

HEARING PROTECTIVE DEVICES

INTRODUCTION

This site provides information about various types of personal hearing protectors which have been evaluated by DoD laboratories. The Noise Reduction Rating (NRR) and frequency specific attenuation as determined by a DoD testing facility is provided for each product as well as a phone number for the manufacturer. Only DoD tested products or any of the listed hearing protective devices (HPDs) may be purchased for and utilized by Navy personnel.

While standard stock HPDs are far less expensive than open-purchased products, they are not necessarily the most protective, nor the easiest to purchase. Commands desiring to open purchase these authorized hearing protectors are advised to follow these procedures:

- Establish that no adequate standard stock protector is available in the required time frame
- Purchase any of the authorized products in small quantities, initially,
- Field test them for comfort, durability, protectiveness, and user acceptance, and
- Spend your dollars accordingly.

Activities desiring to use hearing protective devices not specified here shall submit a sample of the device with a request for evaluation to Chief, Bureau of Medicine and Surgery. BUMED will review manufacturers' test data and determine suitability for use within the Navy's Hearing Conservation Program. Approval is unlikely until the product has been tested by a DoD laboratory.

For further guidance and information on this subject the POC is Mr. Ned Kramp at (757) 462-5579 or DSN 253-5579. E-mail address is krampn@nehc.med.navy.mil

HEARING PROTECTIVE DEVICE ADVISORY

When ordering "foam" type insert earplugs be advised that the NSN 65615-00-137-6345 will not get you the EAR or Deci-Damp plug. EAR no longer has the contract to provide expandable foam earplugs. What you will get is an earplug called Sound Guard by New Dynamic. This plug is harder, expands slower, and works loose easily and customer satisfaction has been very low up to this time. The only other option is to buy the EAR plug outside the stock system at a considerably higher cost. For those of you using the Sound Guard, acceptance and user compliance is very important. Please, let us know if they are not acceptable. Below is listed a new entry into the hearing protective device stock system. A plug designed for combat troops.

COMBAT ARMS EARPLUG

Plug, ear/Aearo Co(317-692-6666)
Plug, ear/Edgewater Corp(412-828-4000)
NSN 6515-01-466-2710
Unit pkg Qty 2
Unit cost \$5.00

This plug is designed to protect the hearing of soldiers and marines in dismounted operations from impulse noise. They are passive nonlinear devices that work without batteries and are easy to maintain and are compatible with most head gear. At this time only one size is available to fit most of the adult male population.

CUSTOM MOLDED

Custom molded hearing protective devices are used in special cases only. NRR values will vary from individual to individual. These devices will only be available from activities which have an audiologist on staff.

AUTHORIZED HEARING PROTECTIVE DEVICES

DEVICE	OCTAVE BAND ATTENUATION									NRR
	125	250	.5k	1K	2K	3K	4K	6K	8K	

PRE-MOLDED (non-disposable earplugs):

Single Flange (V-51R) Bilsom (800/345-4112)

Mean Attenuation	24	24	26	33	38	38	33	36	38	21
Std Deviation	4.1	4.3	3.6	5.2	6.0	4.9	4.2	6.5	6.2	
NSN extra small	6515-00-442-4765									
NSN small	6515-00-467-0085									
NSN medium	6515-00-467-0089									
NSN large	6515-00-442-4807									
NSN x-large	6515-00-442-4813									

Triple Flange (North Safety) (800/ 421-3841)

Mean Attenuation	28	28	30	32	43	45	43	43	45	20
Std Deviation	5.1	5.5	6.3	6.1	7.5	7.8	7.6	5.4	4.9	
NSN small	6515-00-442-4821									
NSN medium	6515-00-442-4818									
NSN large	6515-00-467-0092									

MOLDABLE (disposable earplugs):

Foam (E.A.R.) (800/ 225-9038) (Decidamp) (800/ 421-3841)

Mean Attenuation	32	35	36	40	43	47	45	45	45	27
Standard Deviation	4.8	6.1	6.2	6.1	5.4	5.1	2.8	4.2	4.6	
NSN	6515-00-137-6345									

