

# DEPARTMENT OF THE NAVY

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# MARINE CORPS ORDER 6260.3A

From: Commandant of the Marine Corps To: Distribution List

Subj: MARINE CORPS HEARING CONSERVATION PROGRAM

Ref: See Enclosure (1)

Encl: (1) References (2) Marine Corps Hearing Conservation Program (HCP) Procedures

1. Situation. Noise injury and hearing loss is a continuing concern for the Marine Corps. The Hearing Conservation Program (HCP) requires commands at all levels to establish and maintain HCP requirements per references (a) through (w).

2. Cancellation. MCO 6260.3.

3. <u>Mission</u>. This Order provides policy to preserve the hearing readiness of Marines, assigned Sailors and hazardous noise-exposed civilian personnel.

#### 4. Execution

### a. Commander's Intent and Concept of Operations

(1) <u>Commander's Intent</u>. Protect all Marines, assigned Sailors and hazardous noise-exposed civilian personnel from noise-induced hearing loss.

(2) <u>Concept of Operations</u>. Prevention of noise-induced hearing loss requires elimination or reduction of noise hazards through engineering controls. In the event engineering controls are not practical or feasible, exposure will be administratively limited by exposure time and/or the use of a Hearing Protective Device (HPD). All Marines, assigned Sailors and hazardous noise-exposed civilian personnel will receive annual hearing preservation training and hearing tests to ensure early detection of and protection from hearing loss.

b. Subordinate Element Missions

(1) <u>Director, Safety Division (SD)</u>. The Director, SD provides direct support to the Assistant Commandant of the Marine Corps (ACMC) in establishing HCP policies, objectives, oversight and management of the Marine Corps HCP as an assessable unit. Specifically, the Director SD will:

(a) Serve as the HCP proponent. Under the direction of the ACMC and the Executive Force Preservation Board (EFPB), review HCP initiatives, significant issues or trends, and support resourcing HCP per reference (c).

(b) Establish Marine Corps HCP policy and direction in coordination with the EFPB, Deputy Commandants, Commanders, and other Department of Defense (DoD), government, and non-government agencies, as

appropriate. Ensure the Marine Corps is represented on all DoD and Department of the Navy (DON) HCP policy formulation groups.

(c) Review Marine Corps Orders sponsored and coordinated by other Marine Corps agencies to ensure Marine Corps HCP requirements are addressed.

(d) Exercise oversight responsibility of Marine Corps safety programs including HCP by conducting periodic Command Safety Assessments (CSA), per reference (c). Report all findings to the respective commanders and provide trends and significant HCP issues to the ACMC.

(e) Ensure the Inspector General of the Marine Corps (IGMC) Functional Area 5100 (Safety (non-aviation)) and CSA checklists address the HCP.

(f) Analyze HCP findings from data sources; for example, IGMC Functional Area 5100 checklist, CSA, Warrior Preservation Status Report (WPSR), Defense Occupational and Environmental Health Readiness System Hearing Conservation (DOEHRS-HC) Permanent Threshold Shift (PTS) numbers, Medical Readiness Reporting System (MRRS) hearing conservation report, and the Web Enabled Safety System (WESS) to target hazardous noise sources and prevent further hearing loss.

(g) Per reference (f), provide the Assistant Secretary of the Navy (Energy, Installations and Environment) (ASN (EI&E)) significant HCP issues or trends for the annual Safety and Occupational Health (SOH) In-Progress Review (IPR).

(h) Maintain liaison and coordination with Commander, Naval Safety Center (COMNAVSAFECEN) in support of Marine Corps HCP.

(i) Assist Marine Corps Combat Development Command (MCCDC) and Training and Education Command (TECOM) to develop appropriate HCP curricula for all Marine Corps training.

(j) Provide HCP subject matter experts to support other Marine Corps agencies in eliminating or minimizing risk to hazardous noise.

(k) Represent Marine Corps HCP interest with DoD offices; i.e., Assistant Secretary of the Navy (Research, Development & Acquisition) (ASN (RD&A), ASN (EI&E), Bureau of Medicine and Surgery (BUMED), and HQMC Health Services (HQMC HS).

(1) Publish and disseminate information on the Marine Corps HCP. Collaborate with Office of the U.S. Marine Corps Communication to stimulate interest in HCP through electronic, social and print media.

(2) <u>Deputy Commandant for Aviation (DC AVN)</u>. Advocate and provide direction for the Marine Corps HCP across the spectrum of Marine Corps flight operations and aviation related operations.

(3) Deputy Commandant for Installation and Logistics (DC I&L)

(a) Collaborate with ASN (RD&A) to mitigate hazardous noise exposure aboard Marine Corps installations and facilities.

(b) Collaborate with the Deputy Commandant for Manpower and Reserve Affairs (DC M&RA); the Deputy Commandant for Plans, Policies and Operations (DC PP&O); the Director, SD, and HQMC (HS) to develop tools for analysis of surveillance data and to schedule and track hearing conservation training. (c) Coordinate with the Deputy Commandant for Combat Development and Integration; the Commander, Marine Corps Systems Command; Director, SD, and HQMC HS for hearing protective and tactical communication devices requirements and medical guidance.

### (4) Deputy Commandant for Plans, Policies, and Operations (DC PP&O)

(a) Guide Marine Corps HCP implementation and enforcement in staff coordination of operational matters; i.e., Marine Air-Ground Task Force (MAGTF) matters, combat readiness, security matters, and amphibious and prepositioning matters. Serve as an HCP advocate.

(b) Collaborate with DC M&RA, DC I&L and HQMC (HS) to improve the MRRS to track hearing readiness training and surveillance.

(c) Provide over-arching MRRS reporting policies, requirements and functional oversight for use throughout the Marine Corps to ensure commonality of medical readiness reporting within the Total Force.

#### (5) Deputy Commandant for Manpower and Reserve Affairs (DC M&RA)

(a) Facilitate Marine Corps HCP documentation of training and tracking of personnel enrolled in Marine Corps HCP.

(b) Modify the independent duty screening checklist to ensure all Marines are screened for baseline and annual audiograms, as well as diagnostic and fitness for duty audiology evaluations, prior to assignment to independent duty.

(6) <u>Deputy Commandant for Programs and Resources (DC P&R)</u>. Coordinate with the other Deputy Commandants and Marine Forces (MARFOR) commanders to ensure HCP initiatives, capabilities, activities and hearing loss prevention products, i.e. personal protective equipment and communication devices, are incorporated into the Program Objective Memorandum (POM) and budget processes.

### (7) Deputy Commandant Combat Development and Integration (DC CD&I)

(a) Collaborate with ASN (RD&A) to ensure efforts to mitigate exposure to hazardous noise are addressed for all Marine Corps weapon systems and equipment.

(b) Ensure the Marine Enhancement Program addresses noise control technologies along with ergonomic factors that optimize the latest in hearing protective and tactical communication device equipment.

(c) Develop and implement HCP within the Marine Corps Range Safety Program per reference (a). Ensure appropriate HPDs for the noise environment are readily available in ample supply at ranges and that visual verification of HPD fit occurs for each individual by range personnel prior to commencement of weapon fire.

(d) Evaluate trends for implementation into new technologies and requirements documents.

(8) <u>Marine Corps Forces Command (MARFORCOM) and Marine Corps Forces</u> <u>Pacific (MARFORPAC)</u>. Ensure operational units comply with this Order and use MRRS to track compliance with audiogram testing and reporting requirements.

