INCH-POUND

A-A-55262
November 15, 1994

COMMERCIAL ITEM DESCRIPTION

SLEEPING BAG, MODULAR

The General Services Administration has authorized the use of this commercial item description (CID).

1. SCOPE. This commercial item description covers a modular sleeping bag system that consists of a patrol sleeping bag, an intermediate cold weather sleeping bag and a compression stuff sack to carry the complete system. This system is constructed to insulate the user in environments ranging from mild weather to extreme cold weather.

2. CLASSIFICATION. The sleeping bags shall be of the following types:

Type I - Sleeping Bag, Patrol

Type II - Sleeping Bag, Intermediate Cold Weather (ICW)

Type III - Sleeping Bag, Extreme Cold Weather (ECW) (Sleeping Bag, Patrol, joined to Sleeping Bag, Intermediate Cold Weather)

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any data which may improve this document should be sent to: Defense Personnel Support Center, Clothing and Textiles Directorate, ATTN: DPSC-FQSD, 2800 South 20th Street, Philadelphia, PA 19145-5099.

AMSC N/A

FSC 8465

DISTRIBUTION STATEMENT A: *Approved for public release; distribution is unlimited.*

3. SALIENT CHARACTERISTICS

3.1 General description. The system shall consist of two "Mummy-bag" type sleeping bags (patrol bag and intermediate cold weather bag), constructed of water-resistent, ripstop nylon, and a compression stuff sack into which the bags shall be placed.

The patrol bag shall be designed for use in temperate climates (approximately 30 to 50 degrees Fahrenheit). The intermediate cold weather bag shall be designed for use in cold weather climates (approximately 30 to minus 10 degrees Fahrenheit).

The patrol and intermediate bags shall be fully functional independent sleeping bags. They shall be used separately, or together, by inserting the intermediate cold weather bag within the patrol bag, attached by using snap fasteners, to form an extreme cold weather bag system. The extreme cold weather bag configuration shall provide insulation to at least minus 30 degrees Fahrenheit for a user dressed in polypropylene expedition weight undershirt and drawers and standard cushion sole socks and to minus 50 degrees Fahrenheit for a user wearing various layers of ECW clothing. The maximum gross weight of the combined intermediate and patrol bags shall be 7.0 pounds.

The stuff sack, when packed with the sleeping bags, shall be capable of being compressed to one cubic foot and shall fit in the sleeping bag compartment of the large field pack with internal frame (MIL-F-44324). Each bag, either independently or when joined together, shall be compatible with the vapor permeable bivy cover (MIL-C-44307).

3.2 Modular sleeping bag components

3.2.1 Sleeping bag, patrol (type I). The patrol bag shall provide the user with adequate insulation to as low as 30 degrees Fahrenheit and shall weigh approximately 3 pounds. The insulating material shall be a lightweight, highly compressible, synthetic material conforming to requirements indicated in 3.3. The insulation shall not migrate in the bag. The patrol bag shall be found to be free from cold spots and no individual Clo value reading shall be less than 5.5 when tested in accordance with ASTM-F 1291.

Inside dimensions of the patrol bag shall be 90 to 92 inches, measured from the bottom of the foot to the top of the hood, 36 to 37 inches wide at its widest point, 22 to 24 inches wide at its narrowest point (measured across seam at top footbox), as measured from side seam to side seam. Measurements shall be taken with the sleeping bag turned inside out.

The foot section shall have an anatomically designed foot box and shall contain at least the same amount of insulation as the rest of

The patrol bag shall have a reversible double pull (open end-to-end) slider that shall permit top or bottom ventilation and the finished measurement shall be 54 inches (± 1/4 inch) (see 3.6). The non-locking slide fastener shall self repair during field use if it becomes jammed or snagged. The slide fastener end at the head of the bag shall have a device to prevent inadvertent opening. The slide fastener area shall have a draft flap or tube to prevent heat loss and shall be constructed to prevent the slide fastener from inadvertently catching the liner or draft tube or flap material. The draft tube of the patrol bag shall be constructed to lay against the slide fastener of the patrol bag inside the bag.

The patrol bag shall have an adjustable hood for heat retention. The hood shall contain, at a minimum, the same level of insulation as the rest of the bag. Adjustments to the hood shall be made by a cord and barrel lock.

