

**USE AND CARE OF THE
INTEGRATED INDIVIDUAL
FIGHTING SYSTEM**
1991 (IIFS)

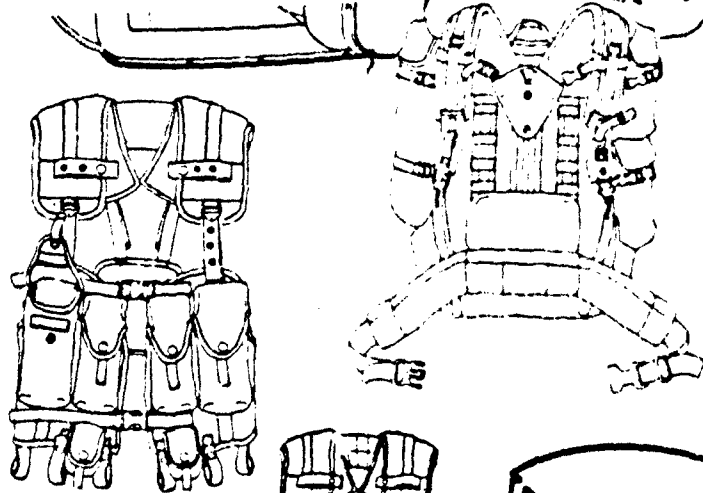
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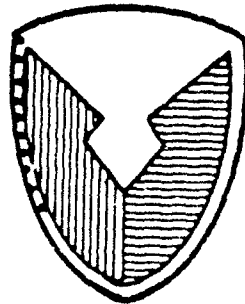
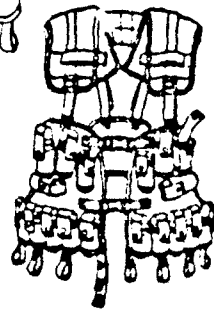


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FOREWORD

The Integrated Individual Fighting System (IIFS) consists of the Individual Tactical Load Bearing Vest (ITLBV), the 40mm Grenade Vest, the Field Pack, Large with Internal Frame (FPLIF), and the Extreme Cold Weather Sleeping System (ECWSS).

The IIFS was designed to improve efficiency through more even distribution of the load weight and reduced bulk. The components of the system are constructed of lightweight materials to reduce overall weight.

Load balance, however, is achieved only if the Field Pack is packed correctly and with the items for which the compartments were intended.

The ECWSS will provide environmental protection between + 40⁰ F and - 45⁰ F (+ 5⁰ C and - 46⁰ C) and is intended to be used with the foam sleeping mat.

The IIFS is easy to maintain both in field and garrison environments but...due to the unique characteristics of the state-of-the-art materials used, the special use and care instructions must be carefully followed.

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Section I: INTRODUCTION

A. PURPOSE. This pamphlet was prepared to help you understand the use, care, and the required maintenance of the IIFS components.

B. SCOPE. The Pamphlet includes item descriptions of each component of the IIFS, as well as general use and care instructions, and general repair procedures. Descriptive and reference data is also provided.

Section II: IIFS SYSTEM DESCRIPTION

A. GENERAL. The IIFS is composed of eight separate equipment and clothing items that, when used together will lighten individual combat loads. When used with the components of the Extended Cold Weather Clothing System, the ECWSS will afford protection for various environmental conditions.

