



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 06/21/2002

SUBJECT : SAFETY ADVISORY : Work Rest Policy

The attached is a clarification of the work/rest policy for federal employees.



June 12, 2002

To: Geographic Area Multi-agency Coordination Groups
From: National Multi-agency Coordination Group
Subject: Work/Rest Guidelines, Length of Assignment, and Rest and Recuperation
Action: Effective immediately this Memo supercedes all previous guidance

This memo is intended to document Interagency guidance for Federal and Tribal firefighters, overhead, dispatchers, and other support personnel regarding work/rest cycles, length of assignment, and rest and recuperation. These guidelines include those found in the Interagency Incident Business Management Handbook, NWCG Handbook 2, PMS 902, NFES 2160, Section 12.7; and the National Interagency Mobilization Guide, NFES 2092, and clarifications / additions as noted. State and/or federal laws, or specific policies, contracts, and agreements pertaining to specific personnel or activities (State employees, contractors, CDL and other drivers, air crews, etc.) take precedence over these rules. As a minimum, the following guidelines will be applied to all Federal, Tribal, state and contracted personnel on Federal jurisdictional fires.

The safety and health of all firefighters, both casual hire and regular government employees, is paramount and must not be compromised. The mental and physical condition of any firefighter must be taken into consideration, and that may dictate directed days off or de-mobilization prior to reaching the limits of the following guidelines. *The only exceptions to the following guidance will be an imminent threat to public and/or firefighter safety.*

Work/Rest Guidelines

The Incident Business Handbook, Chapter 11, Part 12.7-1 states:

“To maintain safe, productive incident activities, incident management personnel must appropriately manage work and rest periods, assignment duration, and shift length for crews, overhead personnel, and support personnel. Plan for and ensure that crews, overhead personnel, and support personnel are provided a 2 to 1 work to rest ratio (for every 2 hours of work or travel, provide 1 hour sleep and/or rest).”

Clarification(s) / Addition(s)

Provide the opportunity for a minimum of 1-hour of rest for every 2-hours of work or travel regardless of work performed (incident/non-incident), incident type or jurisdiction, time of incident or operational period, or regular work schedule.

Work shifts, including the first operational period, will not exceed 24 hours.

All work shifts exceeding 16 hours, and every instance where work:rest cycles will be exceeded, require pre-approval and documentation by the appropriate Agency Administrator, Incident Commander, or other individual with expressly delegated authority. A work shift includes all hours of work or travel since the last rest period meeting the 2 to 1 work:rest ratio.

Length of Incident Assignments

The National Mobilization Guide states in Chapter 10, part 13:

“Incident assignments will not exceed 14 days, excluding travel. There may be situations where life and property are so imminently threatened, or suppression objectives are close to being met, that an exception is necessary to smoothly allow for replacements. Incident Commanders and agency administrators (responsible for the incident and home unit) will closely monitor the situation and jointly agree on extension. The Incident Commander will document, gain approval from agency administrators, and include the justification in the incident records, for any assignment that exceeds 14 days. However, no assignment will exceed 21 days except as stated in the following paragraphs. (Exception: military as outlined below.) Strong consideration and management of firefighting resources must ensure that back-to-back assignments are considered in the health, readiness, and capability of the resource. The health and safety of incident personnel and resources will not be compromised under any circumstance.”

“During National Preparedness Level 5, personnel can be given two days R&R after the first 14 day assignment, and be extended or reassigned up to an additional 14 days. This would be based on concurrence with resource and home unit. At the end of second 14-day assignment, resource will be released to home unit. Upon arriving home, resources should be allowed a minimum of four days, excluding travel before receiving another assignment.”

“Military battalions are mobilized on a 30 day commitment (including training and travel), by prior agreement, as well as the Strike Team Leaders and Battalion Liaisons assigned to those units. Assignments to FEMA incidents may also be extended to 30 days. However, Incident Commanders will give strong consideration as to the health and condition of these crews by varying the intensity and exposure of their assignments.”

The Incident Business Handbook adds from Chapter 11, Part 12.7-2:

“When filling incident assignments, individuals and their supervisors should consider when the requested individual’s last day off occurred, prior to mobilization, to ensure the individual’s readiness and capability for the assignment.”

And in 12.7-4:

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

Clarification(s) / Addition(s)

Days spent in staging or on ordered standby are counted as part of the length of assignment . All other elements of the policy apply.

Additionally, Military Crew Advisors and Battalion Military Liaisons can expect to be staged in hotel accommodations up to 5 days prior to actual assignment to a military unit, at which time the 30 day commitment begins.

R&R (Rest and Recuperation)

“A. The need for R&R at an incident during a 14-day assignment (excluding travel) is normally not necessary. R&R may be provided if it is determined that the individual’s fatigue level may jeopardize safety and welfare.”

“B. Commander has determined that a longer than 14-day commitment is necessary R&R guidelines of one full day (24 hours) in a 14-day assignment or two full days in a 21-day assignment should be applied.”

/s/ Sue Vap, *Chair, National MAC Group*
National Park Service
NPS Fire Director, NIFC

/s/ Lee Englesby
Bureau of Land Management
Fire Operations Manager, NIFC

/s/ Roger Spaulding
Fish & Wildlife Service
Acting Fire Director, NIFC

/s/ Jim Stires
Bureau of Indian Affairs
Fire Director, NIFC

/s/ Alice R. Forbes
USDA Forest Service
Acting Assistant Director, Operations, NIFC

/s/ Bill Baden
National Association of State Foresters
Fire Director



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/11/2002

SUBJECT : SAFETY ADVISORY : P2V and C130A Operational Suspensions

The following attachment contains briefing papers on the temporary suspension of operations for P 2V airtankers, and the indefinite suspension of operations for C 130A airtankers.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/11/2002

SUBJECT : SAFETY ADVISORY : Price Canyon Entrapment 72 Hr Report

Enclosed is the 72 hr report from the entrapment at the Price Canyon Fire in Utah, please insure it gets wide distribution within your fire organization . Additionally, please note the findings as they pertain to adjusting strategy and tactics in extreme fire conditions .



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/12/2002

SUBJECT : SAFETY ADVISORY : Fire Danger PocketCards

This safety advisory is intended to help raise the awareness of Fire Danger Pocket Cards throughout the fire community. Fire Danger PocketCards were created in 1997 by the National Advisory Group for Fire Danger Rating, which has since become the NWCG Fire Danger Working Team (FDWT).

The Fire Danger PocketCard is a method of communicating information on fire danger to firefighters. The objective is to lead to greater awareness of fire danger and subsequently increased firefighter safety. The PocketCard provides a description of seasonal changes in fire danger in a local area. It is, therefore, useful to both local and out-of-area firefighters.

The PocketCard has a very important day-today "pre-suppression" use. When the morning and afternoon weather is read each day, the actual and predicted indices are announced. The firefighters can reference their card and see just where they are in the range of possible values for danger-rating. This important information should be discussed at morning crew meetings, as well as tail gate safety meetings.

Most importantly, the card provides a method for everyone involved with wildland and prescribed fire operations to communicate a common understanding of key index values provided by the National Fire Danger Rating System.

Local fire management personnel can produce the cards using Fire Family Plus. Cards should be developed locally with local fire management involvement to meet local fire management needs.

More about NFDRS PocketCards can be found at the following web site:

<http://famweb.nwcg.gov/pocketcards/objective.htm>



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/16/2002

SUBJECT : SAFETY ADVISORY : Forest Service Policy - Fire Resistant Clothing (Kevlar BDU)

Attached is a summary and clarification of the subject policy .

-ed-

Ed Hollenshead
National Wildland Fire Operations Safety Officer
USDA Forest Service

National Interagency Fire Center
3833 S. Development Ave.
Boise, ID 83705-5354
Voice: (208) 387-5102
Fax: (208) 387-5398



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 08/27/2002
SUBJECT : SAFETY ADVISORY : Securing Large Tent Shelters

Had a situation at a large fire, which shall remain unnamed at this time, where a NFES 0549 20 foot shelter system lifted off, damaged three vehicles and smashed up against a water tender. The shelter system was virtually destroyed beyond economical repair. The point is this shelter was not staked or secured to the ground. The new tents come with pins that allow you to pin or stake the frame to the ground. The roof panel has grommets for attachment of lanyards which can further secure the tent to the surface. Many camps are set up in wind prone area's and all of these should be secured. The manufacturer states that if properly staked it will withstand some pretty intense winds. The vehicles that were damaged could of been people. This was an expensive lesson as this will cost the incident in the neighborhood of \$3,500.00 to replace the shelter in kind. Hopefully we can get the word out to preclude possible serious injury or property damage. Thanks. DE

David A. Estes
Fire Cache Manager
Southern Operations Interagency Support Cache
Phone: (909) 930-3206
FAX : (909) 947-6391
email: destes01@fs.fed.us



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 08/27/2002
SUBJECT : SAFETY ADVISORY : PVC Fusee Holders

From: Meyer, Mike
Sent: Tuesday, August 06, 2002 9:53 AM

Many of our engine crews have used the 4 inch pvc to make fusee holders. We had an incident on a walk in fire where the holder fell off the pack it was tied to and when the firefighters picked it up they could here the hissing sound of a fusee, apparently one had ignited from the shock of dropping. The firefighters quickly tossed it away and the build up of pressure in the PVC tube caused it to explode. Holes should be drilled in the tubes to dissipate the pressure if the fusees should somehow ignite.

Edited and Posted by:

Ed Hollenshead
National Wildland Fire Operations Safety Officer
USDA Forest Service

National Interagency Fire Center
3833 S. Development Ave.
Boise, ID 83705-5354
Voice: (208) 387-5102
Fax: (208) 387-5398



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 10/22/2002

SUBJECT : SAFETY ADVISORY : Defective Wiring, Single Cell Headlamp

The attached cache memo was released today in reference to a wiring problem in single cell headlamps (NFES #0713, NSN 6230-01-387-1399) which may initiate combustion of the plastic battery housing. Please insure this memo gets wide distribution to all firefighters within your agency .



Risk Management Committee



TO : gail.kantak@dnr.state.ia.us

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 12/12/2002

SUBJECT : SAFETY ADVISORY : Fire Shelter Re-bagging Project- Continued

The attached cache memo should be distributed widely within your organization .



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 12/18/2002

SUBJECT : SAFETY ADVISORY : T & D Publications Available

All Forest Service, Technology and Development publications are now accessible on the web to partner agencies and organizations. Missoula Technology & Development Center (MTDC) and San Dimas Technology & Development Center (SDTDC) publications can now be accessed at the following address :

www.fs.fed.us/t-d/

user name: t-d

password: t-d

Please distribute this message widely within your organization .



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 01/31/2003

SUBJECT : SAFETY ADVISORY : 2003 Revisions, Safety Refresher Training Website

Revisions to the Wildland Fire Safety Training Annual Refresher Website (WFSTAR) will be launched on January 31, 2003. This website, developed under the direction of the Federal Fire and Aviation Safety Team (FFAST) was initially launched in March 2002.

The purpose of the WFSTAR website is to provide a one-stop shopping resource for the instructors of refresher training to obtain information necessary to conduct high quality safety refreshers. The site identifies topics for refresher training and lists a wide variety of reference materials that support refresher training, including

- Publications
- Videos
- Training packages
- Lessons learned
- Investigation reports

The website includes links to the refresher training policies of the federal fire management agencies and NWCG direction for refresher training. The website also provides the opportunity for instructors to submit abstracts of their refresher training programs for use by others.

The website updates for 2003 include a new National Emphasis Topic and current Hot Topics. The 2003 National Emphasis Topic is Driving Safety. Hot Topics include Revised 10 Standard Fire Orders, New Fire Shelter, Thirtymile Fire, and other topics. The address for the WFSTAR website is http://www.nifc.gov/safety_study/index.htm. This address will get you to the NIFC Safety Page and then just click on the Refresher Training icon.

As a reminder, the NWCG has adopted language requiring annual fireline safety refresher training for all personnel who may be subject to assignments on the fireline, such as technical specialists and ground support personnel delivering resources to the fireline. This mandatory requirement applies to all NWCG members. The full text of the memorandum can be found on the WFSTAR website under "Policy Statements".

If you have any questions, please contact your agency representative on FFAST.

BIA - John Gould - John_Gould@nifc.gov

BLM - Michelle Ryerson-Grett - Mryerson@nifc.blm.gov

NPS - Al King - al_king@nps.gov

USFWS - Rod Bloms - Rod_Bloms@fws.gov

USFS - Ed Hollenshead - ehollenshead@fs.fed.us



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 02/19/2003

SUBJECT : SAFETY ADVISORY : Aviation Resources Shortfall

The attached Safety Alert describes the prospective shortfall in the Federal Large Airtanker fleet for the 2003 fire season, and addresses the potential impacts on ground firefighting efforts.

Please insure this Safety Alert receives wide distribution within your organization .



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/28/2003

SUBJECT : SAFETY ADVISORY : Jerry Williams Message

Please read the attached, general safety message from Jerry Williams, Director, Fire and Aviation Management, USDA Forest Service.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/14/2003

SUBJECT : SAFETY ADVISORY : King Radio Clam Shell Issues

From James Reim, Assistant Safety Manager from the Pacific Northwest Region:

Please distribute the attached safety alert to supervisors of employees who are using King radios . While replacing the older model battery packs with the new ones is the best solution , several people have checked with the manufacturer, and found that clamshells for the new radios are in short supply . If batteries, and the spacer are properly installed, the problem with overheating is not expected to occur . Supervisors need to follow up and ensure their employees understand and follow correct battery installation practices .



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FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

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TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 09/04/2003
SUBJECT : SAFETY ADVISORY : Group A Streptococcus

The following was received from Shelby Gales, Fire Operations Safety Manager for the BLM and FS in the Pacific NW Region. It is an update on an alarming situation regarding a firefighter infected by the Group A Streptococcus bacteria.

It is well to be reminded that firefighting and all the activities that surround it can adversely affect our immune systems. As an attachment I have provided a copy of the Wildland Firefighter Health and Safety Report No. 2 that deals with the effects of fatigue, nutrition, stress, etc. on our ability to combat even routine infections.

-ed-
Ed Hollenshead
USDA FS Fire Operations Safety Officer
NIFC

PACIFIC NORTHWEST REGION SAFETY ADVISORY

Recently a firefighter was diagnosed with Group A Streptococcus (GAS) Necrotizing Fasciitis, commonly referred to as "flesh-eating bacteria." The firefighter is being treated in a local hospital.

Sometime during a work shift, the firefighter was stung by a bee, but initially had no adverse reaction to the sting. Within the next 24 to 48 hours, the firefighter noticed his hand and arm were swollen and sought medical attention. A diagnosis of GAS Necrotizing Fasciitis was made and the firefighter was transported to a hospital capable of providing the required specialized care. It is possible the bee sting was the entry point for the GAS infection.

The County Health Department tested the crew for signs of infection and all other crewmembers were negative for GAS. The disease is not easily spread and occurs only about 600 times a year in the United States.

The spread of all types of GAS infection can be reduced by good hand washing, especially after coughing and sneezing and before preparing foods or eating. All wounds should be kept clean and watched for possible signs of infection such as redness, swelling, drainage, and pain at the wound site. A person with signs of an infected wound, especially if fever occurs, should seek medical care.

For more information about GAS Necrotizing Fasciitis, please click on the attached link
http://www.cdc.gov/ncidod/dbmd/diseaseinfo/groupastreptococcal_g.htm



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 03/31/2004

SUBJECT : SAFETY ADVISORY : Int'l Harvester Corp. Mod. 4300 and 4400 vehicles

Yesterday the Stanislaus experienced a severe mechanical deficiency on a 2002 IHC Crew Carrier. The body shifted to the right (passenger side) while the vehicle was being operated with a full load of Crew and supplies. All mounting bolts from the right front spring hanger were found missing.

There is an active recall on the spring hanger bolts. IHC informs me the recall notices were sent out in March and April 2002 to the Consignee address. The Stanislaus Fleet Manager never received a copy of the recall notification.

Immediately have each IHC Crew Carrier, and other Model 4300 and 4400 models affected by this recall inspected by insuring the spring hanger bolts are tight to manufacturers torque specifications and take the vehicle to your local IHC dealer for the recall remedy. If you are aware of this recall and have not already taken the affected vehicles to your local IHC dealer for the recall remedy, do so immediately.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 05/07/2004

SUBJECT : SAFETY ADVISORY : Wildland Firefighter Health and Safety Report No. 8

Wildland Firefighter Health and Safety Report No . 8

This issue focuses on efforts to maintain immune function in wildland firefighters . The research section provides summaries of recent field studies related to immune function . The risk management section outlines proven strategies for maintaining immune function during wildland fire suppression activities . The field notes section presents guidelines for selecting liquid and solid energy supplements to maintain immune function in wildland firefighters .

Health_and_Safety.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 06/10/2004

SUBJECT : SAFETY ADVISORY : Wildland Fire Behavior Alert for Southwest Area

The attached Wildland Fire Behavior Alert was issued yesterday for the Southwest United States . Please insure it receives wide distribution within your Agency .

fire_behavior_alert.pdf



TO : louise_bruck@oas.gov

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/02/2004

SUBJECT : SAFETY ADVISORY : Frequency Incompatibility - Narrowband / Wideband Issues

Please read this important memo from the National Multi-Agency Coordination Group



Frequency Incompatibility_Narrowband-Wideband Issues.doc



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 07/22/2004
SUBJECT : SAFETY ADVISORY : RACAL 25 POWER CONSUMPTION

IMPORTANT COMMUNICATIONS NOTICE

RACAL 25 POWER CONSUMPTION

July 20, 2004

Introduction

Power consumption by the new digital (P25) portable radios has been a major concern, and field issue, ever since their introduction into the fire community. Due to the increased amount of electronics within the radio, and the larger band spread requirements (136 – 174 MHz), a digital radio requires more current than an older analog only radio. Non-rechargeable battery technologies have just not kept up with the increased current demands like rechargeable batteries have. The manufacturer's response to their radio's increased current demands has been to build larger cell count clamshells. This, unfortunately, has not been the solution we all had hoped for.

Thales' Racal 25 Current Draw Issue

The Racal 25 radio has never been known for its battery life when operated on their 10 cell AA battery pack (clamshell). This issue has become even more prevalent with their update to the "503" and later board sets. An apparent loss of "talk time" has prompted a look into the cause, and possible, solution to the issue. The National Interagency Incident Communications Division (NIICD), in conjunction with Thales Communications, Inc., has investigated the situation and has come up with the following.

Brief History

In the early stages of testing the new digital P25 radios, it was discovered that the effective communications range of the Racal 25 could be increased if the supplied "cut-band" antenna was

replaced with the full band spread Motorola antenna. This prompted Racal to upgrade the antenna connector on their radios and to offer the Motorola antenna as an option. It has recently been discovered that the combination of the Motorola broad band antenna and the later model board sets (503 and above) has caused a significant increase in transmit current requirements.

Testing

The NIICD Engineering and Development Section and Thales Communications have recently performed numerous tests on the Racal 25 utilizing different antennas. The goal of the testing was to reduce the overall power consumption of the radio while still preserving the communications capabilities of the radios. The NIICD tests were conducted within the Division's engineering lab, on the NIFC voice check station and in the field, both portable-to-portable and through a NIFC repeater, on frequencies ranging from 154 to 174 MHz.

A technical report detailing the tests and their results can soon be found on the NIICD's hotsheet web site at www.fs.fed.us/fire/niicd/Hotsheet/Hotsheet.html.

Results and Recommendation

A significant change (reduction) in the Racal 25's transmit current requirements can be achieved by utilizing different antennas on the radio. Within the 162 to 174 MHz frequency range, a reduction of over 50% in transmit current draw can be achieved.

For radio use within the 162 – 174 MHz band, the NIICD recommends the use of a Centurion 495500, EXH-170-SF. The Centurion SXB165SF works almost as well as the Centurion EXH-170-SF. The end-user may not be able to tell any difference between the two antennas. The Centurion ¼ wave, spring base, BNC antenna (with adapter) can also be used. When fully extended, the telescoping antenna works well within this band.

