.

Initiate November, 2001

- **A-12** The Director of Fire and Aviation Management will ensure that local fire mobilization plans provide direction that requires dispatch centers to:
 - **A-12-a.** Implement a standard protocol, where dispatch centers inform all resources of the name of the assigned Incident Commander and all other pertinent information.
 - **A-12-b.** Announce all changes in Incident Command leadership to all assigned and incoming resources for initial and extended attack incidents and relay that information to the Duty officer and Forest Fire Management staff.

Initiate November, 2001

A-13 The Director of Fire and Aviation Management will initiate a proposed revision of the NWCG Fireline Handbook (PMS 410-1) and all other related documents that would change incident classifications from the current; Initial Attack, Extended Attack, Type 2 and Type 1 structure to Type 5, Type 4, Type 3, Type 2 and Type 1 Structure. Initial attack and extended attack will be reserved as terms describing the stages of an incident, not the command level required.

Initiate November, 2001

A-14 The Director of Fire and Aviation Management will assess the need for a complexity analyses for Type 3-5 incident that would assist fire program managers in determining the appropriate level of management. Factors such as historic levels of fire danger, fuels, fire history, fire potential and historic fires in the vicinity, should be considered.

Initiate November, 2001

A-15 The Director of Fire and Aviation Management will ensure that fire management plans require a single dedicated Incident Commander for all incidents, Type 3-1.. Incident Command responsibilities should not be diluted with collateral duties. The exception would be as a trainer, or as an evaluator of and assigned trainee.

Initiate November, 2001

A-16 The Director of Fire and Aviation Management will initiate development of a standard operation guide fro Type 3, Type 4 and Type 5 incidents.

Initiate November, 2001

A-17 The Director of Fire and Aviation Management will initiate the adoption of an interagency "Standards for Fire Operations" handbook modeled upon the Bureau of Land Management's "red book". The interagency handbook should be developed to ensure an agency's standard's, which are unique, are maintained.

Initiate November, 2001

A-18 The Director of Fire and Aviation Management and the Director of Human Resources will work with the Forest Service Line Officer Team to develop core fire management competencies for agency administrators having fire program responsibilities. Seek inclusion of these competencies into the position descriptions and in selection criteria for agency administrators.

Initiate December, 2001

A-19 The Director of Fire and Aviation Management will adopt and implement newly developed "Interagency Fire Program Management Qualifications" for the key fire program management positions.

Complete by March 2002

A-20 The Director of Fire and Aviation Management will initiate actions to distribute the findings, recommendations and casual factors from this accident investigation. Additionally, the Director will work with the NWCG to ensure incorporation of it into the Leadership Training Curriculum.

Initiate November, 2001

A-21 The Director of Fire and Aviation Management will review the fire simulation program currently assigned to San Dimas Technology and Development Center to ensure its release for the 2002 training season.

Initiate November, 2001

A-22 The Chief, Regional Foresters, Forest Supervisors and District Rangers will personally communicate their expectation of leadership in fire management. This should be completed prior to fire season and in conjunction with Leadership Team meetings and annual fire schools.

Complete by April 2002

A-23 The Directors of Human Resources and Fire and Aviation Management should work with the Forest Service Line Officer's Team (Tom Thompson, chair) to assess the roles, responsibilities and methodologies in developing future fire management leaders. This would include fitness assessments to deal with performance expectations and issues surrounding fire leadership.

Initiate December, 2001

A-24 The Director of Fire and Aviation Management shall utilize the findings from the 30-mile Accident Investigation Report in preparedness training.

This training will be available to all fire fighting personnel. It will be mandatory for all new fire employees.

Complete by April, 2002

A-25 The Director of Fire and Aviation Management will work with the NWCG in the development of the Leadership Curriculum to ensure there is adequate attention to the preparation fire personnel to effectively exercise personal responsibilities and leadership.

The curriculum must specifically address how group dynamics influence situational awareness, communications, group judgments, decision-making and responsibility for individual personal actions.

A-26 The Directors of Human Resources and Fire and Aviation Management should develop and implement a comprehensive safety and health program utilizing all of the tools available. This should include risk management, system safety analysis, compliance, inspection, oversight, human factor and behavior modification. Use of a" Behavior Based Safety Program" for fire management which:

(1) focuses on active agency administrator involvement, (2) Encourages monitoring and intervention, (3) Promotes individual safe behavior on the fireline, (4) Rewards safe behavior, and (5) Reinforces the agency's commitment to safety through the use of incentives, recognition and disciplinary procedures could be the first part of this program.

Additionally, develop procedures and protocols to ensure accountability at all levels of the organization. These procedures and protocol should enable fire line supervisors, fire management personnel and line officers to obtain safe performance at all times.

Initiate in January, 2002 for implementation by January, 2003.

A-27 The Director of Fire and Aviation Management will adopt and implement the formal "Risk Management Process" endorsed by NWCG.

Initiate November, 2001

A-28 The Director of Fire and Aviation Management and the Director of Engineering will review the current fire shelter development program to determine the possibility of accelerating the development of an improved fire shelter. The current timeline provides for completion in 2003.

Initiate November, 2001

A-29 The Director of Fire and Aviation Management and the Director of Engineering will revise fire shelter training to emphasize entrapment avoidance. Incorporate information from this accident in revision of the training. This training will include the proper use of PPE (including use of gloves and shrouds), the importance of crew cohesion in deployment, alternative deployment site selection, shelter deployment preparation and training, and deployment site command and control.

Initiate November, 2001. Implement in the 2002 western fire season.

A-30 The Director of Engineering will work with the Missoula Technology Development Center to review and appropriately incorporate into the program of work the recommendations found in the Equipment Appendix of the Thirtymile Fire Investigation Report.

A-31 The Directors of Wildlife, Fish and Rare Plants and Fire and Aviation Management will review and clarify issues of firefighter safety, fire potential and use of tactical resources during developing fire emergencies with regard to threatened and endangered species. Such review will include coordination and clarification of existing protocols with the National Marine Fisheries Service and Fish & Wildlife Service.

Initiate immediately.