



SPEAR Body Armor/ Load Carriage System (BALCS)

Overview:

Special Operations Forces Equipment Advanced Requirements (SPEAR) is the United States Special Operations Command's (USSOCOM) modernization effort for the joint (Army, Navy, and Air Force) Special Operations Forces (SOF) operator. SPEAR will focus on four areas of improvement in personal equipment from 1996 - 2005 including body armor and load carriage. SPEAR's Body Armor/Load Carriage System (BALCS) consists of body armor, an equipment load carrying subsystem, and a backpack subsystem.

Description:

The BALCS maximizes ballistic protection, buoyancy compensation, and load carrying capacity, while minimizing the burdens of weight, bulk and heat stress.

The BALCS components are:

Body Armor: Provides protection against fragmentation, handgun, and rifle threats. The armor system contains a soft armor vest; front and back interchangeable upgrade plates, and modular neck and groin protection. The neutrally buoyant soft vest is available in four sizes (S-XL); plates are sized with the vest. Approximate weight of a Medium vest is 6.5 lbs.; the Medium plates are approximately 6 lbs. each.



Equipment Load Carrying Subsystem (ELCS): The modular pocketing and harness system (H-Harness or Vest) allows mission tailoring of load and system configuration. The ELCS is compatible with the SPEAR Body Armor and Backpack Subsystem, and provides optimum compatibility with individual equipment and weapons. The positive buoyant ELCS comes in one size, and features easy adjustments for shoulder, waist, and chest.

Backpack Subsystem: The modified commercial Backpack Subsystem contains a backpack, patrol pack, and butt pack. The backpack's state-of-the-art internal frame affords a stable platform sufficient to carry 120 lbs. effectively. The backpack transfers load efficiently from the shoulders to the waist and provides adjustments to fit the 5th - 95th percentile male SOF operator. The butt pack attaches to ELCS or the backpack; the patrol pack attaches to the backpack, and is compatible with the other SPEAR BALCS components. The one size subsystem weighs 17 lbs. Load capacity are as follows:

- Backpack: 120 lbs.
- Patrol pack 50 lbs.
- Butt pack: 13 lbs.

Point of Contact:

Individual Protection Liaison
COMM (508) 233-6481, DSN 256-6481
EMAIL amssb-rip@natick.army.mil



**NATICK
SOLDIER
CENTER**

Kansas St.
Natick, MA
01760
nsc.natick.army.mil

Rev 12-19-01