(9) Commanding General, Training and Education Command (CG TECOM)

(a) Incorporate the HCP into the curricula of all military and

occupationally-exposed civilian personnel training and education per reference (a). Ensure subordinate activities request and receive from Military Treatment Facility (MTF) audiology subject matter experts HCP training and provide fitted HPDs to all recruits.

(b) Research, develop, publish, and disseminate curricula for HCP into professional development courses; e.g., Ground Safety for Marines and Risk Management.

#### (10) Commanding General, Marine Corps Logistics Command (CG LOGCOM)

(a) Institute this HCP at all LOGCOM units, support facilities and production plants per enclosure (2).

(b) Provide resourcing and management requirements for LOGCOM activities and facilities sponsored HCPs and noise abatement initiatives.

(c) Conduct annual HCP assessments using enclosure (2), Appendix D to ensure HCP's full implementation and compliance. Maintain completed assessments for three years for review by higher headquarters.

#### (11) Commander, Marine Corps Systems Command (COMMARCORSYSCOM)

(a) Incorporate management processes into the acquisition material life cycle to control hazardous noise and implement appropriate noise control methodologies per references (a), (g), (h), (i) and (j).

(b) Ensure consideration of noise control technologies and permissible exposure level requirements from DC CD&I features in the design or procurement programs of all items over which the command exercises acquisition authority.

(c) Serve as the Marine Corps point of contact with external agencies for all noise control in acquisition.

(d) Collaborate with ASN (RD&A) to ensure efforts to mitigate exposure to hazardous noise are addressed for Marine Corps weapon systems and equipment.

(e) Coordinate with BUMED for appropriate noise health hazard assessments for weapons systems/acquisition per reference (q).

(12) <u>Inspector General of the Marine Corps (IGMC)</u>. Ensure HCP is included as a CMC special interest item during assistance visits/inspections and results are reviewed and briefed to CMC or ACMC per reference (t).

#### (13) Medical Officer of the Marine Corps (TMO)

(a) Coordinate with BUMED to ensure Marine Corps HCP medical services are provided to all Marines, assigned Sailors and occupationally exposed civilian personnel working in noise hazardous areas.

(b) Provide HCP support and coordination with CMC (SD).

(c) Ensure IGMC's Functional Area 500 (Health Services Support) checklist addresses the HCP.

#### (14) Commander, Marine Corps Installation Command (COMMCICOM)

(a) Institute this HCP on all Marine Corps installations, support

facilities and production plants as a core safety service per enclosure (2).

(b) Provide resourcing and management requirements for MCICOM installation and facilities sponsored HCPs and noise abatement initiatives.

(c) Conduct annual installation HCP assessments using enclosure (2), Appendix D to ensure HCP's full implementation and compliance. Maintain completed assessments for three years for review by higher headquarters.

(15) Marine Corps Installation Commanders (Bases and Stations)

(a) Implement this HCP as a core safety service per enclosure (2).

(b) Conduct annual HCP self-assessments using enclosure (2), Appendix D to ensure HCP's full implementation. Maintain completed assessments for three years for review by higher headquarters.

(16) <u>Commanders</u>, <u>Commanding Officers (COs)</u>, <u>and Officers-In-Charge</u> (OICs)

(a) Implement the Marine Corps HCP per enclosure (2).

(b) Ensure the resourcing and management of the command's HCP and noise abatement programs.

(c) Annually use the Unit's HCP self-assessment guide, found in enclosure (2), Appendix D. Maintain completed assessments for three years for review by higher headquarters.

(d) Identify and enroll all Marines and assigned Sailors into the HCP, along with all civilians assigned to hazardous noise tasks, processes, operations or similar exposure groups. Use MRRS or Department of Defense Information Technology Portfolio Repository-Department of Navy (DITPR-DON) to track personnel enrolled in the HCP. Implement noise abatement and engineering controls. Ensure labeling of hazardous noise areas and equipment, provide and enforce use of HPDs, ensure identified employees receive documented annual training and audiometric testing, and comply with fitness for duty criteria.

(17) <u>Marines, Sailors and Hazardous Noise-Exposed Civilian Personnel</u> of the Marine Corps

(a) Comply with the requirements of the Marine Corps HCP herein.

(b) In accordance with reference (f), report unhealthful hazardous noise operations or working conditions using form NAVMC 11401, "Unsafe or Unhealthful Working Condition" per reference (c).

(c) Report to supervisor or safety officer noise and hearingrelated factors that contribute to mishap incidents (i.e., hearing loss, miscommunication, and misunderstanding of verbal communication).

## c. Coordinating Instructions

(1) <u>Host-Tenant Relationships</u>. Marine Corps installation commanders are responsible for the overall health and safety environment aboard the installation, particularly as specified below.

(a) An Inter-Service Support Agreement (ISSA), Memorandum of Understanding (MOU) or Memorandum of Agreement (MOA) will specify HCP support in host-tenant relationships. HCP support will not be reimbursable. (b) Marine Corps and other Service tenant commands aboard Marine Corps installations will adhere to the host installation's HCP standards. Where tenant commands have HCP standards that meet or exceed the host command's requirements, tenant commands will adhere to the more stringent standards. Marine Corps tenants on other DoD installations will adhere to the host's HCP standards if more stringent.

(c) Installation safety offices will provide the core HCP services described in enclosure (2) to all personnel on the installation unless precluded by an ISSA, MOU, or MOA.

(2) <u>Commander, Naval Safety Center (COMNAVSAFECEN)</u>. By MOA with the Director, SD, COMNAVSAFECEN supports the Marine Corps HCP.

### (3) Military Treatment Facility (MTF) Support

(a) BUMED supports the Marine Corps in all aspects of Occupational Health (OH), including industrial hygiene (IH), Occupational and Environmental Medicine (OEM), occupational audiology, and nursing per reference (w).

(b) All Marine Corps commands will use the supporting MTF for OH services.

(c) Marine Corps commanders will ensure Marines, assigned Sailors and DoD civilian personnel receive applicable OH services. Where such support is not available, (i.e., Marine Corps Forces Reserves and Marine Corps Recruiting Command), commanders will ensure the OH services acquired meet the requirements set forth by reference (m).

(d) MTF OH personnel will conduct worksite visits for noise hazard commands to provide consultation, support, training and expertise on hearing loss prevention and HCP improvement initiatives.

#### 5. Administration and Logistics

a. Commanders will ensure adequate staff and budgets are provided to implement a comprehensive HCP that meets the requirements of this Order.

b. Commanders will apply risk management strategies to HCP along with appropriate planning, orders, training and indoctrination programs, technical and tactical publications, checklists, and standard operating procedures.

c. Records created as a result of this Order will be managed according to National Archives and Records Administration approved dispositions per reference (r) to ensure proper maintenance, use, accessibility and preservation, regardless of format or medium.

d. The generation, collection or distribution of personally identifiable information (PII) and management of privacy sensitive information will be in accordance with the Privacy Act of 1974, as amended, per reference (v). Any unauthorized review, use, disclosure or distribution is prohibited.

### 6. Command and Signal

a. Command. This Order is applicable to the Marine Corps Total Force.

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b. <u>Signal</u>. This Order is effective the date signed.