3.2.2 Sleeping Bag, Intermediate Cold Weather (ICW) (type II). The intermediate bag shall provide the user with adequate insulation to as low as 0 degrees Fahrenheit and shall weigh approximately 4 pounds. The insulation material shall be a lightweight, highly compressible, synthetic material conforming to requirements indicated in 3.3. The insulation shall not migrate in the bag. The intermediate cold weather bag shall be found to be free from cold spots and no individual Clo value reading shall be less than 6.5 when tested in accordance with ASTM-F 1291.

The foot section shall have an anatomically designed foot box and shall contain at least twice the amount of insulation as the rest of the bag.

A chest collar shall be sewn along the inside of the intermediate cold weather sleeping bag, at the top of the chest area, to prevent air-drafting up and down through the hood. The chest collar will be quilted with the same insulating material as in the intermediate cold weather bag.

Inside dimensions of the intermediate cold weather bag shall be 85 to 87 inches, measured from the bottom of the foot to the top of the hood, 34.5 to 35.5 inches wide at its widest point, 21 to 23 inches wide at its narrowest point (measured across seam at top of footbox), as measured from side seam to side seam. Measurements shall be taken with the sleeping bag turned inside out.

The hood and the slide fastener for the intermediate cold weather bag shall be as described for the patrol bag (see 3.2.1).

3.2.3 Sleeping Bag, Extreme Cold Weather (ECW) (Sleeping Bag, Patrol, joined to Sleeping Bag, Intermediate Cold Weather). The sleeping bag (ECW) shall consist of the patrol sleeping bag and the intermediate

cold weather sleeping bag (ICW). The patrol and the intermediate cold weather bags shall have the appropriate hardware to allow them to be joined and to form the extreme cold weather sleeping bag (ECW). The joined bags shall be engineered to allow the user access to the interior of the extreme cold weather bag by way of the patrol bag slide fastener. This configuration is designed for temperatures from minus 10 degrees Fahrenheit to minus 50 degrees Fahrenheit when used with varying layers of clothing.

3.2.4 Stuff sack, compression. The stuff sack shall be cylindrical in shape and shall be 28 to 30 inches in length and 12 to 14 inches in diameter. A user wearing cold weather mittens shall be able to easily stuff both component bags (joined together) inside. The stuff sack shall compress from end to end, reducing sack length; and shall fully compress the patrol bag and the intermediate cold weather bag or both bags with bivy cover to a maximum volume of one cubic foot. The stuff sack shall be constructed from 200 denier plain weave, water-resistant, coated nylon cloth. The stuff sack shall be compressed by means of at least six (6) one-inch wide nylon webbing straps, adjustable by means of ladderlock (or equal) buckles. Reinforcement webbing shall be sewn around the circumference of the bag (i.e., around the top and bottom of bag). Webbing, to be used as a handle when shaking sleeping bags out of stuff sack, shall be sewn to bottom of bag. The stuff sack shall also have a nylon drawcord closure with a barrel lock (or equal) extending through a metal grommet. The color of the cloth shall match Black 357.

3.2.5 Flammability. The materials used to construct the modular sleeping bag (MSB) shall not be hazardous to personnel. The MSB components must meet established federal/commercial flammability standards for sleeping bags (CPAI-75) (see 7.2).

3.2.6 Laundering, compressional recovery. The sleeping bags shall be laundered in accordance with FED-STD-191 test method 5556.1, using the cotton laundering procedure for five cycles. The drying temperature shall be 140 degrees Fahrenheit to 160 degrees Fahrenheit.

The bag's insulation shall not clump up after machine washing and shall regain at least 80 percent of its loft when tested after laundering. For compressional recovery, the initial thickness shall be measured with the sample under a light pressure of 0.0004 lb/in^2. The sample shall be placed under a pressure of 0.67 lb/in^2 and held for one hour. The thickness after compression shall be measured in the same manner as initial thickness. The percent compressional recovery shall be calculated as follows:

$$\text{Percent Compressional Recovery} = \frac{\text{Thickness after compression}}{\text{Initial Thickness}} \times 100$$

boards or trays need only be grease proof on bulk and one-pound package

3.2.7 Stitching. The stitch type shall be locked stitch for all seams, safety stitch for foot and hood attachments, and serge or over-edge stitch for the center-line seam (below the slide fastener). There shall be no exposed raw edges. Each bag shall be double stitched along the slide fastener. There shall be 8 to 10 stitches per inch. The bartacks shall be 28 to 32 stitches per bartack, and 1/2 to 5/8 inch in length. Threads exposed to surface of sleeping bag shall be ticket sized 30, 2 or 3 ply (for all needles). Internally or hidden placed threads shall be ticket sized 50, 2 ply (for all loopers or bottom); and when applicable, the bartacks with 50, 2 ply for both needle and loopers.