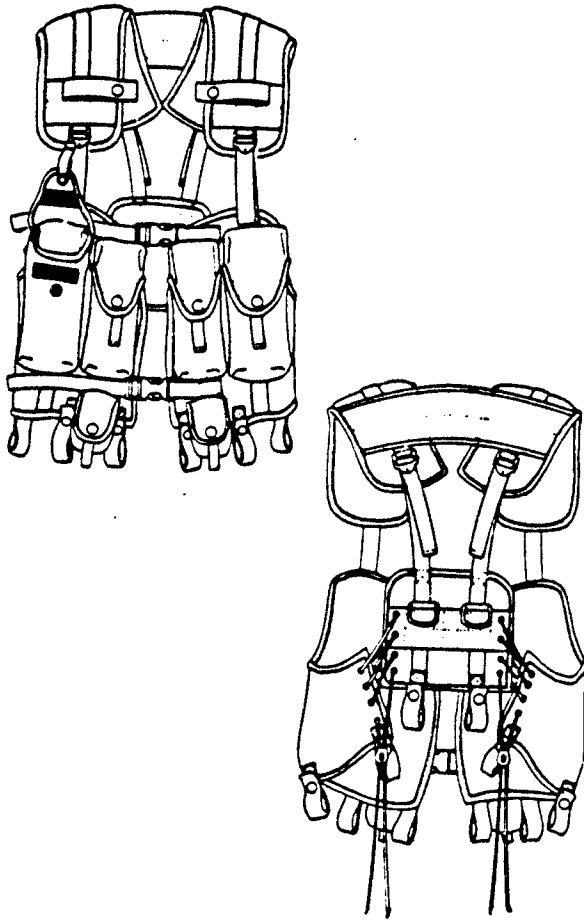
B. LOAD BEARING COMPONENTS.

1. Tactical Load Bearing Vest. The vest is designed to transport the individual's fighting load. It is a one-size-fits-all item constructed of very strong nylon fabric and webbing.

a. Materials Used. The vest is made of a lightweight nylon fabric with foam padding in the shoulder straps. Two plastic quick release buckles are used to secure it in front.

b. Concept of Use. The vest is intended to be worn with the standard equipment belt. The belt is attached to the belt loops at the bottom of the vest.

c. Description of Item. The vest consists of the suspenders, a left, right and back panel that are connected with adjustable drawcords in a corset lacing system secured by cord locks. The vest weighs 1.8 pounds empty. It provides space for six, thirty round magazines in four permanently attached ammunition pockets and two fragmentation grenades in two grenade pockets.



Individual Tactical Load Bearing Vest
(ITLBV)

2. 40 MM Grenade Vest. The vest is designed to transport the basic load of 40mm grenade ammunition for the grenadier. It is a one-size-fits-all item constructed of very strong nylon fabric and webbing.

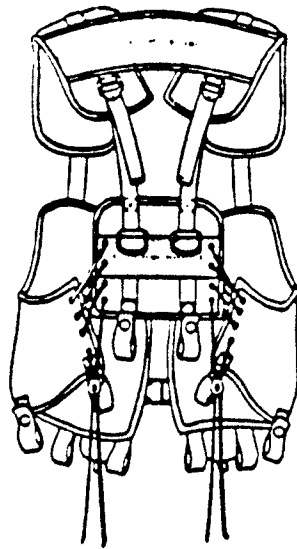
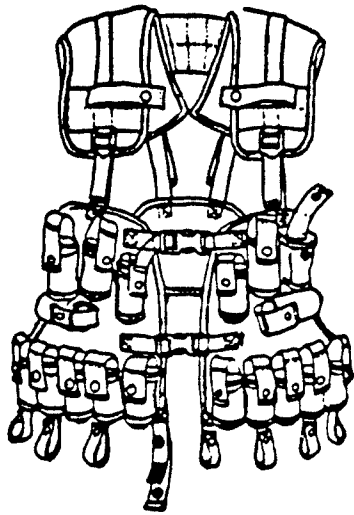
a. Materials Used. The vest is made of a lightweight nylon fabric with foam padding in the shoulder straps. Two plastic quick release buckles are used to secure it in front.

b. Concept of Use. The vest is intended to be worn with the standard equipment belt. The belt is attached to the belt loops at the bottom of the vest.