5. Y JAMES B. LASTER Director, Marine Corps Staff

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# References

- (a) DoD Instruction 6055.12, "Hearing Conservation Program (HCP)," December 3, 2010
- (b) 29 CFR 1910.95
- (c) MCO 5100.29B
- (d) NAVMC DIR 5100.8
- (e) SECNAVINST 6120.3 CH-1
- (f) DoD Instruction 6055.01, "DoD Safety and Occupational Health (SOH) Program," October 14, 2014
- (g) DOD Directive 5000.01, "The Defense Acquisition System," May 12, 2003
- (h) DoD Instruction 5000.02, "Operation of the Defense Acquisition System," January 7, 2015
- (i) DoD Military Standard 882D, "Standard Practice for System Safety," February 10, 2000
- (j) DoD Military Standard 1474E, "Noise Limits for Military Materiel," April 15, 2015
- (k) DoD Instruction 6025.19, "Individual Medical Readiness (IMR),"
  June 9, 2014
- (1) BUMEDINST 6110.14 CH-3
- (m) NMCPHC TM 6260.51.99-2 (September 2008)
- (n) Industrial Hygiene Field Operations Manual (IHFOM)
- (o) MCO P1020.34G W/CH 1-5
- (p) MCO 5200.24D
- (q) BUMEDINST 6270.8B
- (r) SECNAV M-5210.1
- (s) MCO P5102.1B W/CH 1-2
- (t) NAVMC DIR 5040.6H
- (u) SECNAV M-5210.2
- (v) SECNAVINST 5211.5E
- (w) OPNAVINST 5100.23G CH-1

# LOCATOR SHEET

Subj: U.S. MARINE CORPS HEARING CONSERVATION PROGRAM

Location: (Indicate the location(s) of the copy(ies) of this Order.)

# RECORD OF CHANGES

Log completed change action as indicated.

Change	Date of	Date	Signature of Person
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## Marine Corps Hearing Conservation Program (HCP) Procedures

# 1. General

a. Noise injury is a continuing concern within the Marine Corps. The goals of the HCP are threefold: reduce hazardous noise sources through acquisition and engineering controls; prevent noise induced hearing loss; and ensure auditory fitness-for-duty for service members and civilian workforce. Marines, assigned Sailors and hazardous noise-exposed civilian personnel will be enrolled in the HCP. This enclosure details HCP policy guidance for Marine Corps personnel. The intent of the HCP is to maintain hearing readiness of Marines and Sailors so that they understand and distinguish verbal commands such as "get back" from "attack" as well as prevent noise induced hearing loss.

b. Repeated and prolonged exposure to hazardous noise from aircraft, weapons, vehicles, industrial and recreational activities will cause noiseinduced hearing loss. Noise-induced hearing loss may be temporary or permanent, depending on the duration, intensity, and susceptibility of the individual. Prevention of hearing loss is possible by reducing the sound pressure produced by the source, isolating the source, limiting the exposure time, or stopping the sound from reaching the ear.

c. Advances in the technology of acoustic measuring allow peak noise above 140 decibel peak (dBP) to be measured. Determing the noise levels produced by weapons on each range allows commanders to select appropriate hearing protection devices to prevent hearing loss. Commanders will consult Navy Medicine occupational audiologists or industrial hygienists to determine from sound pressure measurements appropriate hearing protective devices for their operational needs.

d. Navy Medicine supports the Marine Corps by performing periodic IH surveys, occupational audiometry and providing necessary data to commanders for updating Individual Medical Readiness (IMR) data into approved DITPR-DON, systems such as the MRRS and the electronic health record.

#### 2. Marine Corps HCP

- a. The following personnel will be enrolled in the HCP:
  - (1) All active duty and reserve Marines.

(2) All active duty and reserve Sailors assigned with or supporting USMC forces.

(3) All civilian personnel occupationally exposed to hazardous noise.

b. The HCP will include identification and evaluation of noise sources, noise abatement, engineering controls, reference (baseline) audiograms, hearing loss prevention training, monitoring audiograms, termination audiograms, hearing protection, hearing readiness status, and diagnostic audiology evaluations.

c. All Marine Corps commands will conduct an annual self-assessment of their HCP using Appendix D. HCP metrics and performance evaluations will be reported in accordance with paragraphs 10 and 11 below. Director, SD will annually brief ACMC on hearing readiness of the Marine Corps.

d. Sources of HCP data include but are not limited to safety selfassessment surveys, IH surveys, hazard abatement logs, MRRS or equivalent approved DITPR-DON systems such as Enterprise Safety Applications Management System (ESAMS), WESS, Marine Corps injury and illness logs, CSAs, IGMC inspections, personal casualty reports, and WESS.

e. Marines receive a reference (baseline) audiogram as part of their initial physical examination conducted at MTFs while at the Recruit Depot or Officer Candidate School (OCS). Marine Corps civilians will receive a reference audiogram prior to assignment to a noise hazardous operation.

f. Hearing tests (audiometry) are performed to detect changes in hearing readiness before hearing loss becomes a mission impairment or impairs quality of life. Marines and assigned Sailors are annually monitored for hearing changes. Civilian personnel enrolled in the HCP should receive an annual monitoring audiogram while occupationally exposed to hazardous noise.

g. The commander and supervisor will take action to prevent further hearing loss when notified of early changes in personnel's hearing, such as Significant Threshold Shifts (STS). These actions will include evaluation of the work-site for additional engineering controls by a qualified engineer, IH, OH professional, Occupational Audiologist or safety specialist; determining adequacy of Hearing Protection Devices (HPDs); and ensuring that HPDs are properly worn.

h. <u>Removal or Re-entry</u>. Active and reserve personnel assigned with or supporting USMC forces may not be removed from the HCP. Supervisors may remove Civilian personnel after noise measurements and dosimetry by qualified industrial hygienists or audiologists have determine steady state SPLs are below a Time Weighted Average (TWA) of 85 dBA weighting or a single exposure to impulse or impact noise of 140 dBP is not exceeded per reference (a). However, upon re-assignment to a noise hazardous environment, an individual will be re-enrolled into the HCP.

### i. Supervisors in Accordance with Command Procedures

(1) Schedule hearing tests for their personnel at the nearest MTF occupational audiology department. Use the form SECNAV 5100/1, "Supervisor's Medical Surveillance and Certification Exam Referral", to schedule hearing test. Personnel will keep scheduled appointments for hearing tests, especially all follow-up appointments. Personnel reporting for monitoring (annual) audiograms will bring their HPDs to verify fit and effectiveness.

(2) Ensure that personnel report for all required hearing and medical surveillance examinations.

(3) Ensure personnel receive timely follow-up to address hearing loss as detected and reported by MTF.

(4) Receive monthly audiometry reports of no-shows and names of tested personnel from Command HCP Liaison or MTF Occupational Audiology Department.

## j. Safety Officer

(1) Track engineering control projects for hazardous noise on hazard abatement log until abated.

(2) Ensure the date of reference audiogram and date of periodic audiogram are documented in MRRS or other approved DITPR-DON SOH electronic tracking system.

(3) Review STS data captured in MRRS or other approved DITPR-DON SOH electronic tracking system. Ensure personnel with STS complete follow-up care at the MTF until the STS resolves, or a PTS is documented. Supervisors ensure personnel referred to an Audiologist for further evaluation and care complies with scheduled appointments.

(4) Date of periodic audiogram may only be entered into MRRS or other approved DITPR-DON SOH electronic tracking system when:

(a) No STS exists on the periodic audiogram.

(b) Subsequent to an STS or other abnormal findings, personnel have completed all required follow-up audiograms and diagnostic audiology evaluations.

## k. HCP Elements are Described Below

(a) <u>Noise Measurement</u>: Noise measurement and exposure analysis to identify noise hazardous areas, sources and exposure levels.

