

DEPARTMENT OF THE NAVY

NAVY MEDICINE READINESS AND TRAINING COMMAND
2080 CHILD STREET
JACKSONVILLE, FL 32214-5000

IN REPLY REFER TO:

6200.2
Ser 06IHZZ/0942
22 June 2021

From: Commanding Officer, Navy Medicine Readiness and Training Command Jacksonville
To: Officer in Charge, Inspector-Instructor Staff, Detachment Two, Supply Company, 4th
Supply Battalion, 4th Marine Logistics Group

Subj: PERIODIC INDUSTRIAL HYGIENE SURVEY OF THE INSPECTOR-INSTRUCTOR
STAFF

Ref: (a) OPNAVINST 5100.23H of 05 Jun 2020, *Navy Safety and Occupational Health
Program*
(b) OPNAV M-5100.23 of 05 Jun 2020, *Navy Safety and Occupational Health Manual*

Encl: (1) Executive Summary
(2) Industrial Hygiene Survey Report (AL21022)

1. A Periodic Industrial Hygiene Survey of the Inspector-Instructor Staff was conducted on 14 June 2021 as required by references (a). Enclosures (1) and (2) are provided for your information.

2. Point of contact is Mr. Bryan Arwood of the Navy Medicine Readiness and Training Unit Albany, Industrial Hygiene Division, at 229-639-7846 or email bryan.s.arwood.civ@mail.mil.


G. A. MOELLER
By direction

Copy to:
MDMC Risk Management Office, MDMC Albany

EXECUTIVE SUMMARY

A Periodic Industrial Hygiene Survey of the Inspector-Instructor Staff was conducted on 14 June 2021 by Mr. Bryan Arwood, Industrial Hygienist, Navy Medicine Readiness and Training Unit Albany. The purpose of this survey was to identify health hazards present, assess actual health risk, and recommend controls where needed, as well as to assess your Occupational Health program status. No formal response to Industrial Hygiene is needed, although the Safety Manager may specify recommendations made in this report as items for mandatory corrective action. Following is a summary of major findings and recommendations. Detailed findings, observations and recommendations are provided in enclosure (2) and its associated attachments.

Item: *Hazard Assessments.* Since the previous industrial hygiene (IH) survey in October 2018, there have been no significant changes to this work center. This survey consisted of a walk-through evaluation of the work areas, sampling as required and employee interviews, as appropriate, to assist in the industrial hygiene assessment.

Recommended Action: Please review the individual work center hazard assessments in Attachment (1) for more details on all identified hazards. If there are any changes in work operation from what is described in this report, or if a focused health hazard evaluation of a specific work operation or new project is needed, please contact Mr. Bryan Arwood of the Navy Medicine Readiness and Training Unit Albany Industrial Hygiene Division, at 229-639-7846 or bryan.s.arwood.civ@mail.mil.

**PERIODIC INDUSTRIAL HYGIENE SURVEY
MANPOWER DIVISION
MARINE CORPS LOGISTICS BASE ALBANY, GEORGIA
ALBANY, GA
REPORT NUMBER: AL21022
JUNE 2021**

Ref: (a) OPNAV M-5100.23 of 05 Jun 2020, *Navy Safety and Occupational Health Manual*
(b) Navy and Marine Corps Public Health Center (NMCPHC) Industrial Hygiene Field Operations Manual (IHFOM)

Att: (1) Periodic Industrial Hygiene Survey: Shop Assessment
(2) Neutral Posture for Computer Use/Computer Breaks
(3) Customer Satisfaction Survey

1. **Introduction.** Per reference (a), a Periodic Industrial Hygiene Survey of the Inspector-Instructor Staff was conducted on 14 June 2021 by Mr. Bryan Arwood, Industrial Hygienist, Navy Medicine Readiness and Training Unit Albany (NMRTU Albany). This survey consisted of a walk-through evaluation of the work areas, a review of the operations and the hazards associated and employee interviews, as appropriate, to assist in the industrial hygiene assessment.

