

**National Fire Equipment System Meeting Minutes  
November 5, 8, 2007  
Portland, Oregon**

**Attendees:**

<b>Matt Cnudde</b>	<b>FS – NIFC HQ</b>
<b>Bob Behrner</b>	<b>FS – R-9 Cache</b>
<b>Sam Wu</b>	<b>FS – SDTDC</b>
<b>Dennis Davis</b>	<b>FS – MTDC</b>
<b>Matt Hoggard</b>	<b>FS – R-4 Hotshots</b>
<b>Tony Petrilli</b>	<b>FS – MTDC</b>
<b>Leslie Anderson</b>	<b>FS – MTDC</b>
<b>John Smith</b>	<b>FS – MTDC</b>
<b>Brad Gibbs</b>	<b>BLM – NIFC Aviation</b>
<b>Ralph Gonzales</b>	<b>FS – SDTDC</b>
<b>Dave Haston</b>	<b>FS – SDTDC</b>
<b>Bill Hicks</b>	<b>GSA – Fire Program</b>
<b>Tory Henderson</b>	<b>FS – NIFC HQ</b>
<b>Paul Naman</b>	<b>BLM – NIFC Acting Chair</b>

**Old Business and Meeting Orientation**

Members and guests introduced themselves and indicated if they had any additional agenda items. The agenda was modified to accommodate new agenda items.

**1. New Generation Fire Shelters with Defective PVC Bags.**

**Discussion:** A significant percentage of New Generation Fire Shelters undergoing the handle reinforcement of the PVC bag by sewing webbing reinforcement have been found to be too far out of specification to allow for the repair within the specification guidelines provided. Estimates of the numbers of affected shelter bags are as high as 15 % to 20%. Many of these bags may actually be capable of supporting the bag handle reinforcement but the sewing specification will need to be clarified to make new assessments. Replacement PVC bags, and a re-bagging plan will be needed. GSA fire shelters having the handle reinforcement work performed by the OEM can address re-bagging issues directly with the vendor.

**Recommendation:** Tony Petrilli, Missoula Technology and Development Center (MTDC), will provide new sewing specification tolerance data for fire shelter PVC bags to ensure all serviceable fire shelter bags capable of having handle reinforcements can be

modified. Remaining inventory of out of specification fire shelter PVC bags will need to be replaced with new bags. When the quantities of new bags needed is determined MTDC will arrange for procurement of new bags from the manufacturer and provide appropriate sewing specifications for re-bagging by Smokejumper parachute lofts or other approved sources.

## **2. Helicopter Lead Line Retrofit**

**Discussion:** Recent technical guidance from Carl Bamberger, San Dimas Technology and Development Center (SDTDC) and Brad Gibbs provides specific information on retrofit procedures, estimated costs, and new specification standards for old style gated helicopter lead lines. Discussions centered on what direction should be provided to the caches and owners of lead lines regarding the retrofit.

**Recommendation:** Caches should separate their inventory of lead lines with old style gated hooks. This inventory should be replaced or retrofitted at the caches discretion. Old inventory should be removed from service. A Cache Memorandum on this topic will be issued.

**Due Date: January, 2008**

## **3. Kocheck Hose Clamp Problem**

**Discussion:** The brass (lock) pin found on the clamp assembly of the Kocheck hose clamp will sometimes fall out, leaving the hose clamp inoperable. These items are out of warranty in field service. GSA's inventory of 500 Kocheck hose clamps has been retrofitted. There are about 4000 Kocheck hose clamps in the national cache inventories.

**Recommendation:** SDTDC recommends replacement of the solid pin with a roll pin and NFES concurs. Repairs should be performed by owners as minimum skill and tooling is required for performing the retrofit. SDTDC will provide repair instructions and materials bill/sources for distribution via Cache Memorandum.

**Due Date: January, 2008**

## **4. Draft Charter Review for NFES, Cache Manager Task Group, Refurbishment Task Group, and Kit Committee Task Group**

**Discussion:** The draft charters for the NFES, Cache Manager Task Group, Refurbishment Task Group, and Kit Committee Task Group were reviewed. These program changes are a result of the current re-organization of NWCG. Objectives of the changes are to provide for more accountability, improved communications, and better

utilization of subject matter experts. The charters were reviewed by FEWT at the Fall 2007 meeting.

