



U. S. NAVY

SAFETY AND OCCUPATIONAL HEALTH PROGRAM

**FISCAL YEAR 2009
ANNUAL AGENCY REPORT**

PREPARED BY:

**OFFICE OF CHIEF OF NAVAL OPERATIONS
SPECIAL ASSISTANT FOR SAFETY (OPNAV N09F)**



The Navy is committed to protecting our most valuable resource – Our people

Fiscal Year:	2009
Name of Agency:	Department of the Navy
Name of Component:	U.S. Navy
Address	2000 Navy Pentagon Washington, DC 20350-2000
Number of federal civilian employees covered by this report:	164,293 U.S. Navy Civilian Workforce
Name of USN Senior Flag Safety & Health Official:	Rear Admiral Arthur J. Johnson, USN
Title:	Special Assistant to the Chief of Naval Operations for Safety Matters (OPNAV N09F)/ Commander, Naval Safety Center
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Executive Summary

The FY 2009 U.S. Navy Annual Report to the Secretary of Labor Occupational Safety and Health Administration (OSHA) provides an overview of U.S. Navy mishap injury and illness data, worker safety and health accomplishments over the past year and goals for the future. It also provides insight into U.S. Navy safety and health issues and highlights our strengths and challenges. In this executive summary and detailed report, we used the format specified in the August 17, 2009 U.S. Department of Labor (DOL) Memorandum to Designated Agency Safety and Health Officials. It should be noted that the U.S. Marine Corps submits a separate report. Both Navy and Marine Corps reports are forwarded through the Deputy Assistant Secretary of the Navy for Safety and are submitted as the Department of the Navy (DON) Annual Report.

The U.S. Navy's Safety and Occupational Health (SOH) program protects over 600,000 individuals worldwide - active duty military, reserve military, U.S. civilians, and foreign national¹ employees. The U.S. Navy's diverse workplaces include shipyards, shipboard operations, aircraft repair facilities, research facilities, chemical manufacturing facilities, hospitals, laboratories, and construction sites on both domestic and foreign Navy bases. The statistics in this report focus on the approximately 164,293 U.S. Navy civilians; however, this report also includes examples across the Navy's entire civilian and military workforce to demonstrate our commitment to protect our most valuable resource - our people.

Statistics

- **Injury and Illness Trends** - U.S. Navy's civilian workforce (without the Marine Corps) increased from 2008 by approximately 3%, from 159,975 employees in FY08 to 164,293 in FY09. The Navy reported 4,349 injury and illness cases for FY09. Of those 4,349 total injuries, 2,130 (almost half) involved lost time. There was a two percent (2%) decrease in the total case rate from FY08.
- **Fatalities and Catastrophic Accidents** - There was one Navy civilian fatal fall in FY09, one more than in FY08. (**Note:** The Navy does not track those fatalities reported by the DOL Office of Workers' Compensation Program (OWCP) for workers who were injured in previous years, are on long term disability, and who die from illnesses or natural causes, that are then reported by OWCP to close out workers' compensation claims.)
- **Overseas Employees** - There are approximately 6,000 Navy civilians working at overseas locations. Most of these civilians are at Navy bases around the world; it is unknown how many or what percentage work at State Department posts. The State Department Safety Staff report that U.S. Navy military and civilians working at their State Department posts are afforded State Department safety services including mishap reporting. Workers compensation costs, however, would continue to be paid by the U.S. Navy. For those employees working overseas not located on State Department posts, the U.S. Navy has had a longstanding policy to provide an equal level of safety and health protection for our Navy workers (civilians and Sailors) overseas as they would get in the United States.

Occupational Safety and Health (OSH) Initiatives

- **Safety, Health, and Return-to-Employment (SHARE) Initiative** - The U.S. Navy met all of the OSHA SHARE goals in FY 2009 and did well over the past five years:
 - Since 2003, the Navy's total case rate has declined 30% (goal was 18%).
 - Since 2003, the Navy's lost-time case rate has declined 35% (goal was 18%).
 - Since 2003, the Navy's timely filing of claims increased over 40% (goal was 30%).
 - Since 2003, the Navy's lost production day rate decreased over 40% (goal was 9%).
- **Motor Vehicle/Seat Belt Safety** - There were 28 motor vehicle mishaps involving civilians in an on-duty status in FY 2009. A total of 29 people were involved in the 28 mishaps. There were 0 fatalities and 26 people suffered injuries. Of the 26 people with injuries, 6 experienced 5 or more lost work days. In support of Executive Order 13043, the Navy Traffic Safety Program Instruction (OPNAVINST 5100.12H) requires that all persons, military or civilian, operating or riding in any government motor vehicle (GMV), on or off base, wear seat belts. All persons, military or civilian,

¹ Foreign National employees are employed by Foreign governments and work at Navy bases outside the United States under Status of Forces Agreements (SOFAs). Although foreign national employees are not included in the statistics in this report, the U.S. Navy is committed to their safety and health.

operating or riding in any private motor vehicle (PMV) on a naval installation must wear seat belts. Additionally, military and civilian employees are required to wear seat belts during on-duty operation of PMVs, whether on or off-base.

- **Pandemic Flu Planning** - OPNAVINST 3500.41, *Pandemic Influenza Policy* of 18 September 2009 identified responsibilities for pandemic flu planning within the U.S. Navy.

http://www.fas.org/irp/doddir/navy/opnavinst/3500_41.pdf

Although Occupational Safety and Health (OSH) policy was not emphasized in this instruction, it will be integrated into the instruction in FY10. Interim OSH guidance was developed in September 2009 and issued by email in early October 2009. This OSH guidance is provided in Appendix F of the Detailed Report and is also available at:

http://www.public.navy.mil/navsafecen/Pages/pandemic_flu.aspx.

Employee & Contractor Support

- **Training** - In FY09, as in prior years, Navy civilian and military personnel received training tailored to their individual needs, from awareness training to education required to attain and maintain competency in their technical area(s) of expertise. The Naval Safety and Environmental Training Center (NAVSAFENVTRACEN) provides safety, occupational health, and environmental training to active duty and DoD civilian employees in the Navy, Marine Corps, and Coast Guard. The Detailed Report and Attachment H list training courses and numbers trained by the NAVSAFENVTRACEN (37 courses and 8,546 trained) and courses through the Enterprise Safety Application Management System (ESAMS) (1,639,079 trained in ESAMS SOH online courses and Navy Knowledge Online courses).
- **Councils and Conferences** - During FY09, the Navy encouraged participation in a number of important safety conferences. While involvement in the Field Federal Safety & Health Councils was somewhat limited in FY09, we did have Navy participation in fleet concentration areas. The Navy also encouraged and funded professional certifications, where possible.
- **Contract Safety Language** - The Navy is working on standard contractor safety policy.

FY09 Accomplishments (*listed alphabetically*)

- **Acquisition Safety/Systems Safety (Improving Safety in Design)** - A policy and technical exchange forum was maintained through the Navy System Safety Advisory Board and participation in varied DoD/Navy working groups. The Navy led a Defense Safety Oversight Council project that made U.S. manufactured, ISO 10819 certified anti-vibration gloves available in the federal supply system and introduced three low-vibration power hand tools via General Services Administration. The Navy Clothing and Textile Research Facility initiated research projects to develop an abrasive blasting helmet accommodating double hearing protection.
- **Anti-Terrorism Force Protection (AT/FP)** - Commander, Naval Installations Command's Emergency Management (EM) support accomplished the following in FY09: continued to integrate occupational safety and health (OSH) requirements into the EM programs; continued to designate and enter Chemical, Biological, Radiological, Nuclear, and High Explosive (CBRNE) first responders into ESAMS; worked with the OSH department to ensure designated first responders are enrolled in the CBRNE Respiratory Protection Program (RPP); worked with OSH to track and verify that designated first responders received approved CBRNE Respiratory Protection equipment, CBRNE RPP training and medical surveillance; continued to consult with OSH to identify safety and health risks unique to the EM population.
- **Ergonomics**
 - Developed the "Ergonomics Guide for Welders" for managers and supervisors at activities performing welding tasks.
 - Developed a guidance sheet for configuring office workstations with dual monitors.
 - Formatted the interactive computer based training module "General Ergonomics Awareness" and posted on Navy Knowledge Online eLearning website.
 - Updated Workplace Physical Risk Factor Ergonomics Checklist.
 - Updated the Computer Workstation Checklist.
- **Fall Protection (FP)**
 - Developed the following documents: Update of the Navy Fall Protection Guide for Ashore Facilities; Criteria for selecting FP equipment conforming to the latest ANSI/OSHA Standards; Sample Activity Written Fall Protection Program; Compliance Checklist for OPNAVINST 5100.23G, Chapter

13, FP Program; Fall Hazard Survey Report; Fall Protection and Prevention Plan requirements; Rescue Plan and Procedures for Fall Hazard Control; Fall Protection for Aircraft Maintenance and Inspection Work; and Fall Prevention for Architects and Engineers;

➤ Training and education: updated end user and supervisors of end users training; developed competent person/program manager course syllabus for NAVSAFENVTRACEN; updated slips, trips, and falls training.

