United States Department of Agriculture rorest Service

Reply To: 5130

Date: July 28, 1992

Subject: Fire Shelter Deployment Round Lake Incident, 6/11/92

To: Director, Avaition & Fire Management, R-6

On June 11, 1992 a Winema National Forest employee deployed his Fire Shelter while assisting the Oregon Department of Forestry with the Initial Attack of the Round Lake Incident.

Attached to this letter is two copies of the Investigation Summary Report compiled by Don Smith, Unit Forester for the Lakeview Unit, Oregon Department of Forestry.

Please forward a copy of this report to Missoula Technologly Development Center. The fire shelter used in this incident was inadvertently used for training at the Area 4 Basic Fire Training. We are unable to identify the shelter from among the others we use for training. Therefore, we will not be able to furnish the shelter to MTDC for examination.

DOUG BRIGHT Fire Staff Officer



# ROUND LAKE FIRE FIRE SHELTER DEPLOYMENT 6/11/92

# INVESTIGATION SUMMARY REPORT



Compiled by Don Smith, Unit Forester Lakeview

- Narrative Summary Report/ Recommendations.
- Documentation, Letters.
- Interview Notes.
- Fire Area Map.
- Radio Log/etc.
- Ore. Dept. Forestry Directive (1-2-1-001).
- Klamath-Lake District Shelter Policy.
- Memo to State Safety Coordinator, Salem.
- List of persons having knowledge of Incident.

i	SUMMARY REPORT
2	FIRE SHELTER DEPLOYMENT
3 4	ROUND LAKE FIRE 6/11/92 <u>e1430</u> HRS.

During the Round Lake Fire, there was an individual (Dan Fiorito), 5 that had been scouting the west flank of the fire for Div. Grp. 6 Supv. Sam Hescock. Dan Fiorito was out ahead of the personnel on 7 the Division looking at or for spot fires. Dan had accessed this 8 portion of the fire from a cinder road #(210-30). He entered the 9 area at about 1300 hrs. to do the scouting for Sam Hescock Div. 10 Grp.Supv. for that division. The fire according to Dan Fiorito , 11 was holding below that road. Flame lengths observed by Dan were in 12 the 4'-6' range. Dan kept Sam Hescock advised of the conditions in 13 the area, relative to suppression possibilities available for the 14 area above the road. 15

16 Dan Fiorito met with Dan Thorpe sometime shortly after 1330 hrs. to 17 investigate a slop over along the cinder road.

18 Dan Thorpe had agreed with Fiorito that the rocky area where some 19 spot fires were located would need some air support, and that 20 dozers could not do an adequate job in there. This was about 1415 hrs., according to Fiorito's recollection. Dan Thorpe then left the area to monitor another area of the fire action.

23 Dan Fiorito stayed near the spot fires, and directed three 24 retardant drops on the spot fires.

At about 1425 hrs. , the fire had made a move on the west flank. 25 Dan had heard some radio traffic that indicated that there was some 26 identified two Dan had over. slop the 27 line lost below safety/deployment zones near the slop over, the rocky area where he 28 was located, and an old landing to the east about 500 feet. He had 29 identified two escape routes, one to the west around the slop over, 30 and another to the east along a spur road. Dan decided that going 31 up the ridge and out was not an option due to up slope winds and 32 rough terrain. 33

At about this same time, the spot fires that Dan had been looking at began to be more active, and started to pick up and spread. The slop over crossed the control lines, and the area above the cinder road was involved within three minutes.

Fire behavior became very active and erratic, trees were crowning and torching, igniting spot fires further up slope. Dan decided to stay within the rocky area rather than attempt an escape to the west. Dan Fiorito contacted Dan Thorpe and advised him of this decision to remain.

J From the upper portion of the rocky slide area, Dan observed the

fire behavior occurring. Dan Fiorito contacted Rick Dryer and advised him that he was in a safe area and would wait until the fire burned out to leave the area. Dan then moved to the center of the rocky slide as the fire burned through. Dan indicated later that at no time did he feel that he would be burned over or injured by the fire. After the fire had burned past, Dan moved to the bottom of the rock slide area. This was about 1430 hrs..

At this time Dan decided to deploy his Fire Shelter to get some protection from the smoke and ash. He opened the shelter and got inside in a standing position. Dan Fiorito then contacted Dan Thorpe and told him that he was deploying the shelter for protection from the smoke and ashes, and that the fire had passed and he was in a safe location. Dan then said he got under the shelter on the ground.