2. **Report Contents.** Reference (a) requires that each Navy workplace, or naval base supported DOD workplace, be thoroughly evaluated in order to accurately identify and quantify all potential health hazards. This report fulfills that requirement. The updated Periodic Industrial Hygiene Survey: Shop Assessment, medical surveillance recommendations, and updated exposure monitoring plans for surveyed division(s) are provided in Attachment (1). The Neutral Posture for Computer Use/Computer Breaks, can be used for training personnel in utilizing their computer workstations ergonomically (Attachment (2)). Attachment (3) is a Customer Satisfaction Survey, so that you may critique the services provided.

3. **Design Reviews.** Per reference (a), industrial hygienists should participate in the review of plans and specifications for local projects, standard operating procedures, purchasing transactions, and contracts which involve, or could create, exposure to potential health hazards, such as toxic materials, radiation, noise, or other health hazards. Cognizant facilities management and/or occupational health and safety personnel should ensure that the supporting industrial hygienist is made aware of such plans and specifications and that they are made available for his/her review.

4. **Re-evaluation Schedule and Changes in the Workplace.** Please retain this report on file and post a copy in a common work area for personnel to review. IH surveys had historically been accomplished with an established survey frequency based on the nature of operations at the Activity/Command in accordance with reference (a). Survey periodicity is now scheduled at the command or shop level in accordance with reference (c). Ratings and associated survey frequency are now listed on individual work center assessment(s) within this report and reflect as High (annual), Moderate (biennial), or Low (quadrennial) hazard category. Shop periodicity will

Enclosure (2)

be continually re-assessed during future IH surveys. The Inspector-Instructor Staff is categorized as Moderate and will be reassessed biannually. The next Survey will be scheduled for June 2023.

Any significant changes in the type of operations currently performed, current workplace setting, new equipment acquired, or change in the kinds or amounts of chemical used, as identified in the survey, will result in a need for an immediate re-evaluation of the affected area. Industrial Hygiene, NMRTU Albany should be notified in the event of any significant operational changes as described above so that a prompt re-evaluation can be completed.

Periodic Industrial Hygiene Survey: Shop Assessment

v1.0

Survey Date: 09 Jun 2021**Shop Priority:** Medium**Command: M83190E95 / SITE SPT (ALBANY GA) CLR 4 4TH MLG****Shop: Inspector-Instructor Staff (I - I)**

Location: Building 7106

Industrial Hygienist: ARWOOD, BRYAN
bryan.s.arwood.civ@mail.mil**Safety POC:** Collins, Alexander
alexander.collins@usmc.mil**This assessment consists of the following sections:**

1. Shop Description
2. Observations and Notes
3. List of Processes
4. Process Information, Controls, and Exposure Assessments
5. Hazards that have Special Notations
6. Medical Surveillance
7. Workplace Monitoring Plan

1. Shop Description**# of Shop Personnel**

Personnel are responsible for providing equipment, training, administrative and logistical support necessary for mobilization. Personnel also support base and the local community by providing color guard and funeral details along with assisting the annual Toys for Tots Program. Personnel primarily perform administrative tasks.

13**2. Observations and Notes**

06/11/2021

Abbreviations: ADM – Administrative, PPE – Personal Protective Equipment, ISO – Isolation, DV – Dilution Ventilation, ENG – Engineering Controls, and LV – Local Ventilation

Work-related musculoskeletal disorders (WRMD) risk factors: Personnel should ensure that all workstations are set up per the ergonomic attachment of the periodic industrial hygiene survey to help prevent WMSD issues from occurring. Gel pads or wrist rests should be employed in front of the keyboards to help maintain a neutral wrist and keep the wrists off of hard edges of the desk. As chairs are replaced, consideration should be given to purchasing adjustable ergonomic chairs.