**Recommendation:** None

## 5. Fuel Container Issues

**Discussion:** The status of the MTDC draft publication Interagency Transportation Guide for Gasoline, Mixed Gas, Drip Torch Fuel, and Diesel was discussed. Alternate standard/waiver requests to OSHA will probably take a year before a final determination is made. The following specific fuel container issues were also reviewed:

- Drip Torch. A new specification for the drip torch has been provided to GSA. The new specification will require red powder coating to conform with current fuel container color requirements. The disposition of old drip torch stocks (DOT approved) that are unpainted is pending a decision on an alternate standard (waiver). In the interim, continued use of the drip torch is approved.
- Sigg Type Bottles. MSR manufactured "Sigg" type bottles will meet DOT standards but the manufacturer has no interest in obtaining that certification. A joint DOA/DOI request for a draft alternate standard is being forwarded.
- Dolmars. A waiver request for Dolmar plastic fuel containers has been approved and continued use is authorized.
- Jerry Can. The jerry can is approved for use by the Forest Service if UL marked. The Forest Service has asked for OSHA approval to use the jerry can for transport and storage. The BLM does not accept the use of jerry cans for fuel storage.
- Plastic. Three years after the guide becomes policy all plastic fuel containers, except the Dolmar, will be phased out of service.

**Recommendation:** none

## 6. Type I and Type II Hose

**Discussion:** With increased experience with the use of type II fire hose it is becoming more apparent that it is well received in some regions, such as Region 5, and is not popular in others. GSA crop levels had been based upon the assumption that the type II hose would be in greater demand than seems to be the case. High cost, high weight, bulk, and handling issues have been noted as concerns by some users of the type II hose. These users would like to ensure there will be sufficient quantities of Type I synthetic hose to meet their needs in the future.

**Recommendation:** GSA crops (quantities) for type I and type II hose should be adjusted for the upcoming 2008 fire season to better reflect actual demand for each type of hose.

## **7. Wick 375 Pumps.**

**Discussion:** The Wick 375 may be the only pump available through GSA in the near future due to competitive pricing. There has been concern expressed about having more than one type of pump in inventory, with resulting concerns regarding stocking spare parts, tool kit differences, etc. GSA wants to confirm a sole source justification for the purchase of Mark III pump will not be pursued.

**Recommendation:** Market competition has resulted in lower pricing for this item and a sole source justification to purchase Mark III pumps would be counter productive and without merit. Concerns about tool kit variations between the Wick 375 and the Mark III have been resolved. Other concerns should be addressed through training or other appropriate means. The NFES catalog description should be changed to a more generic description (Dave Haston, SDTDC).

**Due Date: January, 2008**

## **8. Fire Pants – New Design with Kevlar.**

**Discussion:** MTDC's most recent survey indicates 50% of respondents see the need for two different fabric weights for fire pants. Field testing of a new nomex /kevlar blend fabric fire pants design has been conducted successfully. The new nomex/kevlar fire pants are estimated to cost about \$100.00 per pair, or roughly ½ of the cost of their commercial counterparts now seeing widespread use by all the wildland fire agencies. Overall cost savings to agencies and individuals can be expected with the adoption of the new design. MTDC believes the new fire pants design provides superior cool weather characteristics to the standard fire pants and is ready to enter service. The new pants are viewed as an item to be utilized by "regular" fire crew such as hotshots, smokejumpers, and helitack.

**Recommendation:** GSA should begin stocking the most common sizes of the new fire pants as soon as possible. GSA will check to see if the new design can be added to the existing fire pants contract. Initial stocking levels and sizes to be carried will need to be determined. While GSA will stock the model fire pants for direct sales, the Caches will not be adding the new fire pants at this time. The 2008 NFES catalog can provide source information on the new fire pants to direct interested customers.

## **9. Technology Transfer**

**Discussion:** An improved means of evaluating and recommending proper selection of complex commercial electronic equipment (IR systems, weather monitoring equipment, etc.) is needed by the fire community. Objective evaluations of this type of equipment are difficult to find, and field units are forced to rely on vendor marketing literature in order to make comparative assessments. As a result many organizations are not always

purchasing the best or most cost effective equipment for their applications. Staffing and resources available to the Development Centers is insufficient to allow them to commit to the role of a clearinghouse for commercial electronic equipment.

