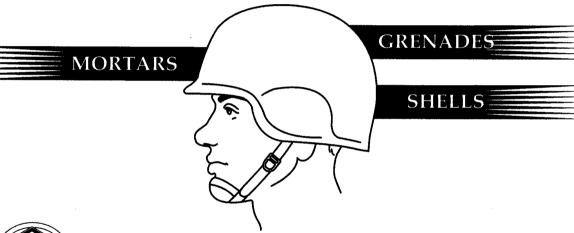
# THIS IS YOUR BALLISTIC HELMET





U.S. ARMY SOLDIER AND BIOLOGICAL CHEMICAL COMMAND NATICK SOLDIER CENTER, NATICK, MASSACHUSETTS NATICK PAMPHLET 70-2 (JULY 2000)

#### IT REALLY WORKS - IF IT'S THE CORRECT SIZE!

These are actual accounts from soldiers who survived the battlefield because of the Personnel Armor System, Ground Troops Helmet's ballistic protection.

#### **GRENADA 1983**

- 20mm mortar barrage. Hit by 22 fragments in helmet. No injury to head
- Sniper attack from close range. Hit by AK-47 round, one hit to helmet. Minor concussion; life saved

## IS YOUR HELMET THE CORRECT SIZE? — YOUR LIFE MAY DEPEND UPON IT

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#### THE PROPER HEAD MEASURING PROCEDURE

Step 1	Subject must be seated in upright position.
	Measure head length (see page 5). Record size measured*.
Step 3	Measure head width (see page 6). Record size measured*.
Step 4	Measure head circumference (see page 7). Record size measured*.
Step 5	Select the largest helmet size based on the 3 measurements. This is THE proper helmet size for the soldier measured.

<sup>\*</sup>If a measurement falls on the line between two sizes, select the larger of the two measurements.

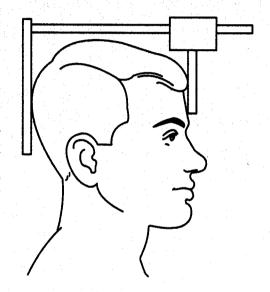
A set of calipers and tape measure was developed by Natick RD&E Center which have sizes inscribed on them. If Natick sizing calipers and tape measure are not available, use GSA calipers (NSN 5210-01-434-9493), measuring tape (NSN 8315-00-782-3520) and the sizing chart on page 4.

#### HEAD/HELMET SIZING CHART

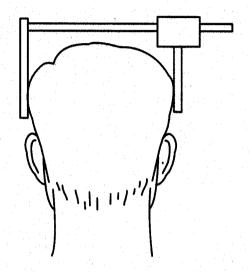
ATTENTION -- The chart is only to be used if PASGT sizing calipers and tape measure are not available.

	Head Length (inches)	Head Width (inches)	Head Circumference (inches)
X-SMALL (XS)	Up to 7.1	Up to 5.6	Up to 21.1
SMALL (S)	7.1 to 7.6	5.6 to 6.0	21.1 to 21.9
MEDIUM (M)	7.6 to 7.9	6.0 to 6.3	21.9 to 22.7
LARGE (L)	7.9 to 8.3	6.3 to 6.5	22.7 to 24.0
X-LARGE (XL)	8.3 to 8.8	6.5 to 7.1	24.0 to 26.0

If a measurement falls on a dividing line between sizes, select the larger of the two sizes (Reason: Maximum Ballistic Protection).



**HEAD LENGTH:** Subject sits erect with head level. The maximum length of the head is measured from the back of the head (occiput, the farthest point back) to the forehead (glabella, between the eyebrows).

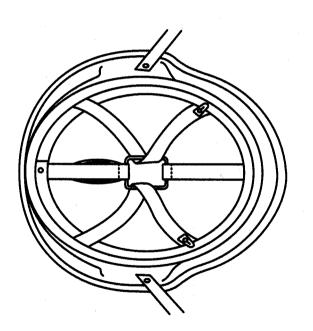


**HEAD WIDTH:** Subject sits erect with head level. The maximum horizontal width of the head is measured above and behind the ears. It is best to take measurement of subject while standing behind subject.

## YOUR HELMET HAS 4 SIMPLE PARTS:

- 1. HELMET SHELL
- 2. SUSPENSION ASSEMBLY
- 3. HEAD BAND
- 4. CHIN STRAP

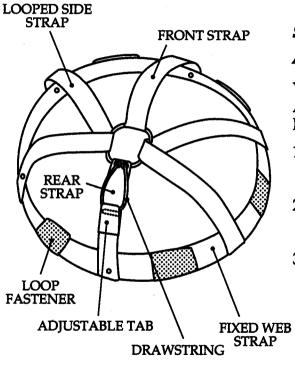
A helmet cover and a helmet band are also used with the helmet. Airborne soldiers will also use the parachutist retention strap, parachutist pad, and parachutist impact liner. A chemical protective cover is also used in certain operations.



### THE HELMET SHELL COMES WITH:

Suspension assembly and chin strap installed.