Howard Leight Max 1(800/327-1110)

Mean Attenuation	29	30	32	30	36	43	46	47	47	18
Standard Deviation	8.0	8.1	7.6	7.2	4.0	4.5	4.9	3.3	3.8	
NSN	6515-01-329-4700									

3M 1110 (651/733-0957)

Mean Attenuation	22	25	28	29	34	41	40	40	42	19
Standard Deviation	5.1	5.4	5.6	6.1	5.4	4.5	4.2	5.1	4.5	

(Not available through the NSN, local purchase required)

Flents Silaflex silicone type (800/364-0680)

Mean Attenuation	21	21	19	28	42	44	41	40	37	16
Standard Deviation	4.5	4.1	5.0	5.4	3.3	4.7	4.9	3.1	6.4	
NSN 24 pairs	6515-00-135-2612									
NSN 100 pairs	6515-00-135-5416									

Bilsom Prop-O-Plast (800/345-4112)

Mean Attenuation	19	20	22	30	39	42	40	41	38	18
Standard Deviation	5.8	4.5	4.2	4.6	3.7	5.1	4.6	4.2	5.1	
NSN	4240-01-071-2515									
NSN	4240-01-071-2516									

DEVICE	OCTAVE BAND ATTENUATION									NRR
	125	250	.5k	1K	2K	3K	4K	6K	8K	
Moldex Purafit 6800										
Mean Attenuation	29	22	23	25	30	38	38	39	47	8
Standard Deviation	8	10	10	9	5	7	7	8	7	

DEVICE OCTAVE BAND ATTENUATION NRR

CIRCUMAUURAL MUFFS

NSN 4240-00-022-2946 (This NSN could provide you with any one of the 4 muffs listed below)

	125	250	.5k	1K	2K	3K	4K	6K	8K	
David Clark E310 (508/756-6216)										
Mean Attenuation	12	18	27	34	30	39	37	37	36	17
Standard Deviation	3.9	3.6	5.3	5/9	5.3	4.1	4.1	3.6	3.2	

Wilson 365GS (800/345-4112)										
Mean Attenuation	13	19	24	38	32	34	36	37	36	17
Standard Deviation	3.8	5.3	5.3	6.5	4.6	4.6	6.3	3.5	4.7	

Safety Direct RBW-71(602/968-7009)										
Mean Attenuation	7	11	18	33	34	43	30	30	29	9
Standard Deviation	4.1	5.5	7.2	6.6	5.5	7.6	7.9	4.1	5.0	

(Because of the low NRR this muff is not recommended as single protection against noise exceeding 95 dBA)

MSA Mark IV (412/967-3000)										
Mean Attenuation	14	16	22	32	30	40	37	35	34	15
Standard Deviation	4.0	5.0	5.6	5.5	4.6	6.2	5.5	5.3	6.7	

Other muffs available through standard stock

Howard Leight Thunder 29 (800/327-1110)										
Mean Attenuation	11	14	19	32	34	38	33	34	32	13
Standard Deviation	3.5	3.7	5.4	6.0	6.5	4.7	4.8	4.4	4.4	
NSN	4240-01-357-3998									

Wilson 365 (800/345-4112)										
Mean Attenuation	13	19	24	38	32	34	36	37	36	17
Standard Deviation	3.8	5.3	5.3	6.5	4.6	4.6	6.3	3.5.	4.7	
NSN	4240-01-256-3350									

Safety Direct USN-86 "Flight Deck" (602/968-7009)										
Mean Attenuation	17	24	30	39	32	32	32	31	32	21
Standard Deviation	4.4	3.5	5.7	4.1	3.5	4.0	4.7	3.6	4.4	
NSN	4240-00-759-3290									

Not available through NSN, local purchase required

Tasco Sound Shield #2900 (800/343-2311)										
Mean Attenuation	14	20	28	38	35	39	38	36	35	19
Standard Deviation	3.0	3.6	6.7	3.9	5.5	5.2	6.1	4.0	3.4	