(b) <u>Noise Inventory</u>: IH noise survey or form DD 2214, "Noise Survey" identifies hazardous noise sources or processes that requires at risk Marines, Sailors and hazardous noise-exposed civilian personnel for appropriate HCP training, medical surveillance, issue and fitting of correct HPD.

(c) <u>Engineering Control</u>: Engineering control of noise levels to reduce the potential hazard to the maximum extent feasible.

(d) <u>Training</u>: Training by commands or units regarding potentially noise-hazardous areas and sources, use and care of HPDs, the effects of noise on hearing, and the command's HCP.

(e) <u>Hearing Testing</u>: Periodic hearing testing of HCP enrolled personnel to monitor the effectiveness of the program, and enable timely audiologic and medical evaluation of those personnel who demonstrate significant hearing loss or threshold shift.

(f) <u>Hearing Protective Devices (HPDs)</u>: Recommendations for use of HPDs as an interim measure pending effective engineering controls.

### 3. Measurements and Exposure Assessments

a. To effectively control sound intensity, it is necessary to accurately assess the noise type, level and spectrum per reference (n).

b. Results of personal noise dosimetry performed by industrial hygienist that are at or above 85 dBA, as an 8-hour time-weighted average, must be communicated to the monitored person and command or unit.

c. It is recommended that activities and units, in consultation with supporting MTF occupational audiologist, consider new technology to fit test hearing protectors. Like respiratory fit testing, this indicates that maximum protection can only be obtained if the ideal fit is achieved; various commercial off-the-shelf products assist in achieving optimal fit through hearing protector selection and employee training. Such products generate a personal attenuation rating (PAR) that indicates a worker's noise reduction levels for a given fitting and hearing protector.

d. Assign a risk assessment code (RAC) to all potentially hazardous noise areas and operations in accordance with references (a) and (f).

e. Baseline noise surveys do not require periodic updates. However, commands or units will request an IH noise survey any time a facility,

engineering, weapons or systems change occurs, as well as when new equipment, machinery, vehicles, or tools are purchased for use.

f. For acquisition and development of new systems, identify prospective noise levels from historical data from existing systems, modeling of anticipated noise levels, measurement of noise levels in new or modified systems/equipment during the test and evaluation stage.

#### 4. Marine Corps Occupational Exposure Limit (MCOEL)

a. For an 8-hour TWA, the MCOEL is 85 dBA SPL.

b. For impact or impulse noise, the MCOEL is 140 dBP SPL.

c. Work environments where ultrasound is produced and hearing protection is not already used will conform to the ultrasound exposure limits set forth in reference (a).

#### 5. Labeling of Hazardous Noise Areas and Equipment

a. All potentially hazardous noise areas must be clearly identified by signs located at their entrances or boundaries. Each tool or piece of equipment producing noise levels greater than 85 dBA, including vehicles (tactical vehicles require signage be placed inside), will be conspicuously marked to alert personnel of the potential hazard.

b. Labels will include the type of HPD to wear; (i.e., single or double, or administrative maximum stay times) when hazardous noise exceeds HPD noise reduction ratings. The exception will be when an entire space is designated as a hazardous noise area and the equipment is stationary.

(1) Designated hazardous noise areas and equipment that produce hazardous sound levels will be appropriately labeled. NAVMED 6260/2, hazardous noise warning decal (8" x 10") NSN 0105-LF-004-7200 and the NAVMED 6260/2A, hazardous noise labels (2" x 2") NSN 0105-LF-004-7800, or their equivalents are approved for marking hazardous noise areas and equipment.

(2) NAVMED 6260/2A or equivalent will be used to label smaller individual pieces of equipment or tools that produce hazardous noise.

c. Exteriors of military combatant equipment are excluded from this requirement. Interiors of military combatant equipment will be labeled with appropriate hazardous noise warning signs or labels. Professional judgment and discretion will be exercised when labeling tools and equipment.

d. The designation of hazardous noise areas and equipment will be based on the following criteria.

(1) Any work area or equipment where the SPL is 85 dBA or above (continuous or intermittent) will be considered noise hazardous.

(2) Any work area or equipment where a single impulse or impact SPL is 140 dBP or greater will be considered noise hazardous.

#### 6. Engineering Controls and Noise Abatement

a. Engineering controls will be the primary means of eliminating or reducing personnel exposure to hazardous SPLs. The engineering objective is to reduce SPLs to below TWA 85 dBA weighting and 140 dBP. Noise generation, personnel exposures, and signal control will be considered in the context of life-cycle risk management and combat capability. b. Noise abatement programs will include implementation of noise assessment and engineering control measures through the systems engineering and systems safety in accordance with references (a), (h), (i) and (j). Include in acquisition programs the implementation of noise assessment and engineering control measures through the systems engineering and systems safety process as directed by reference (h) when:

(1) Legacy systems have measured noise exposure concerns as indicated by personnel exposures at or above 85 dBA or 140 dBP.

(2) New systems are considered likely to create noise exposures at or greater than 85 dBA or 140 dBP.

(3) Communication is anticipated to be potentially impaired by background noise caused by new equipment.

(4) Commanders, facility engineers, supervisors, safety officers, and safety managers, in consultation with IH professionals from the supporting MTF, will evaluate and recommend the appropriate engineering controls at the work-site. Where the source is a defense platform such as a vehicle or aircraft, all efforts will be made to communicate findings to the relevant acquisition program manager in the context of a system safety issue.

c. Risk Assessment Codes (RAC 2 or higher) will be assigned to recommended engineering controls identified in noise surveys and tracked until fully corrected in hazard abatement logs.

d. When procuring new tools and equipment, purchase "buy quiet" ones when possible; (i.e., those with lowest sound emission levels which are technologically and economically feasible and compatible with performance and environmental requirements). For large volume purchases, consultation will be made with the GSA commodity manager for the powered hand tools.

e. The secondary means of protecting people will be administrative; (i.e., limiting times of exposure or enforcing safe stay times). Administrative controls are effective only under strict supervisory control and in consultation with safety, IH or occupational audiology.

f. Use of personal protective equipment (PPE), (i.e., ear plugs, muffs, etc.) will be temporary or a last resort solution and only after noise studies have determined engineering or administrative controls are not feasible. The effective protection provided by PPE will be derated in accordance with Appendix A. Administrative control is mandatory when HPD will not reduce exposure at or below the 85 dBA TWA.

#### 7. Training

a. Commanding Officers (COs) and Officers in Charge (OICs) will ensure supervisors, managers and personnel exposed to hazardous noise receive training on their role in preserving the mission's hearing readiness. While the provision of annual training is the command's responsibility, COs, OICs, supervisors and managers are encouraged to collaborate with MTF occupational audiology subject matter experts to provide quality, meaningful HCP education and training. HCP training is mandatory for all Marines, assigned Sailors and hazardous noise-exposed civilian personnel.

b. Marines, assigned Sailors and hazardous noise-exposed civilians will attend initial HCP training session prior to duties in hazardous noise and annually thereafter. Typically, Marines and assigned Sailors obtain initial HCP training at their first duty station. c. All Marines, assigned Sailors and hazardous noise-exposed civilian personnel will receive annual hazardous noise awareness refresher training. Training will be officially documented maintained in appropriate training records for review by chain of command. Training may be found on MarineNet; Course Code: ESHSAHB24.

d. HCP training will cover responsibilities to support effective noise control to include the following:

(1) Importance of hearing readiness for mission success.

