



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.

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To: Fremont Forest Supervisor Chuck Graham
Lakeview BLM District Manager Steve Ellis
Director of Fire and Aviation, Northwest Region Laurie Perrett
Fire and Aviation Safety Manager, Oregon/Washington BLM Shelby Gales
Subject: 72 Hour Report from the Serious Accident Investigation Team

Date: 7/28/2002

LOCATION: Toolbox/Winter Complex (P-61273), northeastern corner of Division T
Fremont National Forest/Lakeview BLM District
Lake County Oregon
N43 degree 0034.0, W120 degree 473.7
NE 1/4 SW 1/4 Section 35, T29S R16E
(See map)

DATE OF OCCURRENCE: July 24, 2002

TIME OF OCCURRENCE: Approximately 1545; deployment lasted 15-30 minutes according to statements by and interviews with the crew boss for Ferguson 53.

LOCAL AGENCY ADMINISTRATOR OR TEAM LEADER: Susan Giannettino

ACTIVITY: The Pacific Northwest contract 20 person crew, "Ferguson 53", deployed their fire shelters while in an area that had been constructed as a safety zone by a bulldozer (195' by 210' dimensions). They had been working since July 18th on the Toolbox fire Complex, having come to the Toolbox Complex from the Tiller Complex. The deployment lasted about ½ hour according to the Crew Boss who said in his statement "...I ordered the deployment to calm the fears and give protection against the heat".

FATALITIES/ INJURIES/ PROPERTY DAMAGE: There were no fatalities. There was no property damage. Initial radio communication following the deployment indicated there were no injuries. Once the Ferguson 53 crew members walked out to the FS 2901 road and they were met by the overhead and safety personnel, two individuals were treated for minor burns. Later, in camp, these same two individuals were seen by medical personnel. One individual had 1st and 2nd degree burns to an ear and hand and another individual had a small 1st and 2nd degree burn on an elbow. 15 crew members received treatment for a variety of complaints that can be associated with smoke inhalation (chest pain, eye pain, anxiety) according to the medical unit leader trainee. Later that evening, eleven of the seventeen crew members were transported to St. Charles Hospital in Bend where all were treated and released.

ACTIONS TAKEN TO DATE: An Interagency Serious Accident Investigation Team (SAIT) has been mobilized. The team includes specialists trained in investigation of shelter deployments, a chief investigator, a safety specialist, a fire behavior and operations specialist and a team leader.

Members of the SAIT have twice visited the site of the deployment. Photographs have been taken. Interviews and/or witness statements have been provided by over 20 personnel assigned to the fire. The fire shelters and fire resistant clothing have been examined. A preliminary chronology of events has been developed. An incomplete preliminary set of findings that are instructive to an understanding of the incident have been developed and are attached.

Susan Giannettino
Serious Accident Investigation Team Leader

cc:
BLM Safety Manager
Official Case File
Office of Fire and Aviation Safety Manager (if a fire accident)

**Incomplete Preliminary Findings by the Serious Accident Investigation Team
Toolbox Complex
7/24/02 Shelter Deployment Incident**

The Fire Weather Forecast was accurate for the shift conditions experienced.

The Fire Behavior Forecast gave an accurate prediction of fire behavior potentials for the shift.

Active fire behavior, including spotting, negated efforts to fire a dozer line and resulted in a crew having to remain in an established safety zone as other Division T resources disengaged.

A review of the shelters used in the deployment indicates that all of the shelters performed as designed. No heat damage was found on any of the shelters used.

A review of the clothing and contract inspection records indicate that all of the firefighters were equipped with appropriate personal protective equipment and clothing. Examination of the clothing indicated that the clothing performed as designed. Heat damage was limited to a small number of tiny marks, (predominantly smaller than ¼ “ in diameter) where embers apparently came in contact with the clothing.

All the firefighters had received fire shelter training prior to the incident. All firefighters involved in the deployment were reportedly able to deploy their shelters without delay.

The crew boss had the crew deploy shelters to “calm their fears and give protection against the heat”.

The safety zone was adequate to prevent any serious injury but discomfort and minor burns may not have been prevented without the deployment of fire shelters.

The Ferguson 53 crew is a 20 person Type II contract crew based in Albany Oregon. The company is Ferguson Management Company owned by Bruce Ferguson.

The Ferguson 53 crew came to the Toolbox complex from the Tiller complex on 7/17/02 and got out on the fire for the day shift 7/18/02. By 7/24/02, the day of the shelter deployment, the Ferguson 53 crew had been working in Division T, Branch III of the Toolbox Complex for four days.

On 7/23/02 the Ferguson 53 crew received an acceptable performance rating from the outgoing Division Supervisor.

On 7/24/02 the Ferguson 53 crew was inspected by a contract inspector who found the crew to be well organized and the crew boss well prepared for inspection. Her inspection found no issues with the crew.

The contract requirements that the “ crew boss and two squad bosses of every crew shall be able to communicate fluently in English and in any language that crew members use to communicate” were met. The crew boss estimates about ½ of the crew speak English. The crew boss and the three squad bosses speak English and Spanish.

Ferguson 53 crew members had varied experience in fighting fire. For about ten crew members, this was their first season and/or first fire.