PLEASE NOTE: Even though the above antennas are designed (cut) to operate in the 162 – 174 MHz band, they do operate in the 150 MHz band without a significant reduction in propagation characteristics and increase in current draw.

For the lower end of the spectrum, the Motorola wideband antenna works very well on the radio.

Additional, Future Testing

Life cycle testing of the 10 battery AA clamshell has not been done since the unit was originally accepted on the DOI Digital Radio Contract. Field testing of several prototypes of the new Hybrid Battery (Li-ion rechargeable battery/charging regulator/AA clamshell combination) was accomplished during the last two fire seasons. The prototypes of the new hybrid battery demonstrated a tremendous improvement in battery life, as well as, having the capacity to operate the radio at high wattage settings. Testing of both the AA clamshell and the hybrid battery will continue this field season. The results of the tests will be published as soon as they are completed.

Stephen C. German
Engineering and Development
NIICD / NIFC



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/10/2004

SUBJECT : SAFETY ADVISORY : Utility Box Mounting Brackets - Chevrolet 2500 HD Crew Cab Pickups

Several IHC and other crews utilize six-passenger pickups with mounted utility box and camper shell as their mode of transportation. The following issue was identified during an inspection made prior to release of several hotshot crews from a fire use incident in California . **Those crews and units utilizing pedestal mounts and hardware on GM and Dodge equipment please take note .**

The IMT involved is to be commended for their attention to these details that so often go unattended.

This issue highlights the importance of vehicle inspections performed during demobilization .

ISSUE: Cracked pedestal (utility box) mounts on Chevrolet 2500 HD six-passenger (crew cab pickups)

July 26, 2004

SAFENET

NARRATIVE:

During a demobilization of Plumas National Forest Crew #1, (a Type 2 Crew) four 2001 Chevy 2500 heavy-duty "six-pack" pickups (with utility box and camper shell/canopy cover on top of utility box) were inspected. Of the four vehicles, two trucks had cracked front utility box mounts at the main frame area. One of the brackets was completely severed, causing the box to shift to one side of the vehicle and lower approximately 1/2 inch. This caused fuel tank filler hose to be crimped. Continued operations in these conditions could result in: 1) sparking from broken bracket 2) fuel spillage on ground (or possible vehicle fire) 3) expensive body damage 4) lost time of vehicle.

SUGGESTED CORRECTIVE ACTION:

1. Check the loaded weight of the vehicle
2. Utilize the "mid-ship" frame mount
3. Constant monitoring of brackets
4. Compare the GVW sticker on vehicle to the actual loaded vehicle weight.

July 27, 2004

FOLLOW-UP

On July 25 during the demob inspection of the Summit Fire Use Module (Stanislaus Natl Forest) vehicle, the EQUM Mike Fipps found a similar problem, but to a much lesser extent, than the Plumas crew buggies. In this instance it was a hair line crack of the same bracket that was broken on the Plumas vehicles. Again the "mid-ship" frame mount was not utilized.

Stanislaus vehicle was a 2001 Chevy 2500 pickup with license # A298239

The utility box & canopy cover came from Monroe Truck Equip., Flint Michigan.

August 9, 2004

FOLLOW-UP

The issue is with the GM pedestal mount. Not the body or how the body was mounted. Bodies were mounted in compliance with the manufacturers direction. We have also found a cracked pedestal mount on a Dodge which uses the same design as GM. Since receiving the SAFENET notification we have directed fleet manager's to have all GM's using the pedestal mount to be inspected and we have contacted GM with the initial complaint. We are awaiting feed back from the FM's to get to GM. GM engineering is looking into the issue now. We do know that the design of the pedestal mount changed in 2000. We have also found this has been an ongoing, unreported, issue where forest just been repairing the pedestal mount when they have found them broken.

**For more information , please contact Ed Hollenshead , USDA FS Fire Operations
Safety Officer , (208) 387-5102**



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 09/17/2004

SUBJECT : SAFETY ADVISORY : IRPG Correction

This bulletin is intended to serve as a notification from the NWCG's Incident Operations Standards and Safety & Health Working Teams of an error discovered in the first printing of the 2004 Incident Response Pocket Guide (IRPG).

The error is an omission affecting only the first printing of the 2004 IRPG, which was corrected for the second printing. The first printing of the IRPG went out between February 2004 and June 2004. The second printing was put in stock at the PMS Cache in July 2004.

The omission consists of text which should be on the bottom of page 16. It should read as follows:

"If you have checked "Yes" on 3 to 5 of the analysis boxes, consider requesting the next level of incident management support."

If your 2004 IRPG does not have this sentence on the bottom of page 16, please take the time to pencil it in.



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 06/17/2005
SUBJECT : SAFETY ADVISORY : Fine Fuels

A very wet winter in the West, including the Southwest, Great Basin, Southern California and other areas has led to abnormally high grass and brush growth leading to an increase in wildfire potential in the lower elevations (primarily below 6,500 ft).

Long-term forecasts call for a greater than even chance for the monsoon in the Southwest to be weak and/or delayed. Indications are that the monsoon onset this year could be similar to 2004, with many areas west of the continental divide seeing a delay in the onset of consistent precipitation. Additionally, climate models are showing July, August and September outlooks for above average temperatures and below average precipitation throughout the Southwest, Great Basin and Southern California.

http://www.cpc.ncep.noaa.gov/products/predictions/multi_season/13_seasonal_outlooks/color/page2.gif

There is abundant anecdotal evidence from these areas of record high fine fuel loadings with potential for extremely rapid fire growth and high resistance to control once fuels cure. Firefighters throughout the United States should be mindful of the hazards they will encounter when fighting fires in these fuel conditions. With no significant relief in sight the NWCG members request that all Operations resources, including Aviation, who may be assigned to these Geographic Areas, be oriented to the key messages from this safety alert to assist them in preparing for assignments in which they may be exposed to extreme fire behavior.

The attached talking points, written by two seasoned Southern California firefighters, are a good foundation for beginning a discussion on the exceptional hazards posed by this years fuel conditions.

The National Wildland Fire Outlook through September can be found at:
http://www.nifc.gov/news/intell_predserv_forms/season_outlook.html For additional information on weather and fuel predictions, visit the NIFC predictive services website at:
http://www.nifc.gov/news/pred_services/Main_page.htm



FineFuels.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 06/17/2005

SUBJECT : SAFETY ADVISORY : Firefighter Safety Stand Down Talking Points

The following Safety Stand Down is a nation-wide effort to focus on firefighter safety throughout the United State's fire service. Although we are not asking for full participation in the effort, the NWCG Safety and Health Working Team would like to encourage our member organizations to support this Safety Stand Down to the degree possible within their agency's wildland fire management programs.

To assist wildland fire agencies in this effort, a list of talking points pertinent to Wildland fire been created and is attached.

Signed,

Gene Madden
Chair, NWCG Safety and Health Working Team

Firefighter Safety Stand Down

Homeland Security Presidential Directive-7 designated the Emergency Services Sector (ESS) as a national critical infrastructure. Logically, ESS personnel are foremost among the internal critical infrastructures of emergency organizations. Nevertheless, the National Fallen Firefighters Foundation reports there have been almost 50 line-of-duty firefighter deaths related to an emergency incident or mandated training during the first four months of 2005. Therefore, the EMR-ISAC is pleased to announce that in partnership with at least 13 fire service organizations, the International Association of Fire Chiefs (IAFC) has called for all fire departments nationwide to conduct a "stand down" for firefighter safety beginning Tuesday, 21 June.

The IAFC and its partners urge all fire departments throughout the country to suspend non-emergency activity on 21 June and instead focus entirely on firefighter safety. This is NOT a stoppage of emergency firefighting activities, but a specific concentration on injury and death

prevention while on duty during the stand down. Career or combination departments are requested to stand down beginning Tuesday, 21 June, until all personnel and duty nights have been covered. Volunteer departments are requested to conduct a special safety meeting the evening of 21 June or as near to that date as possible.

"We are conducting the stand down to raise awareness of the need for increased vigilance toward firefighter safety," said IAFC President Chief Bob DiPoli. "Take the 21st to talk about the causes of line-of-duty deaths; check all apparatus and equipment; discuss health and safety regulations; review fire ground safety issues; and take stock of training exercises and fitness goals." An entire webpage has been devoted to this important issue. Click on the following link and use the resources contained within to plan activities for the stand down: <http://www.iafc.org/standdown>.



SafetyStandownTalkingPoints.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/24/2005

SUBJECT : SAFETY ADVISORY : Narrowband Radio Operations

**The attached Safety Advisory has just been issued by the National Multi Agency Coordinating Group .
Please ensure it receives wide distribution within your respective agencies .**



Radio Safety Advisory.rtf



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 11/29/2005
SUBJECT : SAFETY ADVISORY : Racal Radio Recall

The National Interagency Incident Communications Division (NIICD) of the National Interagency Fire Center (NIFC), has been made aware that previously unknown problems exist with Racal radios that are currently in use within the interagency fire community.

Radios operating with the most recent firmware version (7.1) have been found to exhibit the following problems:

- Radios will unexpectedly cease transmitting with no indication to the operator. In order to correct the problem the radio must be cycled off and then on again.
- After having been shut down, the radios will intermittently display "Empty" on the LED display. In order to return to the desired Bank/Group, the user must access through the program mode.

All Racal radios currently being used on Wildland and prescribed fire should be immediately recalled from operational use. The NIICD has been informed that an upgrade to correct the problems will soon be released by the manufacturer.

If you have any questions call your agency communication specialist or the manufacturer.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 05/16/2006

SUBJECT : SAFETY ADVISORY : New Wildland Fire Safety Initiatives

This spring two important safety initiatives were introduced to the Wildland Fire community. The first initiative is sponsored jointly by the Wildland Fire Lessons Learned Center, the Safety and Health Working Team, and the Federal Fire and Aviation Safety Team. The project is a database firefighters can query to find historical documents from wildland fire incidents, and it serves as the interagency repository of factual investigation reports and analysis. The available documents include 24 and 48 hour reports, factual accident investigation reports, and escaped prescribed fire reviews. This initiative can be found through the following link:

<http://www.wildfirelessons.net/Reviews.aspx>

The second initiative, sponsored by the Federal Fire and Aviation Safety Team, is a program created to provide the interagency wildland fire community a comprehensive, easy-to-follow fitness program. The objective of this program is to improve firefighter health and safety, and to reduce line injuries. It provides a basic format for a well balanced fitness program that can be augmented as local units see fit. This initiative can be found through the following link:

<http://www.nifc.gov/FireFit/index.htm>

The NWCG Safety and Health Working Team encourages every fire organization to investigate these initiatives and consider using them within their programs.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 06/14/2006

SUBJECT : SAFETY ADVISORY : IAFC Safety Stand Down

On **June 21, 2006**, thousands of fire departments across the United States and Canada will "stand down" for firefighter safety. The NWCG is joining with the International Association Fire Chiefs (IAFC) and other groups in supporting this call for safety. Although the NWCG understands that the responsibilities of its member agencies may not allow for full participation in the initiative, we would still like to support our structural fire partners.

Please distribute the attached NWCG memo throughout your agency, and encourage your firefighters to utilize the information it contains to heighten awareness about next weeks safety stand down.



NWCG_Memorandum_June21SafetyStandDown_2006_06_06.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/13/2006

SUBJECT : SAFETY ADVISORY : Interagency Aviation Safety Alert

The U.S. Forest Service and the Department of Interior, Aviation Management Directorate issued an Interagency Aviation Safety Alert on July 12, 2006. This alert provides important information on the SAFECOM aviation hazard reporting system. The full safety alert can be viewed at the following link:

http://www.oas.gov/oassafety/alerts/IA_Alert_0601.pdf

The NWCG Safety and Health Working Team encourages every fire organization to provide this information to wildland fire personnel who routinely work with aviation resources.



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 07/20/2006
SUBJECT : SAFETY ADVISORY : Extreme Fire Behavior

Safety Advisory: Extreme Fire Behavior

This summer, the National Incident Management Situation Report has consistently reported “extreme fire behavior”, “very active fire behavior”, “active fire behavior” or “rapid rates of spread” on large fires in many different geographic areas. Obviously, these same conditions are occurring daily on numerous smaller initial and extended attack fires in the same areas.

Rapid rates of spread, torching, crowning, running and long range spotting have been observed on many fires. Based on fire danger indices, the potential for extreme fire behavior exists during the coming weeks with periods of hot, dry conditions forecast.

Fuel conditions of concern include:

- Very heavy (now cured) fine fuel loadings in many locations
- Continuity of fuels, especially in grass/shrub regimes
- Extremely low live and dead fuel moisture values, well below historic levels for this time of year in some locations
- Extensive areas of bug-killed or frost damaged vegetation

Many locations in recent weeks have seen extended periods of higher than average daytime temperatures coupled with low relative humidity and periods of strong wind. Forecasts indicate above normal temperatures over much of the west for the remainder of the summer season. All of these conditions, coupled with local topographic effects, may combine to produce rapid rates of spread and extreme fire behavior. The NWCG members request that all Operations and Aviation resources who may be assigned to wildland fire incidents be oriented to the key messages from this safety alert to assist them in preparing for assignments in which they may be exposed to extreme fire behavior.

Wildland firefighters can mitigate the risks posed by these hazardous conditions in a variety of ways. These include:

- Maintain constant vigilance. Remember, most fires are innocent in appearance before unexpected shifts in wind direction and/or speed results in flare-up or extreme fire behavior
- Look up, look down, look around! A firefighter who has situational awareness is a safe firefighter.
- Practice LCES at all times: Lookouts, Communications, Escape Routes and Safety Zones. You’ve studied them well – put that knowledge into practice.

- Use the Safety Zone Guidelines found on page 7 of the Incident Response Pocket Guide. Be extremely cautious when working in areas with potential for reburn.
- Pay attention to what your fire is doing, how it responds to changing conditions, and anticipate how fire behavior will change throughout the day.
- Closely observe the fuels in the area where you're working. Remember that fine, flashy fuels respond very quickly to changes in environmental conditions.
- "Keep informed on fire weather conditions and forecasts". Stay attuned to the fire environment so that you notice the little, incremental changes in addition to the big sudden wind shifts.
- Develop an understanding of local conditions, especially if you are in an area unfamiliar to you. Demand a thorough briefing before engaging the fire.
- Monitor your health and well-being and that of your co-workers. Drink plenty of water to maintain your hydration level and monitor fatigue. Fatigue, dehydration and stress impair situation awareness. Take countermeasures as needed.
- Use Personal Protective Equipment. It was designed for your use and issued to you for your protection; it doesn't work if worn improperly or not carried.

Leaders of wildland firefighters have special responsibilities:

- Maintain command and control. As stated in the Standard Firefighting Orders, "Give clear instructions and insure they are understood" and "Maintain control of your forces at all times."
- Employ your subordinates in accordance with their capabilities. Consider team experience, fatigue and physical limitations when accepting assignments.
- Keep your subordinates informed. Provide accurate and timely briefings.
- Use the Risk Management Process identified in the Incident Response Pocket Guide. It will help you make good risk decisions.

Information on national and geographic area fire season outlook products can be found on the National Predictive Services Outlook page at <http://www.nifc.gov/nicc/predictive/outlooks/outlooks.htm>

A long, hot, and active fire season is still ahead of us in many parts of the country. Pay attention to firefighting basics. The most important resource on any fire is you.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/02/2006

SUBJECT : SAFETY ADVISORY : NATIONAL PREPAREDNESS LEVEL 5 SAFETY CONCERNS AND MITIGATIONS

SAFETY ADVISORY: NATIONAL PREPAREDNESS LEVEL 5 SAFETY CONCERNS AND MITIGATIONS

As we enter National Preparedness Level 5, the Federal Fire and Aviation Safety Team (FFAST), in coordination with the National Multi-Agency Coordinating Group (NMAC), would like to emphasize the following key safety points:

- A high number of entrapments and burnovers have occurred this fire season. One common denominator in these incidents has been **RAPID CHANGES IN FIRE BEHAVIOR**. Review NWCG Safety Advisory: Extreme Fire Behavior (issued 7/20/06): <http://safenet.nifc.gov/notice.nsf> -- study it with your firefighting colleagues. In addition, the following are concerns for firefighter and public safety:
 - Expect reburn potential
 - Winds have highly variable direction and speed
 - Anticipate extreme rates of spread and extraordinary fire behavior
 - Fire whirls developing from terrain, dry atmospheric condition and strong surface instability.
- Driving still remains one of the highest risks during wildland fire operations.
 - Recent accident investigations have discovered personnel are not wearing seat belts. Seat belts are required to be worn at all times during vehicle operations - **NO EXCEPTIONS!** Local fire units and incident management teams are encouraged to conduct spot checks to ensure compliance.
 - To help manage driver fatigue, whenever possible, mobilization should not occur prior to 0500; and during demobilization resources should be able to return to home units or reassignments no later than 2200 hours.
- Resource shortages are already occurring. Recognizing this, it is important that the fatigue of firefighters and support personnel be closely monitored, and that proactive countermeasures to mitigate fatigue be identified and implemented. Remember work/rest guidelines are the minimum and supplementary time off to reduce fatigue should be given as deemed necessary.
- The Draft 2006 NWCG Safety Gram is attached for review and can be utilized for briefing purposes.



Safety Gram CY06.doc



Risk Management

Committee



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/24/2006

SUBJECT : SAFETY ADVISORY : Driving Safety



Driving Safety.doc



Risk Management

Committee



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/28/2006

SUBJECT : SAFETY ADVISORY : Burnovers



Burnover safety advisory.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 01/09/2007

SUBJECT : SAFETY ADVISORY : Factual Investigation Reports -- New York Peak Fire & Mudd Fire

The following factual investigation reports are now available at the following web links :

New York Peak Burnover - July 25th 2006, Nevada

<http://www.fire.blm.gov/textdocuments/NewYorkPkreport.pdf>

Mudd Fire Entrapment/Shelter Deployment - August 23rd, Nevada

<http://www.fire.blm.gov/textdocuments/MuddFactual.pdf>



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 01/31/2007

SUBJECT : SAFETY ADVISORY : 2007 Updates - Annual Fireline Safety Refresher Training

Attached are updates and revisions to Annual Fireline Safety Refresher Training for 2007. Please see that it receives wide distribution within your agency .



2007_Updates_Refresher_Training.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 01/31/2007

SUBJECT : SAFETY ADVISORY : 2006 Safety Gram

Attached is the 2006 Safety Gram for your review.



Safety Gram CY06_FINAL.pdf



2006 Safety Gram Cover Letter.pdf



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 06/15/2007
SUBJECT : SAFETY ADVISORY : Firefighter Safety Stand Down

During the week of June 17-23, fire departments and firefighters across the country will “stand down” for firefighter safety. For the third consecutive year the NWCG is joining with the International Association Fire Chiefs (IAFC) and other groups in supporting this call for safety.

This year’s stand down, titled “Ready to Respond,” has been expanded from one day to one week to allow participating agencies maximum flexibility for participating in the exercise .

The NWCG Safety and Health Working Team urges you to take a moment of silence for line of duty deaths and make a special effort to focus on safety for one day during this week . Heighten your agency’s safety awareness that day by providing tailgate safety sessions or similar brief programs that are unique and above and beyond your usual daily safety briefings.

Attached is a short list of talking points you may wish to consider when developing your Safety Stand Down briefings. You may also wish to visit the following web sites for additional information and ideas . NWCG Safety and Health Working Team (SHWT) at <http://www.nwcg.gov/teams/shwt/index2.htm> or the Six Minutes for Safety Program at http://www.nifc.gov/sixminutes/dsp_sixminutes.php or the International Association of Fire Chiefs (IAFC) at <http://www.iafc.org/standdown>.

Thank you very much for your cooperation in this important national safety effort .

/s/ Michelle Ryerson
Chair, NWCG Safety and Health Working Team



SafetyAdvisory_StandDown_Attachment.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/17/2007

SUBJECT : SAFETY ADVISORY : Dry Fuels and Extreme Fire Behavior

Safety Advisory: Dry Fuels and Extreme Fire Behavior

This summer, the National Incident Management Situation Report has consistently reported “extreme fire behavior”, “very active fire behavior”, or “rapid rates of spread” on large fires in most geographic areas. Obviously, similar fire behavior is occurring daily on numerous smaller initial and extended attack fires in the same areas.