3. List of Processes

Process Name	# of Process Personnel
Cleaning weapons	13
Professional/administrative tasks	13
Vaccines/Blood draws	1
Weapons firing/qualifications	13

4. Process Information, Controls, and Exposure Assessments

Chemical and physical hazards have been assessed for the processes in this shop to determine if the exposure levels are less than Occupational Exposure Limits (OELs). OELs are established to protect workers from the potential health effects due to exposures to chemical substances or physical agents. The Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELs) are the regulatory OELs to which employers must comply. When appropriate, we recommend alternate, more protective OELs as a best practice.

Personal Protective Equipment (PPE) listed in the Industrial Hygiene survey is specified for the control of identified occupational health stressors. Additional PPE not specified in the survey report (e.g. safety shoes/boots, fall protection, safety vests, etc.) may be required for personnel. Consult with your cognizant safety representative, PPE hazard assessment or local instruction/Standard Operating Procedure (SOP) for any additional required PPE specific to your worksite.

In the Control Use column, the controls marked as Required are the minimum deemed necessary to protect workers based on the exposure assessment. Controls marked as Recommended are considered best practice to further reduce exposures and those listed as Elective are strictly voluntary.

In the Adequate column, Yes signifies the control is in place and capable of controlling exposures during the process. If Adequate is listed as No, the control is not yet in place or incapable of controlling exposures. Additional details will be provided in the comments below the control.

In the Acceptable column, Yes indicates that it is highly unlikely that the worker is exposed to the hazard at or above the OEL without regard to PPE. If Acceptable is listed as No, additional controls are required, and the shop should investigate the feasibility of reducing/eliminating the hazard. Medical Surveillance may also be required (Section 6). If Yes is listed in the Need More Data column, see the Shop's Workplace Monitoring Plan (Section 7).

When appropriate, special hazard notations are noted in the exposure assessments below. Section 5 provides notation explanations and a summary of these hazards. Exposures to these hazards should be significantly reduced by elimination, substitution, engineering controls, or work practice controls.

Process: Cleaning weapons			
Frequency: 2-3 Times/Year Duration: 15-30 minutes			
Description: Personnel use various types of CLP (various oils and petroleum distillates) to clean weapons. This is usually drop applied and cleaned with a cloth or cotton swab. There is also the potential for contact with lead dust during this operation.			

Administrative

Control Description	Hazards Controlled	Control Use	Adequate
Hand Washing	LEAD; PETROLEUM DISTILLATES	Recommended	Yes
Comments: To prevent skin contact and ingestion hazards.			

PPE

Control Description	Hazards Controlled	Control Use	Adequate
Nitrile Rubber	LEAD; PETROLEUM DISTILLATES	Recommended	Yes
Comments: Used to prevent skin contact hazards.			

Exposure Assessment

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
Cleaning weapons	LEAD Ingestion (Carcinogen) (Reproductive) (Ototoxin)			Yes	No
SEG: Inspector-Instructor Staff (I & I) Rationale: Due to limited duration of exposure, and hand washing, ingestion hazards are expected to be minimal.					

Cleaning weapons	LEAD Inhalation (Carcinogen) (Reproductive) (Ototoxin)	0.05 mg/m3 8 hr TWA OSHA		Yes	No
SEG: Inspector-Instructor Staff (I & I) Rationale: Due to limited time of exposure, and outdoor setting likelihood of exposure are expected to be minimal. Lead - Workers potentially exposed to airborne lead at any level are required to be informed of the content of Appendices A and B of 29 CFR 1910.1025 (OSHA Lead standard).					
Cleaning weapons	LEAD Skin and/or Eye Contact (Carcinogen) (Reproductive) (Ototoxin)			Yes	No
SEG: Inspector-Instructor Staff (I & I) Rationale: Due to limited time of exposure and hand washing, ingestion hazards are expected to be minimal.					
Cleaning weapons	PETROLEUM DISTILLATES Inhalation	2000 mg/m3 8 hr TWA OSHA		Yes	No
SEG: Inspector-Instructor Staff (I & I) Rationale: Due to minimal amount of material used and time of exposure inhalation hazards are expected to be minimal.					
Cleaning weapons	PETROLEUM DISTILLATES Skin and/or Eye Contact			Yes	No
SEG: Inspector-Instructor Staff (I & I) Rationale: Due to minimal amount of material used, time of exposure, and hand washing, ingestion hazards are expected to be minimal.					