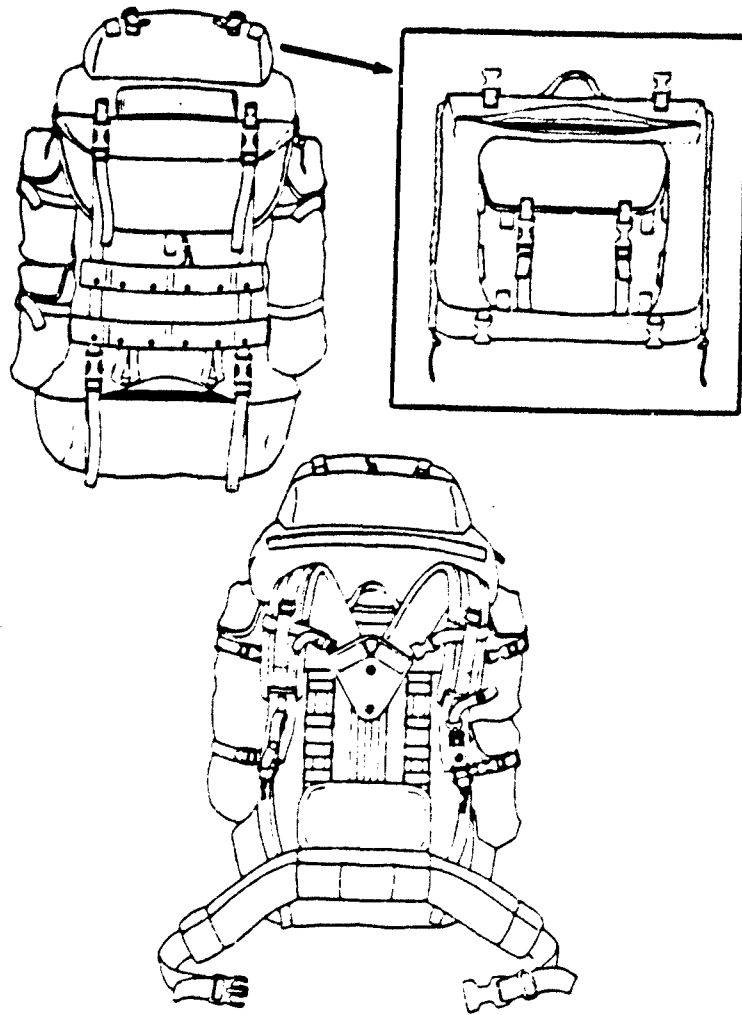
c. Description of Item. The vest consists of the suspenders, a left, right and back panel that are connected with adjustable drawcords in a corset lacing system secured by cord locks. The vest weighs 2.1 lbs empty. It provides space for 14 HE Grenades and 4 Pyrotechnic Projectiles in permanently attached grenade pockets.

3. Field Pack, Large, with Internal Frame. The field pack is designed to transport the individual's existence load. It has an internal frame and is adjustable. A detachable patrol pack has been integrated in the pack's top cover.

a. Materials Used. The pack is made of a backcoated nylon fabric. The frame has two aluminum staves that can be removed. The support pad and shoulder pads are made of bi-laminate foam.



40 MM Grenade Vest



Field Pack, Large with Internal Frame
(FPLIF)

b. Concept of Use. The field pack is used to transport and protect the existence load in all environmental conditions. Even load distribution is achieved through the adjustment features. The patrol pack is used for short missions and can be quickly separated from the field pack.

c. Description of Item. The field pack weighs 8 pounds empty. It consists of three basic sections; the main compartment, the sleeping bag compartment, and the patrol pack. The main compartment has a false bottom that may be extended when the sleeping bag is not carried. Side cargo pockets are located along the right and left side of the pack. Various equipment attachment points in the form of webbing loops are located throughout the pack.

C. EXTREME COLD WEATHER SLEEPING SYSTEM

1. Sleeping Bag. The sleeping bag is designed to be used with the insulating clothing layers of the Extended Cold Weather Clothing System (ECWCS) as supplemental insulation.

a. Materials Used. The sleeping bag is made of nylon fabric that encloses a continuous filament polyester insulation.

b. Concept of Use. With the cover installed, the sleeping bag is used to afford protection in a temperature range of +40⁰ F to -45⁰ F (+5⁰ C to -43⁰ C) with various layers of the ECWCS.

c. Description of Item. The sleeping bag is a mummy type that uses a double draft tube configuration to improve protection in the slide fastener area. It has a 71 inch slide fastener that allows rapid exit. A row of snap fasteners along the opening allow for the installation and removal of the cover. Adjustments across the shoulder and hood area can be made with the drawcord and barrel lock.

2. Cover, Bivy. The cover was designed to be removable to facilitate better air drying of the sleeping bag.

a. Materials Used. The cover is made of a moisture vapor permeable water-proof fabric.

b. Concept of Use. The cover is to be installed around the sleeping bag to provide environmental protection against moisture and wind.