This type of fire behavior is being observed because fuels across most of the west and in other portions of the country are extremely dry. These dry conditions are compounded by a variety of factors in some areas, such as abundant fine fuel loading, increased vegetation stress, frost-killed shrubs and brush, invasion of non-native species, lower than normal live woody and herbaceous fuel moistures, and mortality from drought and disease/insect infestations. Winter and spring precipitation deficits have created exceptionally low soil moistures drying duff layers deeper than normal for this time of year. Many locations in recent weeks have seen extended periods of higher than average daytime temperatures coupled with low relative humidity and periods of strong wind.

Rapid rates of spread, torching, crowning, running, fire whirls and long range spotting have been observed on many fires. When coupled with the effects of terrain and weather, this type of fire behavior has proven lethal in the past. Based on fire danger indices along with weather forecasts and climate outlooks, the potential for extreme fire behavior exists during the coming weeks with periods of hot, very dry conditions likely. Information on national and geographic area fire season outlook products can be found on the National Predictive Services Outlook page at <http://www.nifc.gov/nicc/predictive/outlooks/outlooks.htm>

Wildland firefighters can mitigate the risks posed by these hazardous conditions in a variety of ways. These include:

- Expect the unexpected! Fuels are drier than normal, so don't be surprised by extreme fire behavior!
- Maintain constant vigilance. Remember, most fires are innocent in appearance before unexpected shifts in wind direction and/or speed results in flare-up or extreme fire behavior.
- Look up, look down, look around! A firefighter who has situational awareness is a safe firefighter.
- Ensure firefighters have good anchor points, lookouts, communications, escape routes and

safety zones.

- o Use the Incident Response Pocket Guide! Be extremely cautious when working in areas that have potential for re-burn.
- Pay attention to what your fire is doing, how it responds to changing conditions, and anticipate how fire behavior will change throughout the day.
- Closely observe the fuels in the area where you're working. Remember, fine flashy fuels respond very quickly to changes in environmental conditions.
- Keep informed on fire weather conditions and forecasts. Stay attuned to the fire environment so that you notice the little, incremental changes in addition to the big sudden wind shifts.
- Develop an understanding of local conditions, especially if you are in an area unfamiliar to you. Demand a thorough briefing before engaging the fire.
- Monitor your health and well-being and that of your co-workers. Maintain your hydration level and monitor fatigue. Fatigue, dehydration and stress impair situation awareness. Take countermeasures as needed.
- Use Personal Protective Equipment. It was designed for your use and issued to you for your protection; it only works if carried and worn properly.

Leaders of wildland firefighters have special responsibilities :

- Maintain command and control. Give clear instructions and insure they are understood.
- Employ your subordinates in accordance with their capabilities. Consider team experience, fatigue and physical limitations when accepting assignments.
- Provide accurate and timely briefings. Keep your subordinates informed and updated throughout the day.
- Use the Risk Management Process identified in the Incident Response Pocket Guide.

On October 26, 2006, we lost five wildland firefighters during fire operations in the urban interface from extreme fire behavior on the Esperanza Fire in California. Since that date, wildland firefighters have deployed fire shelters in at least three other entrapment situations in urban interface /intermix areas with extreme fire behavior as a common denominator as well. Firefighters are reminded that no structure or facility is worth the loss of a human life.

The NWCG members request that all Operations and Aviation resources who may be assigned to wildland fire incidents be oriented to the key messages from this safety alert to assist them in preparing for assignments in which they may be exposed to extreme fire behavior.

A long, hot, and active fire season is still ahead of us in many parts of the country. Pay attention to firefighting basics and remember, chance favors the prepared firefighter. ***The most important resource to protect on any fire is you !***



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/06/2007

SUBJECT : SAFETY ADVISORY : SITUATION AWARENESS BRIEFING

Wildland firefighters are strongly encouraged to conduct a "Situation Awareness Briefing" during the first hour of the operational period on Wednesday, August 8, 2007. Similar briefings related to situation awareness were recently conducted by our aviation colleagues.

We are most vulnerable to accidents and errors when the operational tempo is changing, especially when it changes quickly. Maintaining good situation awareness in spite of change in operational tempo represents a considerable challenge. Already this season wildland firefighters have experienced a number of accidents and near misses. To date, a total of 15 people have been involved in fire shelter deployments in four different states. Entrapments without shelter deployments have occurred in other locations. Most of these incidents involved fire operations in or near the urban interface coupled with a sudden change in fire behavior. In some instances, highly qualified and experienced firefighters became entrapped. Firefighters have also been killed or injured this year by vehicle and aircraft accidents, heart attacks and snags.

What is "situation awareness", how can you get it and keep it, and what are some of the barriers to achieving it? Situation awareness (SA) has been described as "knowing what is going on so you can figure out what to do" or "what you need to know not to be surprised". Many principles of safe firefighting are directed toward achieving or maintaining situation awareness. For example, the first three Standard Firefighting Orders and many of the Watch Out Situations describe either things you can do to achieve situation awareness -- "keep informed on fire weather conditions and forecasts" -- or indicators of a potential lack of situation awareness -- "uninformed on strategy, tactics and hazards".

In your SA briefing, you are encouraged to brainstorm and consider specific ways in which you can increase awareness of the hazards we face, the nature of the risks involved in wildland firefighting, and things you can do to achieve and maintain good SA. For example, consider the things that you can do to counter the barriers to good SA:

- * Fatigue: Maintain good physical fitness and get adequate rest and nutrition
- * Complacency: There is no such thing as a "routine fire"
- * Fear: Confront your fears and talk about them with others
- * Lack of communication: Follow the 5 Communication Responsibilities on page ix of the Incident Response Pocket Guide
- * Poor crew cohesion: Build your team all season long

Please take the time to examine the Risk Management Process on page 1 of the Incident Response Pocket Guide. Additional Human Factors are listed there for your evaluation. Is your crew experience level low? Do you become easily distracted from primary tasks? What about your attitude - is it

hazardous? All of these factors impact Situation Awareness.

In your briefing, discuss the differences between this fire season and others. Is there a need to “re-calibrate” our SA for a season that is far from “normal”? What can you do to foster good SA for the rest of this fire season? Have you personally experienced some or all of the barriers to good SA? Can you raise the bar for situation awareness both individually and with your crew or team?

Situation Awareness = SA = Staying Alive



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 10/30/2007

SUBJECT : SAFETY ADVISORY : Seat Belt Use Saves Lives!!!

SAFETY ADVISORY : Seat Belt Use Saves Lives !!!

On October 1, 2007, a helitack crew vehicle driven by an agency employee hit a guard rail. The driver attempted to regain control but over-corrected, striking another guard rail and going airborne off the side of the hill about 90 feet before hitting the hillside. The vehicle landed on its driver side first, crushing the driver cab, whereupon the crew compartment separated from the cab and chassis. The two units then rolled several times down a 100 percent slope coming to rest 235 feet below the highway, being stopped only by heavy timber. There were 8 people in the vehicle at the time.



H534's crew buggy is now scrap metal

On September 19, 2007 two agency employees in a light engine were responding to a wildland fire. While coming out of a right turn in the road, the back dual tires came upon a soft portion of road bed, causing the vehicle to swerve to the left. Taking evasive action, the driver first pulled right and then to the left again. The rear wheels then dropped into the uphill side sandy ditch

and forced the vehicle to swerve off the road and over the right side of the embankment. The vehicle rolled twice side over side before coming to rest approximately 62 feet below the embankment.



Engine 3144 needs serious repairs

Both of these accidents involved agency employees driving fire vehicles en route to fires. Including drivers and passengers, there were a total of 10 agency employees in these rollover accidents. Yet only minor injuries were sustained! Why? All 10 vehicle occupants were wearing their seat belts.

According to data from the National Highway Traffic Safety Administration (NHTSA), 42,426 people were killed in motor vehicle crashes in 2006. Another 2.575 million people were injured. More than half of the passenger vehicle fatalities experienced in 2006 involved people who were unrestrained.

A recently published report, *Wildland Firefighter Fatalities in the United States: 1990 - 2006* (<http://www.nwcg.gov/pms/pubs/pubs.htm>), states that during that time period, motor vehicle accidents were the cause of 23% of total wildland firefighter deaths. Statistically, they were the second biggest killer of firefighters during this time period, second only to aircraft accidents.

Firefighters should be well aware that driving is one of the most hazardous parts of our job. Yet we can cite a number of recent agency vehicle accidents in which employees were not wearing their seat belts. Injuries sustained by unrestrained vehicle occupants are almost always more severe than those experienced by people wearing their seat belts. Part of being a professional wildland firefighter is knowing about and using your Personal Protective Equipment. A seat belt is one of your most important pieces of PPE - WEAR IT.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 01/17/2008

SUBJECT : SAFETY ADVISORY : 2007 Safety Gram

Attached is the 2007 Safety Gram for your review.



2007 Safety Gram Cover Memo.pdf



2007 Final Safety Gram_12-31-07.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 01/31/2008

SUBJECT : SAFETY ADVISORY : 2008 Updates - Annual Fireline Safety Refresher Training

Attached are updates and revisions to the Annual Fireline Safety Refresher Training for 2008. Please see that it receives wide distribution within your agency.



2008_Updates_Refresher_Training.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 02/08/2008

SUBJECT : SAFETY ADVISORY : Hazard Tree and Tree Felling website

The NWCG - Safety and Health Working Team (SHWT) is pleased to announce the launching of a new website. The purpose of the Hazard Tree and Tree Felling website is to help firefighters manage and mitigate this recognized high risk threat to safety in the wildland fire environment . The website will provide a centralized consistent emphasis on high risk activities , programs, and issues involving hazard trees and tree felling to meet the safety needs of the agencies and firefighters . The website includes ongoing information, education, and recommendations on the important roles that leadership , supervisors, sawyers, and individual employees have in managing and mitigating tree hazards .

The website is available at <http://www.nwcg.gov/teams/shwt/http/>.

If you have any questions, please contact your agency representative on SHWT .

Michelle Ryerson , Chair

BLM Safety Manager, OF&A

BLM-NIFC

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Mike Long, NWCG Liaison

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Email: longm@doacs.state.fl.us



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 04/24/2008

SUBJECT : SAFETY ADVISORY : Firefighters Concerned About Fire Shelter Length

A concern regarding the fire shelter length was recently raised -- please see the following attachment for more information and recommendations.

Additional fire shelter information can also be found at: http://www.nifc.gov/safety/fire_shelter.htm



Short_fire_shelters_04_24_08.doc



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 06/17/2008
SUBJECT : SAFETY ADVISORY : Firefighter Safety Stand Down

TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 06/17/2008
SUBJECT : SAFETY ADVISORY : Firefighter Safety Stand Down

During the week of June 22-28, fire departments, firefighters, and Emergency Management Services personnel across the country will “stand down” for firefighter safety. NWCG has been a participant with the International Association Fire Chiefs (IAFC), and other groups in the private, and public sector in supporting this call for safety for four years.

This year’s stand down, titled “Committed to Long-Term Results,” has been expanded from one day to one week to allow participating agencies maximum flexibility for participating in the exercise. Topics this year include: Wellness & Fitness, vehicle safety for emergency responders, and Personal Protective Equipment (PPE).

The NWCG Safety and Health Working Team (SHWT) urges you to take a moment of silence for line of duty deaths, and make a special effort to focus on your safety program for one day during the week. Broaden your unit’s safety awareness that week by providing tailgate safety sessions, or similar brief programs that are unique, and focus on low risk, high frequency events in your daily jobs.

Attached is a list of talking points you may wish to consider when developing your Safety Stand Down briefings. Web sites for additional information and ideas include the following: NWCG Safety and Health Working Team (SHWT) at <http://www.nwcg.gov/teams/shwt/index2.htm> , Six Minutes for Safety Program at http://www.nifc.gov/sixminutes/dsp_sixminutes.php, the Wildland Fire Safety Training Annual Refresher (WFSTAR):

<http://www.nifc.gov/wfstar/topics.html>,
and International Association of Fire Chiefs (IAFC) at <http://www.iafc.org/standdown>.

Thank you for your cooperation and commitment in this important national safety effort.

Michelle G. Ryerson

Michelle G. Ryerson
Chair, NWCG Safety and Health Working Team



iafc_safety_stand_down_topics_2008.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 06/23/2008

SUBJECT : SAFETY ADVISORY : Incident Emergency Medical Task Group (IEMTG)

We are pleased to formally announce the creation of the new Incident Emergency Medical Task Group (IEMTG) which has been created under the direction of the NWCG-Safety and Health Working Team. The IEMTG will continue on-going efforts to assist the NWCG and it's represented agencies in dealing with the complex issues surrounding incident medical and occupational health services .

Please refer to the following attachment for specific information regarding this task group 's efforts. A new website has also been created to view IEMTG information at:

<http://www.nwcg.gov/teams/shwt/iemtg/index.html>

/s/Michelle G. Ryerson
Chair, NWCG-Safety and Health Working Team



IEMTG Introduction Letter_Final_June_08.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/03/2008

SUBJECT : SAFETY ADVISORY : Thunderstorm Safety

Several firefighters have been injured during thunderstorms the past two months . The attached safety advisory provides safety information and countermeasures that can be taken during thunderstorm activity .

/s/Michelle G. Ryerson

Chair, NWCG Safety and Health Working Team



NWCG Lightning Advisory_07_08_.doc



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 07/09/2008
SUBJECT : SAFETY ADVISORY : Wildland Fire Fatalities

On July 7 this year, we reached the number of deaths in wildland fire operations for 2008 that we experienced during all of 2007. A total of nine wildland firefighters died in the line of duty in 2007 and nine have died so far this year. That's nine people who won't be going home to their families and friends after work any more. We need to keep these fallen heroes – and the ones lost in previous years -- in our hearts and minds as we continue our work in what promises to be a long, difficult fire season across the nation.

Causes of death for wildland firefighters in 2008 have included the following:

- vehicle accident (2 deaths when a burned bridge collapsed)
- aviation accidents (1 SEAT pilot; 1 firefighter in a midair collision)
- roadside accident (2 struck by a vehicle in heavy smoke)
- unknown, possible heart attack or aneurysm (2 deaths)
- drowning. (1 death while swimming on R&R)

Many more accidents have been experienced by wildland firefighters in 2008 that did not result in fatalities, but easily could have. Twenty-four firefighters were injured in four separate vehicle accidents; 19 firefighters became entrapped on seven different occasions, with many of those individuals suffering burn injuries; 10 firefighters were injured when lightning struck nearby in two separate incidents; three firefighters suffered burn injuries in separate events that were not entrapments; two dozer operators were injured in separate rollovers; a firefighter was hit by a snag. These are just some of the accidents reported in the NWCG Safety Gram; many other accidents and near misses have occurred both on the ground and in the air in 2008.

Entrapments are worthy of special mention. The 19 firefighters who became entrapped this year were on fires in five different states. Only three of the 19 entrapped firefighters got their fire shelters out; many others were in vehicles when entrapped – specifically engines, dozers and tractor/plows. Many of these firefighters suffered burn injuries. During all of 2007, a total of 53 firefighters were entrapped, and we are on pace to reach or exceed that number in 2008. Many of the firefighters entrapped in 2007 and 2008 are still recovering from their burn injuries and some

have left the fire service.

Mitigations exist for all of the hazards that have led to fatal accidents and near misses this year. Some of these are:

- Scout roads when in unfamiliar territory in low visibility; be aware of load limits and bridge condition when operating fire apparatus.
- Exercise extreme caution when working near a roadside, especially in low visibility conditions. Make yourself as visible as possible.
- Do not enjoy a false sense of security when working near or in a vehicle on the fireline. Survival during a burnover is not guaranteed while in any type of vehicle; vehicles and aircraft are not always reliable as an escape route. Always identify a secondary escape route.
- Rapid, unexpected changes in fire behavior kill wildland firefighters. Always identify the worst case scenario and be prepared for it by maintaining focused situation awareness and using LCES.
- Do not hesitate to use your fire shelter if you feel you need to. If you become entrapped, there will be some type of review or investigation regardless of whether you deploy a shelter or not.
- Maintain physical fitness and monitor your health regularly through medical exams.
- Only swim in designated safe areas while on fire assignments.

All wildland firefighters want to survive this fire season without injury. So did all the people who have been injured or killed to date. You are responsible for your safety and the safety of your fellow firefighters. Maintain your health, manage fatigue, stay hydrated, be actively involved in briefings and fireline communication, and keep your head in the game so that you can go home to your family and friends when the fires are over.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/25/2008

SUBJECT : SAFETY ADVISORY : NWCG Standards and Agency Administrator's Guide to Critical Incident Management

The NWCG Safety and Health Working Team (SHWT) is pleased to announce the new updated Agency Administrator's Guide to Critical Incident Management (PMS 926) is now available. This publication is web-based only (cannot be ordered hard-copy) and can be viewed and downloaded from: <http://www.nwcg.gov/pms/pubs/pubs.htm> (select PMS 926)

The Agency Administrator's Guide to Critical Incident Management is designed to aid Agency Administrators in dealing with critical incidents. This document has been modified and streamlined to assist Agency Administrators prepare and to manage through those difficult and chaotic days that follow a death, serious injury, or other critical or highly visible event. The time to use it is now! The Guide's format is document protected; however, editing is permissible within the shaded areas which allows for site specific inputs and updates. It is recommended that site specific plans be reviewed and updated at least annually.

NWCG has also recently approved two new standards: Standards for Burn Injuries, and Interim Minimum Standards for Incident Emergency Medical Services (both attached). Individual agencies determine implementation of NWCG Standards.

A handwritten signature in black ink that reads "Michelle G. Ryerson".

Michelle G. Ryerson
Chair, NWCG Safety and Health Working Team



NWCG#012-2008_Memorandum_Standards for Burn Injuries_2008_06_27.pdf



NWCG#010-2008_Memorandum_Interim NWCG Minimum Standards for Incident Emergency Medical Services_2008_06_30.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/30/2008

SUBJECT : SAFETY ADVISORY : NMAC Safety Stand Down - August 1, 2008



NMAC Safety Stand Down 08_01_08.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/08/2008

SUBJECT : SAFETY ADVISORY : Incident Medical Plans and Emergency Communications

DATE: 08/08/08

SUBJECT: SAFETY ADVISORY: Incident Medical Plans and Emergency Communications

Reduced visibility due to smoky conditions surrounding incidents, competition for air ambulances, in combination with highly congested communications traffic can contribute to a delay in response time.

SAFETY CONCERNS TO PERSONNEL:

In the event of a medical emergency on the fire line, request that radio channels be cleared for emergency traffic through the Communications unit.

Incident Communications unit should immediately obtain from personnel on scene the following information: mechanism of injury, all significant medical findings, initial vital signs, patient location, medical transport vs. MEDIVAC, need for additional resources, and any other pertinent information with a bearing on resolving the incident.

The term “**MEDIVAC**” should be used for life threatening evacuations only. The term “**Medical Transport**” should be used for non-life threatening injuries or illnesses.

The patient’s name, crew affiliation or other personal identification information should not be communicated over the radio.

As a minimum, incident Communications unit should immediately communicate this information to the Incident Commander, Operations Section Chief, Medical Unit Leader, Safety Officer, and Finance Section Chief.

All employees on an incident need to read and understand the Medical Plan *each* day.

Employees on the fire line need to know their location on the line, distance from drop point and other access points.

Supervisors on the fire line need to know where employees are working on the line.

Know the process. Know the procedures. Know your role in each.

Prior to each operational period, line supervisors need to identify specific MEDIVAC sites, ensure appropriate first-aid supplies are available, and identify EMT's, or other trained personnel to assist in a medical emergency.

Medical Plans need to clearly identify appropriate timeframes:

Medical Plans should account for time lags due to the dispatch, travel to incident patient assessment, packaging and travel to medical facility.

In a medical emergency the urgency and severity of the situation, often indicated by the victim's vital signs, needs to be clearly communicated to medical responders.

Remember just like having good Situational Awareness, escape routes and safety zones, continually assess your situation and always keep in mind the nearest medical evacuation location, know your Medical Plan and clearly identify your emergency traffic.