Process: Professional/administrative tasks

Frequency: Daily Duration: 6-8 hours

Description: Personnel work in an office setting for long periods of time performing various administrative tasks to include the use of a computer.

Hazard:
Excessive Sitting (Excessive sitting is a NMCPHC listed reproductive/developmental hazard)

WMSD RISK FACTORS: No ergonomic-related injuries/ problems were reported during the survey walkthrough. Any ergonomic related injury should be reported to the command safety manager.

Administrative

Control Description	Hazards Controlled	Control Use	Adequate
Work/Rest Cycle	Static Posture	Recommended	Yes

Process: Vaccines/Blood draws

Frequency: Special Occasions Duration: 1-2 hours

Description: Assigned Corpsman manages assigned USMC reserve medical cases and administer vaccines as needed. Hands-on medical care is facilitated by the installation Medical Treatment Facility.

Administrative

Control Description	Hazards Controlled	Control Use	Adequate
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Universal Precautions	BLOODBORNE PATHOGENS	Recommended	Yes
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PPE

Control Description	Hazards Controlled	Control Use	Adequate
Nitrile Rubber	BLOODBORNE PATHOGENS	Recommended	Yes
Comments: Used to prevent exposure to bloodborne pathogens.			

Exposure Assessment

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
Vaccines/Blood draws	BLOODBORNE PATHOGENS Skin and/or Eye Contact			Yes	No
SEG: Inspector-Instructor Staff (I & I) Rationale: Medical Professionals adopt Universal Precautions and implement Bloodborne Pathogen Training. No issues reported by staff.					

Process: Weapons firing/qualifications

Frequency: 2-3 Times/Year Duration: 2-4 hours

Description: All marines are required to perform weapons qualifications and therefore are exposed to hazardous noise. Military personnel qualify on various weapons, e.g. 9mm and M-4, based on grade.

Pistol qualification for E-6s and above is conducted at the Albany outdoor firing range. Initial qualification includes the use of the indoor simulation marksmanship training (ISMT) facility at Bldg. 11211. ISMT is generally used during the 1st day of instruction. E-5s and below conduct rifle qualification at the outdoor, Parris Island facility.

When perform weapons qualifications, there could be minor exposure to lead dust. Qualifications are performed at an outdoor range.

Administrative

Control Description	Hazards Controlled	Control Use	Adequate
Hand Washing	LEAD	Recommended	Yes
Comments: To prevent skin contact and ingestion hazards.			

PPE

Control Description	Hazards Controlled	Control Use	Adequate
Combination, Muff/Earplug	NOISE	Required	Yes
Comments: Single hearing protection is required for noise levels at or above 85 dBA or 140 dBP. Double hearing protection is required for noise levels at or above 104 dBA or 165 dBP.			

Exposure Assessment

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
Weapons firing/qualifications	NOISE (Reproductive)	85 dBA 8 hr TWA DoD		No	No

SEG: Inspector-Instructor Staff (I & I) Rationale: Personnel exposure to noise in excess of the standard is expected based on exposure to noise above the OEL of 140 dBP during weapons firing.					
Weapons firing/qualificaitons	LEAD Ingestion (Carcinogen) (Reproductive) (Ototoxin)			Yes	No
SEG: Inspector-Instructor Staff (I & I) Rationale: Due to limited duration of exposure, and hand washing, ingestion hazards are expected to be minimal.					
Weapons firing/qualificaitons	LEAD Inhalation (Carcinogen) (Reproductive) (Ototoxin)	0.05 mg/m3 8 hr TWA OSHA		Yes	No
SEG: Inspector-Instructor Staff (I & I) Rationale: Due to limited time of exposure, and outdoor setting likelihood of exposure are expected to be minimal. Lead - Workers potentially exposed to airborne lead at any level are required to be informed of the content of Appendices A and B of 29 CFR 1910.1025 (OSHA Lead standard).					

