Fire
Tech Tips

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Alternate Head Protection Available

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Complaints have been raised about the redesigned suspension system (figure 1) on the Bullard helmets (also called hardhats)* in the U.S. General Services Administration (GSA) Wildland Fire Equipment catalog.

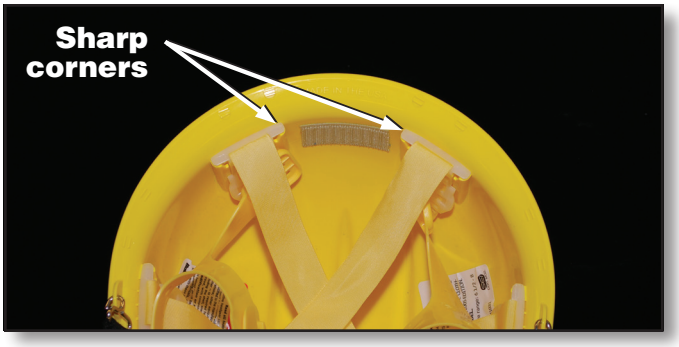

Figure 1—The sharp corners of the redesigned suspension system on the Bullard National Fire Protection Association (NFPA) 1977-compliant hardhats may cause discomfort.

Highlights...

- A change in the suspension system on Bullard hardhats may cause discomfort.
- Two models of Morning Pride hardhats can be suitable replacements.
- Hook fastener tape strips (Velcro) used to secure the face and neck shroud need to be applied to the inside of the hardhat by the user before wearing.

Although the Bullard hardhats meet safety standards, a limited number of users now find the hardhats to be uncomfortable. The redesigned suspension system provides less space between the hardhat and the user's head and may allow sharp corners to cause pressure points (figure 2).

Figure 2—This Bullard hardhat provides adequate space when fully seated on the user's head (top). Less space between the redesigned Bullard hardhat and the user's head can cause pressure points (bottom). *Photos courtesy of Caleb Finch.*

*Bullard hardhats of concern (both cap and full brim styles) are identified in the GSA catalog by the following national stock numbers(NSNs):

NSN	Color	Style
8415-01-055-2265	yellow	cap
8415-01-504-9044	red	cap
8415-01-504-9045	white	cap
8415-01-504-9042	yellow	cap
8415-01-504-9048	red	full brim
8415-01-504-9050	white	full brim
8415-01-504-9047	yellow	full brim

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Alternate Head Protection

Hardhats protect best when they fit properly. If you cannot comfortably wear the current Bullard hardhats, two models of the Morning Pride hardhat are NFPA 1977 compliant and can be suitable replacements. Morning Pride models HT-WS (front brim) and HT-WFS (full brim) are available through the GSA*Advantage!* Web site. Search for "wildland helmets."

Web site:	http://www.gsaadvantage.gov
GSA Contract:	GS-07F-0715W
Contractor:	Morning Pride Manufacturing, LLC
Address:	1 Innovation Ct. Dayton, OH 45414-3967
Phone:	800–688–6148 ext 260
Email:	brian.dillon@honeywell.com

The Morning Pride hardhat with a front brim (figure 3) costs about $37; the hardhat with a full brim costs about $39.

Figure 3—A side view of the Morning Pride hardhat with a front brim.

The cap style Bullard hardhat and the Morning Pride front brim hardhat look similar (figure 4). The Bullard hardhat has three narrow ridges on top; the Morning Pride hardhat has one wide flat ridge on top and has a shorter brim than the Bullard hardhat.

Figure 4—The cap style Bullard hardhat (left) and the Morning Pride front brim hardhat (right) look similar.

Hook Fastener Tape Placement

One difference between the Bullard and the Morning Pride hardhats is that the Bullard hardhat comes ready to secure the Face and Neck Shroud (NFES 1274, NSN 8415-01-483-6075). The user is required to install three 1 inch wide by 2 inches long hook fastener tape strips (Velcro) to the Morning Pride hardhat to secure the shroud. The tape can be purchased at hardware or fabric stores. Instructions for correct placement of the tape strips follow.