DEVICE	OCTAVE BAND ATTENUATION									NRR
	125	250	.5k	1K	2K	3K	4K	6K	8K	
Tasco Golden Eagle #2950 (800/343-2311)										
Mean Attenuation	16	21	31	41	37	38	37	34	34	23
Standard Deviation	2.9	2.8	3.9	4.8	5.4	6.1	3.7	2.8	5.0	
Peltor H10A (800/678-4163)										
Mean Attenuation	12	18	27	34	35	36	40	37	35	17
Standard Deviation	4.9	2.9	5.8	6.7	5.2	5.1	5.4	4.3	8.8	
Bilsom 727 Gen. Purp. (800/345-4112)										
Mean Attenuation	10	18	27	30	33	38	33	33	32	18
Standard Deviation	3.0	2.5	2.3	2.5	7.2	3.3	3.0	3.5	4.7	
Blue Point GA 3000										
Mean Deviation	16	18	28	29	34	33	33	34	32	19
Standard Deviation	4.4	4.4	4.1	4.4	3.1	2.5	3.2	4.1	6.2	
3M 1435 (651/733-0957)										
Mean Attenuation	10	14	21	28	30	33	35	34	32	16
Standard Deviation	3.6	2.5	4.7	4.1	4.1	4.5	3.4	3.5	6.2	
3m 1440										
Mean Attenuation	12	18	25	30	31	34	37	38	37	18
Standard Deviation	3.6	3.8	3.6	4.8	3.0	3.6	3.5	2.9	5.1	
Aero Earmuff 1000										
Mean Attenuation	10	13	22	31	29	35	34	35	37	18
Standard Deviation	3.6	5.8	3.4	6.0	3.8	3.4	5.5	5.4	5.6	
Bilsom 707 Impact (800/345-4112)										
Mean Attenuation	11	12	21	25	22	27	31	35	36	18
Standard Deviation	4.9	3.9	5.8	5.2	5.2	6.3	5.8	4.7	4.0	
Bilsom Blue 2308										
Mean Attenuation	7	10	17	28	30	35	36	36	34	13
Standard Deviation	3.8	3.5	2.7	3.4	3.1	3.9	4.2	4.9	6.9	
Bilsom Viking 29										
Mean Attenuation	15	21	30	34	32	36	41	41	40	22
Standard Deviation	3.1	4.2	3.4	3.7	3.5	2.9	3.5	4.7	5.7	
Cabot 1720										
Mean Attenuation	7	14	21	30	31	32	34	35	34	13
Standard Deviation	5.4	4.5	5.0	5.0	3.5	3.9	3.6	3.7	5.0	
E-A-R 1000 (800/225-9038)										
Mean Attenuation	8	14	24	28	24	28	26	25	27	14
Standard Deviation	3.3	2.9	3.6	4.5	2.5	2.9	4.6	5.3	5.0	