5. Hazards that have Special Notations

The following is a summary of hazards found to be in use in this Shop that have one or more of the following notations: Carcinogen, Reproductive, Sensitizer, Skin, or Ototoxin. These notations are provided next to the hazard names in Section 4, Chemical and Physical Hazards Exposure Assessments. Exposure to these hazards should be significantly reduced by elimination, substitution, or through work practice and engineering controls.

Carcinogen: A Carcinogen is a hazard capable of causing cancer.

LEAD (IARC (2B)- Possible Human Carcinogen)

Reproductive: Hazards identified with the Reproductive notation are those associated with occupational exposures regarding their potential to cause an adverse effect on reproductive health or fetal development. Pregnant workers and/or workers concerned about their future reproductive capacity should seek the advice of their medical provider before working in an environment that contains reproductive hazards.

LEAD
NOISE

Sensitizer: A sensitizer is a hazard with the potential to produce dermal and/or respiratory health effects similar to an allergic reaction or asthma. Worker exposures to sensitizing hazards may evoke severe respiratory or dermal reactions.

None

Skin: This notation refers to the potential significant contribution to a worker's overall exposure by the cutaneous route, including mucous membranes and the eyes, by contact with vapors, liquids, and solids. A Skin notation is not applied to chemicals that solely cause dermal irritation.

None

Ototoxin: Ototoxic chemicals either cause hearing loss independently, or work synergistically with hazardous noise to damage the inner ear. Regardless of the mechanism, exposure to certain chemicals, either alone or in concert with noise, results in hearing loss.

LEAD

6. Medical Surveillance

The following are exposure based medical surveillance program recommendations. Workers are included in medical surveillance programs based on several factors: 1) unacceptable exposure assessments, 2) frequency of exposure, and 3) the availability of surveillance criteria. The decision to include a worker in a program is based on the possibility of exposure at or above a regulatory action level, if OSHA has established one. The decision may also be driven by other exposure standards, policy and guidance from the DoD or Navy. The only certification exam recommended in the IH Survey is for Respirator Users.

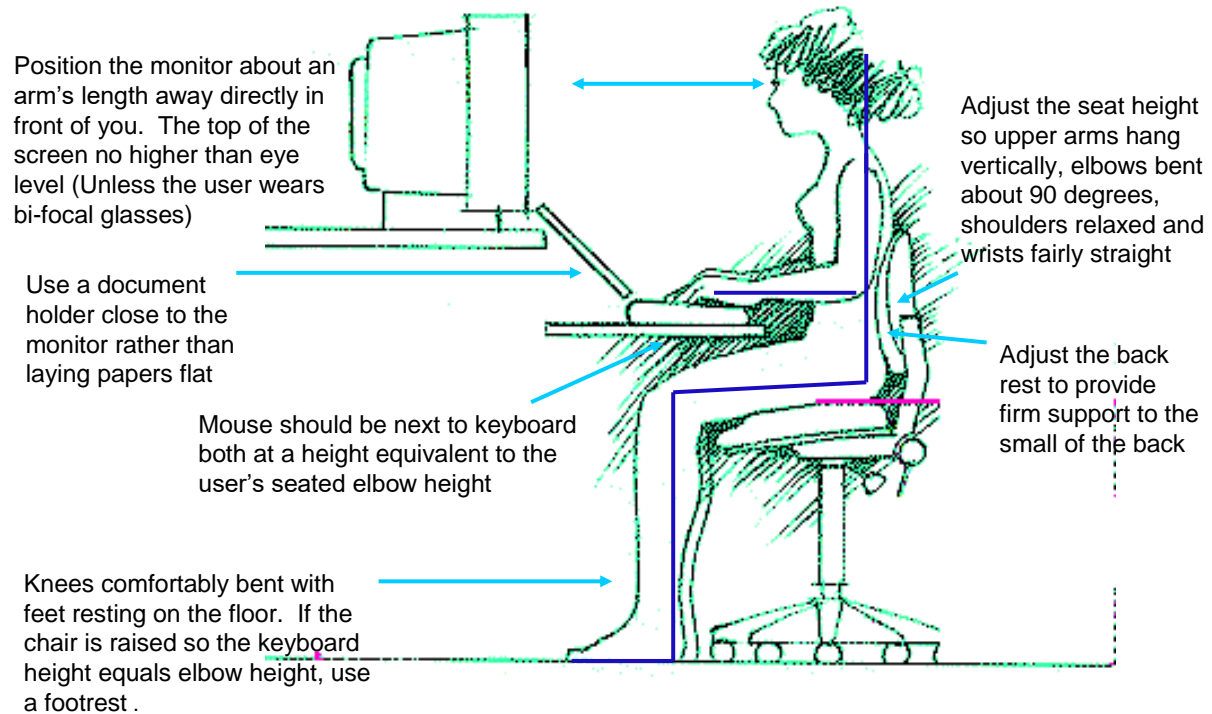
SEG Name	Process Name	Med Surv Program	# Process Personnel
Inspector-Instructor Staff (I & I)	Weapons firing/qualificaitons	Audiometric Testing	13