With the inside of the hardhat facing you and the front brim pointing downward, plan to place tape strips inside the hardhat at 12 o'clock, 4 o'clock, and 8 o'clock (figure 5). The rear tape strip can be placed near the inner edge of the hardhat, but the two side tape strips need to be placed about 1 inch below the inner edge to clear the suspension attachment components (figure 6).

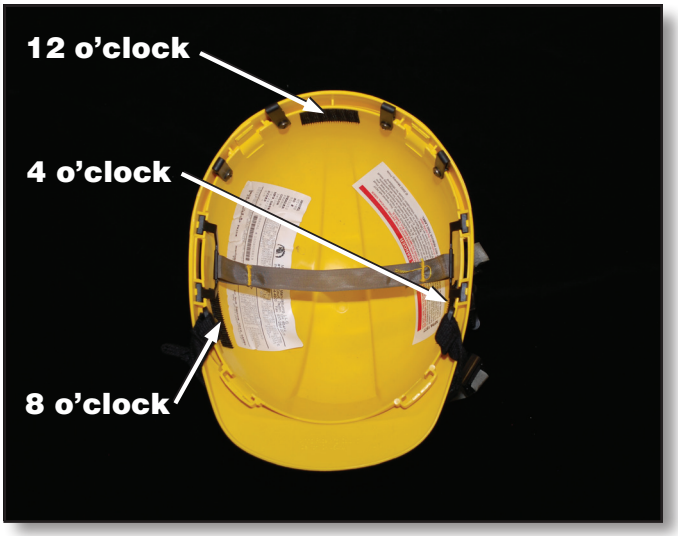

Figure 5—Place tape strips inside the hardhat at 12 o'clock, 4 o'clock, and 8 o'clock.

Figure 6—The two side tape strips need to be placed about 1 inch below the inner edge to clear the suspension attachment components.

Step 1—Place one tape strip horizontally inside the hardhat near the inner edge on the rear. Insert the suspension system into the hardhat.

Step 2—Attach the center loop tab (Velcro) of the shroud to the rear hook tape strip, stretch the sides around, and tuck the shroud material into the hardhat between the shell and the suspension system.

Step 3— Locate the approximate placement of the side tape strip. Attach the side tape strip far enough below the inner edge of the hardhat to clear the suspension pieces.

Step 4—Repeat step 3 for the other side of the hardhat. Make sure that when fully attached, the face and neck shroud hangs properly (figure 7).

Figure 7—When the face and neck shroud is attached correctly to the hardhat, it will hang in the proper position.

About the Authors

Dennis Davis is the specifications engineer for wildland firefighting equipment and the Forest Service explosives program technical advisor. He joined the Missoula Technology and Development Center (MTDC) in 1998. Davis received a bachelor's degree in engineering from the University of Oklahoma and worked as an oil and gas drilling engineer before beginning his Government career with GSA in 1986. He serves as a volunteer firefighter and emergency medical technician for the Frenchtown, MT, Rural Fire District.

Leslie Anderson is the fire program leader at MTDC. She joined MTDC as an equipment specialist in 1997 and was a project leader for fire shelters and fire-resistant clothing projects. Anderson has a bachelor's degree in forestry from the University of California, Berkeley, and a master's degree in forestry from the University of Montana. She began working in wildland fire in 1979. Anderson was a smokejumper from 1984 to 1989 in Missoula, MT. She worked for 2 years in fire management with the Costa Rican National Park Service as a Peace Corps volunteer from 1989 to 1991. Anderson worked as an assistant district fire management officer on the Bitterroot National Forest from 1992 to 1997.

Library Card

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A recent redesign to the suspension system on the Bullard NFPA 1977-compliant hardhats has caused some users to complain about discomfort. The new suspension system provides less space between the hardhat and the user's head and may allow sharp corners to cause pressure points. Two models (front brim and full brim) of Morning Pride hardhat are NFPA 1977 compliant and may provide a suitable alternative. The user is required to install hook fastener tape strips (Velcro) inside the Morning Pride hardhats to attach the face and neck shroud.

Keywords: General Services Administration, GSA, hardhat, helmet, NFPA 1977 compliant, safety at work

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http://fsweb.mtdc.wo.fs.fed.us/search/

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