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 08/14/2008
SUBJECT : SAFETY ADVISORY : MRSA Exposure Potential (Staph Infection)

During the last 2 weeks several cases of CA-MRSA, (Community Associated-methicillin-resistant *Staphylococcus aureus*) have been confirmed with firefighters assigned to wildland fire throughout the Continental United States. CA-MRSA is a bacteria that can cause infections in healthy persons who live in crowded conditions, practice poor hygiene, have skin-to-skin contact with someone that has a staph infection, or have open cuts and scrapes.

What is MRSA

MRSA is a type of staph that is resistant to many common antibiotics. While 25% to 30% of the population is colonized with staph, approximately 1% is colonized with MRSA. CA-MRSA infections are acquired by persons who **have not** been recently hospitalized, or had a medical procedure in the last year. Persons who are “colonized” may or may not present symptoms. If left untreated, MRSA could be fatal.

What does a staph or MRSA infection look like?

Staph bacteria, including MRSA, can cause skin infections that may look like a pimple or boil and can be red, swollen, painful, or have pus or other drainage.

How can you prevent staph or MRSA skin infections?

Wash your hands - The simplest thing to do to help stop the spread of MRSA is to wash your hands. When washing hands, do it for at least 10 to 15 seconds. If soap and water are not available, use an alcohol-based hand sanitizing gel.

Treat cuts, scrapes, and abrasions immediately - Look for wound treatments that kill MRSA. Ask your Medical Unit whether it has a wound care gel or ointment that kills MRSA. Also, keep wounds covered with a bandage until healed.

Shower after physical activity - Bacteria grow best in warm, moist environments such as those created after physical activity.

Properly clean tools, gear, and equipment - Take time to clean tools and equipment that can accumulate MRSA. Situations where workers share tools and gear may be ripe for the spread of infection-causing bacteria.

Avoid contact with other people's wounds or bandages - Bacteria can live on wounds and bandages and can easily spread. Never touch another person's wound without proper personal protective equipment such as surgical gloves.

Avoid sharing personal items such as towels or razors

There are many valid reasons for practicing good hygiene during fire assignments, MRSA infections are just one of them. Do your part to limit the spread of unwanted disease and infections.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 10/06/2008

SUBJECT : SAFETY ADVISORY : Fire Shelter System Website

http://www.nifc.gov/fire_equipment/fire_shelter.htm



Fire Shelter System Website 100108.doc



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 11/17/2008
SUBJECT : SAFETY ADVISORY : TriData Study: 10 Years Later



***Wildland Fire Safety Awareness Study (TriData) Phase 3
10 Year Anniversary Project***

This year (2008) marks the 10th anniversary of the release of the TriData Phase 3 study. The TriData Phase 3 Report is available at: <http://www.nifc.gov/safety/phaseIII.htm>
This was a landmark safety study for the interagency wildland fire community that helped shape fire management direction during the past decade. Several of the NWCG Safety and Health Working Team (SHWT) projects and initiatives came out of this study as did the formation of the Wildland Fire Lessons Learned Center (LLC).

To recognize this landmark study, the LLC has created the following four video podcasts for wildland fire community viewing. These videos are short (3-7 minutes each), provide important background information, and we encourage you to take the time to view them at; <http://wildfirelessons.net/Additional.aspx?Page=144>

- Video 1 – Introduction
- Video 2 – Successes
- Video 3 -- Continuing Challenges
- Video 4 – Looking to the Future

SHWT and LLC want to gather your feedback and recommendations for follow-up actions to this landmark study. **Please provide input by January 12, 2009; through the following method(s):**

- Completing a short survey at: <http://wildfirelessons.net/Surveys.aspx>
- Or, contact your respective agency's SHWT Representative:
<http://www.nwccg.gov/teams/shwt/team2.htm>

Your recommendations will assist us in providing NWCG with opportunities to improve wildland fire safety and health for firefighters.

Your participation is greatly appreciated.

/s/Michelle Ryerson, Chair SHWT

/s/Paula Nasiatka, LLC Center Manager



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 01/22/2009
SUBJECT : SAFETY ADVISORY : 10th Wildland Fire Safety Summit

TO:
FROM: National Wildfire Coordinating Group
REPLY TO: NWCG@nifc.gov
DATE: 01/22/2009
SUBJECT: SAFETY ADVISORY: 10th Wildland Fire Safety Summit

The International Association of Wildland Fire (IAWF), in cooperation with the NWCG Safety & Health Working Team and the Wildland Fire Lessons Learned Center, is sponsoring the 10th Wildland Fire Safety Summit scheduled for April 27-30, 2009 in Phoenix, AZ. This continues the tradition begun by the IAWF in 1997 to provide a forum for sharing the latest developments in wildland fire safety.

A major emphasis for this year's summit will be "*10 Years after the TriData Study: What is different ?*" The TriData Study was a groundbreaking wildland fire safety study conducted in the mid-1990s and included specific recommendations for improving the safety and health of wildland firefighters. Safety Summit participants will have the opportunity to provide input on high priority wildland fire safety issues that need to be addressed in the next ten years.

The Safety Summit also includes an optional Dude Fire Staff Ride on Friday, May 1. In 1990, six firefighters died and five others were badly burned on the Dude Fire near Payson, Arizona.

The NWCG Safety & Health Working Team would like to encourage attendance by wildland fire personnel. This is the only forum of its kind that is exclusively focused on wildland fire safety and provides the opportunity for researchers, managers and wildland fire practitioners to interact and share information.

Early registration, at a reduced rate, can be completed through March 15, 2009. Registration can be completed online at <http://www.iawfonline.org/phoenix/> or by using the form on the second



page of the Safety Summit flier (see attachment) [10thWildlandFireSafetySummit_Flyer.pdf](#) . You are also encouraged to visit the IAWF website for the latest information.

We hope to see you there!



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 02/02/2009

SUBJECT : SAFETY ADVISORY : Annual Wildland Fire Safety Refresher Training - 2009



Annual Wildland Fire Safety Refresher Training - 2009

The intent of annual fireline safety refresher training is to focus line going personnel on operations and decision making issues related to fireline and all-hazard incident safety. Refresher training will ensure firefighters, and support personnel have information regarding current initiatives, the upcoming fire season, and any policy/guidance changes. Refresher training is provided in order to recognize and mitigate risk, maintain safe and effective practices, and to reduce accidents and near misses.

Refresher Website (WFSTAR)

The 2009 revisions to the Wildland Fire Safety Training Annual Refresher (WFSTAR) website will be posted on February 2nd, 2009. This website is managed under the direction of the Federal Fire and Aviation Safety Team (FFAST). The purpose of WFSTAR is to provide a one-stop shopping resource for instructors of annual refresher training to obtain information necessary to conduct relevant and engaging safety refreshers. The website identifies topics for refresher training and lists a wide variety of reference materials that support refresher training.

Updates include a new National Emphasis Topic and Hot Topics. The 2009 National Emphasis Topic is “If you see something, say something”. The 2009 Hot Topics include “Fire Whirls, and Extreme Weather in the Wildland Fire Environment”, “Hazard Trees, and Tree Felling”, “Driving Safety, and “High Reliability Organizations”. The WFSTAR website is located at <http://www.nifc.gov/wfstar/index.htm>.

Refresher Video/DVD

The NWCG 2009 annual fireline safety refresher training package “The Art and Science of Fighting Wildfire” DVD is tentatively scheduled for release March 20th, 2009. The VHS format for the video will no longer be available in 2009. The BIA, BLM, NPS, and USFWS will distribute 2009 video packages to their respective districts/field offices, agencies, refuges, or parks. Other agencies, as well as state and private entities (USFS, DNR, VFD, etc.) will need to order directly from Custom Recording and Sound at 208-344-3535 or fire2009@crsmedia.com. Personnel conducting refreshers prior to the 2009 release date are encouraged to use pertinent modules from prior annual refreshers.

Copies of the 2009 Facilitator Guide and Student Workbook will be available for download from the new BLM Training Unit website at http://www.blm.gov/nifc/st/en/prog/fire/training/fire_training.html by March 20th, 2009. Additional information on the refresher DVD can be found on the WFSTAR website under Refresher Video.

Instructors Note: Instructors and Unit Leaders are encouraged to customize training to reach your target audience. All students should have the Incident Response Pocket Guide (IRPG), Fireline Handbook, and other Agency specific material for annual refresher training.

Refresher Training Required for Some NWCG Positions

The revised National Wildfire Coordinating Group (NWCG) *Wildland Fire Qualification System Guide (PMS 310-1)* was posted to the web in May 2008. It states:

- In order to maintain currency, some positions have identified recurrent training (RT) at various intervals.
- Attendance at an Annual Fireline Safety Refresher (RT-130) is required for designated positions in this guide in order to maintain currency, and for all personnel assigned to positions with fireline duties and for any position assigned to the fireline for non-suppression tasks.
- Annual Fireline Safety Refresher (RT-130) training will focus on mandatory core content subjects and not on a minimum timeframe standard. The required number of hours is determined by the agency. Core content is listed under Wildland Fire Safety Refresher Training at <http://www.nifc.gov/wfstar/index.htm>

Please refer to the May 2008 *Wildland Fire Qualification System Guide (PMS 310-1)* at <http://www.nwcg.gov/pms/docs/docs.htm> for positions that require Annual Fireline Safety Refresher Training.

NWCG Standards for Instructors of Annual Fireline Safety Refresher Training

In 2006 the NWCG also established minimum qualifications for instructors of refresher training.

- Lead instructors must be a qualified single resource boss.
- Unit instructors must be qualified firefighter type one (FFT1).
- Adjunct instructors may be utilized to provide limited instruction in specialized knowledge and skills at the discretion of the lead instructor. They must be experienced, proficient and knowledgeable of current issues in their field of expertise.

For additional information please refer to the September 2007 NWCG *Field Manager's Course Guide (PMS 901-1)* at <http://www.nwcg.gov/pms/training/fmcg.pdf>.

Questions and Additional Information

For federal agency questions, please contact your NWCG Safety and Health Working Team (SHWT) representative.

Agency	Name	Phone Number	Email
BIA	Tony Beitia	208-387-5177	tony_beitia@nifc.gov
BLM	Michelle Ryerson	208-387-5175	michelle_ryerson@nifc.blm.gov
NPS	Chad Fisher	208-387-5967	chad_fisher@nps.gov
USFS	Larry Sutton	208-387-5970	lsutton@fs.fed.us
FWS	Rod Bloms	208-387-5599	rod_bloms@fws.gov

For state agencies, please contact your state training officer. If you need additional assistance, please contact the SHWT representative for your National Association of State Foresters (NASF) region.

Region	Name	Phone Number	
NE	Wesley Keller	570-325-6111	
SE	Mark Goeller	405-522-6146	
West	Wayne Ching	808-587-4173	



Risk Management

Committee



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 02/03/2009

SUBJECT : SAFETY ADVISORY : 2008 SAFETY GRAM



2008 Safety Gram Cover Memo.pdf



2008 Final Safety Gram_12-31-08.pdf



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 06/12/2009
SUBJECT : SAFETY ADVISORY : International Association of Fire Chiefs Safety Week



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 06/12/2009
SUBJECT : SAFETY ADVISORY : International Association of Fire Chiefs Safety Week

During the week of June 14-20, fire departments, firefighters, and Emergency Management Services personnel across the country will promote a safety and health week for firefighter and emergency services personnel. NWCG has been a participant with the International Association Fire Chiefs (IAFC), and other groups in the private, and public sector in supporting this call for safety.

This year's Safety Week, titled "Protect Yourself: Your Safety, Health, and Survival Are Your Responsibility," has been expanded to one week to allow participating agencies maximum flexibility for participation. Topics this year include:

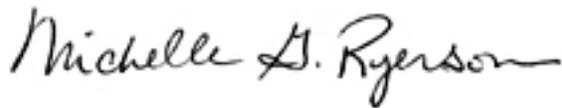
- Safety – Defensive Driving and Roadside Safety
- Health & Wellness
- Wildland Urban Interface and Situational Awareness
- Operational Leadership

The NWCG Safety and Health Working Team (SHWT) urges you to take a moment of silence for line of duty deaths, and review the June 2009 Safety Gram for fatalities and serious accidents. Take time each day by providing tailgate safety sessions on one topic area each day, or provide similar brief programs that are unique, and focus on high risk, low frequency events in your daily jobs.

Attached is a list of talking points you may wish to consider when developing your Safety Week briefings. Web sites for additional information and ideas include the following: NWCG Safety and Health Working Team (SHWT) at <http://www.nwcg.gov/teams/shwt/index2.htm> , Six Minutes for Safety Program at http://www.nifc.gov/sixminutes/dsp_sixminutes.php, the Wildland Fire Safety Training Annual Refresher (WFSTAR):

<http://www.nifc.gov/wfstar/topics.html>,
and the IAFC website at <http://www.iafc.org/displaycommon.cfm?an=1&subarticlenbr=306>

Thank you for your cooperation and commitment in this important national safety effort.



Chair, NWCG Safety and Health Working Team



2009_iafc_safety_week_topics_dp.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 06/16/2009

SUBJECT : SAFETY ADVISORY : Interagency Safety and Health Reporting Processes



NWCG#018-2009_Memorandum_Interagency Safety and Health Reporting Processes_2009_06_15.pdf



Risk Management

Committee



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/02/2009

SUBJECT : SAFETY ADVISORY : New Six Minutes for Safety addition



This Day in History introduction.doc



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 07/02/2009
SUBJECT : SAFETY ADVISORY : Heat Illness Safety

Fit firefighters are safe firefighters: regular physical fitness training is a component of a professional wildland firefighter's work day. Unfortunately, physical training itself has its own set of hazards. In 1996 a hotshot crew member in Arizona died of heatstroke during a 4-mile physical training run. In 2009, wildland firefighters in both the U.S. Forest Service and Bureau of Land Management have experienced a number of serious heat-related illnesses during physical training activities. While some heat illnesses are less severe and are easily treated by resting, cooling down and drinking water, others can be life-threatening or lead to permanent disability. Periods of low fire occurrence can result in complacency regarding the everyday hazards encountered by wildland firefighters conducting Physical Training (PT) activities. Don't let this happen to you!

Heat Illness and Physical Training

In physical pursuits like training to be a wildland firefighter or participating in most sports, hydration matters. In some cases, actions taken by you on the previous day can set you up to be dehydrated during PT; your overall fitness level also plays a role.

According to the National Institutes of Health, heat emergencies fall into three categories of increasing severity: heat cramps, heat exhaustion, and heatstroke. If the problem isn't addressed, heat cramps (caused by loss of salt from heavy sweating) can lead to heat exhaustion (caused by dehydration), which can progress to heatstroke. Heatstroke, the most serious of the three, can cause shock, brain damage, organ failure, and even death.

These early symptoms may indicate the onset of heat illness:

- Profuse sweating
- Fatigue
- Thirst
- Muscle cramps

Later symptoms of heat exhaustion include:

- Headache
- Dizziness and lightheadedness
- Weakness
- Nausea and vomiting
- Cool, moist skin
- Dark urine

The symptoms of heatstroke include:

- Fever (temperature above 104 °F)
- Irrational behavior
- Extreme confusion
- Dry, hot, and red skin; sweating may cease
- Rapid, shallow breathing
- Rapid, weak pulse; possible decrease in blood pressure
- Seizures
- Unconsciousness

Other Serious Medical Conditions

In recent years, wildland firefighters have experienced two serious illnesses both as a result of physical training and firefighting: rhabdomyolysis and compartment syndrome. In some cases these conditions have led to the permanent disabling of young, healthy firefighters. Unfortunately some of the symptoms of these conditions have been misdiagnosed as heat illness.

Rhabdomyolysis is the breakdown of muscle fibers resulting in the release of muscle contents (myoglobin) into the bloodstream. Some of these are harmful to the kidney and frequently result in kidney damage. Risk factors for rhabdomyolysis include:

- Alcoholism (with subsequent muscle tremors)
- Crush Injuries
- Heat intolerance
- Heatstroke
- Ischemia or necrosis of the muscles (as may occur with arterial occlusion, deep venous thrombosis, or other conditions)
- Low phosphate levels
- Seizures
- Severe exertion such as marathon running or calisthenics

- Shaking chills
- Trauma
- Use or overdose of drugs, especially cocaine, amphetamines, statins, heroin, or PCP

Acute compartment syndrome may take several hours develop. Within the muscle compartment, swelling and/or bleeding creates pressure on capillaries and nerves. When the pressure in the compartment exceeds the blood pressure within the capillaries, the capillaries collapse. This disrupts the blood flow to muscle and nerve cells. Without a steady supply of oxygen and nutrients, nerve and muscle cells begin to die within hours. Unless the pressure is relieved quickly, this can cause permanent disability or death. Muscle groups in the arms, hands, legs, feet, and buttocks can be affected.

A combination of signs and symptoms characterize compartment syndrome. The classic sign of acute compartment syndrome is pain, especially when the muscle is stretched.

- The pain may be intensely out of proportion to the injury, especially if no bone is broken.
- There may also be a tingling or burning sensation (paresthesias) in the muscle.
- The muscle may feel tight or full.
- If the area becomes numb or paralysis sets in, cell death has begun and efforts to lower the pressure in the compartment may not be successful in restoring function.

Risk Mitigations for Physical Training and Hard Work

Hydrate before, during and after exercise. Limit your intake of alcohol and so-called “energy drinks” -- prior to prolonged periods of exertion.

Drink at least 1 quart of water per hour during strenuous exercise or work.

About one third to one half of the liquid consumed during a work shift should be a sports drink such as Gatorade, for the purpose of replenishing fluids, electrolytes and carbohydrates. “Energy drinks” such as Red Bull, Monster and RockStar are NOT sports drinks.

Monitor your hydration status by observing urine color: pale yellow or wheat color is normal. A lighter color is a sign of over hydration; dark yellow or brown urine is a sign of dehydration. Be aware of unusual body odor especially in the case when it smells like ‘ammonia’ – this could be a sign of rhabdomyolysis.

Monitor body weight pre- and post-exercise. Weight loss during activities is primarily water loss; any loss of greater than 2% of pre-exercise weight can be detrimental.

Practice good nutritional habits. Monitor salt intake during high heat stress conditions and

ensure electrolyte replacement. Eat several small meals a day rather than three large meals for higher energy and more optimal metabolism,

Ensure that your PT program is balanced and supports muscle balance. There have been cases of compartment syndrome related to overuse of certain muscles along with other factors. Always be sure to warm up and cool down appropriately, especially during any adverse weather conditions and monitor the Heat Stress Index when doing PT.

Be able to recognize the symptoms of heat illness in yourself and others – if you are feeling overexerted – STOP! Hydrate and try to lower your heart rate. Oftentimes feeling ‘thirsty’ means that you are already dehydrated.

If you still have symptoms, notify co-workers or supervisor immediately.

Immediately treat heat illness if it occurs. Conduct rapid medivac if needed...ignoring or delaying the need for medical attention could lead to permanent disability and even death.



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 07/15/2009
SUBJECT : SAFETY ADVISORY : NWCG#020-2009 Memorandum -- Interim Influenza Guidelines for Wildland Fire Responses

TO: NWCG EXECUTIVE BOARD

WHAT: NWCG#020-2009 Memorandum -- Interim Influenza Guidelines for Wildland Fire Responses

ACTION: Please review and distribute .

Note: Memorandum is dated 6/24/09. The Memorandum was not sent out until all documents mentioned in the Memorandum were in place on the NWCG website .



NWCG#020-2009_Memorandum_Interim Influenza Guidelines_2009_06_24.pdf

Bonnie L. Bradshaw
NWCG Executive Secretary
National Interagency Fire Center
3833 S. Development Avenue
Boise, ID 83705-5354
(208) 387-5823
Fax: (208) 387-5398
NWCG_Executive_Secretary@nifc.blm.gov



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/15/2009

SUBJECT : SAFETY ADVISORY : Test mail list to BLM

Michelle / Marie

Please send me a message if you received this.