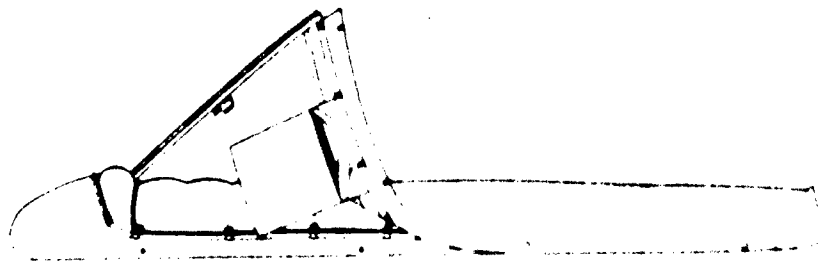
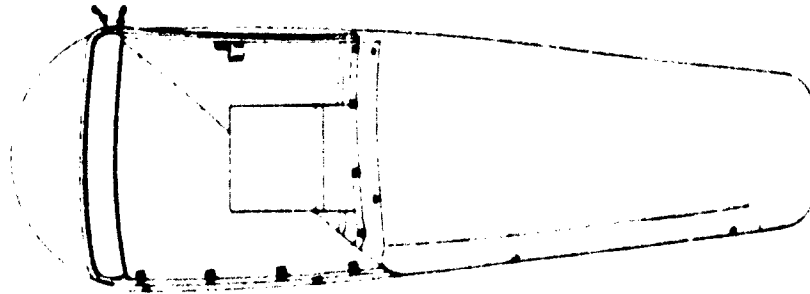
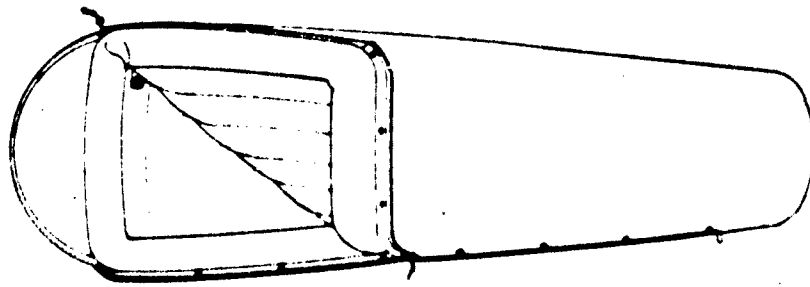
c. Description of Item. The cover is cut to fit around the sleeping bag and is held in place by two rows of snap fasteners. A drawcord and barrel lock provide adjustment around the shoulder and hood area. A water resistant storage compartment inside the cover allows for storage of small items.

3. Hood and Socks. Included in the ECWSS as accessories are a hood and socks for added head and foot protection.

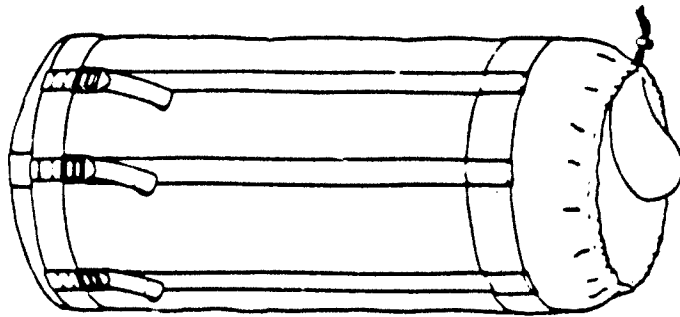
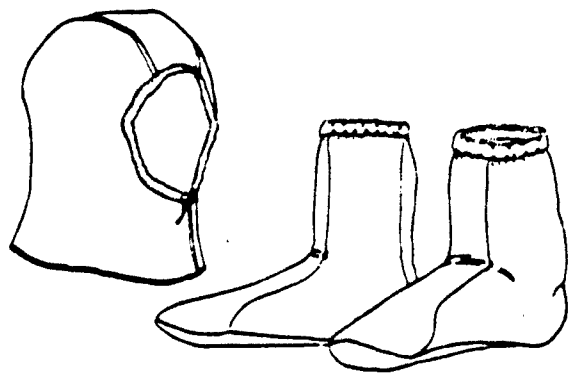
a. Materials Used. The hood and socks are made of a polyester fiberpile material.

b. Concept of Use. The hood and socks are to be worn as needed or with other components of the ECWCS to protection levels as required.

c. Description of Item. The hood and socks are cut of a brown colored pile material. The hood has a drawstring allowing adjustment to the facial opening. The socks are held in place with an elastic band around the top.