7. Workplace Monitoring Plan

Processes listed below require initial and/or periodic exposure monitoring to determine if levels are controlled to below the Occupational Exposure Limits. In order to fulfill this requirement, your assistance in scheduling monitoring is needed by notifying the Industrial Hygiene Department at least 48 hours in advance of the next operation.

No Workplace Monitoring Requested at this time.

Neutral Posture for Computer Use



TIME TO TAKE A COMPUTER BREAK

For every 20 minutes of computer use,
look at an object 20 feet away for
20 seconds. This reduces eyestrain.

Move your eyes side-to-side and
top to bottom. This helps moisten
your eyes and reduces eyestrain.

Cup your eyes with your hands
and close your eyes. Do not put
any direct pressure on your eyes.
This relaxes your face and
moistens your eyes.

Rotate your ankle. This promotes
blood circulation in your legs.

While seated, elongate your back
by pretending there is a cable
attached to your head that is slowly
pulling upwards. This will promote
good posture and relieve some
low back pain.

Slowly pull your arms back as far as
you can, trying to touch your shoulder
blades together. This will reduce
upper back stress.

Close your eyes and gradually
lower your head. This relaxes
your eyes and neck.

Extend your arms and fingers
and rotate. This reduces stress
on the upper extremities.

With your arms at your sides,
shake your fingers. This
relaxes your arms, hands
and fingers.

Shrug your shoulders. This eliminates
stress from the shoulders and upper back.

Tip: Taking 20 second micro-breaks throughout the day to refocus your eyes will reduce fatigue at the end of the day. 20/20 rule: for every 20 minutes of work, rest the eyes 20 seconds.

CUSTOMER SATISFACTION SURVEY

Industrial Hygiene Department
Navy Medicine Readiness and Training Unit Albany Georgia

Command: _____ Date: _____

Please rate this survey and report by indicating the numbers below that reflect your level of satisfaction:

	Level of Satisfaction				
	Low				High
	1	2	3	4	5
1. Coordination and/or response to request					
2. Courtesy and professionalism of IH personnel					
3. IH personnel's ability to communicate clearly and openly					
4. Clarity of Report					
5. Usefulness of Report					
6. Exposure Monitoring (if applicable)					
7. Timeliness of Report					

8. How can we improve the services we are providing?

9. What other services would you like Industrial Hygiene Services to provide?

10. Additional Comments (add a separate sheet if necessary):

Name: _____ Position: _____ Shop/Codes: _____

PLEASE RETURN THIS SURVEY TO:

Industrial Hygiene Department
Navy Medicine Readiness and Training Unit Albany
bryan.s.arwood.civ@mail.mil



Attachment (3)