- **Mishap Prevention and Hazard Abatement (MPHA) Program** - The systematic identification, evaluation, and correction of hazards continue to improve Navy workplaces. Emphasis remains on prioritizing and correcting identified hazardous conditions with the highest degree of risk to ensure cost-effective use of available funds. This \$9+M program is managed by the Naval Facilities Engineering Command.
- **Occupational Health**
 - Implemented a VPP-like self assessment process for IH and Safety.
 - Navy Medicine completed an 18 month enterprise-wide Defense Occupational and Environmental Readiness (DOEHRS-IH) Training and Implementation with 98% participation.
 - Deployment of new DOEHRS-Hearing Conservation (HC) audiometers completed to all 230+ Navy regular testing locations with both audiometers and updated software in June, 2009. During 2009, 11 additional sites world-wide were established.
- **OSHA Citation Website** - The Navy continued to monitor OSHA citations issued to Navy and posted them on the Naval Safety Center website to assist all installations in identifying areas of potential risk.
- **Policy** - During FY09 Change 4 to OPNAVINST 3750.6R, Naval Aviation Safety Program was completed. Several additional policy updates initiated in FY09 will be completed during FY10.
- **Safety Success Stories** - Seven success stories were posted to the 1,001 Safety Success Stories web pages on the NAVSAFECEN website on topics of VPP, heat stress, mishap reduction, fall protection, electrical safety, and ergonomics. The latter story documented a return on investment of over 200%. Two of the stories featured safety at a Navy overseas location in Rota, Spain. The stories demonstrate the Navy's commitment to the safety, health, and quality of life of our Navy personnel. See Attachment J in the Detailed Report and at: http://www.public.navy.mil/navsafecen/Pages/osh/Success_Stories/safety_success_stories_home.aspx.
- **Studies** - The Center for Naval Analyses completed two safety related studies and the Naval Audit Service completed one safety related study for the Navy in FY09.
- **Voluntary Protection Program (VPP)** - The Navy continued its pursuit of OSHA VPP Star recognition at Navy field activities. Eight Navy VPP sites are showcased on the Navy Success Story website at: http://www.public.navy.mil/navsafecen/Pages/osh/Success_Stories/Success_index.aspx#voluntary. Currently, there are approximately 45 Navy activities pursuing VPP under the DoD VPP initiative.
- **Workers' Compensation** - During FY09, CNIC Human Resources Offices supported 9,900 active workers' compensation cases that incurred a Department of Labor bill of \$168M. CNIC continued a partnership with Naval Criminal Investigative Service to reduce potential fraud/abuse. 252 cases have been assigned to investigators - 59 during FY09. CNIC had an 11-month nurse intervention pilot program with the Puget Sound Naval Shipyard. The assigned case nurse had contact with 258 claimants. Of these, 192 cases were closed with a total of 660 lost production days. The estimated disability days assigned to these 192 injuries is 2,117 days; this resulted in 1,457 saved days for a cost avoidance of \$439,128.

Concluding Comments:

- During FY09, the U.S. Navy continued to move safety upfront in acquisition. Engineered hazard controls designed and acquired into new acquisitions will reduce mishaps and increase productivity. Anything OSHA can do to promote safety in design would be appreciated. A summary of Navy acquisition safety challenges can be found at: <http://www.public.navy.mil/navsafecen/Pages/acquisition/acquisition.aspx>
- The U.S. Navy continued tracking value added by safety to improved worker safety, productivity, and cost avoidance on its Safety Success Stories website: http://www.public.navy.mil/navsafecen/Pages/osh/Success_Stories/safety_success_stories_home.aspx.

- The U.S. Navy recognizes challenges it faces to make continued safety improvements, including the continued war against terrorism, changing technology, reduced staffing, outsourcing, contractor safety, an aging civilian workforce, a rotating military workforce, competition for funding, and difficulty accurately documenting safety losses, projected savings, and return-on-investment.

For further details on FY09 accomplishments and FY10 goals, please see the Detailed Report.

**The United States Navy
Annual Occupational Safety and Health Report to the Secretary of Labor**

Detailed Report {OSHA guidance for completing report is highlighted in yellow}

The United States Navy (USN) and the United States Marine Corps (USMC) comprise the Department of Navy. The Chief of Naval Operations Special Assistant for Safety and the Commandant of the Marine Corps submit separate OSHA reports to the Deputy Assistant Secretary of the Navy for Safety.

The U.S. Navy’s Safety and Occupational Health (SOH) program protects over 600,000 individuals worldwide - active duty military, reserve military, U.S. civilians, and foreign national employees. Foreign national employees are employed by foreign governments, and work at Navy bases outside the United States under Status of Forces Agreements (SOFAs). Although foreign national employees are not included in the statistics in this report (except for emergency response), the U.S. Navy is committed to their safety and health. The U.S. Navy’s diverse workplaces include shipyards, shipboard operations, aircraft repair facilities, research facilities, hospitals, laboratories, and construction sites, on both domestic and foreign Navy bases. The statistics in this report focus on the Navy civilians who support the maintenance of more than 3,700 aircraft and 287 ships, as well as the Navy’s physical infrastructure. In addition, this report also includes examples across the Navy’s entire civilian and military workforce that demonstrates our commitment to protect the Navy’s most valuable resource - our people.

I. Statistics

A. Injury and Illness Statistics

1. Injury and illness rates. *Use injury and illness data to summarize your agency’s incident experience for total and lost time cases during FY09. Include a discussion that compares your agency’s performance to that of the prior fiscal year. Specify source of data used.*

A comparison of the Navy to other Federal agencies for number of Lost Time Cases and Lost Time Case Rates is shown in **Attachment G**.

Injury and Illness Trends

The data included in the following table was obtained from the Department of Labor, OSHA Federal Agency Programs, Injury and Illness Statistics and Safety, Health and Return-to-Employment (SHARE) Initiative. U.S. Navy’s civilian workforce (without the Marine Corps) increased from 2008 by approximately 3%, from 159,975 employees in FY08 to 164,293 in FY09. The Navy reported 4,349 injury and illness cases for FY09. Of those 4,349 total injuries, 2,130 (almost half) involved lost time. There was a two percent (2%) decrease in the total case rate from FY08.

**Navy (without the Marine Corp) Federal Injury and Illness Statistics
for Fiscal Year 2009 End-of-Year Cumulative Totals**

	FY 2008	FY 2009	Change
Number of Federal Navy Civilian Employees,¹ (including full-time, part-time, seasonal, intermittent workers)	159,975	164,293	+2.7%
Total Cases Injury/Illness¹ (number of injury/illness cases/claims)	4,340	4,349	+0.2%

	FY 2008	FY 2009	Change
Total Case Rate ¹ (rate of all injury/illness cases per 100 employees)	2.71	2.65	-2.2%
Lost Time Cases ¹ (number of cases that involved days away from work)	2,029	2,130	+5.0%
Lost Time Case Rate ¹ (rate of only the injury/illness cases with days away from work per 100 employees)	1.27	1.30	+2.3%
Lost Production Days ² (number of days away from work)	58,421	54,087	-7.4%
Lost Production Day Rate ² (per 100 employees)	36.4	32.8	-9.9%

¹ Department of Labor, OSHA Federal Agency Programs, Injury and Illness Statistics for 2009, http://osha.gov/dep/fap/statistics/fedprgms_stats09_final.html

² Office of the Deputy Under Secretary of Defense (Installations and Environment) for Safety, Health, Fire and Emergency Services

2. **Facilities with high injury and illness rates. Explain how your agency identifies facilities with high injury and illness case rates, particularly those with high lost time case rates, and what was done during the period to improve these facilities' OSH experience.**

To identify facilities with high injury and illness case rates, the U.S. Navy uses the civilian lost production day rate. This information is obtained from the Defense Manpower Data Center using DoD civilian payroll data, which monitors time not at work due to workplace injury or illness. The Federal civilian Lost Production Day Rate is the number of lost workdays per 100 civilian workers per year and is calculated as follows:

$$\text{Lost production day rate} = \frac{(\#COP \text{ Days} + \#LWOP \text{ days}) \times 200,000}{\text{Number of civilian hours worked}}$$

Notes: (1) COP is continuation of pay and LWOP is leave without pay.

(2) DoD continuously analyzes the data and posts information on the worst 40 facilities across DoD, called the "Top 40" list. This information is available at:

<https://www.dmdc.osd.mil/ltwi/owa/cop>.

At the Department of Defense (DoD) level, the Defense Safety Oversight Council (DSOC) Installation and Industrial Operations Task Force continues to focus on the "Top 5" occupations across the services and defense agencies resulting in injuries, Office of Workers' Compensation Programs (OWCP) claims, and lost work days. The Navy has several representatives on this Task Force, including the Chair, who is a Navy flag officer. The Task Force plan is to rank injury causes/types to target high risk tasks and work to develop prevention strategies across the services and defense agencies. The DoD "Top 5" occupations are:

- (1) Fire Protection/Prevention. Firefighters remain #1. The Task Force was able to obtain DoD funding in FY07 to develop online training to target areas where firefighters are injured (e.g., fire stations, vehicles, etc) - this product is nearing completion. Within the Navy, the Naval Facilities Engineering Command manages the Ergonomics Center of Expertise, which has worked with fire departments to help eliminate ergonomics hazards in high risk job tasks.
- (2) Aircraft Mechanics
- (3) Heavy Mobile Equipment Mechanics
- (4) Misc. Clerks
- (5) Electronic Mechanics

B. Fatalities and Catastrophic Incidents

Use agency data to summarize fatal and catastrophic incident cases during FY09. Explain where each case occurred, investigation results and corrective action. If the number of fatalities identified differs from those OSHA has listed, explain what might have caused the discrepancy.

There was one Navy civilian fatality in FY09, one more than in FY08. (**Note:** The Navy does not track those fatalities reported by the DOL Office of Workers’ Compensation Program (OWCP) for workers who were injured in previous years, are on long term disability, and who die from illnesses or natural causes, that are then reported by OWCP to close out workers’ compensation claims.)

Fatalities	Fatality Details, Causal Factors & Corrective Actions Taken
1	<p>3 June 2009 – Naval Amphibious Base Coronado, CA. A construction mechanic sustained significant head and internal injuries ultimately resulting in his death when he fell 23 feet from a mezzanine. The mezzanine guard rail had been removed to facilitate removal of equipment and material by a mobile crane team and caution tape was placed to cover the opening. The employee fell backward through the tape for an unknown reason. He was taken by ambulance to the hospital for treatment and declared deceased on 4 June 2009.</p> <p>Causal factors The work crew deviated from the original work plan and removed an existing guard rail to facilitate work. This created a fall hazard resulting in the construction mechanic falling and sustaining critical injuries. Additionally, the inappropriate use of caution tape was a direct cause of this mishap.</p> <p>Corrective Actions Taken</p> <ul style="list-style-type: none"> • Revised fall protection training to address acceptable fall protection strategies and mitigation of emergent fall hazards. • Validated effectiveness of fall protection awareness training, fall protection end user training and operational risk management training. • Conducted and will annually update fall hazard assessment and identify personnel who work at heights. • Formalized re-briefing policy for weight handling evolutions to address changes in conditions once an evolution commences.