(2) Understanding the physical and psychological effects hazardous noise plays in situational awareness, combat effectiveness and lifelong impact on one's quality of life.

(3) Knowledge that hearing tests are performed for early detection of hearing loss and are not preventive, but a tool to alert command or unit of weaknesses in the HCP.

(4) Disciplinary actions are authorized if one is observed not using HPD in hazardous noise environments.

(5) Supervisors' and employees' responsibilities to prevent hearing loss and the importance of leading by example.

(6) Taking personal responsibility to protect one's own hearing from hazardous noise in all live fire operational training and in garrison.

(7) Awareness training will include discussion of hazardous noise occurrence at home, recreationally and personal choices made while using personal firearms, operating power tools and mowers, as well as volume of music listened to with and without earbuds or headphones.

(8) Incorporation of HCP responsibilities during new employee and supervisory training.

(9) The importance of properly fitted HPDs.

e. HPD fit testing equipment helps to measure the fitting accuracy and noise reduction capacity of HPDs. Commanders should budget for HPD fit testing equipment. The equipment generates a Personal Attenuation Rating (PAR), revealing an individual's noise reduction levels for a given fitting and hearing protector. HPD fit testing can be an effective, objective tool to help Commanders provide the best performing HPD, while also serving as a training event to help personnel practice and achieve effective HPD fitting/placement.

f. Effective training requires personal attention to fitting of HPDs and user feedback related to the comfort and effectiveness of varied products. Like respiratory fit testing, this indicates that maximum protection can only be obtained if the ideal fit is achieved.

### 8. Hearing Tests and Medical Evaluation

a. Commanders and supervisors will take action to prevent further hearing loss when notified of early changes in personnel's hearing, such as STS. These actions will include evaluation of the work-site for additional engineering controls by a qualified engineer, IH, OH professional, Occupational Audiologist or safety specialist; determining adequacy of Hearing Protection Devices (HPDs); and ensuring that HPDs are properly worn. b. Commanders will ensure completion dates for form DD 2215, "Reference Audiogram," and annual/periodic audiogram form DD 2216, "Hearing Conservation Data" are entered and tracked in MRRS or other approved DITPR-DON SOH electronic tracking system for all personnel enrolled in the HCP.

c. Commanders are required to document in the minutes of quarterly safety council meetings their overall hearing readiness (completion rates for reference (baseline) audiogram, annual or periodic audiogram (as medically prescribed). Those commands with completion rates below 85 percent will develop a documented Plan of Action and Milestones (POA&M) to obtain 100 percent completion rate.

d. The cognizant MTF will conduct periodic hearing tests and provide monthly results that allow commands and units to monitor the effectiveness of the HCP, (i.e. STS and PTS).

e. Personnel with pre-existing hearing loss exceeding enlistment or employment standards and/or with demonstrated increased susceptibility to noise-induced hearing loss may be excluded from occupations with noise exposure above the MCOEL. This determination will be made by a trained and certified otolaryngologists, occupational audiologists or occupational medicine physicians.

f. Individuals in the HCP exceeding criteria per reference (e) and reference (m) may be referred for an "Audiometric Fitness for Duty" evaluation.

g. The individual, his or her supervisor, and command will be notified by the MTF when either a STS or PTS occurs.

(1) Personnel demonstrating an unresolved STS after appropriate auditory rest will be immediately notified along with his or her command.

(2) STSs are not recorded if it is not permanent, is not consistent with an occupational origin, or does not exceed an average of 25 dB or more above audiometric zero.

(3) The commander and supervisor will take action to prevent further hearing loss when notified of early changes in personnel's hearing, such as STS. These actions will include evaluation of the work-site for additional engineering controls by a qualified engineer, IH, OH professional or safety specialist; determining adequacy of Hearing Protection Devices (HPDs); and ensuring that HPDs are properly worn.

#### h. Termination Hearing Test

(1) Civilian personnel may be removed from the HCP after noise measurements and dosimetry by qualified industrial hygienists or audiologists have determined steady state SPLs are below a TWA of 85 dBA weighting or a single exposure to impulse or impact noise of 140 dBP is not exceeded per reference (a).

(2) Marines and Sailors will receive a termination hearing test before leaving military service. Marine Corps civilian personnel enrolled in the HCP will receive a termination hearing test when transferring to a non-noise hazardous position or within 90 days prior to separation from the service (see "Termination Audiogram" in Appendix E).

### 9. HPD and Tactical Communication and Protection Systems (TCAPS)

a. HPDs are considered a temporary protective measure. However, Marines, assigned Sailors and civilians exposed to hazardous noise will wear appropriate HPDs at all times during noise hazardous operations and while in noise hazardous areas. HPDs will constitute a permanent measure only if engineering and administrative controls are not technologically, economically, or operationally feasible. Additional guidance is available from an occupational audiologist, safety specialist, or industrial hygienist. Appendix A provides additional guidance on use of Noise Reduction Ratings (NRRs).

b. All commands and units with hazardous noise areas and activities will maintain an adequate, readily accessible supply of hearing protection devices with appropriate NRRs in work areas and passageways leading to high noise areas and at military firing ranges. HPDs will always be available at no cost to personnel entering or assigned to work in designated hazardous noise areas. Supplies will include all sizes of approved preformed earplugs and noise muffs, as well as an adequate supply of disposable earplugs.

c. TCAPS are electronic products that offer a combination of enhanced hearing capability to increase detectability of soft sounds (through use of a volume control), as well as hearing protection from excessive noise (through electronic compression of sound to a non-hazardous level). TCAPS are available as ear muffs or in ear devices with custom earplugs or foam tip plugs. Some TCAPS are compatible with military radio communication systems.

d. Commands will collaborate with Navy Medicine Occupational Audiologists or industrial hygienists to determine the most appropriate device for their operational needs, to ensure devices do not contribute to further hearing loss, and to receive training on acquisition, use and maintenance of HPDs.

e. Refer to paragraph 5d above for designation of hazardous noise areas and equipment criteria as well as Appendix B for noise exposure limits.

f. Commanders in consultation with occupational audiologists, IH, or occupational medicine physicians will ensure that HPDs used reduce noise hazard exposure to within the MCOEL listed in paragraph 4. If a Commander cannot reduce the noise hazard exposure to within the MCOEL listed in paragraph 4 by engineering controls, administrative controls and HPD, then the Commander will request a deviation from policy to the Assistant Commandant of the Marine Corps via CMC Safety Division with a deliberate risk assessment attached.

g. Use of custom earplugs is authorized. However, only professionally trained and certified audiologists, otolaryngologists, and other healthcare providers trained in ear impression techniques may take impressions of the ear necessary to make custom earplugs. As with all personal protective equipment, cost is the responsibility of the individual commands.

h. Preformed sized earplugs will be fitted and issued only under the supervision of personnel specifically trained by a qualified audiologist.

i. All recruits and officer candidates will receive HCP training as well as reference (baseline) hearing test. This should include initial fitting of preformed sized earplugs with documentation of members' size in his/her health record.

j. Leadership will ensure individuals enrolled in the HCP are properly fitted by appropriate audiologist and enforce the correct use of HPDs. Appendix A contains HPD selection criteria.

k. Hearing aids may not be used in conjunction with or in place of HPDs except as approved by an otolaryngologist or audiologist on a case-by-case basis. Appropriate use of hearing aids in noise hazardous areas will be described in writing by attending otolaryngologist or audiologist to command authorized safety representative.