Dan was in the shelter off and on for about 30 minutes. He said 58 that when smoke and ashes got heavy, he would get under the 59 shelter. He maintained his contact with overhead, drank water as he 60 was in and out of the shelter. Dan did request one retardant drop 61 in his location to cool the area around him. This did not happen, 62 due to heavy smoke, and not being able to pinpoint his location. Rick Dryer came up in a helicopter to recon the area, and was able 63 to find Dan to give directions out of the area to safety. The 64 65 helicopter stayed over Dan until he arrived at a meadow on the northeast side of the fire. Dan arrived at the meadow at about 1515 66 67 hrs. 3

Dan was asked by several people if he was ok, and he said that he was. He indicated that he had deployed the shelter as a matter of comfort to get out of the smoke and ash, not because of fire and heat. Dan then got another fire shelter and returned to the line on the northeast side of the fire. Dan worked the rest of the shift on the fire, and was released at about 0800 hrs. on 6/12/92. 5

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76 77 78	There were several watchout situations that applied to this incident, that Dan Fiorito identified in his report which should be noted.
79 80	1. Fire not scouted and sized up. (This was in the process of when the fire blew up).
81	10. <u>Attempting a frontal assault on a fire.</u>
82	(Taking action on spots ahead of the fire).
83	11. <u>Unburned fuel between you and the fire.</u>
84	(Again, working on the spots and building the secondary
85	line along the spur road above the cinder road).
86	16. <u>Getting frequent spot fires across your line.</u>
87	(An indicator of blow-up conditions).
88	17. <u>Terrain and fuels make escape to safety zones difficult.</u>
89	(This would have been more important if Dan had not taken
90	the time to scout out safety areas and escape routes).

OTHER RECOMMENDATIONS:

Dan Fiorito suggested that when a individual has gone through an entrapment situation similar to this, that there be a person assigned to meet the individual, get him/her to an EMT for evaluation before being allowed to return to the line. The eyes should be flushed, and some oxygen administered to clear the lungs of an increased amount of carbon monoxide also.

98 Comments from the Division Supervisor who Dan Fiorito was 99 working for at the time, included the following; Sam felt that in 100 future he would or should have questioned Dan further concerning 101 his situation.

There were many positive things that happened even though Dan Fiorito was possibly in a position that provided some threat to his person as a result of the active fire front. The overhead personnel maintained contact with Dan throughout the period that he was cut off and while he remained in the rock area. Immediate action was taken to ensure the safety of the individual, and to try to extricate him if possible.

The elements of this incident should provide opportunity to reinforce with all personnel the importance of the Watchout Э 110 Situations, and planning for survival. The use of the shelter in this case provided some protection 111 for the individual from smoke and ash. As reported by Dan Fiorito, 112 it was not deployed for the purpose of protection from heat or 113 114 flames. 115 It is not felt that the individual was placed or did place himself in a more dangerous situation because he had access to use 116 of the shelter. In visiting with several veteran firefighters, 117 there are many similar situations that occur where no shelters are 118 deployed, yet individuals are in areas where they may not be able 119 to leave the fire area at will. In conclusion, Dan could have endured the smoke and ash, 120 121 without too much more discomfort, however, he felt the shelter 122 123 would provide some relief. Attention should be given to training of initial attack crews 124 or other personnel working in similar situations to recognize the 125 126 signs of blowup or entrapment conditions. 127 128

#### SHELTER DEPLOYMENT

### ROUND LAKE FIRE

#### <u>6/11/92</u>

Notes from phone conversation with Dan Thorpe.

Dan Thorpe was working with the initial attack forces on the Round Lake fire, on 6/11/92.

He had been looking at the same area where Dan Fiorito was located also, spot fires, the slop over, and the rocky slide area above the main fire.

Dan Thorpe had been at the Northwest corner of the fire all day. The fire had crossed the red cinder road in the Northwest corner, there was a major move of the fire in that area.

There had been some retardant drops in that area also.

Rick Dryer sent a Cat on the slop over above the red cinder road,Steve "Red" was the operator. Dan Thorpe met Mike Dykseul from Weyco there on the slop over.

Thorpe said the area was burning hot, they were trying to deal with spots from the half acre spot fire. During that time, the Cat worked on 6-10 spot fires in the area.

Thorpe said he hiked uphill and found a spot in the rock slide area.

Thorpe then called Rick Dryer and asked to meet him on the red cinder road. He was asking for intelligence on the upper road. Sam Hescock told Thorpe that Dan Fiorito was in the area. They met and talked about the spur road above the cinder road, and the spot fires in the rocky slide area.

Thorpe left the area and returned down to bottom of the slope. Retardant was shut off in that area because of difficulty in seeing the targets due to smoke.

#### FIRE SHELTER DEPLOYMENT ROUND LAKE FIRE 6/11/92

Notes from Rick Dryer, who was Operations on the incident during the initial attack of the incident.

The fire was burning fairly actively and the wind was gusting up to 20 plus mph. The fire spotted across the road just above the Trailer park. Rick was watching the situation in that area.

Sam Hescock the Div. Supv. in that part of the fire called Rick Dryer and said that Dan Fiorito was in trouble.

Dan had a radio, and was on red net the Tactical frequency being used. Dan kept saying that he was ok.

Every five minutes, contact was nade with Dan to affirm his condition, he kept saying he was ok.

Retardant was used in the area to try to cool the area down where DAn was believed to be. The retardant was not very effective in doing this.

There was a major wind shift that occurred ,the fire burned above DAn on the hill, and was basically burned out below him, His location was about 500 feet above the lower road.

Rick Dryer and John Ketchum went up in Helicopter to look for Dan.

Rick Dryer said they saw Dan with shelter partially unfolded. Maybe folded out about two feet or so.