Fatality and Catastrophic Accident Investigations

When submitting this report, please include a copy of the summary reports for all fatality and catastrophic accident investigations, as required under 29 CFR Part 1960.70.

See **Attachment D** - Fatality/Catastrophic Accident Summary Reports

Office of Workers’ Compensation Programs Costs

(Prepared by Mr. Robert Short, Office of Civilian Human Resources, DON FECA Program Manager from the USDOL OWCP Chargeback bill) (Charge Back Year (CBY), July 1 to June 30)

CATEGORY	CBY 2007	CBY 2008	CBY 2009
Total # Employees	159.5K	165,400	174,492
Chargeback Cases	15,976	15,676	15,725
Total Chargeback (\$ Million)	221.9	218.7	217.9
Total Continuation of Pay (COP) (\$ Million)	2.7	2.7	2.6
Total Chargeback + COP (\$ Million)	224.6	221.4	220.5
Avg. Cost per Case (\$)	14,058	14,123	14,022

CATEGORY	CBY 2007	CBY 2008	CBY 2009
Avg. Cost per Employee (\$)	1,408	1,339	1,264
Chargeback for cases that occurred in the CBY	5.1	5.0	5.4

C. Overseas Employees

Please provide a summary of your overseas civilian employees. Include the number overseas employees, the percent who are covered by the State Department because they reside on State Department posts. Please describe how the agency ensures the occupational safety and health of those employees not located at these posts.

There are approximately 6,000 Navy civilians working at overseas locations. Most of these civilians are at Navy bases around the world; it is unknown how many or what percentage work at State Department posts. The State Department Safety Staff report that U.S. Navy military and civilians working at their State Department posts are afforded State Department safety services including mishap reporting. Workers compensation costs, however, would continue to be paid by the U.S. Navy.

For those employees working overseas not located on State Department posts, the U.S. Navy has had a longstanding policy to provide an equal level of safety and health protection for our Navy workers (civilians and Sailors) overseas as they would get in the United States. OPNAVINST 5100.23G, Navy Safety & Occupational Health (SOH) Program Manual, paragraph 0105a states, "The provisions of this manual apply to all Navy civilian and military personnel and operations worldwide..." The U.S. Navy has also recognized outstanding safety performance at overseas locations. The Navy Safety Success story website contains 25 success stories from Navy overseas locations, out of a total of 146 success stories. Our most recent overseas success story is "Automation of Shore Installation Heat Stress Monitoring at Naval Station Rota Spain." All success stories can be viewed at:

http://www.public.navy.mil/navsafecen/Pages/osh/Success_Stories/safety_success_stories_home.aspx

Two additional overseas examples are provided below.

Commander Pacific Fleet - Naval Ship Repair Facility Yokosuka and Detachment Sasebo Japan are both working toward OSHA VPP recognition. Although approval has not been granted by OSHA to recognize these overseas Navy commands for VPP certification, strides are being made to meet the VPP elements as their safety management system.

Space and Warfare Systems Command - Space and Naval Warfare Systems Center (SSC) Pacific has about 400 employees at overseas sites (including Hawaii). The majority of these employees are at Hawaii, Guam, and Japan and each of these sites has an on-site Safety representative who has received training commensurate to Collateral Duty Safety representatives. One issue which has been resolved is the onsite capability of the safety representatives to perform mishap investigations of lost time mishaps. The safety representatives have completed the Naval Safety and Environmental Training Center (NASAFENVTRACEN) Mishap Investigation and Reporting course. The Hawaii, Guam, and Japan sites receive triennial command inspections, which include oversight of the Safety Program and also periodic inspections by the SSC Pacific Safety Office.

D. Significant Trends and Major Causes or Sources of Lost Time Disabilities

1. Tracking accidents. *Use your agency's accident/incident reporting system, supplemental reports to the OSHA Form 300 logs, and/or OWCP reports to determine and explain any noticeable trends, major causes, or sources of lost time disabilities that occurred during FY09.*

The following data was taken from the Civilian Personnel Management System (CPMS) for FY08 and FY09. Data includes the percentage of the total number of injuries for the top five categories reported (with and without lost time). Data was downloaded from CPMS on 18 November 2009.

Comparison of FY 2008 and FY 2009 Major Trends									
Nature (i.e., sprains, contusions, etc.)	FY 2008				FY 2009				Description
	% of Total	# of Cases	% of Cost	Cost in Millions	% of Total	# of Cases	% of Cost	Cost in Millions	
Musculoskeletal	31	1187	26	65.8	31	1176	28	67.1	Sprains, sprains, carpal tunnel, pain, swelling of joints
Minor Contusions	27	980	8	18.7	29	1085	8	19.6	Cuts and bruises
Back Conditions	15	553	27	64.3	15	553	27	63.7	Back sprains and strains
Fractures	6	217	4	10.8	6	231	5	11	Broken bones
Traumatic Injury Unclassified	6	212	10	24.3	4	140	10	23.1	Unknown
Injury causes	% of Total	# of Cases	% of Cost	Cost in Millions	% of Total	# of Cases	% of Cost	Cost in Millions	Description
Manual Material Handling	37	1423	33	78.9	37	1396	33	78.4	Manually lifting all types of materials
Slips, Trips and Falls	33	1181	24	58.4	33	1243	24	58.7	Falls of all types from all surfaces
Unclassified, Misc., Unspecified	17	639	30	72.3	17	632	30	71.6	Unknown
Falling Objects	4	146	2	3.8	4	138	2	4.1	Falling objects from machinery, ladders, furniture
Transportation	4	141	4	10.2	3	129	4	9.8	Working around vehicles of all types

2. Controlling Trends. *Describe what your agency has done to control trends and major causes of lost time disabilities.*

- The Navy continues to address the two most prevalent mishap areas, ergonomics and fall protection through its working groups.

- The Navy's increased emphasis on the VPP is expected to have a positive influence on reducing lost time disabilities.
- Navy echelon 2 command safety managers work closely with field activities through site visits, newsletters, and major mishap investigations.

E. Contract Workers and Volunteers

Please provide the number of contract workers supervised by federal employees and the number of volunteers employed during FY09. List the number and type of injuries experienced by each group.

Historically, volunteer injury and illness experience was not recorded. One Navy command has a safety management tool, the Enterprise Safety Application Management System (ESAMS) that has the potential to track volunteer injury and illness experience.

The Naval Facilities Engineering Command (NAVFAC) tracks construction contractor injury statistics for Navy and Marine Corps construction projects for which the command provides oversight. Construction contractor Days Away, Restricted, or Transferred (DART) rates were 0.47 for FY06, 0.35 for FY07, and 0.42 for FY08 and 0.49 for FY09.

NAVFAC awards and manages a wide range of contracts, including, but not limited to: design, surveying, construction, planning, environmental cleanup and remediation, service, and maintenance. During FY09 NAVFAC expanded its collection of safety performance data from its contractor community. Previously, mishap and labor hour statistics were collected predominantly, if not solely, for construction contractors. The significant increase in labor hours can be attributed to both an increased workload across NAVFAC as well as the collection of data from environmental, service, and maintenance contractors.

NAVFAC continues to work on the following initiatives regarding contractor safety:

- Obtaining a greater appreciation for all contractor mishaps - including construction, facility services, architecture and engineering (A&E), and environmental contracts.
- Increasing the attention to contractor reporting such that there is an increased confidence in the accuracy of the DART rates provided.

Note: As part of their annual summary report from their OSHA 300 log, Navy activities in the OSHA VPP submit all contractor injuries and illnesses that occurred at their activities. This is in accordance with Appendix D of OSHA'S – CSP 03-01-003, *Voluntary Protection Programs (VPP); Policies and Procedures Manual (Rev. April 18, 2008)*

II. OSH Initiatives—SHARE & Motor Vehicle and Seat Belt Safety

A. SHARE—Safety, Health, and Return-to-Employment Initiative

1. SHARE Analysis. *Provide a detailed analysis of your agency's progress in achieving each of the four SHARE goals listed below: **Goal 1:** Reduce total injury and illness case rates by 3% per year; **Goal 2:** Reduce lost time injury and illness case rates by 3% per year; **Goal 3:** Increase the timely filing of injury and illness claims by 5% per year¹; and **Goal 4:** Reduce the rate of lost production days due to injury and illness by 1% per year.²*

¹ Under the SHARE extension, begun in FY07, all agencies are required to achieve at least a 50% timely filing rate under Goal 3. Agencies for which a 5% per year improvement from their FY03 baseline results in a FY09 goal higher than 60% will have performance tracked against that formula-driven target, except that no agency's goal is required to exceed 95%. Agencies must meet the minimum level or their formula-driven goal, whichever is higher, up to a maximum of 95%.

² Under the SHARE extension, Goal 4 targets also have been slightly modified. Agencies with a FY 2003 baseline Lost Production Day Rate (LPDR) at or below 15 days are charged with maintaining an LPDR of 15 or less. All other agencies will have their progress measured against the formula-driven target of reducing LPDRs by 1% per year, except that no such target is required to be fewer than 15 days.

Safety, Health, and Return-to-Employment (SHARE) Initiative - The SHARE Initiative was launched in 2004 with the purpose of reducing occupational injuries, illnesses and fatalities within the Federal government. After the Federal government made strides toward meeting all four goals by the end of the first three years of the initiative in 2006, President Bush extended the SHARE initiative through FY09, reaffirming the commitment to improving workplace safety and health conditions for Federal workers, while also reducing the financial costs. The initiative was scheduled to run for three years, and established four goals (see above highlighted in yellow) in the critical areas of safety, health and injury case management, with performance measured based on improvement from a baseline of FY03.

U.S. Navy SHARE performance is shown in the table below. Highlights are:

- Since 2003, the Navy’s total case rate has declined 30%, far exceeding the goal for an 18% reduction (3% per year times 6 years).
- Since 2003, the Navy’s lost-time case rate has declined 35%, also far exceeding the goal for an 18% reduction (3% reduction per year over the past six years).
- Since 2003, the Navy’s timely filing of claims increased over 40%, exceeding the goal of a 30% increase (5% per year times six years); and the minimum thresholds of 55% for 2008 and 65% for 2009.
- Since 2003, the Navy’s lost production day rate decreased over 40%.