1. The wearing of personal portable music headphones are prohibited where hazardous noise or traffic hazards exists; (e.g., in industrial areas, in work areas, operating vehicles, riding bicycles, or jogging on roadways with traffic).

m. Regardless of exposure time, HPDs will be used when training or working within noise hazardous zones, while hazardous noise sources are operational, when using noise hazardous weapons and tools, or entering designated noise hazardous areas.

n. All personnel exposed to gunfire, artillery or missile firing, under any circumstances, will wear approved HPDs.

o. Non-linear, noise level-dependent TCAPS (HPDs) are available through military supply systems. These products are capable of attenuating both impulse and stead-state noise to below hazardous levels while preserving situational awareness, and are required tactical combat gear. Marines, Sailors and civilian personnel participating in operational training will possess and train with these devices, along with other required tactical armor.

p. All Marines, assigned Sailors and civilian personnel must deploy with a pair of fitted hearing protectors.

q. The non-linear, noise level-dependent HPD is an authorized part of Marines tactical combat utility uniform per reference (o). When not in use non-linear, noise level-dependent HPDs should be maintained inside their protective case in utility uniform pockets or attached to their outer tactical vest or flak jacket.

### 10. HCP Metrics

a. The Hearing Conservation Program (HCP) is an assessable unit, therefore Commanders and managers at all levels of the Marine Corps will develop, execute, track and report on corrective action plans to mitigate internal control weaknesses in accordance with reference (p).

b. The following metrics provide reasonable assurance that Marine Corps commands are meeting the objectives of the HCP which will enhance the effectiveness and efficiency of Marine Corps hearing readiness. Commanders will use the two metrics in accordance with Appendix C to calculate STS rates and audiogram completion rates. COs and OICs will ensure a hearing readiness status at these benchmarks:

(1) 100 percent of Marines, Sailors and at-risk civilian personnel have reference (baseline) audiograms.

(2) 85 percent of annual or periodic audiograms are performed within one month of previous annual or periodic audiogram.

(3) 100 percent of active duty personnel leaving the service and civilian personnel no longer exposed to hazardous noise receive termination audiograms.

NOTE: These benchmarks will be evaluated and documented in accordance with paragraph 8.b above.

c. Major commands and headquarters commands will ensure subordinate commands are up-to-date with hazardous noise inventories, reference (baseline) audiograms, monitoring audiograms and annual training as documented through appropriate annual self-assessments, quarterly safety council minutes and commanders' oversight inspections, (i.e., IGMC, Commanding General Inspection Programs and Command Safety Assessments) per references (c), (d) and (t).

#### 11. Program Performance Evaluation

a. Commands with noise hazards and/or personnel enrolled in a HCP will evaluate its HCP effectiveness annually through examination of program performance metrics described above and implement steps to mitigate program shortfalls.

b. All Marine Corps commands with hazardous noise sources and operations will conduct and document an annual self-assessment in accordance with paragraph 12 below using Appendix D.

c. All COMMARFORS, CG MCCDC, COMMCICOM, CG LOGCOM, CG MCRC, and COMMARCORSYSCOM will use MRRS HCP reports or other electronic safety reporting system and document in minutes of safety councils reviews of subordinate commands' hearing readiness, (i.e. STS and audiogram completion rates). CMC SD, using the MRRS HCP reports will annually brief the ACMC on hearing readiness of the Marine Corps.

d. For acquisition and development of new systems, identify prospective noise levels from historical data from existing systems, the modeling of anticipated noise levels, measurement of noise levels in new or modified systems, and equipment during the test and evaluation stage per reference (j). Acquisition program evaluations should consider the effectiveness of programs in managing risk to hazardous noise.

12. <u>HCP Self-Assessment Checklist</u>. All commanders will annually perform a HCP self-assessment using Appendix D. Maintain the assessments as per reference (u) for review during higher headquarters safety program management assessments per references (d) and (t).

13. <u>Reporting Systems</u>. MRRS or equivalent DITPR-DON approved system such as ESAMS, WESS or other appropriate tracking tools must be used to document hearing readiness.

a. MRRS is the authoritative source for active and reserve components. Civilians at this time require a local tracking system for unit HCP. MRRS provides commanders aggregated HCP data in the hearing conservation report and full visibility into the individual HCP status for his or her command or unit per reference (a) and this Order.

b. Marine Corps designated medical liaisons, Individual Medical Readiness (IMR) or Safety Officers will obtain MRRS web access from their Battalion Medical Readiness Office or from the HQMC PP&O MRRS lead project administrator at (703) 571-1048 DSN 671-1048.

c. Units will validate their hearing status monthly from the MRRS hearing conservation report. Document in the minutes of quarterly safety council meetings the units hearing readiness in accordance with paragraph 8.b, above.

d. PTS reported by MTF will be recorded in WESS. Hearing loss occurring over time from an occupational exposure is considered an occupational illness.

A hearing loss that occurs from an instantaneous event, for example, an acoustic trauma from an explosion (over pressure), will be recorded as an "injury" in WESS.

e. Commands will maintain appropriate WESS generated logs of military and civilian personnel who experience a PTS. Marine Corps hazardous noise exposed civilian personnel identified with an OSHA recordable hearing loss will be recorded in WESS, an equivalent OSHA 300 Log.

f. Track and maintain MRRS reports and statistics on MTF audiogram medical surveillance results. MTF audiology departments have 21 days to notify commands/units of their personnel identified with a PTS.

### 14. Desktop Turnover Binder

a. Desktop turnover binders are critical to an effective and efficient HCP. Safety desktop turnover binders will be available in every work center and typically maintained by the supervisor or safety representative. Safety specialists will direct and oversee assembly of the safety desktop turnover binders.

b. At a minimum, safety desktop turnover binders will contain the following HCP items.

(1) A copy of the DD 2214 or its equivalent from the IH survey. DD 2214 is a standard inventory tool for noise hazards. The form or survey is available from the MTF IH baseline and identifies hazardous noise operations, processes, equipment and areas.

(2) A current copy of the detailed MRRS hearing conservation report(by name list of specific work center/shop/company personnel) or other command approved DITPR-DON SOH electronic tracking system for all personnel enrolled in the HCP..

(3) HCP training records, (e.g., training attendance roster).

### APPENDIX A

### HEARING PROTECTIVE DEVICES (HPDS)

1. Available hearing protectors include preformed earplugs, noise muffs, ear canal caps, TCAPS, noise attenuating helmets, as well as musician's earplugs or other custom earplugs/devices. TCAPS are electronic products that offer a combination of enhanced hearing capability to increase detectability of soft sounds (through use of a volume control), as well as hearing protection from excessive noise (through electronic compression of sound to a non-hazardous level). Some TCAPS offer over the ear protection (electronic muffs) and some are available as in-the-ear devices (with custom earplugs or foam tip plugs) and have the capability of facilitating communication through tactical radios. Tactical commands are required to collaborate with BUMED Occupational Audiologists to determine the most appropriate device for their operational needs, to ensure devices do not contribute to further hearing loss, and to receive training on acquisition, use and maintenance of these products. Hearing protectors can also be worn in combination (e.g., earplugs with noise muffs or noise attenuating helmet).

2. Preformed earplugs, once fitted, need to be rechecked annually for appropriate size and any signs of deterioration. In some cases, individuals may require earplugs of a different size or type for each ear.

3. Helmets and noise muffs need to be rechecked at least twice a year for appropriate use and to replace any worn/deteriorated seals.

