

A soldier should not need to wear the entire system except at the coldest temperatures (below minus 40 degrees Fahrenheit.) The amount of clothing worn must be adjusted to meet each soldier's needs, and commanders should dictate only that the outer layer be worn. (This should always include the PTFE parka and either the field trousers or the PTFE trousers.) When taking part in such activities as skiing or road marching, in most cases a soldier should have enough on if he wears only the PP underwear and the outer shell layer. In fact, during operations, in areas where the temperatures change quite drastically during the day, some users have been known to change into regular underwear to prevent overheating. A soldier may have to change layers quite frequently as his activities and the temperature conditions change.

The ECWCS requires care that is somewhat different from that of the present cold weather system. When it is first issued, a soldier should try on all of the garments to make sure those that form the outer layers are large enough to fit over the inner layer without causing undue compression of the insulation or discomfort to the wearer. (Experience has shown that the

PTFE outer layers should be about one size larger than the standard items the user normally wears.) The soldier should also check to see that the tape along all the seams on the inside of the PTFE items covers the seams completely. The item is unserviceable if the tape is loose or does not cover all the stitches.

WASHING

When washing the ECWCS the soldier must be careful to follow the instructions. The PP underwear, for example, should never be washed in hot water or placed in a heated dryer. If it is, it will shrink. The best method is to machine or hand wash it in cold water and hang it up to dry.

The average PP item will dry in less than one hour in a heated shelter. Soldiers have found that it will also dry quickly if it gets wet while being worn.

Maintaining ECWCS components, with the exception of the PTFE items, is the same as maintaining standard clothing. The PTFE components do require special care when repairs are attempted. Field repairs can be made with fabric tape (NSN 7510-00-074-5157). The wearer should

simply turn the item inside out and cover the tear with the tape. Permanent repairs to any holes in the PTFE must be sealed with sealing tape and a seam sealer.

Name tags should not be sewn on the PTFE parka, and rank insignia should be pinned only to the rank tab provided on the front of the PTFE parka.

Special care should be taken with this clothing system around heat sources, because the components will melt at much lower temperatures than standard materials. Continued research into improving the fire retardancy of the components is being conducted by Natick Laboratories.

The introduction of the ECWCS gives the U.S. fighting man a state-of-the-art cold weather uniform that is as good as any in the world. Commanders must properly train their soldiers to take full advantage of the improved performance of a clothing system that significantly improves their ability to live and fight in a cold environment.

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The Feet

Mission-Essential Equipment

LIEUTENANT LARRY T. STAATS

On today's battlefield where mobility is one of the decisive factors in the success of a mission, the importance of having a dependable means of transportation cannot be overemphasized. This is precisely why taking care of the feet must be an integral part of preventive maintenance for light infantry units. Just as the combat readiness of a mechanized unit is affected by the condition of its vehicles, so the combat readiness and

effectiveness of a light infantry unit is dependent upon the serviceability of its soldiers' feet.

Most foot complaints can be prevented by proper hygiene. In fact, most conditions that require hospitalization and most disabilities result from minor conditions that have been neglected or maltreated.

Several preventive measures can be taken, and it is the responsibility of

leaders and trainers to make sure they are being taken. (See also "The Traveling Toe," by William N. Gorge, INFANTRY, March-April 1979, pages 9-13.)

Before marches, toenails should be cut short and square — straight across to avoid ingrown toenails. The feet should be kept clean and dry by foot powder and clean, dry well-fitting boots and socks (preferably with wool cushion

soles). Extra socks should be carried and put on when they are needed. Blisters and abrasions are most commonly caused by moisture, improperly maintained or poorly fitted footwear, and heat caused by friction. A nylon or polypropylene sock liner can reduce the friction and act as a second skin.

During halts, feet should be elevated with the boot laces slightly loosened where they cross the arch to provide relief from swelling. If time permits, cool water can be used to relieve hot and irritated feet, powder can be applied, socks changed, and blisters treated when necessary. After a march, the feet can be cleaned and dried more carefully, boots cleaned, and blisters and abrasions treated.

BLISTERS

If there are blisters, the feet should be carefully washed with soap and water. Care should be taken not to break the blisters. A sterile needle should then be used to prick the skin on the lower edge of the blister to empty the fluid. The skin over the blister should not be removed, as it is nature's best Band-aid, but some antibacterial ointment should be applied and the blister covered with a sterile pad or moleskin. (Blisters and abrasions on dirty, sweaty feet can lead to serious infections.)

Other serious foot problems that affect light infantry soldiers are stress fractures and injuries resulting from the

repetitive pounding the feet receive during running, jogging, and marching. Many stress fractures can be prevented if the workload is increased gradually to strengthen the muscles, ligaments, and tendons that support the bones. Running on hard surfaces such as concrete and asphalt must be avoided as much as possible. Running shoes with cushioned soles can help absorb much of the shock.

The most important point for leaders to understand in the treatment of stress fractures is that the bone must be given time to rest and heal properly so it can stand physical stress again. The usual treatment is bone rest until the pain disappears, followed by a gradual return to activity. The following guidelines apply: two to three weeks of rest for a metatarsal (foot) stress fracture, at least six weeks for a tibial (shin) fracture, and eight weeks for a femoral (thigh) fracture. Studies have shown that soldiers who sustain fractures from training continue to be at high risk for recurrent stress fractures in subsequent training. In light of this, a gradual strength-building return to duty cannot be over-emphasized.

The muscles and connective tissue also need attention. The best way to guard against injuries to muscles and tissue is to make sure the major muscle groups are stretched and warmed up before strenuous activity and stretched and cooled down after. These measures will increase the flexibility of the muscles and decrease the possibility of muscle strains, connective ligament and tendon

sprains, cramps, or tightness. Stretching is most beneficial if a muscle is extended to its elastic limit and held there for a count. (See also "Physical Fitness Program" by Lieutenant Colonel Robert J. Hoffman, INFANTRY, September-October 1986, pages 16-19.)

Some soldiers will be injured during training no matter how many precautions have been taken, because there are many variables over which the leaders and trainers have no control. These include the soldiers' varying levels of conditioning, dormant physical weaknesses, and accidents. But leaders and trainers can help prevent injuries by giving these matters their careful consideration. Fewer injuries lead, in turn, to higher morale and fewer training management problems. Leaders should recognize, though, that the injured soldiers are not defective in any way and should make every effort to return them to normal duty and to maintain their morale.

Light infantry leaders who approach the care of the feet as they would the maintenance of a mission-essential piece of equipment will succeed in reaching their objective. They must realize that morale, training benefits, and combat readiness in a light infantry unit are all dependent upon the individual soldiers and their feet.

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Time Management Model

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Time. There never seems to be enough of it. One of the problems any infantry leader faces is how to manage his time so that he can seize control of the battle.

More, how does he teach it in his unit? How can a unit institutionalize its own time management?

To do both things, I use a time manage-

ment model (see example). The goals of the model are these:

- To allow subordinates the greatest amount of time for their planning.