Rick



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 07/25/2009
SUBJECT : SAFETY ADVISORY : Final Safety Advisory Norovirus

Recently approximately 100 individuals associated with the Redrock/Trailer 1 incident in the Great Basin experienced acute gastroenteritis. The Washoe County, Nevada, District Health Department has confirmed that the illness that moved through the camp was norovirus. While the source of this norovirus outbreak is unknown at this time, in the United States only the common cold causes more infections per year than noroviruses.

The symptoms of norovirus are:

- Nausea, vomiting, and/or diarrhea accompanied by abdominal cramps.
- Headache, fever/chills, and muscle aches may also be experienced.

Symptoms are usually brief and last only 1 or 2 days. However, during that brief period, people can feel very ill and vomit, **often violently and without warning**, many times a day, which can result in dehydration:

- Dehydration is the most serious health effect that can result from norovirus infection.
- By drinking juice or water you can reduce your chance of becoming dehydrated.
- Sports drinks do not replace the nutrients and minerals lost during this illness.

Symptoms usually begin 24 to 48 hours after ingestion of the virus, but can appear as early as 12 hours after exposure. Norovirus illness is usually brief in healthy individuals lasting 1 or 2 days. There is no evidence that sick persons can become long-term carriers of the virus, but the virus can be in the stool and vomit of infected persons from the day they start to feel ill until to 2 weeks after they feel better.

Persons with norovirus symptoms should not work in settings in which they may have the ability to contaminate food, water, or any objects that may come in contact with others and they should not be placed back into these work settings for 3 days after they recover from their illness.

If a norovirus outbreak is suspected on an incident the following measures should be taken:

- Individuals exhibiting symptoms of acute gastroenteritis should be separated from other

incident personnel. They should remain separated for 72 hours after symptoms cease.

- Use of common items should be eliminated. For example, instead of placing salt and pepper shakers on tables use single serve packages dispensed with individual meals; eliminate buffet lines/salad bars where multiple people use the same utensil to get food.
- Restrooms and portable toilets should be cleaned frequently instead of once daily.
- Clean and disinfect contaminated surfaces immediately after an episode of illness.
- Report any suspected norovirus illness to the local health department and through agency channels to the Geographic Area.

Incident personnel should wash their hands frequently with soap and water for at least 20 seconds of vigorous rubbing followed by a thorough rinse and drying with disposable towels. **This is the single most important procedure for preventing the spread of the infection!**

Further information on dealing with infectious outbreaks during incidents is being developed. Reference the Center for Disease Control's website for more information on norovirus at <http://www.cdc.gov/ncidod/dvrd/revb/gastro/norovirus.htm>.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/17/2009

SUBJECT : SAFETY ADVISORY : Updates to the SAFENET Website

The SAFENET system became operational in the summer of 2000. The development of SAFENET was recommended in Phase III of the TriData Wildland Firefighter Safety Awareness Study and is endorsed by the National Wildfire Coordinating Group (NWCG).

The SAFENET website has recently been updated; however, it will remain at the same web address; <http://safenet.nifc.gov/>. The NWCG Safety and Health Working Team (SHWT) would like to take this opportunity to review the intent of SAFENET, highlight the updates and provide information on how a SAFENET can be submitted.

Purpose

As stated by Karl Weick and Kathleen Sutcliffe (authors of *Managing the Unexpected*) “a reporting culture is a safety culture.” The goal is to report and resolve safety and health issues at the near miss/close call stage, or sooner, instead of after an accident or injury occurs.

SAFENET is a form and process that was requested by firefighters themselves. It is a method for communicating and resolving safety and health concerns encountered in wildland fire and all hazard incidents. The information provided on the form will also help collect important, safety-related data at the National Interagency Fire Center, to determine long-term trends and problem areas (e.g. equipment and supplies). Annual SAFENET summaries are prepared at the end of each fiscal year and are available on the SAFENET website.

What SAFENET Is / Is Not

What SAFENET is:

- An anonymous reporting system where firefighters can voice safety and health concerns.
- Documents corrective actions taken at the field level or provides suggested corrective actions for higher level of action.

What SAFENET is NOT:

- A forum for personal attacks/defamation.
- A mechanism to elevate “pet peeves.”

- Only used for incidents that need higher level corrective action.

Interagency criteria for posting SAFENETs:

- Clearly stated safety or health issue, encountered on wildland fire or all hazard incidents.

What happens to a SAFENET:

- Upon submission, a SAFENET is forwarded to the national fire management safety program manager for the jurisdictional agency identified in the submission. These individuals determine the course of action for the submission, forwarding to the regional, state or local level for response.
- The jurisdictional agency is responsible for researching the issue identified in the submission, taking appropriate action, and filing a corrective action outlining the agency's response.
- There is no punishment or penalty for filing a SAFENET.

SAFENET Updates

- The SAFENET form (PMS 405-2) is no longer available in the cache system. However, forms already in circulation or forms printed from the SAFENET website can continue to be mailed in.
- Two substantive changes were made to the SAFENET form:
 1. The section previously titled "Corrective Action" was renamed "Actions Taken." This is where the SAFENET submitter describes what actions he/she took to mitigate the unsafe/unhealthful event.
 2. The section previously titled "Supplemental Corrective Action" was renamed "Agency Corrective Actions." This is where the agency describes the corrective action(s) that were taken to address the safety/health concern.
- The Help Screen, SAFENET Protocols, Frequently Asked Questions (FAQs), and other information on the website were updated.

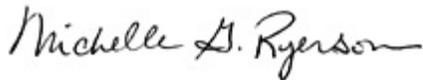
How to Submit a SAFENET

- Internet: Go to <http://safenet.nifc.gov/>, click on "Submit SAFENET" and follow the instructions.
- Mail: SAFENET, P.O. Box 16645, Boise, ID 83715-9750
- Telephone: Call 1-888-670-3938 and follow the prompts.

For Additional Information:

- Check out the PowerPoint Presentation, FAQs and other information on the SAFENET website.
- Contact your NWCG-Safety and Health Working Team representative. The team roster is available at www.nwcg.gov/teams/shwt/team2.htm.
- Email the SAFENET Administrator at SAFENET_Administrator@blm.gov.

Thank you for your commitment to this important safety effort.



Michelle Ryerson
Chair, NWCG Safety and Health Working Team



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 10/01/2009

SUBJECT : SAFETY ADVISORY : 6 Minutes for Safety New Features



Safety Advisory_6 Minutes for Safety.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 01/29/2010

SUBJECT : SAFETY ADVISORY : 2010 Wildland Fire Safety Training Annual Refresher (WFSTAR)



WFSTAR 2010.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 02/10/2010

SUBJECT : SAFETY ADVISORY : Hang-Ups_Take a Second Look



Hang-ups_Take a Second Look.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 02/24/2010

SUBJECT : SAFETY ADVISORY : 2009 Final Safety Gram

Current and past Safety Grams are available at the following website :

<http://www.nwcg.gov/branches/pre/rmc/index.htm>



FINAL 2009 Safety Gram.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 06/07/2010

SUBJECT : Ash Pit Safety Advisory :



Ash Pit Safety Advisory.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 06/17/2010

SUBJECT : SAFETY ADVISORY : International Association of Fire Chiefs Safety Week



Safety Week Letter.pdf



Safety Week Topics.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/04/2010

SUBJECT : SAFETY ADVISORY : Wildland Fire Smoke - Employee Exposure and Health



Wildland Fire Smoke - Employee Exposure and Health.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/22/2010

SUBJECT : SAFETY ADVISORY : CACHE MEMORANDUM NO.10-3 - Non Compliant Fuel Bottles



Cache Memorandum No. 10-3 - Non Compliant Fuel Bottles.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 12/21/2010

SUBJECT : SAFETY ADVISORY : Rhabdomyolysis Epidemiological Study



Rhabdomyolysis Epidemiological Study.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 02/04/2011

SUBJECT : SAFETY ADVISORY : 2011 Wildland Fire Safety Training Annual Refresher (WFSTAR)



WFSTAR 2011.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 03/28/2011

SUBJECT : SAFETY ADVISORY : Draft MTDC Tech Tip - Bullard Hard Hats

Below is the link to the latest draft MTDC Tech Tip for issues regarding some certain large sizes and brim styles of Bullard hard hats. To open document, click on the link below and then go to "View HTML" to open the Tech Tip.

http://fsweb.mtdc.wo.fs.fed.us/php/library_card.php?p_num=1151%202316



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 05/12/2011

SUBJECT : SAFETY ADVISORY : Rhabdomyolysis Epidemiological Study Results and Recommendations

May 10, 2011

Rhabdomyolysis Epidemiological Study Results and Recommendations

In December of 2010, the NWCG Risk Management Committee (RMC) requested a study, called an EPI-AID, through the Centers for Disease Control and Prevention (CDC). Since this type of study involves risk factors unique to a work environment, the National Institute for Occupational Safety and Health (NIOSH) provided technical assistance.

The CDC and NIOSH completed their case study and below is a summary of their conclusions and recommendations.

Rhabdomyolysis is the breakdown of muscle fibers resulting in the release of muscle contents (myoglobin) into the bloodstream. These releases can cause multiple symptoms and if left undiagnosed, can lead to kidney and muscle damage, and in rare cases results can be fatal.

The CDC Study concludes that the 10 cases of rhabdomyolysis they studied among wildland firefighters occurred during or close to either physical training or actual fire response activities involving high levels of physical exertion, often carrying heavy packs. Despite carrying the prescribed water supplies, dehydration played a significant role in over half the cases. Lack of acclimatization, use of medications or dietary supplements such as creatine, as well as caffeine intake, and other health conditions such as upper respiratory tract infections and flu-like

illnesses also were likely contributing factors.

The 10 firefighters varied in age, type of wildland firefighter unit, assignment geography, symptoms, and outcomes. In half of the cases symptoms started on the first day of training, a new crew assignment, or the first day after completion of a fire response. The time between symptom onset and reporting of symptoms to supervisors varied from 30 minutes to 2 days. The time between symptom onset and arrival to a medical facility varied from 1 hour to 6 days. Five firefighters experienced disability for at least 3 months following discharge, and three of these have permanent disability.

In some cases, firefighters' personal ethic to "tough it out" led to delays in reporting symptoms to supervisors. Lack of knowledge about rhabdomyolysis contributed to delays in reporting and diagnosis of symptoms, which led to delays in medical treatment. In a third of the cases, there were delays in diagnosis or missed diagnosis of the condition by health care providers.

Based upon medical literature research and this study, the following are some key recommendations provided by CDC and NIOSH (the full case study report can be viewed on the RMC website at: <http://www.nwccg.gov/branches/pre/rmc>):

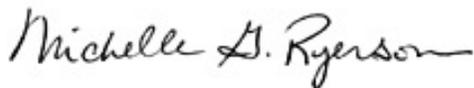
- 1) Provide the wildland fire community and health care providers with education materials as created by the CDC and NIOSH (**attached**).
- 2) Instruct those with signs or symptoms of rhabdomyolysis (or those accompanying the ill patient) to remind their healthcare provider that they are at risk of this condition due to the nature of their work and to ask for a blood test that identifies Creatine Kinase (CK) level.
- 3) Build flexibility into physical training programs for significant changes in weather. When ambient temperatures are much warmer than normal for the geographic area that firefighters are accustomed to working in, supervisors should increase the frequency of scheduled hydration breaks, and decrease weight of packs and gear carried in early part of training season.
- 4) Consider redesigning physical training program schedules to maximize physical conditioning safely. This may include redesigning of training schedule to allow a gradual increase of physical exertion rather than having the period of maximal physical exertion fall on the first few days of training. Also, use longer duration, submaximal exercise routines instead of repetitive exhaustive exercise routines. (FireFit offers a well rounded wildland firefighter fitness program: www.nifc.gov/Firefit)
- 5) Ensure new and returning firefighters are in good health and have

completed off season conditioning prior to engaging in rapid strenuous training routines.

The RMC's focus is on prevention and rapid medical response. We encourage these recommendations be implemented at the field level and the provided education materials are widely distributed and posted in common areas and provided to healthcare providers when firefighters seek medical care for heat/overexertion related medical conditions. Other longer term recommendations are being vetted through the RMC for consideration.

In addition to your agency-required illness and injury reporting system, please report any cases of rhabdomyolysis through the SAFENET system <http://safenet.nifc.gov/> so that these events can be tracked and we can improve trend tracking and mitigations. The ISUITE Injury/Illness module should also be utilized during large incidents so that incident related injuries and illnesses can be better tracked.

If you have questions or comments, please contact your agencies RMC representative (<http://www.nwcg.gov/branches/pre/rmc/contactus.htm>).



Michelle G. Ryerson
RMC Chair



rhabdo2_3-25-11v2_nwcg_sm.pdf



rhabdo1_3-24-11_wildlandFF healthcare providers_nwcg_sm.pdf



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 05/17/2011
SUBJECT : SAFETY ADVISORY : Implementation of New SAFENET Field Card



SAFENET_Field_Card_Memo_May_2011.pdf SAFENET_Field_Card_03_15_2011.pdf



Risk Management

Committee



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 09/13/2011

SUBJECT : SAFETY ADVISORY : Hyperthermia



Safety Alert_Hyperthermia_09_13_11.pdf



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 01/27/2012
SUBJECT : SAFETY ADVISORY : 2012 Wildland Fire Safety Training Annual Refresher



2012 Wildland Fire Safety Training Annual Refresher.doc



Risk Management

Committee



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/24/2012

SUBJECT : SAFETY ADVISORY :





TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/16/2001

SUBJECT : SAFETY BULLETIN :30 Mile Fire Fatality Investigation

The attached document is the 72 hour brief for the Thirtymile Fire Fatality Investigation .



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 09/28/2001

SUBJECT : SAFETY BULLETIN : Thirtymile Fire Debrief

This is a debrief for the entrapment and fatalities that occurred July 10, 2001 at the Thirtymile Fire on the Okanogan National Forest. The intent of this bulletin is to provide local units with a training tool for safety discussion and accident prevention (see attached document). A narrative with these same discussion points and the incident time line with links to maps and photos can be accessed at this web site : www.fire.blm.gov/training/main.html

The Thirtymile Fire Investigation Report was issued on September 26, 2001. The entire report and other related documents can be accessed at this web site: www.nifc.gov



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/11/2001

SUBJECT : SAFETY BULLETIN : Okanogan Fatalities

The following attachment provides information involving the 30 Mile Fire fatalities on the Okanogan National Forest.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/13/2001

SUBJECT : SAFETY BULLETIN : Fish Fire Deployment 24 Hr Report

The attached 24 Hour Report describes the deployment event that occurred on the Fish Incident, Carson City Field Office-BLM.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/20/2001

SUBJECT : SAFETY BULLETIN : 72 Hr Report - Fish Fire Deployment

Attached is the 72 Hr Report for the Fish Fire Deployment Investigation.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 09/05/2001

SUBJECT : SAFETY BULLETIN : 9/3 Fire Fatality

Following Monday's fatality, the US Forest Service released the attached news bulletin.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 11/21/2001

SUBJECT : SAFETY BULLETIN : Preliminary Report - Daddy Ridge Fire

Attached is the preliminary report of the recent fatality at Daddy Ridge fire , near Crawford, TN. It covers the basic information and key elements of the incident.

John E. Gould
Fire and Aviation Safety Specialist
BIA/NIFC
(208) 387-5177



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/16/2001

SUBJECT : SAFETY BULLETIN : Virginia Lake Entrapment 24 hr Brief

Attached is the 24 hour brief from the Virginia Lake entrapment investigation team.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 09/28/2001

SUBJECT : SAFETY BULLETIN : Thirtymile Fire Debrief

This is a debrief for the entrapment and fatalities that occurred July 10, 2001 at the Thirtymile Fire on the Okanogan National Forest. The intent of this bulletin is to provide local units with a training tool for safety discussion and accident prevention (see attached document). A narrative with these same discussion points and the incident time line with links to maps and photos can be accessed at this web site : www.fire.blm.gov/training/main.html

The Thirtymile Fire Investigation Report was issued on September 26, 2001. The entire report and other related documents can be accessed at this web site: www.nifc.gov



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : safeteam@nifc.gov

DATE : 06/05/2001

SUBJECT : SAFETY BULLETIN : Work Capacity Test Medical Incident

Work Capacity Test Medical Incident

On May 1, 2001, a 53-year-old fuel management dozer operator on the Stanislaus NF suffered a heart attack while taking the "pack test". He was about 1/3 of the way through the test when he sat down because he wasn't feeling well. On-site personnel activated their test medical plan and provided treatment as his condition deteriorated. The employee was transported by air to an advanced medical facility where he underwent successful quadruple by-pass surgery the next morning. He is presently recovering at home.

The employee was taking the "pack test" to satisfy the fitness requirements for Division Supervisor, as he is an assigned member of a Type 1 Incident Management Team. The Region investigated the incident. All indications are the Stanislaus NF and test administrators followed the established protocols for taking and administering the WCT at the arduous level. The employee had filled out an HSQ and was given a medical examination by a doctor under a contract with the Forest. He had adequate time to condition for the test. There were no obvious indicators presaging an existing heart condition.



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 06/07/2002
SUBJECT : SAFETY BULLETIN : 5/31 Pack Test Fatality

Pack test fatality notification attached.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/16/2002

SUBJECT : SAFETY BULLETIN : 24 and 72 Hour Reports - Missionary Ridge Fatality of July 2, 2002

Attached are the subject reports.

-ed-

Ed Hollenshead
National Wildland Fire Operations Safety Officer
USDA Forest Service

National Interagency Fire Center
3833 S. Development Ave.
Boise, ID 83705-5354
Voice: (208) 387-5102



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/18/2002

SUBJECT : SAFETY BULLETIN : East Marble 24 and 72 Hour Reports

Attached are the 24 and 72 Hour Reports for the East Marble fire on the Ute Mountain Ute Indian Reservation.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/07/2002

SUBJECT : SAFETY BULLETIN : 24 Hr Report - PUMPHOUSE FIRE SHELTER DEPLOYMENT INVESTIGATION

Please see the attached, subject report.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/07/2002

SUBJECT : SAFETY BULLETIN : Engine #11 / Stanza Fire 24 and 72 Hour Reports

Please see the attached, subject reports.

-ed-

Ed Hollenshead
National Wildland Fire Operations Safety Officer
USDA Forest Service

National Interagency Fire Center
3833 S. Development Ave.
Boise, ID 83705-5354
Voice: (208) 387-5102
Fax: (208) 387-5398



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/09/2002

SUBJECT : SAFETY BULLETIN : Tool Box Deployment Investigation - 72 hour Report

Please see the attached.

Ed Hollenshead
National Wildland Fire Operations Safety Officer
USDA Forest Service

National Interagency Fire Center
3833 S. Development Ave.
Boise, ID 83705-5354
Voice: (208) 387-5102
Fax: (208) 387-5398



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 09/12/2002

SUBJECT : SAFETY BULLETIN : Leona Incident Entrapment and Burnover

Engines were attempting structure protection near the area of origin during Initial Attack.

A note from Charlie Gripp, Region 5 (FS) Fire Operations Safety Officer:

"Taking the time to discuss and verify safety procedures, as done here, before something happens means there is less opportunity for people to be caught unprepared. There were no injuries, only blistered varnish on a ladder and some melted plastic on the exterior control panel. I can't stress enough as we approach the wind event season in SoCAL that most fire behavior has been exceeding expected/usual characteristics for all aspects of the incident (location, slope, fuel, aspect, time, etc). We shouldn't be surprised or caught off-guard, we need to pay attention to all of our predictive sources. Most of our safety "incidents" of note in CA are still revolving around some aspect of structures within the wildlands. Remember houses can sprout up/grow back if burned, generally bigger and better. Be safe. Be aggressive. Be around for Xmas. Please distribute."

-ed-

Ed Hollenshead

National Wildland Fire Operations Safety Officer

USDA Forest Service

National Interagency Fire Center

3833 S. Development Ave.

Boise, ID 83705-5354

Voice: (208) 387-5102

Fax: (208) 387-5398



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 12/06/2002

SUBJECT : SAFETY BULLETIN : Drip Torch Safety

The incident relayed in the attached report could have been much worse. As with many accidents and injuries, this one could have been prevented by adhering to established safety practices.

MTDC is planning to develop and proffer a Tech Tip on proper maintenance and use of drip torches in the near future.