4. If single hearing protection cannot reduce the noise exposure below the MCOEL, then other measures will be taken to reduce the noise exposure. This may include engineering and administrative controls and/or double hearing protection in accordance with paragraph 8b of this appendix.

5. The actual effectiveness of any individual hearing protector cannot be determined under workplace conditions; however, both references (a) and (c) require that personal hearing protection be worn to attenuate the occupational noise exposure of employees to within the limits of the occupational exposure limit. Hearing protectors are evaluated under rigorous laboratory conditions specified by the American National Standards Institute. However, OSHA's experience and the published scientific literature indicate that laboratory-obtained real ear attenuation for hearing protectors can seldom be achieved in the workplace.

6. The Navy and Marine Corps Public Health Center (NMCPHC) website at <a href="http://www.nmcphc.med.navy.mil/">http://www.nmcphc.med.navy.mil/</a> provides guidance and links to sites with additional information on selecting HPDs that have been tested for attenuation under American National Standards Institute requirements. Consult occupational audiologist or industrial hygienist for specifics per references (a) and (m).

7. Appendix B provides information on how to determine the adequacy of hearing protector attenuation using the Noise Reduction Rating (NRR) of a given hearing protector.

8. Field Attenuation of HPDs. To estimate the attenuation afforded to a noise-exposed employee in an actual work environment by muffs, plugs, or a combination of both, proceed as follows:

## a. For Muffs or Plugs

(1) Obtain the Noise Reduction Rating (NRR) which is on the packaging of the HPD.

(2) Subtract 7 dB from the NRR to correct for using A-weighted measurements. For C-weighted measurements and peak measurements, no correction is needed.

(3) To adjust for workplace conditions, appl y a safety factor of 50 percent. This is because the field use of HPDs does not afford the same degree of protection achieved in the laboratory using well-trained subjects under ideal test conditions

b. For Dual Protection (i.e., muffs and plugs)

(1) Obtain the NRR for the higher rated hearing protector, subtract 7 dB if using A-weighted measurements, no correction for C-weighted measurement or peak measurements, and apply a safety factor of 50 percent.

(2) Then add 5 dB to the field-adjusted NRR to account for the use of the second hearing protector.

(3) Calculation examples are provided in Appendix B.

HPD	Rationale <sup>1,2</sup>	
<b>Single</b> (plugs <u>or</u> muffs) with derated NRR that will bring the effective exposure to less than an 8-hour TWA of 85 dBA or 140 dBP	<b>Example</b> A more effective HPD might be considered to have a NRR of 29. The effective "dBA" derated NRR is approx. <b>11</b> (i.e., 29 – 7 x 0.5). The approximate upper SPL attenuation limit of the derated <b>single</b> HPD is <b>96 dBA</b> (i.e., 85 + 11)	
<b>Double</b> (plugs <u>and</u> muffs) with derated NRR that will bring the effective exposure to less than an 8-hour TWA of 85 dBA or 140 dBP	<b>Example</b> One HPD has a NRR of 29 and the other has a NRR of 27. The effective "dBA" derated NRR for the higher rated HPD is approx. <b>11</b> (i.e., $29 - 7 \ge 0.5$ ). The second HPD adds approximately 5 dB of additional attenuation. The approximate upper SPL attenuation limit of the derated <b>double</b> HPDs is <b>101 dBA</b> (i.e., $85 + 11 + 5$ ). (Upper limit was rounded to 100 dBA)	

# Table A-1. Example of HPD Use Calculations 1,2

<sup>1</sup> OSHA's experience and the published scientific literature indicate that laboratory-obtained real ear attenuation NRR values for HPDs can seldom be achieved in the workplace. Therefore, OSHA has implemented the concept of 50 percent derating of labeled NRRs as a tool to make determinations of HPD adequacy. Studies have found that on average, workers only received approximately 50 percent of the published NRR values and OSHA felt that this should be accounted for especially in programs with high STS rates. The 50 percent derating means that the listed NRR of a HPD is divided by half in an effort to more realistically represent a HPD's real world attenuation.

 $^2$  The "96" and "100" dBA criterion for single and double HPD use, respectively are general "rules of thumb". Therefore, BUMED IHs will recommend the appropriate type of HPD based upon the actual derated attenuation properties of the HPD for the given assessed environment and other factors such as comfort, length of use, cost, cleaning and maintenance, etc.

# APPENDIX B

### HEARING PROTECTION DEVICES (HPDS) STAY TIMES

### (NOISE EXPOSURE LIMITS)



Figure B-1.--Administrative Control of Noise Exposure with Hearing Protective Devices.

#### NOTE: Values may also be calculated using the formula:

 $T = \frac{16}{2 \left(\frac{L-82}{3}\right)}$ 

$$T = 8 x 2^{\frac{85-L}{3}}$$

in hours (decimal)

sound level in dBA,

Where: T = time

L = effective (i.e., environmental SPL - NRR)

 $\star$  Sound levels may be measured in either dBA or dBC. However, if dBA is used, the NRR must be reduced by 7 dB.

Intermediate values may be interpolated by adding or subtracting the decibel difference to the appropriate column.

### APPENDIX C

### HEARING READINESS METRICS

#### 1. Two Metrics Track HCP Effectiveness

a. <u>Significant Threshold Shifts (STS)</u>. STS rate is defined as the number of STSs identified during annual audiograms, regardless of the findings of follow-up audiometry, for each 100 workers identified as potentially exposed to hazardous noise and tested during the annual reporting period. STS rates will be monitored over time to identify changes in rates with goal that rates decrease.

### STS Rate Formula

A = Number of persons who have a Significant threshold shift.

B = Number of employees requiring annual audiograms.

### STS Rate = $(A/B) \times 100$

b. <u>Audiogram Completion (AC)</u>. Rate is defined as the "percentage of workers identified as requiring annual audiograms who receive their audiograms."

## AC Rate Formula

A = Number of persons who receive annual audiograms.

B = Number of persons requiring annual audiograms.

#### AC Rate = $(A/B) \times 100$

2. <u>Hearing Readiness Rates</u>. Hearing readiness rates are intended primarily for installations and units to monitor their effectiveness in preventing noise-induced hearing loss. STS rates and AC rates are also used to monitor effectiveness of the HCP. Because STS rates are heavily influenced by the percentage of exposed workers actually receiving annual audiograms, the rate of completion of audiograms is also measured. The STS rate and the audiogram completion rate will be calculated per reference (a).

# APPENDIX D

HEARING CONSERVATION PROGRAM (HCP) SELF-ASSESSMENT CHECKLIST

ITEM	QUESTION	ANSWER
1.	Do Commanders maintain data in MRRS or	12101121
	DITPR-DON approved electronic system for	
	his or her Marines, Sailors as well as	
	hazardous noise-exposed civilian	
	personnel?	
Referen	ce: MCO 6260.3A, Encl. (2) par. 13. a.	
2.	Is HCP initial and annual training	
	provided to all Marines, assigned Sailors	
	and only hazardous noise-exposed civilian	
	personnel?	
Referen	ce: MCO 6260.3A, Encl. (2) par. 7.	
3.	Does documented HCP training address the	
	responsibilities to support effective	
	noise control to include the following:	
3.a.	Importance of hearing readiness for	
	mission success?	
3.b.	Understanding the physical and	
	psychological effects hazardous noise	
	plays in situational awareness, combat	
	effectiveness and lifelong impact on ones	
	quality of life?	
3.c.	Knowledge that hearing tests are performed	
	for early detection of hearing loss and	
	are not preventive; but more so a tool to	
	alert command or unit of weaknesses in the	
	HCP?	
.d.	Disciplinary actions are authorized if one	
5. a.	is observed not using HPD in hazardous	
	noise environments?	
3.e.	Supervisors' and employees'	
	responsibilities to prevent hearing loss	
	and the importance of leading by example?	
3.f.	Taking personal responsibility to protect	
	one's own hearing from hazardous noise in	
	all live fire operational training and in	
	garrison?	
3.g.	Awareness training will include:	
	indicator of attring with thousand.	
3.g.(1)	Discussion of hazardous noise occurrence	
	at home?	
3.g.(2)	Recreationally and personal choices made	
	while using personal firearms?	
3.g.(3)		
3.g.(4)	Volume of music listened to with and	
	without earbuds or headphones?	

