

The DH-133A Combat Vehicle Crewmember Protective Helmet was developed by Gentex Corporation as an upgrade to the DH-132® and DH-132A models both of which were type classified and adopted as the Standard A for U.S. Army personnel.

The DH-133A retains the compatibility of the DH-132 and DH-132A models with field components such as binoculars, protective masks, and vehicle instruments while offering improvements in the areas of comfort, sound attenuation, and helmet retention and stability.

The DH-133A helmet has five major components: a ballistic helmet shell, an energy absorbing liner, a thermoplastic liner (TPL®), retention assembly, and communications assembly. Ballistic, impact and lateral protection are provided by combining the high strength protective materials of the shell, energy absorbing liner, and earcups. The TPL is preformed and will fit a majority of head sizes, and can also be custom fit to individual head shapes. The retention assembly features separate adjustable chin and nape straps and permits earcup rotation to enhance fit and noise attenuation. Additional proprietary design features of the DH-133A helmet include a raised inner ring on the earseals which reduces outside ambient noise while improving headset communication, and an earcup tension spring.

STANDARD CONFIGURATION

COLOR

Olive Drab No. 34088 of FED-STD-595. The shell is finished in accordance with MIL-C-46168. Walnut shell flour is used to produce the rough, matte finish on the shell.

SHELL

Specially formulated combination of polyvinyl butyral and phenolic resin with Kevlar® ballistic protective fabric. The shell edge is trimmed with a neoprene beading.

ENERGY ABSORBING LINER

Three piece energy absorbing material is bonded to the inside of helmet shell with removable tabs placed over the retention assembly attachment points to allow retention adjustment without liner removal.

TPL

Molded plastic layers and a cloth cover. The cover incorporates ventilated fabric for wear next to the head, and sides made of pile fastener for attachment to hook fastener tabs on the energy absorbing liner.

EARCUPS

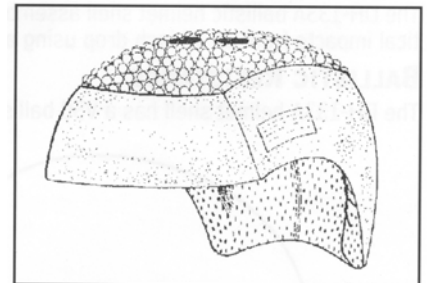
Contoured earcups easily rotate within the retention assembly to ensure a comfortable fit.

EARSEALS

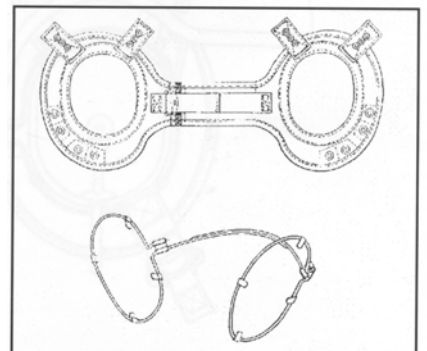
Padded, non-hardening polyurethane with a raised ring around the inside edge to improve sound attenuation and reduce outside noise interference.

RETENTION ASSEMBLY

The retention consists of a sewn, cotton/nylon fabric. It attaches to the helmet shell at four locations, with three holes at the end of each adjustment strap to allow individual adjustment. Adjustments provide for the raising/lowering and forward and aft positioning of the earcups.



ENERGY ABSORBING LINER



RETENTION ASSEMBLY

CHINSTRAP

Secured with a single snap release and "D" Rings for tensioning. A chin pad is provided with each chinstrap.

COMMUNICATIONS

Consists of Headset-Microphone MK-1697/G which meet the requirements of MIL-H-49161 and includes the following components:

M-138G dynamic microphone with a frequency response of 300-3500 Hz. The microphone is 150 ohms at the plug.
Universal ball joint boom assembly.

CORD SET

Ear to ear cord extending from helmet at the left side and terminating at a quick disconnect connector which mates with a lower cable assembly leading to two U-229/U connectors. Radio/Intercom Switch on left earcup.

SUN, WIND, DUST, GOGGLE RETAINER

A retainer strap is attached to the rear of the helmet shell to secure the Sun, Wind and Dust Goggle strap to the helmet.

ACCESSORIES / OPTIONS

CONVERSATIONAL COMMUNICATIONS UNIT

The DH-133A helmet will accept a modified Conversational Communications Unit (Model 6011) which is designed to provide two-way communications for the user when disconnected from the vehicle communications system but is wearing the helmet and chemical defense mask with integrated microphone.

ELECTRET MICROPHONE

The MK-1697/G headset-microphone can be modified by the inclusion of a transformer and diode capacitor network. These are installed in the left earcup to permit the use of a high performance electret microphone with superior noise cancelling characteristics and improved EMI performance.

FACESHIELD KIT

A protective faceshield is designed for use with the DH-133A helmet and provides limited ballistic and impact protection in the eye, face and jaw regions. The faceshield attaches to the front of the helmet and may be stowed on top of the helmet when not in use.

VISOR HOUSING KIT

The visor housing kit consists a protective visor housing and a single polycarbonate visor. The visor housing attaches to the front of the helmet shell and contains a knob for raising or lowering the visor. A clear, neutral, or laser visor lens may be ordered.

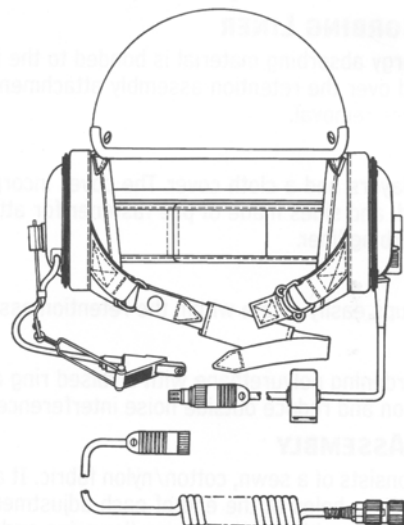
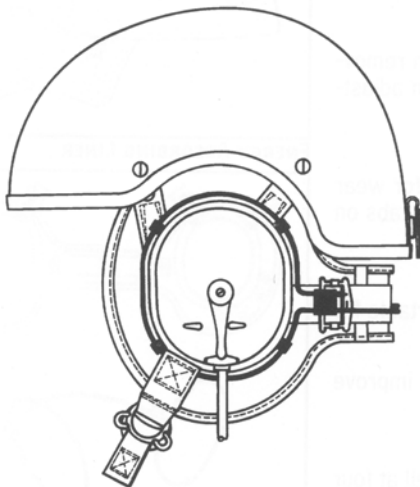
MINIMUM PERFORMANCE REQUIREMENTS:

IMPACT RESISTANCE

The DH-133A ballistic helmet shell assembly limits the acceleration of a test headform to an average of 75g when subjected to two identical impacts from an 18 inch drop using a hemispherical anvil (ANSI Z90.1 test methodology used).

BALLISTIC RESISTANCE

The DH-133A helmet shell has a V50 ballistic limit of not less than 1400 feet per second when tested in accordance with MIL-STD-662.



associated industries