U.S. Navy Performance on OSHA’s Share Initiative and Goals Through 2009

FY03 Base-line	FY04 Goal	FY04 Actual	FY05 Goal	FY05 Actual	FY06 Goal	FY06 Actual	FY07 Goal	FY07 Actual	FY08 Goal	FY08 Actual	FY09 Goal	FY09 Actual	Percent Change (Note 1)
Goal 1: Total Case Rate		Goal: Reduce by 3% per year											
3.86	3.74	3.48	3.63	3.09	3.52	2.80	3.41	2.85	3.31	2.71	3.21	2.65 (Note 2)	-17.4%
Goal 2: Lost Time Case Rate		Goal: Reduce by 3% per year											
2.00	1.94	1.81	1.88	1.62	1.82	1.51	1.76	1.48	1.71	1.27	1.70	1.30 (Note 2)	-23.5%
Goal 3: Timely Filing of Claims		Goal: Increase at least 5% per year											
58.1	61.0	61.0	64.1	71.1	67.3	72.8	70.6	77.6	74.2	82.7	77.9	84.0 (Note 3)	+7.8%
Goal 4: Lost Production Day Rate		Goal: Reduce at least 1% per year											
56.6	56.0	55.5	55.5	47.4	54.9	49.5	54.4	40.2	53.8	36.4	48.0	32.8 (Note 3)	-31.7%

Notes:

- 1 - Percent change is the percent difference between FY09 goal and FY09 actual
- 2 - The total case rate and lost time case rate are for the Navy (excluding Marine Corps) from: http://osha.gov/dep/fap/statistics/fedprgms_stats09_final.html
- 3 - Timely Filing of Claims data and Lost Production Day Rates were obtained from Office of the Deputy Under Secretary of Defense (Installations and Environment) for Safety, Health, Fire and Emergency Services

2. **SHARE Programs/Initiatives.** Describe programs established and initiatives your agency launched in support of SHARE. Discuss the successes and shortcomings of these programs or initiatives, and explain how they impacted the overall effectiveness of your agency’s OSH program(s).

The U.S. Navy has focused on the Secretary of Defense’s (SECDEF) Mishap Reduction Initiative of reducing mishaps by 75% by the end of FY12 using the 2002 baseline. The SECDEF goals are comparable to SHARE goals except that the numeric goal for DoD is higher than the OSHA SHARE goal, and DoD has additional goals for Aviation Safety and Traffic Safety. The Defense Safety Oversight Council promotes the 75% mishap reduction goal to all levels of the military and civilian leadership. The U.S. Navy’s initiatives to meet the 75% mishap reduction goals are described throughout the Accomplishments section of this report.

B. Motor Vehicle/Seat Belt Safety

1. Number of motor vehicle accidents experienced by employees in FY 2009. *Summarize your agency’s motor vehicle accidents during the period. When reporting your results, include a discussion that compares your agency’s performance to that of the prior fiscal year.*

There were 28 motor vehicle mishaps involving civilians in an on-duty status in FY 2009. A total of 29 people were involved in the 28 mishaps. There were 0 fatalities and 26 people suffered injuries. Of the 26 people with injuries, 6 experienced 5 or more lost work days.

	FY 2008	FY 2009	Change
Number of motor vehicle accidents experienced by employees	17	28	+11
Number of accidents resulting in personal injury	15	26	+11
Number of accidents resulting from emergency response and disaster recovery operations	0	0	0

2. Mechanisms in place to track the percentage of seat belt usage by employees. *Executive Order 13043 requires seat belt use by federal employees on the job, including drivers and passengers. Describe how your agency tracks this information, including the usage percentage, and the number of employees involved in motor vehicle accidents in FY 2009 who were wearing seat belts and the number who were not.*

In support of Executive Order 13043, the Navy Traffic Safety Program Instruction (OPNAVINST 5100.12H) requires that all persons, military or civilian, operating or riding in any government motor vehicle, on or off-base, must wear seat belts. All persons, military or civilian, operating or riding in any private motor vehicle (PMV) on a Naval installation must wear seat belts. Additionally, military and civilian employees are required to wear seat belts during on-duty operation of PMVs, whether on or off-base. The Department of the Navy (DON) solicits seat belt usage information from subordinate commands on an annual basis. This information is provided to the Department of Defense (DoD) by 30 April each year for the preceding calendar year. Information gained from this collection effort is used to tailor our enforcement efforts in this area. Seat belt observational surveys were conducted at random locations (entrance gates, parking lots, intersections, etc.) at 42 Navy shore installations and indicate an average seat belt use of 94%. This surpasses the national average for seat belt use (84% per Department of Transportation/National Highway Traffic Safety Administration) but falls short of the Navy goal of 100% usage. Our efforts will continue to emphasize this important part of our PMV injury prevention program.

The Navy’s Web Enabled Safety System (WESS), a mishap reporting system, has the mechanism to capture whether or not vehicle occupants who are involved in motor vehicle mishaps are wearing seat belts. However, the ‘seat belt’ field in WESS is not a required field, so the data is not completely accurate. Of the 29 people involved in motor vehicle mishaps in FY 2009 (involving

civilians on-duty), 4 were identified as properly wearing their seat belts. The remaining 25 were not identified at all. This issue is being addressed to improve future accuracy.

3. Efforts taken to improve motor vehicle safety and seat belt usage. *Please describe what efforts your agency has taken to improve motor vehicle safety and seat belt usage.*

The Navy continues to promote national driver safety campaigns and programs (e.g., Click-It-or-Ticket, Buckle Up America, That Guy, Street Smart, and Hero) in an effort to raise awareness on the importance of seat belts as a life-saving tool and reinforce the requirement to wear them on Navy installations and any time personnel travel in government motor vehicles. Safety belt checkpoints and other stepped-up law enforcement activities were conducted during these campaigns.

A centrally managed Navy Traffic Safety Program was put in place by the Commander, Navy Installations Command (CNIC) in April 2005. This program provides critical training, behavior modification, and enforcement support. Training includes nationally accredited safety courses for automobiles, motorcycles, and emergency vehicles. Additionally, traffic safety training lectures are provided before major holidays and long weekends. Behavior modification and enforcement support includes peer and subordinate mentoring programs and various traffic safety awareness campaigns. Traffic safety messages are sent to all Navy commands providing mishap statistics and safe driving tips prior to holidays and/or seasonally. CNIC promulgated policy on distracted driving, prohibiting driver use of hand-held cellular phones and personal listening devices (e.g., headphones) in moving vehicles. All efforts are focused on identifying and providing proven approaches for reducing risk factors such as speed, fatigue, lack of seat belt use, and drinking and driving.

Initiatives that various CNIC Regions/Installations took to improve motor vehicle safety and seat belt usage in FY09:

- Conducted American Automobile Association Driver Improvement Program (AAA-DIP) training.
- Conducted motorcycle training (Basic Rider Course, Experienced Rider Course, Military Sportbike Rider Course).
- Purchased Simulator Training Bikes at various Navy installations to be utilized by sailors unfamiliar with riding a motorcycle.
- Coordinated "Save a Life Tour" driving simulator training days.
- Held safety stand downs to address various traffic safety awareness issues.
- Published numerous articles and newsletters regarding traffic safety awareness.
- Held Traffic Safety Working Group meetings to recommend and address new initiatives to improve motor vehicle safety.
- Placed Speed Monitoring Awareness Radar machines randomly alongside roadways to help drivers to be informed of their speed of travel.
- Displayed posters and banners promoting Safety Belt usage and motor vehicle safety.
- Provided Vince and Larry Crash test dummies at numerous locations throughout the year to promote seat belt safety.
- Placed wrecked vehicles at various gates during holiday weekends as a reminder to drive safely.

C. Pandemic Flu Preparations

OSHA would like to collect best practices for federal agencies on OSH planning for pandemic flu.

Please provide the following:

- o *Describe the focus of your agency's pandemic flu planning, identifying whether public safety and/or occupational safety and health has been emphasized.*

An August 2006 Department of Defense Implementation Plan, available at: [http://fhp.osd.mil/aiWatchboard/pdf/DoD PI Implementation Plan August 2006 Public Release.pdf](http://fhp.osd.mil/aiWatchboard/pdf/DoD_PI_Implementation_Plan_August_2006_Public_Release.pdf) set DoD guidance and addressed key policy issues for pandemic influenza planning/preparing and responding to pandemic influenza. The guidance enables the Combatant Commanders, Military Departments, and DoD agencies to develop plans to prepare for, detect, respond to, and contain the effects of a pandemic on military forces, DoD civilians, DoD contractors, dependents, and beneficiaries. Additionally, plans address the provision of DoD assistance to civil authorities both foreign and domestic. The Navy follows the requirements of the DoD pandemic flu implementation plan.

OPNAVINST 3500.41, *Pandemic Influenza Policy* of 18 September 2009 issued policy and identified responsibilities for pandemic flu planning within the U.S. Navy. [http://www.fas.org/irp/doddir/navy/opnavinst/3500_41.pdf] The instruction consists of six sections: purpose, situation, mission execution, administration, logistics, and command and control. The situation section covers the background of an influenza pandemic. The mission section describes the Navy's primary responsibility during a pandemic. The execution section provides a detailed list of responsibilities for Navy component commands to meet in order to comply with the Navy's Pandemic Influenza Instruction. The logistics and command and control (C2) sections provide detailed administrative and logistics and C2 authorities during an influenza epidemic. Although Occupational Safety and Health (OSH) policy was not emphasized in this instruction, it will be integrated into the instruction in FY10.

Interim OSH guidance was developed in September 2009 and issued by email in early October 2009. This OSH guidance is provided in **Appendix F** and is also available on the Naval Safety Center website at http://www.public.navy.mil/navsafecen/Pages/pandemic_flu.aspx. Additionally, the Navy notes that the Naval Space and Warfare Systems Command (SPAWAR) proactively included workplace guidance in their H1N1 guidance.

- o *If occupational safety and health has been the focus of your planning, has pandemic flu been incorporated into your OSH program?*

The Naval Safety Center (NAVSAFECEN) has a web page devoted to pandemic influenza available at: http://www.public.navy.mil/navsafecen/Pages/pandemic_flu.aspx where web links are provided for safety and occupational health professionals, and references are included for worker pandemic influenza training published by OSHA and links to other federal pandemic flu federal government web sites (See **Appendix F**).