3.3 Materials

3.3.1 Basic material. The basic material for the inner and outer shell of the patrol and intermediate bags shall be a 100 percent hydrophobic nylon ripstop with an approved water repellent finish. The material shall have a minimum weight of 1.9 oz/sq yd when tested in accordance with ASTM-D 3775, Option C; a minimum yarn count of 98 filling yarns when tested in accordance with ASTM-D 3776; a minimum tearing strength of 9.0 pounds in the warp and filling when tested in accordance with ASTM-D 1424.

The material shall be laundered for five cycles in accordance with test method AATCC 135-1992, (1)VA(i). The laundered cloth shall have a minimum spray rating of 90, 90, 80 when tested in accordance with test method AATCC 22. The color for the outer and innershells shall be Camouflage Green 483 for the patrol bag (type I). The color for the outer and innershells shall be Black 357 for the intermediate cold weather sleeping bag (type II).

3.3.1.1 Material for the stuff sack, compression. The material for the stuff sack, compression shall be nylon, plain weave, with an approved water-repellent finish. The color of the cloth shall match Black 357. The material shall weigh between 3.8 to 4.8 oz/sq yd when tested in accordance with ASTM-D 3775, Option C with a minimum breaking strength of 275 pounds for the warp direction and 225 pounds for the filling direction when tested in accordance with ASTM-D 5034 and the minimum spray rating shall be 90, 90, 80 when tested in accordance with test method AATCC 22.

3.4 Batting material. The insulation for the type I and II sleeping bags shall be a 5 denier, single hole, hollow continuous filament (CF) polyester with at least 18 percent void, resin bonded. Bonding agent must be approved for bonding in battings (see 7.1).

3.5 Slide fasteners. The slide fastener shall be a commercially sized 9 or 10 continuous monofilament (CM) coil chain (nylon or polyester) with a minimum chain filament diameter of 0.033 inch, minimum closed chain width of 0.320 inch, and minimum crosswise breaking strength of 250 pounds when tested, in accordance with test method ASTM-D 2061. The slide fasteners shall have two reversible double pull sliders configured mouth to mouth such that they will open at either end of the slide fastener. The bottom of the zipper shall have a closed slider stop and the top of the zipper shall have open slider stops. The total width, including tape, shall be 1 inch wide (± 1/16 inch); and the tape shall be 100 percent polyester and water-repellent treated. A closed bottom stop and open top stop shall be securely configured to the slide fastener. As an option, the continuous chain method (off a roll) with added sliders, pulls, thongs, and secured stops may be used. The color of the chains, sliders, pulls, tapes and thongs shall match Camouflage Green 483 (cable number 34094), for the patrol bag and Black 357 for the intermediate cold weather bag.

3.6 Thread. The thread for all seams shall have an approved finish, be water-repellent, and conform to A-A-50199 (Thread, Polyester Core, Cotton- or Polyester-Covered). The color of the thread shall approximate the color of the sleeping bag shell material as applicable.

3.7 Drawcord. The drawcord for the hood shall be 3/16 inch diameter elastic (multi-strand) with braided nylon cover. The drawcord for the stuff sack shall be 1/8 inch diameter braided nylon. The color shall match Black 357.

3.8 Barrel lock closure. The fastener and its adjusting device shall be capable of withstanding 5 pounds pull force for 15 seconds with no signs of slippage or damage, after being on the cord for over 168 hours, using a cord conforming to type IIA of MIL-C-5040. The fastener and its adjusting device shall use black virgin acetal material with up to 20 percent reground of that same material. (For suggested sources of supply see 7.1.)

3.9 Buckle, double bar, one-inch. The fastener and its adjusting device shall be capable of withstanding 200 pounds pull force for 15 seconds when the angle of the fastener is between 0 degrees to 45 degrees with no slippage or damage using a one-inch webbing conforming to type III of MIL-W-43668. The fastener and its adjusting device shall use black virgin acetal material with up to 20 percent reground of that same material. (For suggested sources of supply see 7.1.)