Sleeping Bag with Cover, Bivy



Hood and Socks
Bag, Stuff

4. Bag, Stuff. The bag reduces the bulk of the sleeping bag to less than 1 cubic foot

a. Materials Used. The bag is constructed of a waterproof nylon fabric. The compression straps are made from webbing with standard buckles.

b. Concept of Use. The sleeping bag is inserted into the stuff bag and compressed to allow insertion of the bag into the field pack.

c. Description of Item. The nylon bag is surrounded by six evenly spaced straps running lengthwise with standard buckles on one end. The bag opening can be secured with a drawstring and cord lock to prevent moisture from entering.

Section III. USE AND CARE OF IIFS

YOU are responsible for keeping your IIFS components in good serviceable condition.

This is **YOUR** equipment. It will remain in serviceable condition only if it is kept clean, maintained in good repair and is stored properly. It will serve its function only if **YOU** use it for its intended purpose.

Check the adjustments on the vests and the field pack. Correct load balance and weight distribution can only be achieved if the equipment is worn in proper adjustment.

IIFS Is Different

Follow the cleaning and care instructions contained in this chapter and on the equipment labels. Pay particular attention to the cleaning instructions for the sleeping bag. Refer to Chapter 1 of FM 21-15, Care and Use of Individual Clothing and Equipment for additional general care and maintenance instructions.

Recognize that many parts of your IIFS components are made of *state-of-the-art* materials that require added care and special handling to retain their characteristics.

A. DONNING AND ADJUSTMENT PROCEDURES

1. Tactical Load Bearing Vest, and 40 mm Grenade Vest.

a. Inspect the adjustment points on the vest to insure they are in proper working order.

b. Don the vest, making sure none of the straps are twisted. Check for proper fit. The pockets should be on front and not interfere with arm movement. The quick release buckles on front should close snug, without being restricting.

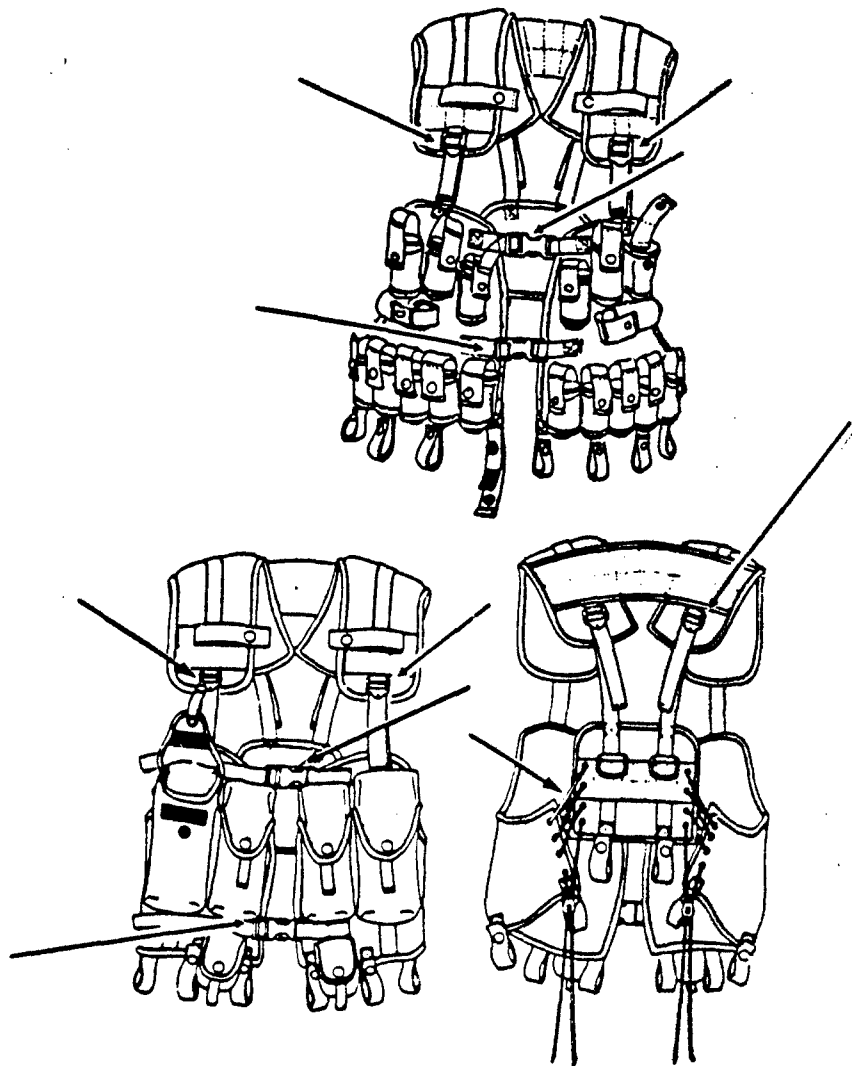
c. If necessary, adjust the girth of the vest with the drawstrings between the front and back panels. Adjust the length of the suspenders with the front and back buckles.