- o *If it has been incorporated into your OSH program, please provide a copy of that part of your OSH program*

This effort is in progress.

III. Employee & Contractor Support

A. OSH Training

1. Ensuring staff are trained

Describe your agency's overall plan for ensuring that all staff receive appropriate OSH awareness and hazard recognition information and training.

U.S. Navy's strategic SOH training objectives focus on facilitating the improvement of safety performance across the Navy in order to meet Secretary of Defense Strategic Planning Guidance to reduce FY 2002 baseline mishap rates by 75%. Effective safety performance has been enabled by developing and maintaining a workforce of talented and skilled safety personnel, both military and civilian through a wide-range of training mechanisms and delivery media.

The development of a risk management training continuum to ensure all Navy personnel receive targeted Operational Risk Management (ORM) training and seamlessly infusing all professional training with examples of how effective use of risk management improves both safety and mission readiness.

Workplace and employee safety is a strong value embedded into the U.S. Navy's diverse workforce. This value is strengthened and reinforced through SOH training using effective blended delivery methods provided through formal classroom style training, informal on the job training (OJT), and web-based training from web portals such as: Navy Knowledge Online (NKO); Enterprise Safety Applications Management System (ESAMS) as well as other more specialized organizational specific portals.

Most of the required training for SOH professionals is offered by the Naval Safety and Environmental Training Center (NAVSAFENVTRACEN). NAVSAFENVTRACEN provides safety, occupational health, and environmental training to active duty and DoD civilian employees primarily in the Navy and Marine Corps. NAVSAFENVTRACEN trained 8,546 students during FY09. In FY09, NAVSAFENVTRACEN offered 37 different courses using various delivery methods such as resident training, video-teletraining, synchronous web based, and asynchronous web based (see table next page).

2. Impact of Training

Describe the overall impact of your agency's training efforts on improving work-related safety and health. Include any challenges faced in these efforts.

The overall impact of training is significant in making Navy personnel aware of safety and health hazards in their workplaces as well as helping them to understand procedures to follow to improve the quality and safety of their work and to prevent mishaps. All training courses offered by the NAVSAFENVTRACEN can be found at:

<http://www.public.navy.mil/navsafecen/navsafenvtracen/Pages/default.aspx>.

The U.S. Navy oversees a large and diverse population of organizations and employees. Safety and health hazards exist in varying degrees and forms throughout the workforce. Some organizations, such as Naval Facilities (NAVFAC), maintenance activities (NAVSEA, NAVAIR) have operations that are inherently more hazardous than others. At the same time, less obvious hazards, such as ergonomics factors and exposures to hazardous substances, pose just as serious a risk to a wide cross-section of the entire workforce. Training and awareness can be adversely affected by this diverse demographic population, delivery methods of training needs has accommodated and

adapted to this challenge by developing a wide-range delivery mechanism. Organizational specific challenges are met and overcome through a combination of macro and micro-level specific educational methodologies.

Challenges faced by our safety professionals in the SOH training arena can be significant when the budgetary constraints do not allow for a more robust mobile training schedule. Remote areas require travel funds to achieve their minimum SOH training requirements as set and identified by Navy instruction. Primarily most SOH training is held on either coast in Fleet concentration areas. This can lead to disparities in SOH educational opportunities and knowledge of current or changing OSH standards, trends and techniques.

While there will always be challenges to providing effective safety training and awareness to a diverse workforce, the U.S. Navy’s SOH training programs have been instrumental in providing the tools and skills needed for our safety professionals to facilitate the enculturation of safety throughout the Navy.

3. Staff Trained

In the table below, list the specific training your agency offered in FY 2009 and the number of employees trained.

The table below lists training provided by NAVSAFENVTRACEN. **Appendix H** lists additional safety related training as documented through Navy Knowledge Online and the Enterprise Safety Application Management System, ESAMS.

Type of Training Provided in FY 2009	Number Trained
1. Afloat Environmental Protection Coordinator	158
2. Asbestos Inspector Initial	77
3. Asbestos Inspector Refresher	159
4. Asbestos Management Planner Initial	114
5. Asbestos Project Designer Refresher	22
6. Asbestos Supervisor Initial	67
7. Asbestos Supervisor Refresher	157
8. Aviation Safety Specialist	179
9. Confined Space Safety	29
10. Construction Safety Standards	128
11. Electrical Standards	179
12. Emergency Asbestos Response Team	57
13. Excavation, Trenching and Soil Mechanics	47
14. Facility Response Team [FRT] Five Day	404
15. Facility Response Team [FRT] Three Day	705
16. Fall Protection	120
17. Fire Protection and Life Safety	152
18. General Industry Safety Standards	80
19. Hazardous Material Control and Management [HMC&M] Technician	786
20. Hazardous Substance Incident Response Management [HSIRM]	364
21. Hazardous Substance Incident Response Management [HSIRM] Refresher	618
22. Incident Action Planning (IAP)	16

Type of Training Provided in FY 2009	Number Trained
23. Incident Command System 300 (ICS 300)	199
24. Incident Command System 300 (ICS 300) Refresher	102
25. Industrial Noise	89
26. Introduction to Hazardous Materials [Ashore]	59
27. Introduction to Industrial Hygiene for Safety Professionals	100
28. Introduction to Navy Occupational Safety and Health [Ashore]	647
29. Machinery and Machine Guarding Standards	147
30. Mishap Investigation [Ashore]	291
31. NAVOSH Assessment Tools & Strategies	102
32. Navy Ergonomics Program	125
33. Oil Hazardous Substance Spill Response Tabletop Exercise (OHS TTX)	132
34. Respiratory Protection Program Management	371
35. Safety Programs Afloat	1440
36. Submarine Safety Officer	107
37. Worst Case Discharge (WCCD) Triennial Tabletop Exercise (TTX)	17

B. Agency OSH Poster

Please submit a copy of the agency's 29 CFR §1960.12 (c) required poster. A template for federal agencies OSH poster can be found at: <http://www.osha.gov/Publications/fedposter.doc>.

The U.S. Navy uses the DD Form 2272 Department of Defense Safety and Occupational Health Protection Program (see below) to meet the federal agencies OSH poster requirement. The form includes all required information from the OSHA "federal poster" template and provides a standard format for the U.S. Navy. The DD 2272 will be made available on each ESAMS Customer Page for the more than 300,000 employees who use the system. Federal Forms are available at the following site: <http://www.usa-federal-forms.com/fbf-by-form/36.html> [see **Attachment C** for a copy of the OSH poster].

C. OSH Conferences/Seminars

OSHA is interested in learning about agencies' plans for OSH conferences/seminars and providing support when possible. Please provide the following information:

- *List any safety seminars or conferences the agency is planning for FY 2010*
- *Explain if and how the sessions will address 29 CFR 1960 requirements.*
- *Indicate if the agency would like assistance from OSHA—and if so, the kind of support you are seeking.*

The NAVSAFECENVTRACEN will host the annual Naval Safety conference in Virginia Beach, VA on March 8 - 12, 2010, with an expected attendance of approximately 700. The Navy greatly appreciates the support from OSHA for the following topics:

- "OSHA Updates," Mr. Leo Edwards, Virginia State OSHA
- "Health Care Safety Update," Mr. Warren Rick, Virginia State OSHA
- "Contractor Best Practices from an OSHA Perspective," Mr. Jim Boom, OSHA Directorate of Cooperative and State Programs

Regarding topics at our conference that support 29 CFR 1960 requirements, we have a number of safety courses/seminars that cover the spirit of 29 CFR 1960, such as the Navy/Marine Corps Mishap Reporting and Recordkeeping 1/2 day seminar, that covers:

- Overview of OSHA and DoD injury/illness recordkeeping requirements and brief discussion of DODI 6055.07, Accident Investigation, Reporting, and Record Keeping
- Mishap reporting requirements of OPNAVINST 5102.1D/MCO P5102.1B, Navy & Marine Corps Mishap and Safety Investigation, Reporting, And Record Keeping Manual
- Sample Mishap Recordkeeping scenarios for military and civilian employees
- Interpretations, recordkeeping guidance and military and civilian logs

The annual Navy and Marine Corps Public Health Conference (NMCPHC) will be held March 19 - 25, 2010 in Hampton, VA. As always, it will include a significant OSH component. The conference supports Navy Preventive Medicine, Health Promotion, and Occupational Safety and Health Programs. Over 1,000 attendees have an opportunity to receive training, exchange ideas, promote a better understanding of intra-service capabilities, and enhance management of programs that are essential to the Navy's implementation of various OSHA, Navy, & Bureau of Medicine and Surgery (BUMED) occupational health standards.

http://www.nmcphc.med.navy.mil/public_health_conference/conference10/index.htm

Various courses and technical sessions will provide professional training and information for Navy Industrial Hygiene (IH) and Occupational Health personnel. Navy Marine Corps Public Health Center (NMCPHC) does not currently anticipate needing assistance from OSHA for this conference.

D. Field Federal Safety and Health Councils

The Field Federal Safety and Health Councils (FFSHC) are cooperative interagency groups chartered by the Secretary of Labor to facilitate the exchange of OSH information throughout the federal government. According to 29 CFR Part 1960.88(b), federal agency heads should encourage OSH personnel to participate in the activities of the councils. Generally these councils meet four to twelve times a year and may provide different types of OSH training. Currently there are approximately 45 active FFSHCs throughout the country.

1. Involvement

Describe the extent to which employees/managers from your agency were involved in these councils.

While the U.S. Navy does not track attendance at Federal Safety and Health Council meetings, representatives from NAVAIR, CNIC, and the Bureau of Medicine and Surgery report participation at various locations around the country.

NAVSEA is a sitting Employer member on the current OSHA Maritime Occupational Safety and Health Committee. Supervisor of Shipbuilding, Conversion & Repair (SUPSHIP) Groton Environmental Safety & Health actively participates in the Connecticut and Western MA FFSHC meetings with an appointed liaison to the council. SUPSHIP has also engaged Electric Boat in the FFSHC and they are now active participants as well. SUPSHIP Groton actively encourages the participation on the FFSHC through their local SUPSHIP safety instruction.