3.10 Grommet with washer. The grommet used on the stuff sack shall be a size 0 rolled rim grommet with spur washer, constructed from brass with a black chemical finish.

3.11 Snap fasteners. Snap fasteners for the sleeping bag, patrol (type I), and the sleeping bag, intermediate cold weather (type II), shall be style 2, finish 2, socket hard action, stud eyelet, size 2.

3.12 Webbing. The webbing for the compression straps on the stuff sack shall be one-inch wide, color Black 357 in accordance with The Society for Automotive Engineering (SAE) specification, SAE AMS 3793/4, class 3, issued April 1, 1986; except the material shall be nylon in lieu of para-aramid.

The filling yarn shall traverse the full width of the webbing and shall be held at the edge by an extra catch-cord end, interlaced with the filling yarn.

3.13 Labels. The label shall be stitched on all 4 sides and sewn to center back of each bag below hood. The ink shall be waterproof and legible after 5 laundry cycles when tested in accordance with 3.2.6. The label for the sleeping bags shall contain instructions for use, care, cleaning, and laundering. The color of the label shall be Camouflage Green 483 with Black print. The print type shall be no smaller than 10 characters per inch. The label shall have the following inscription:

INSTRUCTIONS FOR USE

1. **KEEP BAG DRY**
   (a) The outside of the bag is water repellent and will protect against light moisture.
   (b) SELECT the driest ground possible.
   (c) Breathe through the face opening to prevent moisture from wetting the bag.
   (d) If face is cold, reduce hood opening by pulling on drawstrings. **DO NOT TIE DRAWSTRINGS.**
   (e) **DO NOT** wear damp clothing and **AVOID** sweating in bag. If too warm, remove some clothing or open slide fastener for ventilation.
   (f) When practical, open the bag completely and air thoroughly each day.
   (g) Use foam mattress or bivy cover sack to protect sleeping bag from ground moisture and dirt.
   (h) When practical wear clean, dry clothing in bag.

2. **KEEP BAG CLEAN**
   (a) Wear sleeping bag hood drawn around head.
   (b) Brush clothing, boots, and socks before entering bag.
   (c) Remove grease and other contaminants from bag by spot cleaning with damp cloth and soap.
   (d) **DO NOT SMOKE IN BAG, KEEP AWAY FROM OPEN FLAME.**

3. **LAUNDERING**

(a) The sleeping bag shall be laundered in a standard commercial washing machine and dried by a standard commercial dryer set on its normal tumble setting.

(b) Wash temperature will be 140 degrees Fahrenheit, rinse will be at 105 degrees Fahrenheit using normal cycle.

(c) Drying will be at 140 degrees Fahrenheit to 160 degrees Fahrenheit using normal tumble dry cycle.

4. **CONFIGURATION**

(a) Outer green patrol bag is designed to be used in temperatures down to 30 degrees Fahrenheit.

(b) Inner black bag is designed to be used in temperatures from 30 to minus 10 degrees Fahrenheit.

(c) Join both bags together by placing black bag inside green bag and snapping all black bag snaps to green bag snaps along each side of the zippers. Insure hoods are wide open and tuck black bag hood inside the green bag hood. Use only the zipper for the green bag to exit and enter bags when in this configuration. This configuration is designed for temperatures from minus 10 to minus 50 degrees Fahrenheit when used with various insulating layers of the extended cold weather clothing system. For added protection from wind and rain or wet snow, a bivy cover may be attached to the outside of the outermost sleeping bag.

5. **SLIDE FASTENER OPERATION**

(a) To close the bag, keep both sides of slide fastener close together before pulling thong on slider.

(b) For **EMERGENCY EXIT**, grasp each side of the opening above the slider and spread apart quickly forcing the slider downward. **NOTE:** If chain separates below slider, pull slider beyond separation, then pull slider up to reclose chain.

(d) Use snap fastener closure on bags only when slider fails, other than when matching bags together.

(e) Repair bag in accordance with D/A TM 10-8400-201-23.

3.13.1 Label/tag. Each item shall be individually bar-coded with the type VIII, class 17 label/tag of DDD-L-20. This label/tag shall be located so that it is completely visible on the item when it is folded and/or packaged as specified and so that it causes no damage to the end item.