2. Field Pack, Large, with Internal Frame

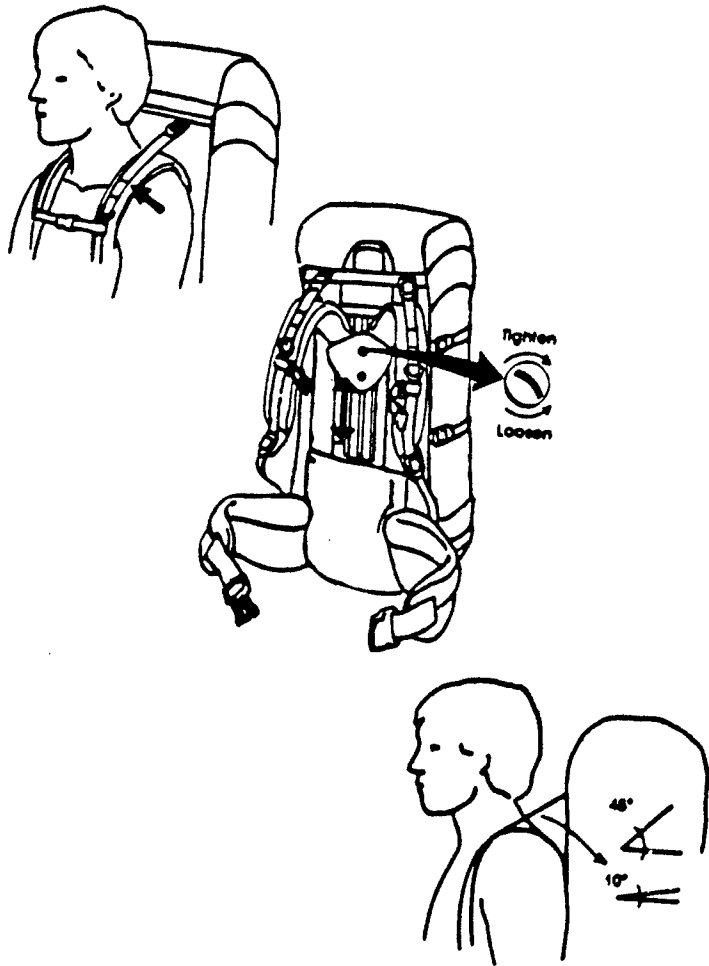
a. Inspect the adjustment points on the field and patrol pack to insure they are in proper working order.

b. Don the pack and cinch up the waistbelt, positioning it so the horizontal seam cradles your hip bones. Tighten the shoulder straps so they are just over your shoulder. Check to see how the horizontal stitch line on the shoulder strap webbing line up with your collar bone. It should be over your bone. If it falls in front, below the bone, the yoke must be moved down the Torso Track; if the seam is above and behind the bone, the yoke must be moved up the track. (See page 20)

c. Adjust the yoke position as needed. Once the yoke is correctly positioned, tighten the top stabilizer straps; they should lift off the shoulder strap between a 10° - 45° angle from horizontal.