-ed-

Ed Hollenshead
National Wildland Fire Operations Safety Officer
USDA Forest Service
National Interagency Fire Center
3833 S. Development Ave.
Boise, ID 83705-5354
Voice: (208) 387-5102
Fax: (208) 387-5398



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 04/29/2003

SUBJECT : SAFETY BULLETIN : Work Capacity Test Fatality

The North Carolina Division of Forest Resources suffered a fire fighter fatality Monday , April 28, 2003. The victim was a 41 year old male, who has been a full time employee of the North Carolina Division of Forest Resources for the past eleven years.

The incident occurred after the Work Capacity Test (Pack Test) had been completed. The individual was attempting the arduous level of the test, and had completed 2.5 miles when labored breathing prompted him to stop. He indicated that he had some upper chest congestion, and was coughing as a result. After a short rest the individual elected to continue walking the course without the weighted pack .

Approximately 15 minutes after completing the walk the subject collapsed . Medical assistance was initiated immediately, with subsequent transport to NC Memorial Hospital at Chapel Hill , where the subject was pronounced dead at approximately 1230.

A Critical Incident Stress debriefing will be conducted for those personnel on the scene .

The North Carolina Division of Forest Resources , along with NC Department's of Labor and Insurance, are in the process of conducting an investigation into the cause of the incident .

The Division will make any additional information available through the normal means of notification .



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 05/13/2003

SUBJECT : SAFETY BULLETIN : 5/11/03 Shelter Deployment

The attached briefing paper outlines the initial factual information regarding last Sunday's shelter deployment on the Coronado NF.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 05/19/2003

SUBJECT : SAFETY BULLETIN : Prescribed Fire Burnover

The attached are the 24 and 72 hour reports from the Sawtooth Prescribed Fire Burnover investigation .



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/28/2003

SUBJECT : SAFETY BULLETIN : Cramer 24 Hour Briefing

Please see the attached 24-hour briefing regarding the Cramer Fire fatalities.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/28/2003

SUBJECT : SAFETY BULLETIN : Cramer 72 Hour Final Report

Please see the attached 72-hour final report on the Cramer fire fatalities.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/28/2003

SUBJECT : SAFETY BULLETIN : July 26 Helicopter Accident

The attached is a news release from a Helicopter accident that occurred at Whiteriver Arizona . This accident resulted in the fatalities of a firefighter and the pilot of the aircraft .



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/28/2003

SUBJECT : SAFETY BULLETIN : July 25th Helicopter Accident

The attached is a news release from a helicopter accident that occurred near Keller, Washington. This accident resulted in the death of the helicopter pilot.



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 05/17/2004
SUBJECT : SAFETY BULLETIN : 24 Hour Report - Mailbox Fire Fatality - FL

----- Forwarded by Dick King/WO/USDAFS on 05/17/2004 12:44 PM -----

Attached is the 24-hour Briefing on the Mailbox Incident Fatality.



Mailbox24hrbriefing.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 05/17/2004

SUBJECT : SAFETY BULLETIN : 72-Hour Report - Mailbox Fire Fatality - FL

Attached is the 72-hour brief for the Mailbox Incident Fatality.



Mailbox72hrbriefing.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/06/2004

SUBJECT : SAFETY BULLETIN : 72-Hour Report - Bitterroot Hotshot MVA - 30 June, 2004



72hour_briefing.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 09/01/2004

SUBJECT : SAFETY BULLETIN : Gardiner Ck 72 Hour Report

Attached is the 72 hour report for the Gardiner Creek Incident. Please give it wide distribution within your agency.



Gardiner Creek.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 09/13/2004

SUBJECT : SAFETY BULLETIN : California Firefighter Fatality

The attached notification of a firefighter fatality in California was received this morning , 9/13/04. Please insure it receives wide distribution within your agency .



FirefighterFatality2004.px



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 09/14/2004

SUBJECT : SAFETY BULLETIN : Tuolumne Incident 24 Hour Report

The attached 24 hour report regarding the fatality on the Tuolumne Incident was released today .
Please insure it receives wide distribution within your agency .



Tuolumne 24 hour brief.r



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 09/20/2004

SUBJECT : SAFETY BULLETIN : Tuolumne Fatality - 72 Hour Report and Supporting Documents



72_Hour_Report.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 10/01/2004

SUBJECT : SAFETY BULLETIN : Novato Fire Protection District, Investigation Analysis of the Cedar Fire Incident (October 29, 2003)

A very interesting and insightful report with a number of excellent lessons .

Novato Fire Protection District Cedar Fire Investigation Analysis is available for viewing:

<http://www.novatofire.org/Shared%20Documents/NFD%20Cedar%20Fire%20Report.pdf>



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 10/04/2004

SUBJECT : SAFETY BULLETIN : Grant West Prescribed Fire, 24 Hour Report

Attached is the 24 hour report regarding the fatality on the Grant West Prescribed Fire. Please insure that it receives wide distribution within your agency.



24HrRpt_GrantWestRxFire.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 10/06/2004

SUBJECT : SAFETY BULLETIN : Grant West Prescribed Fire, 72 Hour Report

Please see the attached 72 Hour Report on the Grant West Prescribed Fire Fatality.



72HrRpt_GrantWestRxFire.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 03/17/2005

SUBJECT : SAFETY BULLETIN : Sabine NF Helicopter Incident

Please see the attached 24 Hour and 72 Hour Reports on the helicopter crash with fatalities.



24_hour.doc 72 hour Report.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 04/19/2005

SUBJECT : SAFETY BULLETIN : Holmes Accident Investigation Reports

The National Park Service has released the fatality investigation report, management report and corrective action plan for the Holmes accident. Firefighter Daniel Holmes died on October 2, 2004 when the top of a burning snag fell, striking him on the head resulting in fatal injuries. The reports are available on the web at <http://www.nps.gov/fire>.

Wildland fire personnel are encouraged to review the reports so that lessons can be learned to reduce the chances of similar accidents occurring in the future.



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 08/12/2005
SUBJECT : SAFETY BULLETIN : Appropriate Fluid Intake

Please note correspondence from Dr. Brian Sharkey, MTDC, regarding appropriate fluid intake.

Along with the US Army, we do not recommend lots and lots of water in the heat. Based on our studies we recommend 1/3 to 1/2 of fluid intake be in carbohydrate/electrolyte drinks (sports drinks), and that FF drink a quart of fluid each hour of work. The electrolytes help avoid losing lots of fluid in urine.

Too much water could lead to hyponatremia. The following will be in a coming report.

Hyponatremia – Excess water intake (water intoxication) can lead to a disturbance in fluid-electrolyte balance and an abnormally low level of plasma sodium (under 135 mmoles/liter). The risk is more pronounced during long-duration exertion in the heat, in events like the marathon, Ironman triathlon, and prolonged work (wildland firefighting, military). When excess water intake is combined with loss of sodium in sweat the risk grows (sodium loss for a participant in the Ironman triathlon could approach 1 gram per hour of a 12 hour event). A moderate decline in plasma sodium may cause gastrointestinal symptoms or nausea. A more pronounced drop may cause unusual fatigue, confusion, disorientation, throbbing headache, vomiting, wheezy breathing, swollen hands and feet. Seizures, coma, and death are possible at very low levels (below 120 mmoles/liter).

Those at greatest risk are small, slower athletes, those who sweat a lot and those who lose lots of salt, drink lots of water before and during the event, and fail to replace electrolytes, especially sodium. A small body means it takes less water to dilute body fluids, and a slow athlete spends more time on the course. Twenty-six cases were found during several San Diego marathons, and average finishing time was 5 hours and 38 minutes.

Nine US Marine recruits experienced hyponatremia on the same day, drinking 10 to 22

quarts of water over a few hours of exertion. All survived after emergency treatment (Military Medicine, 2002).

You can drink too much water!

Hyponatremia – Sodium is available in fire camp meals, but it may not be sufficient during extremely hot weather. To avoid hyponatremia include carbohydrate/electrolyte (sport) drinks or put electrolytes (especially salt) in water to ensure sodium intake.

- Drink half a quart of fluid (water and sport drink) 2 to 3 hours before exertion in the heat.
- Drink a pint of fluid (water and sport drink) 10 to 20 minutes before exercise
- Replace fluids lost in sweat by drinking 6 to 12 oz of fluid (water and sport drink) every 15 to 20 minutes during exertion
- During meals, long breaks and after exertion replace fluids to restore fluid balance, electrolytes, and carbohydrates.

Our advice for wildland firefighters: consume a quart (liter) of fluid (water and sport drink) for each hour of work in the heat. We recommend you use sport drinks for 1/3 to 1/2 of fluid needs (see issue #8 of this report on the MTDC web page).

When hyponatremia is suspected, provide electrolyte fluids – not water.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 04/14/2006

SUBJECT : SAFETY BULLETIN : New Holland Entrapment 24 Hr Report

The attached 24 Hour Report describes the entrapment event that occurred on the New Holland Incident, Lake Andes National Wildlife Refuge Complex - FWS.



24 hr entrapment report.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 04/17/2006

SUBJECT : SAFETY BULLETIN : New Holland Incident 72 Hour Report



72-hour_Briefing.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 04/19/2006

SUBJECT : SAFETY BULLETIN : Sabine Entrapment 24 hr Report

As many of you are aware, there was an entrapment, and subsequent shelter deployment during a prescribed fire operation on the Sabine NF in TX on Monday, the 17th of April. Attached is the 24 Hr. Report. An Investigation Team has been identified and is in route to TX. The individual (a BLM employee on detail to TX) sustained some 1st and 2nd degree burns to his hands and thigh. He was transported to LSU Medical Center in Shreveport, LA where he was treated and later released. Please use this information as an opportunity to remind all employees who participate in fire suppression or prescribed fire activities to remain cognizant of the inherent dangers of firefighting. The 72 hour report will also be sent as a Safety Bulletin when it is released.



Sabine Entrapment 24 Hr Report.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/07/2006

SUBJECT : SAFETY BULLETIN : 24 Hour Accident Report -- Big Draw Fire



24 hour reportTPeters.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/10/2006

SUBJECT : SAFETY BULLETIN : 72 Hour Report for Scorpio Fire



72 hour report.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/16/2006

SUBJECT : SAFETY BULLETIN : Sawtooth Entrapment 72 Hr Report

The attached 72 Hour Report describes the entrapment events that occurred on the Sawtooth Fire, a multi jurisdictional incident in Southern California .



Sawtooth Complex Green Sheet_72 Hour Report.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/21/2006

SUBJECT : SAFETY BULLETIN : Little Venus Entrapment 24 Hr. Report

The attached 24-hour report describes the entrapment event that occurred on the Little Venus Fire, Shoshone National Forest, Wyoming.



24 hour report.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/24/2006

SUBJECT : SAFETY BULLETIN : Little Venus Entrapment 72 Hr. Report

The attached 72-hour report describes the entrapment event that occurred on the Little Venus Fire, Shoshone National Forest, Wyoming.



Little Venus Fire Expanded 72 Hour Briefing.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/28/2006

SUBJECT : SAFETY BULLETIN : 24 Hour Preliminary Report for New York Peak Fire



24 Hour Preliminary Report for New York Peak Fire.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/31/2006

SUBJECT : SAFETY BULLETIN : Expanded (72 Hour) Report for the New York Peak Fire



72 hr report_New York Peak Fire.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/09/2006

SUBJECT : SAFETY BULLETIN : Final Raft River Fire 72 Hour Briefing



Raft River 72 hour report.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/18/2006

SUBJECT : SAFETY BULLETIN : 24 Hour Report E 2421 Motor Vehicle Accident



24 Hour- E2421.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/18/2006

SUBJECT : SAFETY BULLETIN : 24 Hour Report- Elko BLM Engine Rollover Accident



24 hour report- Elko BLM Engine Rollover Accident.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/18/2006

SUBJECT : SAFETY BULLETIN : Expanded (72 Hour) Report, Balanced Rock Rollover



Twin Falls District Offic2.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/21/2006

SUBJECT : SAFETY BULLETIN : Devil's Den Fire 24 Hr. Report

The attached 24-hour report describes the event that occurred on the Devil's Den Fire, Fishlake National Forest, Utah.



Devil's Den 24hour-report.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/21/2006

SUBJECT : SAFETY BULLETIN : Final 72 Hour Report - Devils Den



Devils Den 72 hour OSOH_OFA version2.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/21/2006

SUBJECT : SAFETY BULLETIN : Extended 72 Hour Report - Engine 1949 Rollover



Dixon 72 Hour Report.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/25/2006

SUBJECT : SAFETY BULLETIN : 24 Hour Report - Mudd Incident



24 hour deployment inc v2.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/25/2006

SUBJECT : SAFETY BULLETIN : 24 Hour Report - Burned up Engine



24 Hour Report 082306.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/28/2006

SUBJECT : SAFETY BULLETIN : 72 Hour Mudd Fire - Fireshelter Deployment



72 hr Mudd Fire Shelter Deployment v2.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/30/2006

SUBJECT : SAFETY BULLETIN : 24 Hour Report Sailor Cap Incident



24 hour Sailor Cap.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/30/2006

SUBJECT : SAFETY BULLETIN : 72 Hour Report Sailor Cap Incident



72 Hour Sailor Cap.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 09/21/2006

SUBJECT : SAFETY BULLETIN : 24 Hr AI BLM Water Tender 3690



AI 24hr Report water tender 3690 092006.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 09/25/2006

SUBJECT : SAFETY BULLETIN : Pinnacles Incident BLM WT Roll-over 72 Hour Brief



Pinnacles_72hr_Report.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 09/25/2006

SUBJECT : SAFETY BULLETIN : 24 Hr Kern Canyon Roll-over Report



24 Hr KernCanyon.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 09/26/2006

SUBJECT : SAFETY BULLETIN : Expanded (72 Hour) Report, Kern Canyon Rollover



Expanded (72 Hour) Report, Kern Canyon Rollover.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 10/31/2006

SUBJECT : SAFETY BULLETIN : Esperanza 72 Hour Report

Attached is the 72 hour report released Monday by the team investigating the fatalities on the Esperanza Fire in Southern California . Please see that it receives wide distribution within your agency . When available , other investigation documents , specifically the 24 Hour Report and the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for reviews and investigations (<http://www.wildfirelessons.net/Reviews.aspx>).



Esperanza 72 hour report_geo_10_30_2006_2.rtf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 11/13/2006

SUBJECT : SAFETY BULLETIN : Devils Den Fatality Factual Report and "In Memory of Spencer S. Koyle"

The Devils Den Fatality Factual Report and "In Memory of Spencer S. Koyle" is now posted on the NIFC website homepage at:

www.nifc.gov

The purpose for wide distribution of this report is for our fire community to gain knowledge from lessons learned in such tragedies so that we may prevent them from occurring again .



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 01/29/2007

SUBJECT : SAFETY BULLETIN : Motor Vehicle Accident 24 Hour Report

Attached is the 24 hour report released Friday regarding a fatal motor vehicle accident on the Francis Marion National Forest. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the 24 Hour Report and the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for reviews and investigations (

<http://www.wildfirelessons.net/Reviews.aspx>).



preliminary report.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 02/05/2007

SUBJECT : SAFETY BULLETIN : Motor Vehicle Accident 72 Hour Report

The expanded 72-hour report regarding a fatal motor vehicle accident on the Francis Marion National Forest is now posted on the Wildland Fire Lessons Learned Center database for reviews and investigations at the following URL:

http://www.wildfirelessons.net/documents/Witherbee_72Hour_Report.2007.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 05/29/2007

SUBJECT : SAFETY BULLETIN : 24 Hour Report Pender County

Attached is the 24 Hour Report for the burnover accident/investigation which occurred on the Stag Road Fire in Pender County, NC. Please see that it receives wide distribution within your agency. When available, subsequent investigation documents, specifically the 72 Hour Report and the final, Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for reviews and investigations (<http://www.wildfirelessons.net/Reviews.aspx>).



24 Hour Report Pender County 5-24-07.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/05/2007

SUBJECT : SAFETY BULLETIN : Ashley National Forest Vehicle Accident - 24 Hour Report

Attached is the 24 hour report released today regarding a motor vehicle accident on the Ashley National Forest. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the 72 Hour Report and the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for reviews and investigations (<http://www.wildfirelessons.net/Reviews.aspx>).



Ashley Engine rollover 24 hour.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/05/2007

SUBJECT : SAFETY BULLETIN : Tahoe National Forest - Fire Shelter Deployment - 24 Hour Report

Attached is the 24 hour report released 6/29 regarding a fire shelter deployment on the Tahoe National Forest. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the 72 Hour Report and the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for reviews and investigations (<http://www.wildfirelessons.net/Reviews.aspx>).



24 hour Brief Angora shelter deployments.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/05/2007

SUBJECT : SAFETY BULLETIN : Gallatin National Forest - Entrapment - 24 Hour Report

Attached is the 24 hour report released today regarding an entrapment on the Gallatin National Forest. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the 72 Hour Report and the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for reviews and investigations (<http://www.wildfirelessons.net/Reviews.aspx>).



24 Hour Report - Gallatin Madison Arm Fire Entrapments.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/09/2007

SUBJECT : SAFETY BULLETIN : West Basin Fire - Burnover - 24 Hour Report

Attached is the 24 hour report regarding a firefighter burnover on the West Basin Fire, NV. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the 72 Hour Report and the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for reviews and investigations (<http://www.wildfirelessons.net/Reviews.aspx>).



24 Hour Report West Basin Burnover.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/10/2007

SUBJECT : SAFETY BULLETIN : Black Hills National Forest - Shelter Deployment - 24 Hour Report

Attached is the 24 hour report released 7/8 regarding a fire shelter deployment on the Black Hills National Forest. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the 72 Hour Report and the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for reviews and investigations (<http://www.wildfirelessons.net/Reviews.aspx>).



Alabaugh Fire shelter deployment 24 hr.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/10/2007

SUBJECT : SAFETY BULLETIN : Inyo Complex - Shelter Deployments - 24 Hour Report

Attached is the 24 hour report regarding firefighter shelter deployments on the Inyo Complex, CA. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the 72 Hour Report and the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for reviews and investigations (<http://www.wildfirelessons.net/Reviews.aspx>).



Three firefighters injured fighting wildfire.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/20/2007

SUBJECT : SAFETY BULLETIN : Wood Creek Fire - ATV Accident - 24 Hour Report

Attached is the 24 hour report regarding an ATV accident on the Wood Creek Fire. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the 72 Hour Report and the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for reviews and investigations (<http://www.wildfirelessons.net/Reviews.aspx>).



ATV Accident 24hr Report.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/27/2007

SUBJECT : SAFETY BULLETIN : Trapper Ridge Fire - Snag Accident - 24 Hour Report

Attached is the 24 hour report regarding an accident on the Trapper Ridge Fire. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the 72 Hour Report and the final Report, will be posted on the Wildland Fire Lessons Learned Center database for reviews and investigations (<http://www.wildfirelessons.net/Reviews.aspx>).



Trapper Ridge 24 hr.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/27/2007

SUBJECT : SAFETY BULLETIN : Shultz Fire - Tender Rollover - 24 Hour Report

Attached is the 24 hour report regarding a Water Tender rollover accident on the Shultz Fire. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the 72 Hour Report and the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for reviews and investigations (<http://www.wildfirelessons.net/Reviews.aspx>).



WT_5_24_Hour_Report_Letter.rtf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/31/2007

SUBJECT : SAFETY BULLETIN : Ahorn Fire - Shelter Deployment - 24 Hour Report

Attached is the 24 hour report regarding a fire shelter deployment on the Ahorn Fire in Montana. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the 72 Hour Report and the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for reviews and investigations (<http://www.wildfirelessons.net/Reviews.aspx>).



Ahorn Fire 24 Hour Report.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 09/17/2007

SUBJECT : SAFETY BULLETIN : Cascade Complex Combined 24 and 72 hour reports

Attached is the combined 24 and 72 hour report regarding events that occurred on the Cascade Complex. Please see that it receives wide distribution within your agency. An Accident Prevention Analysis is currently being conducted to review these events and derive lessons learned. When available, other analysis documents, specifically the final Report, will be posted on the Wildland Fire Lessons Learned Center database for reviews, analyses and investigations (<http://www.wildfirelessons.net/Reviews.aspx>).