DEVICE	OCTAVE BAND ATTENUATION									NRR
	125	250	.5k	1K	2K	3K	4K	6K	8K	
E-A-R 820 (800/225-9038)										
Mean Attenuation	7	9	18	27	27	32	32	32	30	10
Standard Deviation	3.9	4.3	4.9	4.4	4.4	3.9	4.5	6.3	7.5	
E-A-R 9000										
Mean Attenuation	9	15	25	25	23	26	25	23	25	14
Standard Deviation	3.5	2.5	2.5	5.9	2.9	2.4	2.0	3.1	3.1	
Gentex Wolf Ear (800/258-3554)										
Mean Attenuation	8	14	21	22	20	30	35	35	36	10
Standard Deviation	3.4	3.7	5.1	4.0	5.0	6.4	6.7	5.4	5.8	
Howard Leight QM 24 (800/327-1110)										
Mean Attenuation	10	13	18	28	27	29	29	32	33	10
Standard Deviation	5.7	6.1	5.0	4.7	3.9	4.2	3.0	5.8	5.9	
MSA Economuff (412/967-3000)										
Mean Attenuation	9	13	18	24	31	32	32	33	31	7
Standard Deviation	7	4	2	10	5	4	3	5	5	
MSA Mark IV										
Mean Attenuation	14	16	22	32	30	40	37	35	34	15
Standard Deviation	4.0	5.0	5.6	5.5	4.6	6.2	5.5	5.3	6.7	
MSA SlimPro Plus										
Mean Attenuation	14	17	24	33	32	34	33	32	31	18
Standard Deviation	5	4	4	5	3	4	3	5	5	
North 28-45-00										
Mean Attenuation	4	9	17	25	29	30	22	25	24	9
Standard Deviation	3.5	4.3	5.6	3.6	4.8	5.1	3.0	4.6	6.9	
Peltor H7A (800/678-4163)										
Mean Attenuation	10	19	27	33	33	34	34	30	33	19
Standard Deviation	4.5	3.1	2.9	4.2	3.5	3.0	2.2	2.8	2.8	
Vallen Pro-Max 1										
Mean Attenuation	15	21	30	35	33	34	35	36	33	21
Standard Deviation	3.9	4.4	4.3	3.8	4.0	3.3	2.4	3.9	6.3	
Wilson 365-Sound (800/345-4112) Barrier										
Mean Attenuation	13	19	24	38	32	34	36	37	36	17
Standard Deviation	3.8	5.3	5.3	6.5	4.6	4.6	6.3	3.5	4.7	
NSN 4240-01-256-3350										

DEVICE	COMMUNICATION HEADSETS									NRR
	OCTAVE BAND ATTENUATION									
	125	250	.5k	1K	2K	3K	4K	6K	8K	
David Clark H10-76										
Mean Attenuation	14	20	20	21	33	37	38	34	31	14
Standard Deviation	4.0	3.7	3.1	4.9	3.4	4.3	4.6	7.3	7.4	
NSN	5965-01-390-9240									
Astrocom H157A (607/432-1930)										
Mean Attenuation	10	12	16	22	27	35	38	38	38	11
Standard Deviation	5.1	2.8	4.6	4.3	4.5	5.2	4.5	5.7	8.5	
NSN	5965-01-128-1410									
Astrocom (81349-MIL-H-87819 Specification)										
Mean Attenuation	16	20	26	41	42	36	33	32	32	19
Standard Deviation	4.5	3.7	5.3	7.0	4.8	4.1	5.6	4.2	5.5	
NSN	5965-01-204-8505									
Roanwell (81349-MIL-H-87819 Specification) (212/989-1090)										
Mean Attenuation	18	18	26	35	31	34	35	35	34	14
Standard Deviation	5.3	6.7	5.2	8.7	6.4	8.2	7.4	7.2	6.5	
NSN	5965-01-204-8505									
David Clark H133C (508/756-6216)										
Mean Attenuation	22	24	31	26	27	29	37	34	34	17
Standard Deviation	5.5	5.6	5.3	3.2	5.4	3.9	4.9	2	3.9	
Peltor Lite-Com (800/678-416)										
Mean Attenuation	12	19	24	34	30	33	36	35	35	20
Standard Deviation	3.1	2.7	2.4	3.4	3.8	2.8	2.7	3.9	3.2	
Roanwell 495-622 001-604										
Mean Attenuation	12	18	23	22	23	29	31	32	32	13
Standard Deviation	6.9	5.2	5.2	3.4	3.2	3.3	3.9	5.9	5.8	
Wire-Com-De-Icing										
Mean Attenuation	13	15	26	32	30	34	38	40	38	20
Standard Deviation	3.8	1.7	3.5	3.6	3.6	2.5	2.8	4.0	4.0	