Individual Tactical Load Bearing Vest
and 40 MM Grenade Vest Adjustment Points



Field Pack, Large with Internal Frame
Adjustment Points

If the angle is lower than 10° , move the stabilizer straps to a higher buckle, if the angle is greater than 45° , use the lower buckle (See page 20). You now have a pack that is perfect in fit. As you change to heavier or lighter clothing, you may have to alter the fit of your pack.

3. ECWSS. There are several adjustment points on the components of the ECWSS that, if used correctly, improve the utility of these items.

a. Drawcords are located on the sleeping hood, the sleeping bag, and the bivy cover. They are secured with barrel locks. When adjusted for proper fit of the user, these items will offer increased protection from extreme cold temperatures.

b. Compression straps located on the stuff bag will reduce the bulk of the sleeping bag considerably.

c. Slide fasteners allow the sleeping bag to be fully opened to adjust for any temperature range and ease of access and exit.

B. INSPECTION. Examine the IIFS components regularly for tears, punctures, rips, or any other damage to materials.

Punctures in the sleeping bag and cover will eventually admit moisture and ruin the item if not properly repaired. Repairs should be made as soon as they are discovered. If the required repairs cannot be accomplished at organizational level, the item must be turned in and exchanged. Use field expedient repairs, if necessary to allow continued use of the components in the field.

C. STORAGE. IIFS components should never be stored in a soiled, dirty, wet or compressed condition. Brush off and air dry components before storing to prevent the buildup of mildew. Remove the cover from the sleeping bag before air drying, and dry the cover separately. Open compartments of field pack and vest before drying.

D. CLEANING.

1. General. Clean all IIFS components on a regular basis and after every use. Dirty equipment will eventually fail to perform it's intended function. Pay particular attention to the cleanliness of slide fasteners, drawcords, cord locks, and barrel locks.

2. Extreme Cold Weather Sleeping System.

a. Machine/Hand Laundering. The sleeping bag cannot be hand or machine laundered. The hood and socks may be hand or machine laundered using the delicate/gentle fabric cycle, in cold water (up to 85⁰ F / 30⁰ C) and cold water laundry detergent. Rinse in clean cold water. The cover, bivy and bag, stuff may be hand or machine laundered using the wash & wear/permanent press cycle, in warm water (90⁰ F / 32⁰ C - 110⁰ F / 44⁰ C) and mild laundry detergent. Rinse thoroughly in clean warm water. **NOTE: DO NOT DRY CLEAN. DO NOT USE CHLORINE BLEACH OR STARCH.**

b. Drying. Tumble dry the hood and socks at lowest fabric cycle, delicate/gentle. Do not exceed 90⁰ F (32⁰ C) at not more than 2/3 capacity. Tumble dry the cover, bivy at low temperature (100⁰ F / 38⁰ C). Remove items from dryer immediately. Avoid overdrying. To drip dry, remove from water and place on rustproof hanger. **NOTE: DO NOT PRESS.**

3. Load Bearing Equipment.

a. Scrape dirt or mud from the equipment with a dull instrument that will not cut the fabric or webbing. Remove loose dirt from soiled surfaces using a cloth or brush.

b. Clean exceedingly dirty areas by wetting the surface and applying a warm water and detergent solution. Scrub with soft brush or sponge. Flush the equipment thoroughly with clean, warm water until all cleaning solution has been rinsed out.

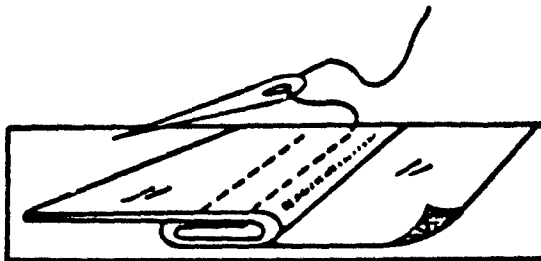
c. Air dry the equipment away from direct sunlight, heat or open flames.