24-72 Cascade.doc



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 09/19/2007
SUBJECT : SAFETY BULLETIN : Pine Fire 72 Hour Report

Attached is the 72 hour report regarding events that occurred on the Pine Fire. Please see that it receives wide distribution within your agency. A review of this accident by an interagency U.S. Forest Service and *CAL FIRE* accident investigation team is ongoing. When available, other documents such as the final Report will be posted on the Wildland Fire Lessons Learned Center database for reviews, analyses and investigations

(<http://www.wildfirelessons.net/Reviews.aspx>).



72 hour Brief_Pine.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 09/24/2007

SUBJECT : SAFETY BULLETIN : Expanded 72 Hour Report - Canebreak Rollover

Attached is the expanded 72 hour report regarding the Canebreak Rollover. Please see that it receives wide distribution within your agency. When available, other documents such as the final Report will be posted on the Wildland Fire Lessons Learned Center database for reviews, analyses and investigations

(<http://www.wildfirelessons.net/Reviews.aspx>).



Expanded (72 hour) report, Canebreak Rollover.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 10/18/2007

SUBJECT : SAFETY BULLETIN : 72 Hour Report - H534 Crew Carrier Rollover

Attached is the expanded 72 hour report regarding the H534 Crew Carrier Rollover. Please see that it receives wide distribution within your agency. When available, other documents such as the final Report will be posted on the Wildland Fire Lessons Learned Center database for reviews, analyses and investigations (<http://www.wildfirelessons.net/Reviews.aspx>).



H534 Crew Carrier 72 hour report.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 04/28/2008

SUBJECT : SAFETY BULLETIN : Preliminary Report - WCT incident - Humboldt CC

This incident is a good reminder to follow your respective agency's work capacity testing (WCT) procedures and ensure that qualified medical personnel are on site.

Thank you,

Michelle Ryerson
Safety & Health Working Team Chair



WCT Incident April 17 2008_Humboldt CC_Preliminary Report.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 06/15/2008

SUBJECT : SAFETY BULLETIN : Indians Fire E-71 Burn Incident Accident 24 Hour Report



Indians Fire E-71 Burn Incident Accident 24 Hour Report.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 06/18/2008

SUBJECT : SAFETY BULLETIN : Expanded 72-hour Briefing of Engine 71 Burn Injuries Indians Fire (Los Padres National Forest) (June 11, 2008)

Attached is the expanded 72 hour report regarding the entrapment/burnover incident on the Indians Fire. Please see that it receives wide distribution within your agency. When available, other documents such as the final Report will be posted on the Wildland Fire Lessons Learned Center database for reviews, analyses and investigations (<http://www.wildfirelessons.net/Reviews.aspx>).



Indians_FireE-71_72hour_Report_Final.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/02/2008

SUBJECT : SAFETY BULLETIN : Firefighter Fatality , Air Ambulance Collision

A wildland firefighter was killed in a private medical helicopter collision while being transported from the Grand Canyon to a Flagstaff, Arizona hospital on Sunday afternoon, June 29, 2008. Five other occupants of the two air ambulances were also killed and one occupant is listed in critical condition. Two responding ground personnel also received minor burns when the wreckage sustained a secondary explosion. Additional responding Forest Service units suppressed the wildfire caused by the crash.

The firefighter was a member of the Chief Mountain Hot Shots, a Bureau of Indian Affairs funded Native American crew based on the Blackfeet Indian Reservation in Browning, Montana. The crew was assigned to the Walla Valley Fire on the North Rim of Grand Canyon National Park.

The firefighter required treatment for a spider bite and was transported the South Rim Helibase by fire helicopter. While being treated at the local clinic he experienced an adverse reaction to the medication and was being transported by a private air ambulance to Flagstaff Medical Center. This helicopter collided with another medical helicopter as they were both on final approach to the Flagstaff hospital.

The accident is being investigated by the National Transportation Safety Board (NTSB).



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/11/2008

SUBJECT : SAFETY BULLETIN : Preliminary 24-hour Briefing of Firefighter Drowning

Location: Kimtu Beach – Trinity River – Approximately one mile northeast from the town of Willow Creek, Ca.

Date of occurrence: July 7, 2008

Time of occurrence: Approximately 1630 Hours

Team leader: Alan Vandiver

Activity: Apparent drowning of a firefighter from a contract wildland firefighting company from Merrill, Oregon.

Mission: Rest and Recuperation

Number of fatalities: One



24 Hour Notification Firefighter Drowning.doc



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 07/29/2008
SUBJECT : SAFETY BULLETIN : Panther Fire - 24 Hour Report

Attached is the 24 hour report regarding a firefighter fatality on the Panther Fire in California. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the 72 Hour Report and the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for reviews and investigations (<http://www.wildfirelessons.net/Home.aspx>).



Panther 24 hour.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/29/2008

SUBJECT : SAFETY BULLETIN : Eagle Fire, Iron Complex - 24 Hour Report

Attached is the 24 hour report regarding a firefighter fatality on the Eagle Fire, Iron Complex in California. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the 72 Hour Report and the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for reviews and investigations (<http://www.wildfirelessons.net/Home.aspx>).



24 Hour - Palmer Fatality Iron Complex 07262008.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/22/2008

SUBJECT : SAFETY BULLETIN : Bradley Falls Fire - 24 Hour Report

Attached is the 24 hour report regarding a firefighter fatality on the Bradley Falls fire in North Carolina. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the 72 Hour Report and the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for reviews and investigations (<http://www.wildfirelessons.net/Home.aspx>).



Bradley Falls 24hr Brief.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 04/20/2009

SUBJECT : SAFETY BULLETIN : 72 Hour Briefing on Christian Creek Incident



Christian Creek 72 Hour Briefing.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 05/11/2009

SUBJECT : SAFETY BULLETIN : Preliminary Summary Report (Blue Sheet) 09-CA-LPF-001479 Jesusita Fire

Attached is the Preliminary Summary Report (Blue Sheet) referencing the multiple burnovers and subsequent firefighter injuries involved on the Jesusita Fire in Santa Barbara County. Please provide wide distribution of this document for the purposes of discussion and Tailgate Safety Session.



Preliminary Summary Report (Blue Sheet) 09-CA-LPF-001479 Jesusita Fire.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 06/29/2009

SUBJECT : SAFETY BULLETIN : Expanded (72 Hour) Report, Freeman Reservoir Fatality

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Fire and Aviation

3833 S. Development Avenue

Boise, Idaho 83705-5354

72 Hour Expanded Report

June 29, 2009

To: Assistant Director, Fire and Aviation

Subject: Expanded (72 Hour) Report, Freeman Reservoir Fatality

THE FOLLOWING INFORMATION IS PRELIMINARY AND SUBJECT TO CHANGE

LOCATION: Freeman Reservoir Recreation Area, Medicine Bow-Routt National Forest

DATE OF OCCURRENCE: June 26, 2009

TIME OF OCCURRENCE: Approximately 1630

TEAM LEADER: Sue Richardson, BLM

ACTIVITY: Chainsaw Training

NUMBER OF INJURIES: 0

NUMBER OF FATALITIES: 1

PROPERTY DAMAGE: None

NAME OF FATALITY VICTIM: **Brett Stearns**

NARRATIVE: On June 26, 2009, Bureau of Land Management engine crews from Northwest Colorado Interagency Fire Management Unit were conducting a chainsaw training field exercise. The field exercise was at the Freeman Reservoir Campground on the Hahns Peak/Bear Ear Ranger District of the Medicine Bow-Routt National Forest. The crews were divided into four separate saw training teams working in four different areas around the campground. At approximately 1630 hours, one of the teams, consisting of one instructor and two trainees, were felling a large dead aspen tree. When the tree began to fall, it got hung up in between two other aspen trees. In the process of freeing the tree, it broke in half and the top portion fell backwards and struck the sawyer. The sawyer, Brett Stearns, was killed. He was an engine captain for the BLM, stationed at the Little Snake Field Office in Craig, Colorado.

Action Taken to Date: On June 27, 2009, a national Serious Accident Investigation Team (SAIT), with interagency representation, was assembled at the Little Snake Field Office in Craig, Colorado.

On June 28, 2009, the SAIT conducted an agency administrator's in-brief with the Little Snake Field Office. After the in-brief, members of the SAIT were briefed by the local sheriff, who is investigating the accident.

Members of the SAIT traveled to the accident scene and were briefed by a saw team member who was at the site shortly after the accident. Two SAIT technical experts remained at the site until late afternoon.

Interviews with the crew members, who have been on administrative leave for two days, and preparation for an OSHA representative visit are being scheduled.

The SAIT out-brief with the local unit is tentatively scheduled for late afternoon Thursday, July 2, 2009.

/s/ Sue Richardson
SAIT Team Leader

cc:
BLM Safety Chief, WO-740
Fire and Aviation Safety Manager, FA-300
Official Case File, WO-740



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/14/2009

SUBJECT : SAFETY BULLETIN : 72 Hour Logging Slash Burn Injury Report



Logging Slash Fire 72 hour report.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/24/2009

SUBJECT : SAFETY BULLETIN : 24hr / 72-hour Preliminary Briefing, Backbone Fire Heli-well Accident, Six Rivers National Forest (July 17, 2009) / 24 Hour Notification Firefighter Fatality

72-hour Preliminary Briefing, Backbone Fire Heli-well Accident, Six Rivers National Forest (July 17, 2009)

http://fsweb.r5.fs.fed.us/program/safety/corner/72hour/Preliminary_72hour_Briefing,%20Backbone_Fire_Heli-well_Accident.doc

24 Hour Notification Firefighter Fatality

http://fsweb.r5.fs.fed.us/program/safety/corner/24hour/24Hour_Notification_Firefighter_fatality.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/24/2009

SUBJECT : SAFETY BULLETIN : 24hr / 72-hour Preliminary Briefing, Backbone Fire Heli-well Accident, Six Rivers National Forest (July 17, 2009) / 24 Hour Notification Firefighter Fatality (RESEND)

Many could not access the Forest Service links , so here are the two briefing documents.



Preliminary_72hour_Briefing,%20Backbone_Fire_Heli-well_Accident[1].doc



24Hour_Notification_Firefighter_fatality[1]_Backbone_Fire_Heli-well_Accident.doc



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 08/05/2009
SUBJECT : SAFETY BULLETIN : Muddy Creek 24 Hour Report

United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Oregon/Washington State Office
333 SW First Avenue
Portland, Oregon 97204

**24 Hour Preliminary Report
Incident with Potential**

August 4, 2009

THE FOLLOWING INFORMATION IS PRELIMINARY AND SUBJECT TO CHANGE

LOCATION: Prineville District - mixed ownership lands with private and BLM approximately 5 miles SW of Clarno Oregon

DATE OF OCCURRENCE: August 3, 2009

INCIDENT TIME: approximately 1630

RESOURCES INVOLVED: 1 AFMO, 1 T4 engine, 1 T6 hummer, and 1T6 engine

ACTIVITY: Fire Suppression

NUMBER OF INJURIES: 0

NUMBER OF FATALITIES: 0

PROPERTY DAMAGE: None

NARRATIVE: Resources were burning out a road that was improved by a dozer. Around 1730 winds increased significantly producing rapid rates of fire spread. When leaving the area, the engines encountered thick smoke along the dozer line and were unable to progress further down their escape route. The T 4 engine continued until it had secure black to drive into, the AFMO and remaining two engines fired out a grassy flat and parked the vehicles in the black as the main fire burned around them. There were no injuries or damaged equipment.

The State and District have opted to perform a Lesson Learned Review. A Lesson Learned Review Team is enroute to the district and will begin a review of the incident beginning August 5, 2009 at 0930.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/07/2009

SUBJECT : SAFETY BULLETIN : Muddy Creek Near Miss Incident 72 Hour Expanded Report

United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Oregon/Washington State Office
333 SW First Ave
Portland, Oregon 97204

Muddy Creek Near Miss Incident
72 Hour Expanded Report

August 7, 2009

THE FOLLOWING INFORMATION IS PRELIMINARY AND SUBJECT TO CHANGE

LOCATION: Prineville District - mixed ownership lands with private and BLM

DATE OF OCCURRENCE: August 3, 2009

INCIDENT TIME: approximately 1630

RESOURCES INVOLVED: 1 AFMO, 1 T4 engine, 2 T6 Engines, 2 Land Owners

ACTIVITY: Fire Suppression

NUMBER OF INJURIES: 0

NUMBER OF FATALITIES: 0

PROPERTY DAMAGE: None

NARRATIVE:

The Muddy Creek Fire was started by lightning on August 1, 2009. The fire was located on private lands outside of Bureau of Land Management (BLM) fire protection.

On August 2, the Prineville District staff began monitoring the fire to assess threats against BLM protected lands. On August 3, 2009, BLM staff made a decision to engage the fire on a limited basis with three engines and leadership. Tactics included using indirect line to burn out and hold along Robinson Ridge. During this initial burning period, fire behavior increased to the point that the primary escape routes became compromised and the advancing fire front threatened the location of the engines and command vehicle. This occurred as the engines and the command vehicle were moving down the line (out of the fire area using one of two escape routes). In addition, there were two landowner representatives on ATVs moving with the BLM group.

Muddy Creek Near Miss Incident pg -2

The fire front crossed the escape route as the lead engine was moving through it. This engine found good black and parked. The remaining two engines, command vehicle and ATVs were cut off and moved in the opposite direction to an area that had been previously identified as a potential safety zone. At this point, leadership has recognized that the second escape route has been compromised and the fire front was advancing on their location.

The decision to burn out the safety zone was made and implemented. A black safety zone of at least one acre was produced and the vehicles were parked in it. The main fire front passed around the group and moved past their location. No injuries to personnel or damage to equipment was experienced.

On August 5, 2009, a three person facilitative team performed a Lessons Learned Review with the primary principles involved. A final report will be ready for dissemination through the fire community for intent of organizational learning in the next two weeks.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 11/05/2009

SUBJECT : SAFETY BULLETIN : Stanislaus National Forest, Mi Wok Ranger District Rx Burn Facilitated Learning Analysis

The link below will take you to a Facilitated Learning Analysis report about an accident involving burn injuries sustained by a firefighter who was lightning piles .

http://www.wildfirelessons.net/documents/Mi_Wok_FLA.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 12/01/2009

SUBJECT : SAFETY BULLETIN : Dark Ridge 24 Hour Report



Updated_Dark_Ridge_24Hour_Report.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 12/03/2009

SUBJECT : SAFETY BULLETIN : 72 Hour Report - Dark Ridge Felling Accident



72 Hour Report-Dark Ridge Felling Accident.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 03/15/2010

SUBJECT : SAFETY BULLETIN : 24 and 72 Hour Reports - National Park Service, New River Gorge Work Capacity Test



NERI 24 Hour Report.doc NERI 72 hour report.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 04/21/2010

SUBJECT : SAFETY BULLETIN : Birthday Fire - Preliminary 24 Hour Report



Birthday_fire 24_hr_report.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 04/26/2010

SUBJECT : SAFETY BULLETIN : Birthday Fire - Preliminary 72 Hour Report



Birthday_Fire 72_hr_report.doc



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/30/2010

SUBJECT : SAFETY BULLETIN : 72 Hour Expanded Final Report - Constantia Fire



72 Hour Expanded Final Report_Constantia Fire.doc

Attached is the 72 hour report for the Constantia Fire non-serious accident investigation. Please see that it receives wide distribution within your agency. When available the final factual report will be posted on the Wildland Fire Lessons Learned Center database for incident reports and lessons learned analysis. <http://www.wildfirelessons.net/Reviews.aspx>



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/16/2010

SUBJECT : SAFETY BULLETIN : 24-Hour Report - Daven Place Fire

Attached is the 24-Hour Report for the Daven Place incident that occurred. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the 72-Hour Report and the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center Database for incident reports and lessons learned analyses at <http://iirdb.wildfirelessons.net/main/Reviews.aspx>



Daven Place Fire - 24-Hour Report.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 02/03/2011

SUBJECT : SAFETY BULLETIN : 72 Hour Report - Smoky Hill Wind Farm Fire Burnover

Attached is the 72 Hour Report for the Smoky Hill Wind Farm Fire Burnover that occurred . Please see that it receives wide distribution within your agency . When available, other investigation documents, will be posted on the Wildland Fire Lessons Learned Center Database for incident reports and lessons learned analyses at <http://iirdb.wildfirelessons.net/main/Reviews.aspx>



72 Hour Report - Smoky Hill Wind Farm Fire Burnover.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 02/04/2011

SUBJECT : SAFETY BULLETIN : Test Group Mail List

My apologies for the intrusion. We are testing the use on mail groups in hope to improve distribution management

Rick Mills
NBC/ITD, Boise ID



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 05/12/2011

SUBJECT : SAFETY BULLETIN : Paynes Bay Fire Accident 24-Hour Report

Attached is the 24-Hour Report for the Paynes Bay Fire accident which occurred on May 6, 2011. Please see that it receives wide distribution withi your agency. When available, other investigation documents, specifically the 72-Hour Report and the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for incident reports and lessons learned analyses: (<http://www.wildfirelessons.net/Reviews.aspx>)



Paynes Bay Fire Accident 24 Hour Report_5-7-11.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 06/22/2011

SUBJECT : SAFETY BULLETIN : FL DOF Serious Incident Preliminary (24 Hour) Report

Attached is the 24-Hour Report for the FL DOF serious incident which occurred. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the 72-Hour Report and the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for incident reports and lessons learned analyses (<http://www.wildfirelessons.net/Reviews.aspx>).