Dan flagged the area that he was in, and walked out to the meadow. Rick Dryer then asked Dan if he was ok and he replied he was ok.

Dan continued to work on the fire through the night until shift change the following morning.

These notes were taken from interview with Rick Dryer on 6/12/92.



RADIO LOG

DAILY -

;IDENT #\_/// "Round hake" State # 259 FROM MESSAGE TO TIME DATE an attack monte to Kn 6/11 Commed 1424 ETA of 4T 23 1429 1426 Comm hight arder on lighta mind 1427 on coche ri call O.H. Din the fire divise sups; dozen basses and tonight. Lead plane, man tropped on 8103 1433 slope not deployed

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	A. JUN LOWVER had waitlen in Round Lake Fire 6-11-92
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District Policy - Fire Shelters in Klamath-Lake District Page 2

- 2. All personnel sent out of the District will wear their assigned fire shelter unless otherwise instructed by the receiving District or Incident Commander.
- 3. Department employes assigned to the Klamath-Lake District will be provided fire shelters, gloves, belt, and carrying case if they do not already have them. Supervisors will be responsible for obtaining this equipment from the Unit fire caches or Department fire cache van if ordered. Supervisors will also conduct a brief refresher course for move-up personnel, to emphasize safe fireline practices, and ensure that they know how to deploy a shelter if need arises.
- 4. Klamath-Lake District will annually provide use and proper deployment training to all personnel who may be assigned to the fireline.
- 5. All District personnel assigned to line activities will annually receive fire behavior and fireline safety training to promote safe practices on the line.
- 6. Deployment of fire shelters is intended as a last resort. Supervisors will not use fire shelters as a justification for placing fireline personnel in unsafe locations, or taking other undue risks.
- 7. Industry crews, pick-up crews, and ranchers who are outside our regular force will not be issued fire shelters unless they have previously been trained in their use and proper deployment.
- 8. Klamath-Lake District, upon notification, will immediately replace any damaged or deployed fire shelter. The District will annually conduct an "outward appearance" inspection of the shelter, case, gloves, and belt. The District will replace all issued fire shelters on a five (5) year replacement cycle.
- 9. Any time a fire shelter is deployed, the District Forester will notify the Department's Safety Coordinator. In addition, a full report will be filed by the Department's Safety Coordinator, the District Safety Committee Chair, and the Incident Commander. Their report should explore:
  - a. If use prevented any injury or fatality.
  - b. The decisions leading to the need to deploy the shelter.
  - c. If personnel were placed in more dangerous situations because of fire shelters being perceived as a safety backup.

Persons deploying shelters shall write a complete report identifying the situation and circumstances that lead to their entrapment. All reports will be reviewed by the District Forester, and then distributed to the Area Director and the Deputy State Forester. Date: 6-12-92 5:02pm From: MAIL ROOM:Klamath:OSDF To: Dave Sandall:SALEM:OSDF cc: Roy Woo:KLAMATH:OSDF,Bill Hunt:Klamath:Osdf Subj: Fire Shelter Deployment on Round Lake Fire 6/11/92 ا الحب منه الحب المساجعة الحب المساجعة الحب المباد عنه عنه عنه عنه عنه الحب الحب الحب الحب

#### Dave,

This is just a preliminary report informing you of an incident relating. to a Fire Shelter Deployment on the Round Lake Fire Thursday June 11. The incident was not a major type of an incident. Let me elaborate, The person had been scouting for his Division Supv., and was out in front of the group on the line looking for spot fires and looking at spot fires. The wind shifted and the fire burned actively towards his location. He moved to a rock bluff in a safe area, and used his shelter to shield himself from sparks, ashes and smoke. He did not deploy in the sense that he was prone and the fire over ran him.

By definition(FS), this would be a deployment, and all reporting etc. would be done.

Don Smith

# INDIVIDUALS HAVING KNOWLEDGE OF INCIDENT

- 1.Dan Fiorito (Fuels Tech.) USDA Forest Service, Winema N.F. Klamath R.D. 1936 California Ave. Klamath Falls, OR. 97601 Ph. # 883-6824
- 2.Sam Hescock (Division Supv.)
  USDA Forest Service, Winema N.F.
  Chiloquin R.D.
  P.O. Box 357
  Chiloquin, OR. 97624
  Ph. # 783-2221
- 3.Dan Thorpe (Unit Forester) Oregon Department of Forestry SWO District 5286 Table Rock Rd. Central Point, OR. 97502 Ph. # 664-3328
- 4.Rick Dryer (Forest Pract. For.) Oregon Department of Forestry Klamath-Lake District 3400 Greensprings Dr. Klamath Falls, OR. 97603 Ph. # 883-5681
- 5.Alvyn Lawver (Assist. Unit For.) Oregon Department of Forestry Klamath-Lake District 3400 Greensprings Dr. Klamath Falls, OR. 97603
- 6.Dan Benson (Air Attack on Fire) Oregon Department of Forestry Klamath-Lake District 2290 No. 4th. Street Lakeview, OR. 97630 Ph. # 947-3311