

COMMUNICATIONS PLAN

FIRE SHELTER ISSUE

April 8, 2004

Goals:

- Demonstrate the commitment of the Forest Service's MTDC and the interagency firefighting leadership to providing the highest quality products for firefighter safety.
- Effectively communicate a realistic view of the issue with the newer fire shelter and the quick response by the Forest Service and other agencies.
- Effectively communicate the benefits of the newer fire shelter, the plan for retrofitting the existing newer shelters, and the distribution and replacement plan for the newer shelters already in the field.
- Express confidence in the continued effectiveness of the older style shelter when deployed within designated performance parameters.

Objectives:

- Provide written information describing the basis for the issue so that all levels of the Forest Service and cooperating agencies can use consistent messages to clearly communicate the problem and the solution, and express confidence in the interim measures.
- Provide communications tools that can be used by fire leadership for briefings, interviews and discussion of the replacement and production improvement strategy.

Background:

The Forest Service examined the potential for fire shelter changes after shelters were seriously damaged in the Dude Fire entrapment in 1990. In 1994, some wildland firefighters indicated in the "Wildland Fire Fighter Safety Awareness Study" that the firefighting agencies should make the development of a newer shelter a priority. The equipment specialists at the Forest Service's Missoula Technology and Development Center (MTDC) began its research and development in 1996 as advancements in technology surfaced new flame resistant materials offering increased radiant and convective protection in a fire shelter. MTDC created the criteria for the next generation of fire shelters and began developing testing protocols and examining the new materials in 1996.

From 1996 to 2001, MTDC consulted with leading engineering and testing labs including the University of Alberta's Combustion Environmental Group, SGS-US Testing Company, Storm King Technologies, and Underwriter's Laboratories in producing the next generation fire shelter.

The interagency Wildland Fire Leadership Council (WFLC) approved the design for the new generation fire shelter in June 2002. The selection of the newer shelter was based on a combination of performance in thermal and radiant heat tests, and consideration of size, bulk, weight and cost. Upon approval by WFLC, production began through a General Services Administration (GSA) contract, and in 2003 nearly 50,000 shelters were produced.

Issue:

In mid-March, a Safenet alert was submitted through the Forest Service safety program describing 4-inch rips that occurred on the floor material near the left handle on the new shelter during deployment training. The person reporting the issue also stated that despite the tear, the new generation shelter is a great improvement over the older style shelter.

The Safenet report was relayed to MTDC, who consulted with University of Alberta Mechanical Engineer Mark Ackerman. Ackerman examined the information and reported that since energy transfer via thermal radiation is 'line of sight', the presence of a tear or hole in the floor has no bearing on the shelter's performance. Ackerman added that since size and location of the hole is under the shelter and next to the ground, it is unlikely to allow significantly more gases to enter the shelter than would enter through the constructed floor opening.

Response:

The federal and state fire management leadership and the specialists at MTDC are addressing this issue as quickly as possible to provide a quality product for firefighter safety, and retain interagency confidence in the new shelter. Actions taken include:

- MTDC and the newer shelter manufacturer developed a solution to the weakness in newly manufactured shelters by reinforcing a floor section.
- MTDC and the newer shelter manufacturer developed a simple retrofit solution to 'fix' the existing new generation shelters.

In addition, the 2004-2005 plan of action regarding new and older fire shelter distribution is:

- The agencies are recalling the existing 68,600 newer fire shelters for retrofit to reinforce the floor section under a new contract. GSA stopped distributing the newer shelter in March 2004.
- GSA and the manufacturer are immediately producing the newer fire shelter with the reinforced floor section.
- Firefighters with the older style shelters will continue to carry those shelters until they can be replaced by the retrofitted shelters or the newly produced reinforced shelter.
- Fire caches are not issuing the new generation shelter until it has been retrofitted or replaced with the reinforced units.
- MTDC is establishing a quality monitoring and additional testing review process for 30 days to focus on the newer shelter and ensure no other problems currently exist.
- State firefighters will return the new generation shelter for retrofit to the nearest federal agency cache. The federal agency will pay the shipping for the return of the shelter.

Talking Points:

Fire shelters are a tool of last resort and should never be needed if situational awareness, risk management and discipline are employed to make the right decisions in strategy and tactics on wildland fires.

In subsequent sample testing not every newer shelter tore in floor section, and there is no way to determine how many may be flawed. Materials used in the production of the new generation fire shelter were thoroughly tested and scientifically evaluated for performance and toxicity tests. Since the design and testing procedures were peer reviewed before production, this design flaw was unanticipated.

The newer generation shelter, even with the flaw in the floor, remains a significant improvement over the older style of fire shelters in protection from thermal and radiant heat.

The agencies are confident in continuing to use the older style shelters until the newer shelters have been retrofitted or newly produced with the reinforced floor. Since the current fire shelter was distributed in 1970, it has been used approximately 1,100 times. Of those deployments, about 50% were for escaping hot, smoky conditions, or as a precaution in non-life threatening situations. Of the remaining 50%, the fire shelter prevented serious burns to firefighters in 25% of the deployments, and saved the life of the firefighter in 25% of the deployment.

As retrofitted shelters or reinforced newly manufactured shelters become available, they will be provided to initial attack firefighters immediately. Production of new shelters with the design change is expected to be about 11,000 per month. Production of retrofitted shelters, once the manufacturers make the design change and begin receiving the shelters is approximately five thousand per week.

Although there is a significant cost for retrofitting the existing shelters, Forest Service Fire and Aviation leadership and the professionals at MTDC are committed to providing the highest quality product to protect firefighter safety.

Audience – Internal:	Audience – External:
Department of Agriculture – Mark Rey FS WO S&PF and F&AM including FS Regional Fire Directors FS WO Press Office, OC and LA Forest and District FMOs IHC crews Safety Officers, FFAST Teams Cache Managers LOT Team Incident Command Teams Dispatchers	Federal firefighting agencies: BLM, BIA, NPS, F&WS – Fire Directors and External Affairs NWCG State, local and rural firefighting agencies Firefighter contractors GSA and the new generation fire shelter manufacturer Media Key Congressional contacts