2. Field Council Support

Describe if and how your agency encourages staff involvement and how your agency has provided support for these councils.

Although encouraged, due to operational constraints and limited resources, the U.S. Navy had limited involvement in FFSHCs during FY09. Most involvement is at the local level. Listed below are some examples:

NAVAIR provides travel and per diem funding is provided to attend the council meetings.

NAVSEA has encouraged the participation of its activities with their local Safety Councils dependent on mission requirements, however, NAVSEA has no written policy or instruction on this issue.

SPAWAR SSC Pacific participates in the San Diego area FFSHC by supporting Safety Specialist attendance at meetings and keeping apprised of FFSHC news and developments.

NAVFAC's Safety Community Management Plan encourages NAVFAC safety professionals to actively participate in safety councils and committees outside of NAVFAC to share and learn expertise in the areas associated with NAVFAC's products and services. Many safety professionals across NAVFAC actively participate in professional societies, national standards committees and councils, and DON, DoD, and other inter-agency councils and committees. NAVFAC provides the necessary resources to support the active participation of its safety community in field counsels.

E. Contractor Safety

OSHA would like to collect best practices with regard to contract language the agency may use to ensure contractor compliance with federal workplace safety and health requirements. Please provide the following information:

Although there is no standardized contract language across the entire U.S. Navy, efforts are underway to add a chapter on contractor safety to the SOH Program Manual, OPNAVINST 5100.23H. The provisions discussed below are examples of some of the diverse tools the Navy has inserted in contracts. In significant part, the Navy's intent is to satisfy the extent of its duty of care for contractor employees on-site working at a Navy base by the most effective method available, that is by communicating with their employers about safety risks in the context of the larger contract for services and supplies.

- Describe whether any of your agency's contracts include standard language addressing workplace safety requirements.

See **Attachment E** - Contract Language - These are examples of contract language which, when included in a contract, the Navy has used to provide contractor employee safety oversight.

- E1 Unified Facilities Guide Specifications (UFGS), Governmental Safety Requirements, UFGS-01 35 26 (February 2009)
- E2 NAVFAC Ergonomics in Contract Documents, Unified Facilities Criteria (UFC) 04-610-01
- E3 CNIC OSH Related Contract Language
- E4 Naval Air Systems Command (NAVAIR) Fleet Readiness Center East (FRC East) Instruction 5000.1, Visitor Contractor Site Specific Rules and Compliance
- E5 NAVAIR Minimum Contract Requirements, Reference U.S. Army Corps of Engineers Safety and Health Manual (COE-385-1)
- E6 Naval Air Depot Cherry Point, NC Additional Contract Requirements
- E7 SPAWAR Contract Language
- E8 Naval Research Laboratory Requirements for On-Site Contractors

U.S. Navy contract standard language addressing workplace safety requirements:

Naval Facilities Engineering Command (NAVFAC) utilizes a standardized guidance specification, Unified Facilities Guide Specifications (**Attachment E1**) for SOH requirements. Additionally, most contracts include the requirement to conform to the U.S. Army Corps of Engineers Safety and

Health Requirements Manual, EM-3850-1-1, which contains extensive SOH requirements for contractors. Contracts that include exposures to unique or high hazards contain additional contract language to facilitate the protection of contractor employees as well as individuals surrounding contract worksites and others potentially exposed to contractor operations.

Naval Air Systems Command (NAVAIR) includes standard language addressing workplace safety requirements. An example is *Additional Contract Requirements* for Naval Air Depot, Cherry Point North Carolina dated 1 May 2006 (**Attachment E6**). Some activities use standard OSH language in their contracts, an example is the Regional Officer in Charge of Construction (ROICC) *Minimum Contract Requirements* (**Attachment E5**).

Space and Naval Warfare Systems Command (SPAWAR) contracts include reference OPNAVINST 5100.23 series, *Navy Safety & Occupational Health Program Manual*. When a safety issue is identified with a contractor operation, the Contracting Officer/Contracting Office Representative is notified and engaged to work with the contractor to resolve the issue. If an Immediately Dangerous to Life or Health (IDLH) condition exists, work is stopped.

Commander Pacific Fleet (COMPACFLT) - In addition to the NAVSEA Standard Items being invoked for ship repair contracts in Japan, including specific safety requirements, means for oversight, and injury notification, the Master Solicitation was amended to invoke 29 CFR 1915 requirements to Japanese contractors when ship repair work is performed on a U.S. Navy vessel. Of note is that ever since major ship repair work has been awarded to Japanese contractors, a National Fire Protection Association (NFPA) Certified Marine Chemist is being utilized when required by Title 29 of the Code of Federal Regulations, Part 1915 (CFR 1915), Shipyard Industry Occupational Safety and Health Standards.

NAVSEA - Standard contracts for new ship construction, which occur only at private shipyards, require contractor compliance with 29 CFR 1910 and 1915, with no other amplifying language. NAVSEA Supervisors of Shipbuilding monitor new ship construction contracts and have a working relationship with the shipbuilders. For new ship construction contracts, NAVSEA Instruction 4700.17 (NAVSEAINST 4700.17) provides for the submission of Trouble Reports whereby the Navy Supervisors of Shipbuilding report within NAVSEA significant problems involved in the construction, repair, and maintenance of Naval Ships. The Trouble Reports include quality and safety issues and provide requirements for preparing and submitting the reports where severe injury to the private workforce has occurred.

Contracts for repair and alteration of ships, which often are performed at Navy bases, invoke the NAVSEA Standard Items which can be found at:

<http://www.sermc.surfor.navy.mil/SSRAC1/standard.htm>.

This year, NAVSEA added a new standard item to become effective in FY11: 009-74 *Occupational Safety and Health Requirements*. This *Standard Item* requires contractors to establish, document, implement, and maintain a written Safety Plan appropriate for the work to be accomplished, and to provide a copy to the Government upon request. Also included in this Item are requirements to abate hazards, provide Personal Protective Equipment to employees, ensure Material Handling Equipment and Aerial Work Platforms are operated and maintained properly, comply with OSHA's fall protection requirements, and that scaffolding be built and maintained in accordance with OSHA and Manufacturer's specifications.

For ship repair contracts, the Standard Items provide that accidents and fires occurring on the vessels involving contractor/subcontractor personnel are to be reported to the Government as soon as

management becomes aware of such an event. The written report shall contain: the name of each injured person, date and time of incident/fire, extent of each personal injury or property damage, contractor/subcontractor name, Job Order/Work Item Number, type of incident/fire, location of event with ship name, hull number, space, and compartment. In addition, the report shall include a brief description of the event (including occurrences leading up to the incident, equipment involved, contract number, witness and/or individuals involved, short term and long term to the incident/fire, equipment involved, and contract number). These reports are used by the Government to ensure that the contractor identifies root causes, and that corrective actions are completed.

The following Standard Items address OSH related issues:

- 009-01 General Criteria
- 009-03 Toxic and Hazardous Substances
- 009-07 Confined Space Entry, Certification, Fire Prevention and Housekeeping
- 009-08 Fire Protection at Contractor's Facility
- 009-10 Shipboard Asbestos-Containing Material Control
- 009-24 Authorization, Control, Isolation, Blanking, and Tagging Requirements
- 009-34 Fire Protection of Unmanned Vessels at Contractor's Facility
- 009-35 Confined Space Entry, Certification, Fire Prevention Utilizing Military Fire Watches, and Housekeeping
- 009-40 Requirements for Contractor Cranes at Naval Facilities
- 009-70 Confined Space Entry, Certification, Fire Prevention and Housekeeping for Unmanned Craft
- 009-74 Occupational Safety and Health Requirements
- Explain if the agency has established a means for enforcing compliance with these contract provisions.

At a minimum, NAVAIR activities can enforce compliance in immediately dangerous to life or health (IDLH) air concentrations under terms of the contract. The FRC East has established specific means for enforcing compliance with these contract provisions through FRC East Instruction 5000.1 paragraph 5, d. (3) through paragraph 5, f. (1). Contracts for ship repair not only invoke contractor compliance with 29 CFR 1910 and 1915, these contracts also invoke the NAVSEA Standard Items, found at:

<http://www.sermc.surfor.navy.mil/SSRAC1/standard.htm>.

Also see FRC East Instruction 5000.1, Enclosure (2), "Contract Performance Requirements" (**Attachment E4**).

NAVFAC utilizes two methods to ensure compliance with their contract SOH requirements. NAVFAC's contracts mandate that an employee of the prime or general contractor be responsible for the safety of the worksite. This responsibility includes providing oversight and direction and ensuring compliance with all federal, state and local SOH requirements as well as those included in the contract documents. Also, NAVFAC employs project managers, oversight and performance evaluation personnel, and contracting officer's representatives to ensure compliance with the safety and health requirements of the contract.

Military Sealift Command and the Maritime Administration are developing a Best Practices Agreement (BPA) with private companies that will document general and specific responsibilities and standards agreed to, concerning surge sealift ships, including those in the Ready Reserve Force (RRF). This BPA, which amplifies the DOD/DOT Memorandum of Understanding from August

2008, will establish standardized best practices for activation, maintenance, logistics and management for the surge fleet. This initiative has involved an ongoing series of working group meetings to discuss specific topics of interest and develop each section of the BPA. MSC's dedication to keeping people, the environment, and equipment safe is emphasized in the agreement. Our plan is to have the BPA signed and implemented in 2010.

- **Submit the standard OSH language included in your agency's contracts.**

See **Attachment E - Contract Language**

- **Are contractors required to notify agency personnel if a contractor experiences a recordable injury? If so, how does the agency use this information?**

The Navy's interest in contractor recordable injuries varies depending on the circumstances of the worksite. In some regions, the contractor is required to submit a Contractor Significant Incident Report (CSIR) to the Safety Office.

Naval Research Laboratory states:

"For recordable injuries and illness, and property damage resulting in at least \$2,000 in damage, the Prime Contractor shall conduct an accident investigation to establish the root cause(s) of the accident, complete the [Navy Contractor Significant Incident Report \(CSIR\)](#) and provide the report to the Contracting Officer's Representative (COR) within one business day of the accident. The Prime Contractor must notify the COR as soon as practical, but no later than 4 hours after the accident. The CSIR form is available at <https://www.navfac.navy.mil/safety/site/construct/csir.pdf>, through the COR or by contacting the Safety office identified in the contract."