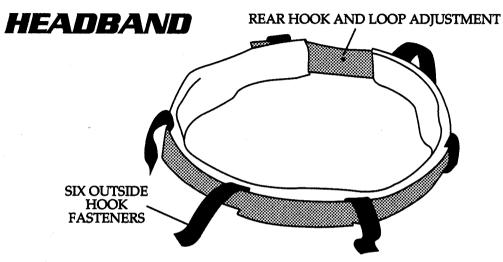
All you have to do is adjust and insert the headband.



## SUSPENSION ASSEMBLY

YOUR SUSPENSION ASSEMBLY CONSISTS OF THE FOLLOWING:

- 1. Two looped side straps and one each front and rear straps.
- 2. A fixed web strap to which the ends of the crown straps are attached.
- 3. Drawstring and adjustable tab.



Your headband is a padded leather-lined web strap. A hook and loop fastener in the back adjusts the headband's length to fit your head.

Attached to the strap's outside are six hook fasteners. These are used to attach the headband to the fixed loop fasteners web strap of the suspension assembly.

## HEADBAND SIZING AND FITTING

- 1. Ensure all six black hook fasteners are unfastened.
- 2. Unfasten new headband. Wrap around your head with leather touching head and opening in back.
- 3. When headband fits snugly, press ends (hook and loop) together so that it is firmly and completely fastened.
- 4. While keeping the headband fastened, remove headband from the head.

## ATTACH HEADBAND TO SUSPENSION ASSEMBLY

- 1. Ensure all of the six black hook and loop fasteners of the new headband are unfastened.
- 2. Place the shell with suspension assembly installed upside down in front of you on a flat surface.
- 3. Place your headband inside the suspension assembly with the folded edge of the leather facing up (toward you). Line up the back of the suspension system (where drawstring adjustment tab is) and adjustment area of the headband (where there is no leather) so they are next to each other.
- 4. Ensure the hook and loop fasteners are around the suspension's fixed web strap and not caught between the fixed web strap and headband.
- 5. Wrap the hook and loop fasteners snugly around the suspension strap and lift leather side of headband up so that hook section can be fastened to the loop section underneath.
- 6. Repeat step #3 with other five hook and loop fasteners, working around the headband from front to back to front again.

### DRAWSTRING ADJUSTMENT: NOW, PUT THE HELMET ON YOUR HEAD

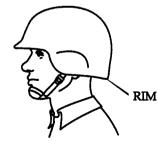
If it sits too high...

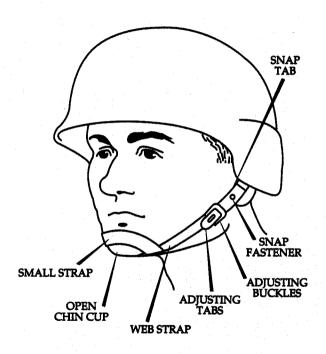
...move drawstring adjustable tab on suspension assembly toward crown of helmet.



If it sits too low...

...move drawstring adjustable tab on suspension assembly toward rim of helmet.





### **CHIN STRAP**

THE CHIN STRAP CONSISTS OF THE FOLLOWING:

- 1. Web straps with open chin cup.
- 2. Two adjusting buckles and tabs.
- 3. One lift-the-dot snap fastener and tab.

## CHIN STRAP FASTENING AND ADJUSTMENT

With the helmet on your head and properly adjusted...

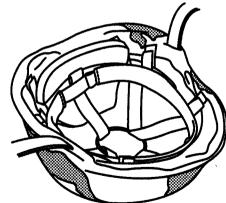
Fasten the snap closure of the chin strap -- make sure the small strap of the chin cup is in front of the chin.

Now grasp the adjustment tabs at each buckle and pull until the chin cup is snug, centered and comfortable.

#### REMEMBER, THE SNAP FASTENER CAN ONLY BE OPENED BY PULLING THE SNAP TAB DIRECTLY DOWN

#### **MOUNTING THE CAMOUFLAGE COVER**

- 1. Line up cover so that the slits on the folded edge are at rear of the helmet.
- 2. Put cover over helmet so that the front end covers the front of the helmet.
- 3. Pull cover over back and sides of the helmet and thread each end of chin strap through slits on the sides of the cover.
- 4. Extend the six cover retaining tabs down and around the fixed web strap of the suspension assembly (but not the headband), fasten the tab onto itself using the hook and loop closure.
- 5. Now place the elastic helmet band over the helmet and cover.



## TO WEAR THE CHEMICAL PROTECTIVE COVER

Simply place the chemical protective cover over the helmet whether or not the camouflage cover is already on.



### PARACHUTISTS: TO JUMP WITH THIS HELMET REQUIRES THREE ADDITIONAL ITEMS FOR YOUR SAFETY

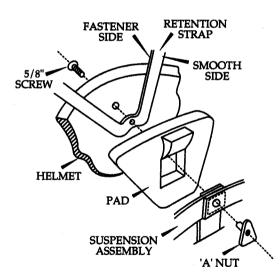
- 1. The parachutist pad (inside rear of helmet)
- 2. The parachutist retention strap with 5/8" screw
- 3. Parachutist impact liner (whole inside of helmet)

These items when properly installed (see detailed views) provide you with maximum safety and stability.