Section IV: REPAIR OF IIFS

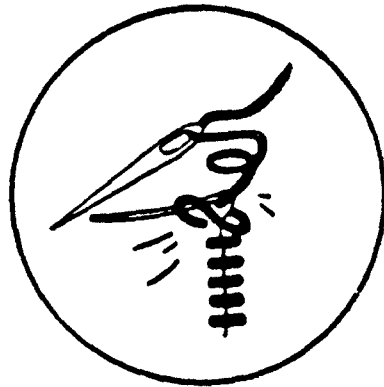
A. Rips and Tears.

1. IIFS. Make field expedient repairs of rips and tears in the components of the IIFS as shown. (Except the cover, bivy)

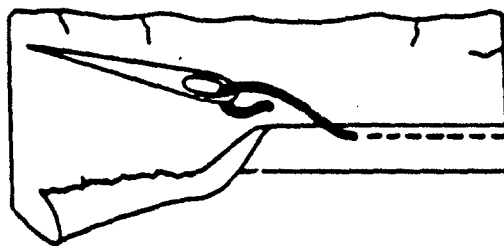
a. To mend a ripped seam, overlap the two edges and sew with straight and small stitches.



b. To repair a tear, place the two edges on the wrong side (inside) and sew together.

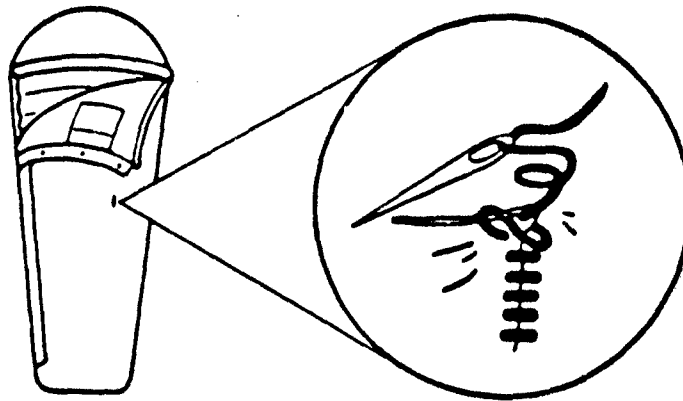


c. To mend a frayed edge, turn it under and sew.



2. Cover, Bivy.

a. Loosely whipstitch any rips or tears in the cover, keeping the seam as flat as possible. Trim the thread ends.



b. Turn the cover inside out, keeping the rip or tear as flat as possible. Cut an appropriate size of tape to cover the rip or tear. Finish the edges of the tape to reduce fraying. Place the tape over the rip or tear and press firmly.

3. Permanent Repairs. More permanent repair measures involve requirements beyond organizational level. Turn IIFS components in to direct Support Maintenance.

B. DRAWCORDS.

1. Drawcords are found in the following IIFS components:

ITEM	TYPE OF DRAWCORD
Sleeping Bag	Elastic w/ Barrel Lock
Cover, Bivy	Elastic w/ Barrel Lock
Vests	Nylon w/Cord Lock
Field Pack	Nylon w/Cord Lock
Hood	Elastic w/Barrel Lock
Bag, Stuff	Elastic w/ Barrel Lock

2. Replace missing or defective drawcords in lengths matching original. If cord lock is broken, tie ends of drawcord into large knots until a new draw cord with cord or barrel locks can be obtained from supply.

C. SLIDE FASTENERS. If slide fasteners work stiffly, rub a thin coating of wax or lead pencil graphite on each side of the track and work slide back and forth a few times.

D. MAINTENANCE TURN IN. Turn in IIFS components to appropriate supply points for exchange when:

1. Items are ripped or torn beyond immediate repair.
2. Snap fasteners, slide fasteners, or hook and pile fasteners are damaged or will not hold.
3. Items are soiled so badly that they cannot be cleaned adequately.

4. Hardware, such as quick release buckles, bar buckles or grommets are bent, loose or unserviceable.

5. Webbing is frayed beyond immediate repair.

Appendix A. References

FM 21-15, Care and Use of Individual Clothing and Equipment

TM 10-8400-201-23, General Repair Procedures for Clothing and Individual Equipment, Organizational and Direct Support Maintenance Manual