***Recommendation:*** Staff time and resources are not available to establish an equipment evaluation group for this purpose. An ongoing fire equipment evaluation web page (chat room site) could function as focal point for information on a variety of technical/electronic fire equipment performance and applications. Examine the feasibility of establishing a product evaluation forum parallel to the National Advanced Fire and Resources Institute (NAFRI) "Lessons Learned Center" where information can be posted and discussed. This type of web site would need a moderator to regulate. Tory Henderson will provide NFES with the name of a contact at NAFRI for further research of options.

**Due Date: February, 2008**

## **10. SPH-5 Flight Helmet Shells**

***Discussion:*** The current AMD specification for the SPH-5 flight helmet specified the use of a helmet shell made from a carbon material called Graphlon. The contractor, Gentex provides Graphlon shells and also can provide shells made from Kevlar. Over the past several years there has been a high incidence of cracking failures of Graphlon shells after a short (as little as 2 to 4 years) service life. Although the graphlon helmet shells pass all applicable tests and meet all contract specifications they are not sufficiently durable and abuse resistant to withstand typical fire suppression aviation applications for extended periods. The current contract will not be completed until the end of February, 2008, but all components for the contract, including the helmet shells, have already been manufactured. As all contract specifications have been met by Gentex it appears there is no means to stop the delivery of the remaining helmets on contract or to make last minute specification changes that would be cost effective.

***Recommendations:*** Gentex will no longer manufacture flight helmets using Graphlon. Gentex has said they will be liberal with their 1 year warranty on the helmet shells but most inventory (estimated total of 15,000) is out of warranty coverage. NIFC Ramp Services and GBK will contact the Contracting Officer at NBC to explore possibility of making arrangements (contract) with Gentex to provide lower than normal cost replacement Kevlar shells in anticipation of a high failure rate of this component in future years.

**Due Date: March, 2008**

## **11. Fire Loss**

**Discussion:** Acceptable fire loss on fire incidents of 15% or lower is considered acceptable. Fire loss includes only non consumable items. Non consumable items that are not returned to the cache are considered a fire loss, as are items that are returned in a damaged or worn out condition beyond repair or refurbishment. The last incident using an item undergoing normal wear and tear will be charged the full cost of the item when it finally fails. Incidents actually receive a credit for returning consumable items, lowering their overall fire loss percentage. Some incident management teams have capitalized on this by over-ordering consumable items to act as a buffer for their total fire loss percentage.

**Recommendation:** The criteria used to establish “fire loss” and the percentage of fire loss that will be considered acceptable should be reviewed. The new definition should define “loss” as when an item is actually missing, as opposed to the end of a normal wear and tear cycle. Tory Henderson and Matt Cnudde will develop specific recommendations to update the fire loss policy.

**Due Date: March, 2008**

## **12. Alternative MRE's**

**Discussion:** A lower cost and simplified type of “Meal, Ready to Eat” (MRE) was shown to the Task Group. The alternative MRE's are manufactured by AmeriQual, and offer fewer meal choices (6 instead of the 24 for standard MRE's) but are the nutritional equal or are superior to the regular, higher cost MRE's. The issue of the desirability of extra-high calorie MRE options for Hotshots and others in need of high calorie diets was discussed.

**Recommendation:** The product may have merit but an assessment from firefighters should be obtained before proceeding with any additional evaluation. Matt Hoggard will take the issue (and samples) to the Hotshot Steering Committee for their consideration on the limited variety. MTDC will review the availability of high calorie MRE's.

## **13. Yellow Fire Packs**

**Discussions:** There is recent direction to the caches on how to manage their inventories of the yellow fire packs in order to accelerate the decline of GSA's stocks.

**Recommendation:** Monitor stocking levels of this item over time throughout the cache system. Periodically assess the option of locating all stock to one location. Be vigilant for opportunities for disposal of the yellow fire packs internationally.

#### **14. Bag, Backpack Pump - Life Cycle Maintenance Scheduled Review**

**Discussion:** Since the adoption of the new backpack pump there has been widespread, but not universal displeasure with its performance and design. Items like this that are more poorly received than is common for other fire equipment may be good candidates to move forward in the schedule for Life Cycle Maintenance Process review.

**Recommendation:** Development Centers will provide to NFES and the Caches the matrix illustrating the Life Cycle Maintenance schedule for all included equipment and supplies.