## PARACHUTIST PAD AND PARACHUTIST RETENTION STRAP

To install the parachutist pad and retention strap, remove rear screw and "A"nut and reinstall with pad and strap using 5/8" screw (supplied with retention strap) as shown.

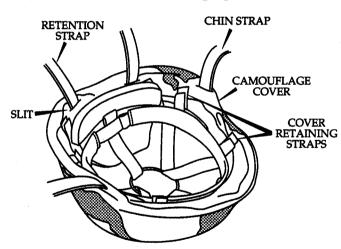
Be sure the hook and loop on the ends of the retention strap face the rear of the helmet.



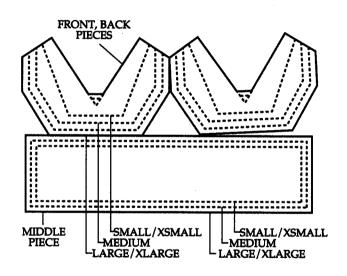
### CAMOUFLAGE COVER ADJUSTMENT FOR PARACHUTISTS

After installing the retention strap and the parachutist pad, replace the camouflage cover as before (see page

18), except -thread the ends of
the retention strap
through the two
slits on the back
of the cover at the
rim (see figure).

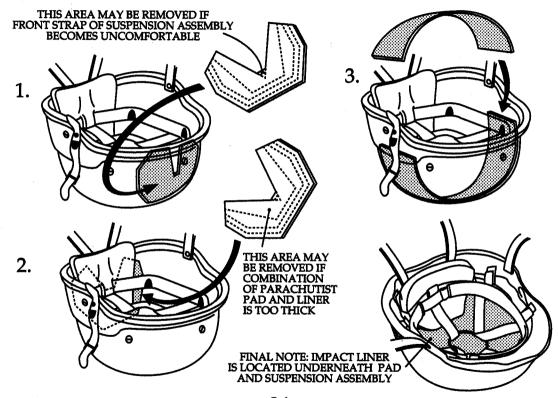


### PARACHUTIST IMPACT LINER



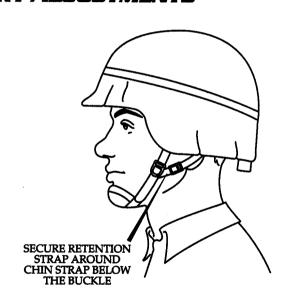
#### **SIZING**

1. Separate the three portions of the liner. (Two V's and a rectangle.)
2. To size, remove material at perforations (for large/extra large, remove nothing; for medium, remove material up to first perforation; for small/extra small, remove material up to second perforation).



# FOR PARACHUTING OPERATIONS PUT ON YOUR HELMET AND MAKE ANY NECESSARY ADJUSTMENTS

Fasten the chin strap and make sure the chin cup is tightly adjusted. Then take each end of the retention strap, bring it along your face and wrap it around and under the tab of the adjustment buckle. Pull tightly and fasten it to itself with the hook and loop attachment (see figure).



## TO REPLACE THE SUSPENSION IS SIMPLE...

Using a screwdriver...

Remove the six mounting screws and 'A' nuts. Lift the suspension assembly out.

To replace — line up the holes in the suspension assembly with the the holes of the helmet, making sure the drawstring and adjustable tab is at the rear of the helmet.

Now insert the 'A' nuts (peak of the 'A' toward the rim) through the holes and replace the six screws.



## TAKE CARE OF YOUR HELMET

DON'T HEAT WATER IN IT DON'T HAMMER WITH IT DON'T DIG WITH IT

USE IT — DON'T ABUSE IT!

**SOLDIER**, your helmet is the best ballistic protective helmet in the world. Make sure you're wearing the proper size.

It is made of a high strength laminate, the strength of which surpasses that of steel...and which pound for pound has better ballistic protection than steel. This helmet along with the vest makes up your body armor system. It will protect you against fragments from exploding munitions.

## WEAR IT AND LIVE! WEAR THE CORRECT SIZE

## **WASHING INSTRUCTIONS**

The suspension assembly, headband, chin strap, parachutist retention strap, parachutist pad, parachutist impact liner, helmet cover, and helmet shell should be washed with mild soap and warm water and air dried.

## REPAIR AND MAINTENANCE

Repair and maintenance instructions for the helmet can be found in Chapter 19 of TM 10-8400-203-23.

#### HELMET, PERSONNEL ARMOR SYSTEM GROUND TROOPS (PASGT) RECORD OF HIT

Name						
RankSerial No						
Unit						
POC and Telephone						
Helmet Size Date of Issue						
Duty being performed when hit						
Check: Grenade Mortar Artillery						
Rifle Mine Booby Trap Date of  Hit Estimated Range						
Location of Hit(s) on Helmet						
Continued to perform mission Yes No						
Was Injury sustained? No Yes						
Describe						

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