HEARING CONSERVATION PROGRAM (HCP) SELF-ASSESSMENT CHECKLIST (CONT.)				
ITEM	QUESTION	ANSWER		
3.h.	Incorporation of HCP responsibilities during new employee and supervisory training?			
3.i.	The importance of properly fitted HPDs?			
Reference:	MCO 6260.3A, Encl. (2) par. 7.			
4.	Do Marines, assigned Sailors and appropriate civilian personnel receive annual audiograms and keep follow-up appointments as prescribed by health care provider or audiologist?			
Reference:	MCO 6260.3A, Encl. (2) pars. 2. f. and i.	. (3)		
5.	Does MTF notify Commanders of employee no-shows for appointments?			
		1)		
6.	Are MTFs providing written notice of PTS within 21 days of identification of PTS by an audiologist?			
Reference:	MCO 6260.3A, Encl. (2) pars. 8. d., g. (2	2) and 13. f.		
7.	Are WESS entries executed for personnel with a PTS?			
Reference:	MCO 6260.3A, Encl. (2) pars. 13. d. and e	e.		
8.	Is use of hearing protectors enforced during firing range exercises and operational exercises in the field?			
8.a.	Is a visual inspection and validation of accurate HPD fitting conducted (by trained personnel) prior to commencement of noise exposures?			
Reference:	MCO 6260.3A, Encl. (2) pars. 11. n. and c	).		
9.	Do safety turnover binders contain an inventory of noise hazardous equipment, tools and processes along with SPL measurements; identity of personnel at risk (refer to the MRRS hearing conservation detailed report); and the types of controls in place?			
Reference:				
10.	Does hearing readiness status reach below benchmarks and are they included in the minutes of safety council meetings?			
10.a.	When benchmarks are not reached does a written POA&M exist to obtain required benchmarks?			
10.a.(1)	100 percent at risk personnel have reference (baseline) audiograms?			
10.a.(2)	85 percent of monitoring audiograms performed within one month of past annual audiogram?			

HEARING CONSERVATION PROGRAM (HCP) SELF-ASSESSMENT CHECKLIST (CONT.)					
ITEM	QUESTION	ANSWER			
10.a.(3)	100 percent of Marines or assigned sailors leaving Service or civilian personnel no longer exposed to hazardous noise have received termination audiograms?				
Reference:	MCO 6260.3A, Encl. (2) pars. 8. c., 10. k	o. and 13. c.			
11.	Were MRRS HCP reports or other DITPR-DON approved electronic safety reporting systems used to calculation STS and audiogram completion numbers and rates in accordance with Appendix C, and annually results sent to the cognizant MARFORs (show calculations)?				
Reference:	MCO 6260.3A, Encl. (2) par. 10. b.				

### APPENDIX E

#### GLOSSARY

Administrative Control. This method limits daily noise exposure or access to hazardous noise areas by control of the work schedule.

<u>Audiogram</u>. A chart, graph, or table showing an individual's hearing threshold levels as a function of frequency.

Decibel (dB). A logarithmic unit of measure used to express SPLs.

 $\underline{dBA}$ . The standard abbreviation for sound levels measured with a sound level meter set on the A-weighting "filter." The A- "filter" mimics the ear's sensitivity to higher frequency noise. The A-weighting, therefore, measures more of the noise frequencies that may cause hearing loss.

 $\frac{dBP}{It}$ . The decibel Peak is standard abbreviation for the peak SPL in decibels. It is the unit of measure used when measuring weapons fire.

Engineering Control. Engineering control is any procedure or method that reduces the sound level either at the noise source or in the hearing zone of the exposed personnel. HPDs (ear muffs, plugs, noise canceling technologies) or administrative controls are not engineering controls. HPDs are PPE.

<u>Hazardous Noise</u>. Any steady-state noise having an 8-hour TWA noise level greater than or equal to 85 dBA, or exposure to impulse and/or impact noise levels of 140 dBP or greater, regardless of duration.

<u>Hazardous Noise Area</u>. Any area where workers are likely to be exposed to noise levels equal to or greater than an 8-hour TWA of 85 dBA, or where impulse noise levels are greater than or equal to 140dBP.

Impulse, Impact or Peak Noise. A sound of short duration, usually less than 1 second, with an abrupt onset and rapid decay. Short bursts of automatic weapons fire are considered impulse noise.

Monitoring (Periodic) Audiograms. Periodic audiograms usually performed annually after the reference (baseline) audiogram to detect early signs of hearing loss.

<u>Permissible Exposure Limit (PEL) or MCOEL</u>. Maximum daily human exposure to a chemical substance or a physical agent such as noise allowed in a workroom's air over an 8-hour shift. A PEL or MCOEL are based either on a time weighted average or the maximum exposure limit prescribed by regulation.

Permanent Threshold Shift (PTS) (Recordable). A hearing test (audiogram) with a change in a hearing threshold relative to the reference (baseline) audiogram of an average of 10 dB or more in either ear at 2000, 3000 and 4000 hertz and total hearing level is 25 decibels (dB) or more above audiometric zero (also averaged at 2000, 3000 and 4000 hertz in the same ear(s).

Reference (Baseline) Audiogram. An original audiogram performed prior to occupational exposure to hazardous noise. Future audiograms are compared with the reference (baseline) to identify hearing changes. Note: This reference hearing test will not be obtained unless the individual has been free from exposure to noise above 80 dBA for at least 14 hours, as well as free of diseases of the ear or hearing. HPDs will not be worn to meet this 14 hour noise free state. Non-occupational noise sources will also be avoided. Revised reference (baseline) audiogram. A revised or re-established audiogram after determination that a change in hearing is permanent. Note: This revised reference (baseline) hearing test will not be obtained unless the individual has been free from exposure to noise above 80 dBA for at least 14 hours, as well as free of diseases of the ear or hearing. HPDs will not be worn to meet this 14-hour noise-free state. Non-occupational noise sources will also be avoided.

Significant Threshold Shift (STS) is defined as a change in hearing threshold relative to the current Reference (Baseline) Audiogram of an average of 10 dB or more at 2000, 3000, and 4000 Hz, in either ear.

<u>Termination audiogram</u>. If there is a break in service or reassignment away from hazardous noise, the employee receives a termination audiogram and a new reference upon reemployment or reassignment. An original reference (Baseline) audiogram is performed prior to hazardous noise exposure while in Federal employment and follows as the Baseline as long as there is no break in service. In the case of civilians transferring between major command and components (e.g., worker employed by the Army transfers to Navy employment) the baseline remains the same.

<u>Time-Weighted Average (TWA)</u>. An average exposure over a given period of a person's working time, as determined by continuous or intermittent measurements (sampling) during the period.