**Due Date: January, 2008**

#### **15. Cold Weather Gloves**

**Discussion:** The initial discussions were on the need for a cold weather liner for the work glove. The degree of agency responsibility for providing these items was debated. As fire seasons and prescribed fire operations begin earlier in spring and extend longer into the fall the need for cold weather equipment is growing. Personal protective equipment that meets standards for fire line safety as well as providing low temperature thermal protection is an emerging need. It is not clear what should be provided by the agency and what should be provided by the employee for these needs. The concept of a clothing allowance for qualifying employees to purchase approved cold weather clothing items was discussed.

**Recommendation:** MTDC will gather additional information on the need for all weather/cold weather personal protective equipment items for fire suppression and prescribed fire.

#### **16. Gloves – Other Issues**

**Discussion:** MTDC has completed field testing of a new rough out glove design based on changes recommended in the 2005 glove survey. It is anticipated the rough out glove design will replace the existing NFES #1293 - #1297 gloves. Also tested were several other commercially available glove designs that meet NFPA 1977 standards. Two of these commercial models would be acceptable with several minor modifications.

**Recommendations:** The rough out glove design will need to be tested for NFPA 1977 certification before forwarding specifications to GSA for procurement. The manufacturers of the commercial model gloves with merit will be asked if they are interested in having their gloves with the requested modifications tested for NFPA 1977 certification.

**Due Date: January, 2008**

## 17. NFES Decisions on Kit Committee Recommendations

1. **#0340 Chain Saw Kit.** Kit Committee Recommendation: Change kit by eliminating #0348 guard, chain saw bar and making it part of the chain saw. New Description: #0159, Chain Saw, 20"-24" Bar w/Guard. *NFES action: Concur with recommendation.*

1A. **#340 Chain Saw Kit.** Kit Committee Recommendation: Replace #0352 Axe, Boys in kit with #0707 Axe, or other alternative such as axe used by Smokejumpers in their chain saw kits. *NFES action: Dennis Davis, MTDC, to review and recommendation/specification on changing axe. Due Date: January, 2008*

2. **#0480 Coffee Kit.** Kit Committee Recommendation: Change from plastic pail to metal pail to allow for hot water use. *NFES action: Concur with recommendation.*

3. **#0650 Evacuation Sked Kit.** Kit Committee Recommendation: Delete #3008 light stick from kit. Add #3012 Light Stick. *NFES action: Concur with recommendation.*

4. **#0390 Finance Kit.** Kit Committee Recommendation: Delete #0411 Form OF-284 "Commissary Accountability" and #0864 Form OF-287 "Commissary Issue". *NFES Action: Wait until decisions are made on the National Commissary Contract before taking any action.*

5. **#0960 Fly, Tent Kit.** Kit Committee Recommendation: Change the carton from #2006 23"x19"x10" to a smaller carton #XXXX 15"x15"x10". *NFES action: Dennis Davis, MTDC, to review recommendation on changing carton size. Due Date: February, 2008*

6. **#0520 Helicopter Support Kit**  
**#3520 Accessory Pack**  
**#3521 Forms Pack**  
**#3522 Net Assembly**

Kit Committee Recommendation: For #3520 Accessory Pack, delete #1228 Brush, Paint, #0237 Paint, Orange, and #0700 Purging Fluid. Add #0538 Pin Panel to the #3520 kit and eliminate from the #3521 kit. For #3521 kit delete #0777 Pencil, China Marking, and #0789 Plexi-Glass. Add #1073 Marker, Dry Erase. *NFES action: Concur with recommendations.*

7. **#0320 Incident Base Maintenance Kit.** Kit Committee Recommendation: Delete 0700 Purging Fluid. Add #0475 Safety Glasses, #0939 Knife, Razor, #XXXX Nails, 16D, #XXXX Surge Protector, #XXXX Screw, Dry Wall 2 1/2", #XXXX Screw, Dry Wall 1 5/8", #XXXX Square, Speed, #XXXX Pliers, Diagonal Cutter, #XXXX Tape, Measuring 25". Increase quantity of #0610 Tie Wraps from 50 to 100. *NFES action: Concur with recommendations.*

8. **#6051 Lighting, Multi Light Kit.** Kit Committee Recommendation: Change carton from the #0643 carton 41"x15"x19" to the #0500 carton 22"x22"x36". Size of some light guards may require GBK to use #0500 Carton. *NFES action: Issue appears to be more than simply box size. Recommend Kit Committee conducts further evaluation of light kit/guards before adopting new carton. Due Date: March, 2008*