FL DOF Serious Incident Preliminary (24 Hour) Report.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/08/2011

SUBJECT : SAFETY BULLETIN : 24 Hour Notification - Crew Carrier Rollover July 2011

Attached is the 24-Hour Notification for the Hotshot Crew Carrier accident/investigation which occurred. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the 72-Hour Report and the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for incident reports and lessons learned analyses (<http://iirdb.wildfirelessons.net/main/Reviews.aspx>)



24 Hour Notification Crew Carrier Rollover July 2011.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/09/2011

SUBJECT : SAFETY BULLETIN : 24-Hour Report for CR 377 Fatality

Attached is the 24-Hour Report for the CR 377 incident/investigation. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the 72 Hour Report and the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for incident reports and lessons learned analyses (<http://iirdb.wildfirelessons.net/main/Reviews.aspx>)



CR 337 24 Hour Report_Final.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/25/2011

SUBJECT : SAFETY BULLETIN : BIA Diamond Fire-Final 24-Hour Report

Attached is the 24-Hour Report for the Diamond Fire incident/investigation which occurred. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the 72 Hour Report and the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for incident reports and lessons learned analyses (<http://iirdb.wildfirelessons.net/main/Reviews.aspx>)



BIA_Diamond_Fire_24_Hour_Report_Final.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/15/2011

SUBJECT : SAFETY BULLETIN : Coal Canyon Fire Expanded 72-Hour Report

Attached is the 72-Hour Report for the Coal Canyon accident/investigation which occurred. Please see that it receives wide distribution within your agency. When available, the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for incident reports and lessons learned analyses (<http://iirdb.wildfirelessons.net/main/Reviews.aspx>)



Coal Canyon Fire Expanded 72-Hour Report.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/22/2011

SUBJECT : SAFETY BULLETIN : TFS Prelim 24-Hour Report_Bowles Creek Bottom Fire

Attached is the 24-Hour Report for the Bowles Creek Bottom accident/investigation which occurred. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the 72-Hour Report and the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for incident reports and lessons learned analyses (<http://iirdb.wildfirelessons.net/main/Reviews.aspx>)



TFS Prelim 24-Hour Report Bowles Creek Bottom Fire .pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 09/19/2011

SUBJECT : SAFETY BULLETIN : 72-Hour Pagami Creek Entrapment/Fire Shelter Deployment Report

Attached is the 72-Hour Report for the Pagami Creek Entrapment/Fire Shelter Deployment investigation which occurred. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for incident reports and lessons learned analyses (<http://iirdb.wildfirelessons.net/main/Reviews.aspx>)



72-Hour Pagami Creek Entrapment_Fire Shelter Deployment Report.pdf



TO : rm1950@mac.com

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 06/12/2012

SUBJECT : SAFETY BULLETIN : 24-Hour Montezuma Fire Fatality Report

Attached is the 24-Hour report for the Montezuma accident/investigation which occurred. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the 72-Hour report and the final Factual Report, will be posted on the Wildland Fire lessons learned Center database for incident reports and lessons learned analyses

(<http://iirdb.wildfirelessons.net/main/Reviews.aspx>)



Montezuma_Fire_24_Hour_Report_Final.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/25/2012

SUBJECT : SAFETY BULLETIN : Test Only - No Need to Reply

We are in the process of making changes to the Safety Alert System and how information is distributed. We are checking to be sure email addresses are still current, along with some other database system testing. We will send out additional information as things evolve.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/30/2012

SUBJECT : SAFETY BULLETIN : 24-Hour Report/Burn Injury on Ridgetop Fire

Attached is the 24-Hour Report for the Ridgetop Fire accident which occurred. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the 72-Hour Report and the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for incident reports and lessons learned analyses

<http://iirdb.wildfirelessons.net/main/Reviews.aspx>



24 Hour Report_Burn Injury on Ridgetop Fire.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/01/2012

SUBJECT : SAFETY BULLETIN : Expanded 72-Hour Briefing - Ash Creek Wildland Fire ATV Accident

Attached is the 72-Hour Report for a recent All-Terrain Vehicle accident. Please see that it receives wide distribution within your agency. When available, the final Facilitated Learning Analysis will be posted on the Wildland Fire Lessons Learned Center database for incident reports and lessons learned analyses <http://iirdb.wildfirelessons.net/main/Reviews.aspx>



Expanded 72-Hour Briefing - Ash Creek Wildland Fire ATV Accident.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/14/2012

SUBJECT : SAFETY BULLETIN : 24-Hour Report-Holloway Fire Entrapment and Fire Shelter Deployment

Attached is the 24-Hour Report for the Holloway Fire accident which occurred. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the 72-Hour Report and the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for incident reports and lessons learned analyses (<http://iirdb.wildfirelessons.net/main/Reviews.aspx>)



24 Hour Report- Holloway Fire Entrapment and Shelter Deployment .pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/16/2012

SUBJECT : SAFETY BULLETIN : 72-Hour Report- Holloway Fire Entrapment and Shelter Deployment

Attached is the 74-Hour Report for the Holloway accident which occurred. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for incident reports and lessons learned analyses

<http://iirdb.wildfirelessons.net/main/Reviews.aspx>



72-Hour Report Holloway Fire Entrapment and Shelter Deployment.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/20/2012

SUBJECT : SAFETY BULLETIN : 72-Hour Report-Steep Corner Fire-Accident

Attached is the 74-Hour Report for the Steep Corner Fire accident which occurred. Please see that it receives wide distribution within your agency. When available, other investigation documents, specifically the final Factual Report, will be posted on the Wildland Fire Lessons Learned Center database for incident reports and lessons learned analyses

<http://iirdb.wildfirelessons.net/main/Reviews.aspx>



72-Hour Report-Steep Corner Fire-Accident .pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 08/13/2001

SUBJECT : SAFETY WARNING : Heat Intolerance from performance pills

Several recent events have brought to light an evolving problem that could put firefighters at increased risk of heat related injuries. A number of prescription as well as over-the-counter drugs and treatments contain agents that interfere with the body's ability to maintain normal body temperature during work or under conditions of environmental heat stress. Therapeutic agents include drugs such as: diuretics, laxatives, antihistamines, beta-blockers, tricyclic antidepressants, vasoconstrictors and others. This includes such substances as caffeine, ephedrine and creatine, which are often used as additives in performance enhancing supplements.

In a recent incident four firefighters were treated for heat related problems after taking over-the-counter performance enhancers. These "performance supplements" are sold in stores under various names such as yellowjackets, ripped fuel and metabolife (a weight loss supplement). These supplements contain ephedrine or ephedra (ma huang), which react in the body much like amphetamines. Problems with these substances are also being seen in the military and professional sports.

Creatine is a natural substance that is often used by bodybuilders to increase bulk. The downside to this is that it causes the body to retain water in cells so it is not available to dissipate heat.

Caffeine is a diuretic, which tends to increase the flow of urine in the body. This increase of fluid output, if not offset with an increased input can increase dehydration. Coffee, tea, soft drinks and "energy drinks" contain caffeine, which also serves as a stimulant.

If you or any of your employees are taking any drugs or over-the-counter supplements, please consult a physician or pharmacist about possible side effects while working in hot conditions.

So much for what not to do, firefighters are encouraged to use sport (carbohydrate/electrolyte) beverages (Gatorade, Powerade, etc.) which enhance fluid intake, help retain fluid, provide energy, and maintain cognitive and immune function during prolonged work in the heat. And don't forget the water.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 06/15/2001

SUBJECT : SAFETY WARNING : Fire Shelter Alert

Please give this notice wide distribution within the wildland fire community . This is a new fire shelter alert that applies to ALL fire shelters.



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 08/22/2002
SUBJECT : SAFETY WARNING : Failure of Sigg type bottles

Fuel bottles in the field were found to bulge and the crimp holding the threaded plug failed due to excessive pressure. During tests all of the four brands tested failed by splitting out the side of the bottle or at the crimp in two piece constructed bottles. Some bottles failed at relatively low pressures. Pressure is generated by filling the bottle completely to the top and exposing the bottles to temperatures in the 80's.

From the limited testing performed to this point, the following conclusions can be reached:

Emphasis should be placed on making sure that these fuel bottles are not filled beyond the manufacturer's recommended fill line. MSR prints a warning on each bottle specifically stating that overfilling may cause extreme pressures as the temperature rises.

Of the four brands tested,(MSR, Stansport, Primus and Optimus) only the MSR meets the requirements of GSA's IPD for aluminum fuel bottles. The MSR fuel bottle is of one-piece construction and exceeds the 400 psia burst pressure requirement. The other three brands are of two-piece construction and do not meet the minimum burst pressure of 400 psia specified in the IPD.

Although further testing should be done, it appears that the cap seal design of the MSR bottle allows the o-ring seal to fail before the bottle bursts. This allows only a small amount of fuel leakage if the bottle is overpressurized instead of allowing the entire contents of the bottle to escape.



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 09/19/2002
SUBJECT : SAFETY WARNING : Fire Shelter Bag Modifications

The following information is alarming. Please assure your employees, as well as local cooperators and contractors are modifying the tear-strips on as yet un-replaced, old-style fire shelter bags. Thanks...
-ed-
Ed Hollenshead
National Wildland Fire Operations Safety Officer
USDA Forest Service

-----#-----

Ed, I have a concern based on personal observations and on the results of a recent fire shelter deployment investigation. It appears that many firefighters have not modified their old style fire shelter bags by opening the tear strips half way, as required in the safety alert of May, 2001. We have ourselves observed that it is common for firefighters to carry unmodified shelter bags. We found further evidence of this during the investigation this summer of the Toolbox shelter deployment in which a 20- person contract crew deployed their shelters on a safety zone. Inspection of the shelter bags used in this incident indicated that few if any had been modified. Three showed evidence of broken strips. Had this event been more severe, these broken strips could have led to much more serious consequences if they had resulted in a delay in deployment.

Galen McCrae, Chief of Safety for CDF, reported that a recent CDF deployment was so severe and required such a rapid deployment that had there been a problem with the tear strip in that case "we would have been going to a funeral".

I suggest we issue another safety alert and in some way require supervisors to check the fire shelters bags of each of their employees immediately to ensure the bags have been properly modified. I would also recommend that contract inspectors be made aware that contract crews must also comply with the requirement to modify the old-style bags. (They should also be made aware of the Safety Alert released last winter that differentiates between the new and old style bags. The new bags with the red strip around the entire bag do not need to be modified.)

We still have the potential for severe fire behavior in the months before the new fire shelter is made available. I'd hate to see us lose someone because we didn't act on the warning signs.

Please let me know if you have any questions or want to discuss. My phone number is (406)329 -1043.

Leslie Anderson
MTDC





TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/29/2003

SUBJECT : SAFETY WARNING : Primus and Other Fuel Bottles

Please see the attached document which includes a description of a critical issue regarding fuel bottles .
Bottom line?! DO NOT FILL THEM TO THE TOP... LEAVE PLENTY OF ROOM FOR EXPANSION!



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 04/09/2004
SUBJECT : SAFETY WARNING: New Fire Shelter Recall

In mid-March, a SAFENET was submitted describing rips occurring in two new generation fire shelters during deployment training. According to the SAFENET, the tears were in the floor material near the shake handles used to quickly deploy the shelters.

Equipment Specialists at the Missoula Technology and Development Center immediately researched the problem and confirmed that some shelters are tearing near the shake handles during deployment. Tearing occurs when shaking creates stress on the material near the handles. All tears are on the floor material. NO TEARS have been found in the shell material. Forest Service equipment specialists believe the problem is related to the stitch pattern used to attach the shake handles to the seam that joins the shelter floor and shelter shell. The stitch pattern may cause the cloth to tear more easily. During the development of the new generation shelter, shake tests did not reveal a weakness in the original design.

MTDC equipment specialists, in consultation with engineers at the University of Alberta, believe the added risk associated with the potential tearing of the shelter is very small because of the location of the tears on the underside of the shelter. However, interagency fire management leadership and specialists at MTDC are taking immediate action to fix the problem in order to ensure firefighters are provided with a quality product.

Upon notification of the SAFENET and verification of the problem in mid-March, MTDC instructed GSA to have the shelter manufacturers halt production until a remedy to the tearing could be found, and instructed GSA to put a hold on distribution of the shelters currently in stock. MTDC personnel worked with a contractor to develop a solution to the weakness in newly manufactured shelters by reinforcing the floor material adjacent to the shake handles. They also developed a retrofit solution to 'fix' the existing new generation shelters.

GSA and contractors are currently producing the new generation fire shelter design with the reinforced floor section. Fire management agencies will immediately recall existing new generation fire shelters for retrofit. Retrofitting should proceed quickly, at the rate of

approximately 3,000-5,000 per week. Fire caches will not issue the new generation shelter until it has been retrofitted or replaced with units made using the new reinforced design.

The eleven National Fire Caches will act as collection points for shelters requiring retrofit. Instructions for submitting shelters for the recall are being finalized and will be issued next week in a National Cache Memo. Firefighters are advised to wait to return any new style shelters for retrofit until the cache managers are prepared to receive them.

Firefighters should carry the old-style shelter on the fireline until either a new reinforced shelter or a retrofitted shelter is made available. **Further, firefighters carrying the older style shelters should review the training and deployment requirements.**



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 05/24/2004
SUBJECT : SAFETY WARNING: 2004 Fire Season & Aviation Resources

May 21, 2004

To: Geographic Area Coordination Groups
From: National Multi Agency Coordination Group

As we move into the 2004 fire season, all indications are that it will be as severe as the last four. Add the recent announcement that the USDA Forest Service and USDI Bureau of Land Management have terminated the contracts for large fixed-wing airtankers, and it appears to be another tough year for our firefighters on the line. It is a good time to stress that firefighter and public safety is the #1 priority in all firefighting operations, and that regardless of the resources that may or may not be available, the basic rules of firefighting still apply.

Firefighter safety must not be compromised as a result of the loss of our airtanker fleet. As most of us learned early on, tactics should never be dependent on aerial support. As long as firefighters adhere to the Standard Firefighting Orders, maintain situational awareness and mitigate the risks associated with the 18 Watchout Situations, their safety is assured.

To further reinforce firefighter safety in this context of reduced heavy airtanker capability, Agency Administrators and Fire Managers must re-evaluate and, if necessary, modify the strategic and tactical directions they give to Incident Commanders.

The shortage of heavy airtankers may increase the likelihood of emerging fires escaping initial attack, resulting in the need for more firefighters. Recognizing this, it is important that the fatigue of firefighters and support personnel be closely monitored, and that proactive countermeasures to mitigate that fatigue be identified and implemented early in the season.

Agency Administrators and Fire Managers are urged to stress the following points with

firefighters:

- Fight every fire from a solid anchor point, and always ensure the line is secure before moving on.
- If the lack of airtanker support is making control objectives difficult to attain, look for tactical advantages that can be achieved by applying more effort after the burning period (cooler temperatures, higher humidities), and by taking advantage of terrain and fuel breaks.
- Maintain situational awareness and recognize changes in fire behavior that may indicate the need to modify strategy or tactics. Use the Risk Management Process outlined in the Incident Response Pocket Guide (IRPG).
 - Always ensure LCES is implemented.
 - Diligently follow the Standard Firefighting Orders and mitigate for the 18 Situations that Shout “Watch Out”.
- In order to make the most of limited resources, minimize acreage lost through emphasis on aggressive initial attack. Initial attack should remain the top priority for most available aviation resources.
- Always maintain positive communication, and make certain everyone knows and understands the plan.

Remember, the loss of large airtankers gives us one less tool in the toolbox and we must improvise and adapt to that loss. Staying vigilant and consistently applying basic firefighting principles to our operations will ensure that no firefighter will be at greater risk.

Discuss these points with your crews and your fellow firefighters early this season, and keep them in mind as you work through the year. Have a good season.

/s/ Don Artley
Chair, NMAC



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 07/11/2005
SUBJECT : SAFETY WARNING : Failure of Sigg type bottles

Due to recent recurring issues in the field regarding Sigg bottles , we are reissuing the following safety alert notice from 2002.

/s/ Gene Madden,
Chair, Safety and Health Working Team

Fuel bottles in the field were found to bulge and the crimp holding the threaded plug failed due to excessive pressure. During tests all of the four brands tested failed by splitting out the side of the bottle or at the crimp in two piece constructed bottles. Some bottles failed at relatively low pressures. Pressure is generated by filling the bottle completely to the top and exposing the bottles to temperatures in the 80's.

From the limited testing performed to this point, the following conclusions can be reached:

Emphasis should be placed on making sure that these fuel bottles are not filled beyond the manufacturer's recommended fill line. MSR prints a warning on each bottle specifically stating that overfilling may cause extreme pressures as the temperature rises.

Of the four brands tested,(MSR, Stansport, Primus and Optimus) only the MSR meets the requirements of GSA's IPD for aluminum fuel bottles. The MSR fuel bottle is of one-piece construction and exceeds the 400 psia burst pressure requirement. The other three brands are of two-piece construction and do not meet the minimum burst pressure of 400 psia specified in the IPD.

Although further testing should be done, it appears that the cap seal design of the MSR bottle allows the o-ring seal to fail before the bottle bursts. This allows only a small amount of fuel leakage if the bottle is overpressurized instead of allowing the entire contents of the bottle to escape.



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/10/2009

SUBJECT : SAFETY WARNING : DO NOT CONSUME MRE Dairy Shake Powder

DO NOT CONSUME MRE Dairy Shake Powder

The Food and Drug Administration has determined a Minnesota dairy cooperative may have shipped nonfat dry milk (NFDM), fruit stabilizers, whey protein, and gum products potentially adulterated with *Salmonella* sp. to their commercial customers between June 2007 and June 2009. NFDM from this cooperative is known to be an ingredient used by manufacturers in the production of MRE and UGR-E Dairyshake Powder, Fortified with Calcium and Vitamin D.

Facts:

Three manufacturers provide the MREs that we have through the National Interagency Caches, procured through the General Services Administration

- **Ameriquel Packaging**
- **SOPAKO Packaging**
- **The Wornick Company**

Ameriquel MREs that were manufactured on or after April 25, 2008 are GOOD

SOPAKO MREs that were manufactured on or after March 28, 2008 are GOOD

Unknown at this time:

The extent of the Lot Numbers from the manufacturers that may be impacted is still unknown. The Defense Logistics Agency is working toward identifying all potential lot numbers and will post this information to a web site in the near future.

Immediate Action Individuals:

Other than the MREs specifically identified above DO NOT CONSUME the Dairyshake Powder found in some of the MREs. Open the Dairyshake Package and dump the contents into the trash. The rest of the MRE is safe to consume.

Do not open MREs in mass and remove the Dairyshake Powder as this can compromise the shelf life of the remaining items.

Immediate Action National Interagency Caches:

Determine current inventory that is clearly good based on the above MRE dates. Place a sticker on the MREs that include the Dairyshake Powder that should not be consumed stating such. Place a different sticker on the MREs that contain Dairyshake powder that is safe to consume, to alleviate any potential confusion.

The General Services Administration is working through their inventory and determining their stocking of safe-to-consume versus unsafe and will attach a sticker when shipping that they are safe to consume. They will not release any inventory that is not safe.

Upon receipt of additional information concerning specific Lot Numbers by manufacturer the National Interagency Caches will reassess their current inventory to determine if additional MREs are indeed safe concerning the consumption of the Dairyshake Powder. This information will be promptly communicated to the field.

Salmonella is an organism that can cause serious and sometimes fatal infections in young children, frail or elderly people, and others with weak immune systems. Healthy people infected with Salmonella often experience fever, diarrhea (which may be bloody), nausea, vomiting, and abdominal pain. Most healthy people recover from Salmonella infections without treatment. In rare circumstances, infection with Salmonella can result in the organism getting into the bloodstream and producing more severe illnesses, such as arterial infections (infected aneurysms), infection of the lining of the heart, and arthritis.



mre MENU dairyshake highlighted.pdf



TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 07/23/2009

SUBJECT : SAFETY WARNING : Test EMail Distribution List / Please Reply

This should be the final test. It includes the complete list. I will be looking for delivering errors but your reply back will help ensure YOU are getting the alerts.

Thanks

Rick Mills
NBC/ITD (208) 433-5050
rick_mills@nbc.gov



TO :
FROM : National Wildfire Coordinating Group
REPLY TO : NWCG@nifc.gov
DATE : 08/03/2009
SUBJECT : SAFETY WARNING : Pump Refueling Safety Warning

On July 9, 2009, an accident occurred in which a firefighter was burned while checking the fuel level in a jerry can attached to a portable pump. The firefighter sustained 2nd and 3rd degree burns over 20% of his body, but after weeks of hospitalization and often painful treatment he is expected to make a full recovery.

Everyone uses portable pumps. Although one accident of this nature out of the thousands of hours of pump operations each year can be considered a rare event, the fact that it CAN happen is cause for concern. Please follow these mitigations in order to avoid a similar accident in the future:

- When refueling a pump, ALWAYS shut the pump down first.
- Take care to locate fuel cans as far away from hot engine parts as possible. DO NOT set up a pump so that the exhaust from the pump vents directly onto the fuel can.
- When setting up a pump inside a fuel spill containment berm, take special care to orient the pump so that the muffler is as far away from the fuel can as possible and not blowing exhaust directly onto it. Consider placing the fuel can in a separate berm from the one that contains the pump. Makeshift or temporary berms can be made using Visqueen or other non-permeable materials. Additional berms can be ordered through the Cache system (see "Berm, Mark III" in the cache catalog).
- ALWAYS wear appropriate PPE when refueling any piece of equipment. Eye protection and gloves can prevent severe, life-changing injuries.
- Always open the air vent on top of the jerry can when running a pump. Ensure the can is secured if set up on uneven or sloping ground.
- Remember to STOP, DROP and ROLL if your clothing catches fire. Even Nomex clothing will burn if it is saturated with a flammable liquid like gasoline.
- Review and be familiar with the NWCG *Standards for Burn Injuries* : <http://www.nwcg.gov/general/memos/nwcg-012-2008.pdf> or know and follow your respective agency's burn injury protocols.
- Do not operate a radio or any other portable electronic device such as a cell phone while

engaged in fueling operations. The Safety Precautions section of the Bendix-King radio owner's manual states: "Do not operate the radio in an explosive atmosphere (petroleum fuels, solvents, dust, etc) unless your radio is an intrinsically safe model designed for such use".

- Review the accident report, located at http://www.wildfirelessons.net/documents/Logging_Slash_Fire_Accident_Investigation_Report.pdf . Be sure to discuss lessons learned with your crew and co-workers.
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TO :

FROM : National Wildfire Coordinating Group

REPLY TO : NWCG@nifc.gov

DATE : 06/21/2012

SUBJECT : SAFETY WARNING :

TEST