Naval Region Marianas states:

"The Contractor shall report all accidents, mishaps, and near misses in a timely manner, as described below:

An initial report shall be developed by the contractor and provided to the contracting officer immediately after an accident or near miss has occurred. The contractor may not have all the facts and information regarding the actual incident or near miss at the time of the initial report; however, it is the government's desire to receive notification of all mishap situations as early as possible.

The contractor shall develop a follow-on report and shall provide a copy to the contracting officer by close of business the day of the accident, or if the accident occurs after hours, at start of business the following morning. Follow-on reports shall be required daily until the contractor can send a final, conclusive report of the nature, cause, and outcome of the accident. The contractor shall provide a final report of the accident to the contracting officer within 24 hours after completing the investigation of the accident.

Mishap Notification

Notification is required immediately but not later than four hours after any mishap meeting the definition of recordable injuries or illnesses, property damage equal to or greater than \$2,000, or any weight handling equipment accident. Information shall include: contractor name and contract title; type of contract; name of activity, installation or location where accident occurred; date and time of accident; names of personnel injured; extent of property damage, if any; extent of injury, if known; and brief description of accident (to include type of construction equipment used, PPE used, etc.). The contractor shall preserve the conditions and evidence on the accident site until the government investigation team arrives on-site and government investigation is conducted.

Accident/Injury rates are used in monthly performance assessments and tri-annual contract review boards to determine award schedules and eligibility to bid on future contracts. Incidents are used as lessons learned to prevent recurrence/future mishaps.”

Many NAVAIR commands do not require notification. However, the FRC East requires mishap reporting of nested contractors just like government employees so the mishap can be investigated and action taken to correct causal factors since the processes are shared by government employees. In addition, the same activity requires notification from other contractors to ensure appropriate mishap investigation and corrective action. (Refer to FRCEASTINST 5000.1 section 5.0 c. (2) in **Attachment E4**)

The contractor is required to notify NAVFAC if an individual on the worksite experiences a recordable incident. Additionally, contractors are required to report property damage and any significant environmental incidents. This information is used by NAVFAC to evaluate the most common causes for mishap on contractor worksites and then develop initiatives to reduce these types of mishaps. These initiatives can include different methodologies of procurement, varying degrees of experience or expertise on the part of the contractor’s site safety and health officer, or changes in contract language to modify steps in the processes associated with the contractor’s SOH program.

F. Other Support Activities

Describe how your agency promotes staff involvement in other safety and health support activities, such as membership in professional safety and health organizations, attendance at safety and health conferences, and professional certification.

During FY09, the Navy continued to participate in OSHA VPP achieving Star status at Naval Weapons Station Charleston and Naval Health Clinic Corpus Christi and Star recertification at Puget Sound Naval Shipyard and Norfolk Naval Shipyard. The Navy encouraged participation in the OSHA Voluntary Protection Programs Participants’ Association and DoD Safety Forums at the National Safety Council/Federal Safety & Health Congress Conference & Expo, the American Industrial Hygiene Conference & Expo, and the 10th Annual DoD Industrial Hygiene Forum. The Navy also encouraged participation at the Navy and Marine Corps Public Health Center’s 48th Naval Public Health Conference, and the 17th Annual Naval Safety Professional Development Conference.

OPNAV Instruction 5100.23G, Navy Safety and Occupational Health Program Manual, contains language concerning professional certification. Chapter 6 of the Instruction states: “Certification of individuals in their professional specialty is highly desirable and fully supported by the U.S. Navy. Commanders of local commands should encourage personnel to obtain professional certification, such as certified safety professional (CSP), certified industrial hygienist (CIH), certified occupational health and safety technologist (OHST), certified occupational health nurse (COHN), and certification by the American Board of Preventive Medicine in occupational medicine (ABPM). Local commands shall support the efforts (within funding capabilities) for the certification of their staffs by providing funding for preparatory courses and attendance at meetings/courses for the purpose of maintaining certification. For civilian personnel, payment of costs associated with obtaining and renewing professional credentials including professional accreditation, state-imposed and professional licenses, and professional certifications, and examinations to obtain such credentials is authorized. Given the availability of funding, a Navy activity may pay for professional credentials that are necessary or beneficial for the civilian employee in the performance of official duties.”

IV. Self-Evaluations

29 CFR Part 1960, Subpart J requires federal agencies to conduct self-evaluations of the effectiveness of their occupational safety and health programs. As required by 29 CFR Subpart 1960.78(b), please provide a summary of the most recent self-evaluation(s) conducted. The summary should include the year the evaluation was conducted and an explanation of how each of the major OSH program elements was evaluated.

Please remember to submit an example of an evaluation protocol used in FY 2009 and the corresponding evaluation report. (See Attachment A and Attachment B)

The Department of Navy issued a Safety Vision on 22 January 2009 that required self assessments using any appropriate safety management system. Navy field activities generally use one of the following safety evaluation protocols:

- Navy-developed Process Review and Measurement System (PR&MS) as outlined in OPNAVINST 5100.23G, Appendix 2B.
- Safety and Occupational Health Program Assessment, which is taken from PR&MS and included in the Enterprise Safety Application Management System (ESAMS).
- OSHA Voluntary Protection Programs (VPP).
- ANSI/AIHA Z10-2005, American National Standard for Occupational Health and Safety Management Systems
- Some of our echelon 2 commands (e.g., Military Sealift Command, Naval Facilities Engineering Command) have developed their own safety management systems and use them as guidance for self-assessments.

Examples of these self-assessment protocols are provided in **Attachment A**. **Attachment B** provides an example self-assessment from a field activity, using PR&MS protocol in ESAMS.

The effectiveness of the Safety & Occupational Health (SOH) Program agency-wide is measured by the Naval Inspector General for shore and by the Board of Inspection and Survey for ships and submarines. Developing the Annual Report to OSHA affords the Navy an excellent opportunity to conduct a self-evaluation of the Navy's SOH Program. The strengths of the Navy's SOH program include: centralized hazard abatement funding, industrial hygiene services, Navy safety websites, occupational health care, safety policy with clear roles and responsibilities, Web Enabled Safety System (WESS), and ESAMS.

During FY09, the Naval Inspector General (NAVINSGEN) conducted three command inspections and two area visits (Mid-Atlantic and Japan). The NAVINSGEN "Annual Naval Inspector General Safety and Occupational Health (SOH) Oversight Inspection Report for FY 2009" highlights three primary challenges:

- (1) Improvement is needed in the self-assessment process
- (2) Increased emphasis is needed in echelon 2 commands' safety oversight evaluations
- (3) Clarification is needed regarding required mishap data tracking by activity and echelon 2 commands.

[View the "Annual Naval Inspector General Safety and Occupational Health (SOH) Oversight Inspection Report for FY09" at <http://www.safetycenter.navy.mil/osh/performance/default.htm>]

V. Accomplishments for FY 2009

Accomplishments represent specific achievements above and beyond program requirements. Please discuss your agency's OSH accomplishments describing the challenges the agency faced, the actions taken to overcome those challenges and the results of those actions. Please include a discussion of your agency's progress toward meeting the goals listed in its FY 2008 annual report.

Acquisition Safety/Systems Safety

- Increased interaction with acquisition program offices, particularly multi-billion dollar ship programs, to influence implementation of system safety during program development.
- Continued review of Joint Requirements (Capabilities) documents.
- Improved liaison with independent test and evaluation organizations, particularly Commander Operations Test and Evaluation Force (OPTEVFOR).
- Facilitated data system design that will help identify design risk factors and root cause analysis in updates of mishap data systems.
- Facilitated a DSOC project that made U.S. manufactured, ISO 10819 certified anti-vibration gloves available in the federal supply system and introduced three low-vibration power hand tools via General Services Administration.
- Continued participation in technical outreach and exchange, including coordination/teaching of workshops at the Navy and Marine Corps Safety Professional Development Conference (March 2009), presentation of information on the DSOC hand-arm vibration project at the National Defense Industries Association Systems Engineering Conference (October 2009), and anticipated presentations at the International System Safety Conference (August 2010) and American Industrial Hygiene Association Conference (May 2010).
- Initiated RDT&E projects by the Navy Clothing and Textile Research Facility (NCTRP) to provide improved abrasive blasting helmets accommodating double hearing protection and improve anti-vibration gloves.
- Selected a member of the OPNAV staff act as the intersociety liaison for the System Safety Society.
- Continued development of hazardous energy and nanotechnology sections of the NAVSAFECEN acquisition safety web pages.
- Participated in update of Military Standard 882 (System Safety) through participation on the DoD working group and G-48 committee.
- Continued use of the System Safety Advisory Board as a forum for Navy review of systems engineering and risk management approaches.
- Completed a DSOC project to evaluate a retrofit device to improve safety of shipboard inclined ladders. The project has been funded with work to be done by relevant NAVSEA technical authority.
- Completed work on the DSOC hand-arm vibration project.
 - Presented two half-day workshops at the Navy Marine Corps Public Health Conference in March 2009 to facilitate DLA availability of certified anti-vibration gloves in the stock system and prioritized procurement/availability of low-vibration power hand tools by GSA with long-term goal of using background learned in this project to facilitate similar improvements in other product areas.
- Provided a Navy liaison with DoD Installations & Environment Emerging Contaminants Office for updated inventory management systems and to implement an executive order for hazardous material minimization.
- Drafted update of NAVSEA's organizational system safety instruction.

Anti-Terrorism Force Protection (AT/FP)

CNIC Emergency Management support has accomplished the following:

- Continued to integrate occupational health and safety requirements into the EM programs.

- Continued to designate and enter Chemical, Biological, Radiological, Nuclear, and High Explosive (CBRNE) first responders into ESAMS.
- Worked with the OSH department to ensure designated first responders are enrolled in the CBRNE Respiratory Protection Program (RPP).
- Worked with OSH to track and verify that designated first responders received approved CBRNE Respiratory Protection equipment, CBRNE RPP training and medical surveillance.
- Continued to consult with OSH to identify safety and health risks unique to the EM population.
- Clarified the difference between the job titles “First Responder” and “CBRNE Respirator User” for proper identification of training required as listed in ESAMS.