4. REGULATORY REQUIREMENTS. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulations (FAR).

5. QUALITY ASSURANCE PROVISIONS

5.1 Certification. The contractor shall certify and maintain substantiating evidence, that the product offered meets the salient characteristics and requirements of this commercial item description; conforms to the producer's own drawings, specifications, standards, and quality assurance practices; and is the same product offered for sale in the commercial marketplace. The Government reserves the right to require proof of such conformance prior to the first delivery and thereafter as may be otherwise provided for under the provisions of the contract or purchase order.

5.2 Market acceptability criteria. The sleeping bag is used in life-threatening, life-endangering situations in an extremely hostile and adverse environment. As such, its performance and reliability in this usage cannot be compromised. The following criteria will be used to evaluate the product described by this commercial item description.

5.2.1 The company offering the sleeping bag must have been producing the model being tendered under the contract or purchase order or generically similar models for at least three years.

5.2.2 The company must have produced at least 1000 generically similar or identical sleeping bags to that being tendered.

5.2.3 The sleeping bag offered must have been sold to the commercial market or to the Government, and the contractor shall certify and provide supporting documentation as to its serviceability and the long term (five years) availability of all necessary maintenance and logistics support parts and materials.

5.3 Warranty. The sleeping bag, patrol, and sleeping bag, intermediate cold weather (ICW), and sleeping system, modular (MSS) (stuff sack, sleeping bag, patrol, and sleeping bag, intermediate [ICW]) offered shall include the standard warranty given to the commercial market beginning with the date of delivery of the individual sleeping bags.

5.4 Visual examination. Each sleeping bag shall be examined for the defects listed below.

5.4.1 Defects. Any hole, cut, or tear; color not as specified; any part shaded; any spot or stain (outside); raw edges, open seams, thread ends not removed, or loose tension resulting in loose seams; any material defects, distorted parts or poor workmanship; any component part omitted; label missing, incorrect, or illegible; measurement of item not as specified; bar code omitted or not readable by scanner; human-readable interpretation (HRI) omitted or illegible;

bar code not visible on folded, packaged item; bar code causes damage to the item; any items not packaged in accordance with the contract or purchase order.

6. PRESERVATION, PACKING, MARKING, AND PALLETIZATION. The packaging, packing, marking, and palletization shall be in accordance with the contract or purchase order.

7. NOTES

7.1 Source for an approved water-repellent finish and bonding agent may be obtained from the contracting officer.

7.2 Suggested sources of supply:

FSCM	PART NO.	NAME AND ADDRESS
CORD LOCK, SINGLE CORD		
02768	BARROLOC (BBL) BLACK DELRIN	ITW NEXUS 230 W. GERRY DRIVE WOOD DALE, IL 60191
BUCKLE, DOUBLE BAR, ONE-INCH		
02768	LADDERLOC(LL) BLACK DELRIN	ITW NEXUS 230 W. GERRY DRIVE WOOD DALE, IL 60191
	TL-1C BLACK DELRIN	NATIONAL MOLDING CORP. 5 DUBON COURT FARMINGTON, NY 11735
70474	DB-1A BLACK DELRIN	AMERICA CARD & WEBBING COMPANY, INC. 505 8th AVE. NEW YORK, NY 10018

7.3 Acceptance criteria. Acceptance criteria shall be as specified in the contract or purchase order.

7.4 Source of Government documents. Copies of Military and Federal documents are available from:

Standardization Documents Order Desk
Bldg. 4D, 700 Robbins Avenue
Philadelphia, PA 19111-5094

7.4.1 Sources of non-Government documents.

ASTM Test Methods

(Applications for copies of manuals should be addressed to:)
American Society For Testing and Materials
1916 Race Street, Philadelphia, PA 19103-1187

AATCC Test Methods

(Applications for copies of manuals should be addressed to:)
American Association of Textile Chemists and Colorists
P.O. Box 12215
Triangle Park, NC 27709-2215

(Request for information on the modular sleeping bag [MSB] components that must meet established federal/commercial flammability standards (CPAI-75) for sleeping bags, address questions to:)

Canvas Products Association International
350 Endicott Blvd.
St. Paul, MINN 55100

MILITARY INTERESTS:

Custodians
Navy - MC
Army - GL

Review Activities
Air Force - 11, 45, 82, 99

CIVIL AGENCY COORDINATING ACTIVITY:
GSA - FSS

PREPARING ACTIVITY:
DLA - CT

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