DEVICE	COMMUNICATION HEADSETS									NRR
	OCTAVE BAND ATTENUATION									
	125	250	.5k	1K	2K	3K	4K	6K	8K	
HELMET										
HGU-53/P, Gentex (800/258-3554)										
Mean Attenuation	15	8	19	26	39	46	50	54	53	10
Standard Deviation	4.4	2.4	6.9	7.8	5.7	4.9	4.2	5.3	6.3	
HGU-55/P, Gentex										
Mean Attenuation	10	5	19	31	44	46	49	50	50	12
Standard Deviation	4.1	2.8	3.1	5.1	3.4	5.0	7.3	6.4	6.8	

DEVICE	OCTAVE BAND ATTENUATION									NRR
	125	250	.5k	1K	2K	3K	4K	6K	8K	
SPH-4B, Gentex (800/258-3554)										
Mean Attenuation	14	13	24	37	38	40	40	45	43	20
Standard Deviation	2.8	2.2	2.2	5.4	2.6	4.0	4.3	5.0	4.8	
HGU-26 with MX 8376/AR ear cups										
Mean Attenuation	7	6	14	22	33	43	44	40	37	6
Standard Deviation	5.1	5.6	5.0	4.4	6.5	5.7	5.7	11.0	10.7	
HGU-26/P with Block Ear Pad										
Mean Attenuation	2	6	10	13	20	28	30	37	35	2
Standard Deviation	5.8	5.4	5.2	5.1	7.2	7.8	9.5	7.4	5.5	

DEVICE	OCTAVE BAND ATTENUATION									NRR
	125	250	.5k	1K	2K	3K	4K	6K	8K	
PLUG AND MUFF										
E-A-R Plugs/Blue Point GA-3000										
Mean Attenuation	31	30	37	39	34	44	46	46	45	20
Standard Deviation	8.4	8.2	8.4	9.4	5.4	6.4	9.3	6.4	5.9	
E-A-R Plugs/Howard Leight Thunder 29										
Mean Attenuation	33	38	47	44	36	47	50	46	45	27
Standard Deviation	5.6	9.0	8.6	5.8	5.2	6.2	6.0	5.2	4.2	
E-A-R Plugs/Peltor Twin Cup Muffs										
Mean Attenuation	31	32	43	42	38	50	50	50	48	26
Standard Deviation	6.7	7.6	8.2	6.3	5.2	6.3	5.8	3.4	3.3	
E-A-R Plugs/Safety Direct RBW-71										
Mean Attenuation	31	37	44	41	38	48	49	48	46	28
Standard Deviation	6.5	6.3	8.2	5.3	5.4	6.0	4.1	3.2	4.4	

DEVICE	OCTAVE BAND ATTENUATION									NRR
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PLUG & COMMUNICATION HEADSET

	125	250	.5k	1K	2K	3K	4K	6K	8K	
E.A.R. Plugs/Astrocom H157-A										
Mean Attenuation	29	38	47	49	47	52	52	51	49	32
Standard Deviation	5.0	5.0	6.5	4.1	8.1	6.3	4.2	4.2	4.0	
V51R/Astrocom H157-A										
Mean Attenuation	25	25	30	38	47	49	49	46	45	21
Standard Deviation	8.3	7.2	5.3	4.4	6.0	7.5	5.9	4.3	5.6	
E-A-R Plugs/Roanwell										
Mean Attenuation	32	34	35	37	34	46	48	48	45	20
Standard Deviation	5.6	7.6	8.4	8.0	6.3	7.2	7.1	7.2	5.6	

PLUG & HELMET

E.A.R. Plugs/Gentex 53P										
Mean Attenuation	31	30	41	41	45	51	54	55	53	29
Standard Deviation	5.6	5.5	6.0	4.7	4.3	5.7	4.9	5.9	5.8	
51R/Gentex 53P										
Mean Attenuation	22	23	34	36	46	54	56	57	56	24
Standard Deviation	4.4	4.8	5.4	3.5	5.4	5.6	4.6	5.4	5.5	
E.A.R. Plugs/Gentex 55P										
Mean Attenuation	26	27	41	44	46	55	55	56	58	28
Standard Deviation	4.7	5.0	5.8	5.1	5.3	5.0	4.9	6.7	7.0	