9. **#0910 Logistics Kit.** Kit Committee Recommendation: Delete # 1344 Form ICS-219-2, #1345 Form ICS-219-3, #1346 Form ICS-219-4, #1347 Form ICS-219-5, #1348 Form ICS-219-6, #1349 Form ICS-219-7, and #1350 Form ICS-219-8. Increase Quantity of #1342 Form ICS-219-1 from 1 pg to 2 pg. *NFES action: Concur with recommendations.*

10. **#2069 Mobil Cache Support Van.** Kit Committee Recommendation: Increase quantity of #0030 Battery size AA from 36 pgs to 120 pgs. Delete #2804 Jeans, BDU 34-38 x 30. Add #2704 Jeans, BDU 34-38 x 34. *NFES action: Concur with recommendations.*

11. **#0760 Office Supply Kit.** Kit Committee Recommendation: Delete #0711 Disk, Floppy, and #1074 Sharpener, Pencil. Increase quantity of #0448 Pad, Writing from 10 to 12. *NFES action: Concur with recommendations.*

12. **#0800 Planning Kit.** Kit Committee Recommendation: Delete #0814 Stereoscope. *NFES action: Concur with recommendations.*

13. **#0670 Kit, Pump, Lightweight.** Kit Committee Recommendation: Need a national strategy on replacing the old 2 cycle lightweight pumps with the new 4 cycle lightweight pumps. *NFES action: More information is needed to proceed. Dave Haston, SDTDC will research issue further so viable options can be identified and considered.*

14. **#1060 Accessory, Pump, Volume 3".** Kit Committee Recommendation: Delete #0700 Purging Fluid. Add #0318 Goggle – mid year change. *NFES action: Concur with recommendations.*

15. **#0430 Shelter Kit 15'x 27'.**

**#0549 Shelter Kit 20".** Kit Committee Recommendation: Increase quantity of #00121 Case Carrying large from 1 to 2 for #0549 kit and from 2 to 3 for the #0430 kit. *NFES action: Concur with recommendations.*

16. **#1031 Incident Sign Kit.** Kit Committee Recommendation: Delete #2006 Carton, 23"x19"x10". Add #1066 Box, General Purpose. *NFES action: Concur with recommendations.*

17. **#XXXX Incident Records Kit.** Kit Committee Recommendation: GBK demonstrated a mock-up and will provide the Kit content list. GBK will build-up 25 kits with NFES approval. *NFES action: Concur with recommendations.*

18. **#XXXX Sprinkler Kit.** Kit Committee Recommendation: The new Sprinkler Kit contents were finalized by item and quantity as follows:

#0018	Bag, cotton, lunch or tool 10" x 24" or alternative	1 EA
#XXXX	Block, wood, 2" x 4" x 6"	4 EA
#XXXX	Clamp Assembly (sprinkler stake)	16 EA
#2007	Container, fiberboard	1 EA
#3305	Cord, nylon, 1/8" x 100'	3 HK
#0721	Gasket, garden hose, 3/4"	10 EA
#0321	Hammer, claw	1 EA
#XXXX	Head, sprinkler, 1/2" brass, rotating	8 EA
#1016	Hose, garden, synthetic, 3/4" x 50'	10 LG
#XXXX	Instructions	1 EA
#XXXX	Nails, scaffold, 16d, 3"d	1 LB
#0136	Nozzle, garden hose 3/4" NH, adjustable, brass	1 EA
#0137	Nozzle, plastic, 60 GPM 1 1/2" NH-F x 4 3/4"	1 EA
#0733	Reducer, 1" NPSH-F to 3/4" NH-M	8 EA
#0010	Reducer, 1 1/2" NH-F to 1" NPSH-M	1 EA
#XXXX	Reducer, pressure, RV, 3/4" NH-F to 3/4" NH-M	8 EA
#XXXX	Saw, pruning, folding (NFES 7862)	1 EA
#XXXX	Stake, sprinkler	16 EA
#0731	Tee, Hoseline, w/cap, 1 1/2" NH-F x 1 1/2" NH-M x 1" NPSH-M	8 EA
#0394	Tie wraps, 15" – 17"	25 EA
#0738	Valve, shut off, ball, 3/4" NH	8 EA
#0272	Valve, wye gated, 3/4" NH-F x 3/4" NH-M	4 EA
#0473	Wrench, adjustable, 10"	1 EA
#0235	Wrench, spanner, 11", 1 1/2" to 2 1/2" hose size	2 EA
#0538	Pin, Panel	24 EA

*NFES action: Concur with recommendations.*