Enterprise Safety Applications Management System (ESAMS)

- Increased tenant command implementation by 15% and overall implementation by 17.5% during FY09.
- Modified mishap reporting and submittal process from ESAMS to Web Enabled Safety System (WESS) (DON Authoritative Mishap Database) to improve Department-wide reporting compliance by automating the validation, closure and submittal (to WESS) process within ESAMS.
- Automated the Property Damage Report generated within ESAMS from Fire & Emergency Services National Fire Incident Reports (NFIRS) based on loss value identified on the NFIRS report. This ensures more complete reporting of all incidents required to be reported into WESS.
- Added the following reports to provide additional analysis and trending capability to management at all levels:
 - A deficiency trend and analysis report. The report added the ability to conduct more complete trending and analysis on identified hazards to determine problem areas or common issues that can then have focused and consistent effort placed on them for mitigation across the enterprise.
 - Respirator Summary Report to provide a “dashboard” view of respirator program compliance by department, command, installation, and region. This report supports Industrial, CBRNE, and self contained breathing apparatus (F&ES) type respirator wearers. The dashboard provides management with the ability to quickly determine respirator user qualification status for training, fit test, and medical surveillance.
 - Modified existing supervisor reports to provide ability for better management of their employees’ safety requirements.
 - Additional access and reports to support command level management of the U.S. Navy Traffic Safety Program. This expanded previous year’s work of providing access to training events by anyone, anywhere, anytime by creating additional access and reports to support unit and organizational level management of Navy Traffic Program requirements.

Ergonomics Task Action Team (Ergo TAT) - The Ergo TAT serves as the ergonomics technical and policy advisor on safety and health aspects of work-related musculoskeletal disorders (WMSDs). The Ergo TAT concentrates on assigned focus areas associated with WMSDs both ashore and afloat as determined by the NESB. During FY09, the Ergo TAT accomplished the following:

- Developed the “Ergonomics Guide for Welders” Welding operations were identified as one of the high risk occupations in the Navy. To address this issue, the Ergo TAT developed the “Ergonomics Guide for Welders.” This guide is for managers and supervisors at activities performing welding tasks. It provides a brief background on ergonomics and offers suggestions for improving the workplace to reduce the risk of work-related musculoskeletal injuries. This document is currently posted on the NAVSAFECEN website at <http://www.safetycenter.navy.mil/osh/ergonomics/index.asp> and the Ergonomics pages of Naval Facilities Engineering Command Safety website at www.navfac.navy.mil/safety.
- Developed a guidance sheet for configuring office workstations with dual monitors. Many computer workstations have dual monitors as computer programs become even more complicated and

LCD monitors become inexpensive. Dual monitors are very useful for engineering drafting programs, movie and graphics editing, and emergency response centers. The guidance document provides simple ergonomic setup guidelines for using dual monitors.

- Formatted the interactive computer based training module “General Ergonomics Awareness” and posted on Navy Knowledge Online eLearning website located on the internet at <https://wwa.nko.navy.mil/portal/home/>. This method of delivery will result in easier access by Navy personnel, tracking of those completing the course, and notification of the requirement to complete the training. It is a Navy requirement that all Navy personnel complete “General Ergonomics Awareness” as applicable to their jobs. This computer-based course satisfies the requirement.
- Updated the ergonomics program chapter for the upcoming revision of OPNAVINST 5100.23 Series, Navy Safety and Occupational Health Program Manual.
- Updated the Physical Risk Factor Ergonomics Checklist used to identify ergonomics stressors in the workplace.
- Updated the Computer Workstation Checklist used to identify ergonomics stressors for computer workstations and recommend possible solutions.
- Submitted ergonomics success stories to NAVSAFECEN for posting on the Success Stories web pages.

Fall Protection Task Action Team (FP TAT)

- Developed the following documents:
 - Update of the Navy Fall Protection Guide for Ashore Facilities.
 - Criteria for selecting FP equipment conforming to the latest ANSI/OSHA Standards.
 - Sample Activity Written Fall Protection Program.
 - Compliance Checklist for OPNAVINST 5100.23G, Chapter 13 FP Program.
 - Fall Hazard Survey Report.
 - Fall Protection and Prevention Plan requirements.
 - Rescue plan and procedures for fall hazard control.
 - Fall Protection for Aircraft Maintenance and Inspection Work.
 - Fall Prevention for Architects and Engineers.
 - Point paper for slips, trips, and same level falls within the Navy.
- Invited various DoD agencies to participate as active members on the FP TAT.
- Training and education:
 - Updated end user and supervisors of end users training.
 - Developed competent person/program manager course syllabus for NAVSAFENV-TRACEN.
 - Updated slips, trips, and falls training.

Global War on Noise (GWON)

- NAVSEA performed the following to reduce noise aboard Navy ships:
 - (1) Updated specifications for major acquisitions (Littoral Combat Ship (LCS 3, LCS 4), Joint High Speed Vessel (JHSV), Ship-to-Shore Connector (SSC), and Mobile Landing Platform (MLP)) to include airborne noise standards published in OPNAVINST 5100.19E.
 - (2) Utilized airborne noise survey results for Landing Helicopter Dock (LHD 8) to modify equipment specifications and drive ship design changes for follow-on ships, Amphibious Assault Ships (LHA 6 and LHA 7).
 - (3) Developed a compilation report of shipboard noise control engineering solutions and associated costs for use by program offices as field reference.
 - (4) Partnered with BUMED and Type Commanders to develop cross platform and cross hull analysis of airborne noise levels to identify best practices and streamline engineering control efforts.

(5) Funded pilot project for custom-molded ear plugs for LCS 1 to evaluate their use shipboard as noise exposure option. Extensive testing has been ongoing. Shipboard trials of the new aviation cranial are scheduled to begin in late March of 2010.

- NAVAIR and the Office of Naval Research (ONR) are continuing to work on reduction of noise from tactical fighter jet engines. An anticipated 3 decibel reduction is projected from trial applications to the FA18 jet engine.

Military Sealift Command

MSC is updating its procedure on personal protective equipment (PPE). MSC is mandating the use of clothing with an Arc Thermal Performance of 11.2 cal/cm for persons working in engineering spaces. This will help protect workers from electrical burns when working in areas with 1000 volts or less. Areas over 1000 volts will require an Arc Flash analysis to determine the proper PPE required.

Mishap Prevention and Hazard Abatement (MPHA) Program

- Completed or awarded MPHA projects approved for FY09.
- Prioritized and selected FY10 MPHA projects.

Navy Mishap Prevention & Hazard Abatement Program Funding FY04 through FY09*

FUNDING YEAR	APPROPRIATION	AUTHORIZATION (\$ Million)	OBLIGATED (\$ Million)
FY 2004		13.5	10.0
FY 2005		13.0	10.7
FY 2006		11.3	11.0
FY 2007		11.0	10.8
FY 2008		9.8	9.3
FY 2009	9.5	9.5	9.3

* **Note** Obligation FY09 is provided by NAVFAC documentation.

NAVSEA has developed a system to track action items assigned to NAVSEA by the NAVSAFECEN resulting from Navy Class A Afloat Mishap Investigations. This tracking system will help NAVSEA complete these action items in a timely manner. These action items are derived from the mishap investigation recommendations so that the identified hazards can be eliminated. NAVSEA has released nine messages providing technical guidance and updates to actions for Class A mishaps in FY09. Efforts included updates to planned maintenance requirements, technical manuals, and equipment procedures on topics including hazardous materials storage, life preservers, main reduction gear maintenance, and fire prevention.

Nanotechnology

- Developed two technical posters on nanotechnology:
 - Nanotechnology Occupational Health Challenges
 - Material Safety Data Sheets (MSDS) for Nanoproducts

NAVSEA Private Shipyard Safety Initiative

Following up on Secretary Winter’s (former SECNAV) goal of improving private shipyard safety, NAVSEA met with the senior leaderships of General Dynamics and Northrop Grumman Shipbuilding Systems shipbuilding yards to discuss shipyard safety of its workforce and those in their shipyards. These were open discussions with the presidents, vice presidents, and their workforces on safety issues. As a result of these meetings, NAVSEA obtained buy-in from the senior leadership in improving safety. This resulted in the sharing of best practices and lessons learned among the shipbuilding yards and Navy. Additionally, NAVSEA was successful in obtaining buy-in from the National Shipbuilding Research Program to accept projects to improve safety among the nation’s

shipbuilding industry. One of the proposed projects submitted for approval was the development of processes for private shipyards to share best practices to reduce injuries and improve safety. In addition, NAVSEA held meetings with the nation's ship repair associations and obtained their buy-in that more can be done to improve safety in shipyards

Occupational Health (BUMED)

- Guidance for communicating exam findings regarding non-occupational disease or risk was distributed to the occupational health community and the update to the Navy Medicine policy document is anticipated in FY11.
- Significant improvements were made to the SOH activity self-assessment and metrics processes for both IH and Safety for Navy Medicine activities. Implemented a VPP-like self assessment process for IH and Safety. Annual reporting requirements for Safety and IH metrics were also streamlined using a new reporting format.
- In September 2009 Navy Medicine completed an 18 month enterprise-wide Defense Occupational and Environmental Readiness (DOEHRs-IH) Training and Implementation with 98% of targeted IH audience (358 of 364) successfully completing the one-week training.
- Deployment of new DOEHRs-Hearing Conservation (HC) audiometers completed to all 230+ Navy regular testing locations with both audiometers and updated software in June, 2009. During 2009, 11 additional sites world-wide were established with permanent training audiometric equipment/software for hosting audiometric technician certification courses.
- Bureau of Medicine and Surgery promulgated a policy instruction BUMEDINST 3440.10, Navy Medicine Force Health Protection (FHP) Emergency Management (EM) Program in November 2008. Training standards are based on existing DoD, OSHA, NFPA, and military standards and guidelines. These training standards focus on the requirements for Category 1 personnel to maintain critical operations, for Category 2-4 personnel to gain hazard awareness and understanding of warning and response procedures, and for Category 5 personnel to conduct safe and effective operations at their level of training. IHs and SOH personnel are category 5 personnel.
- During FY 09, 482 technicians were certified/re-certified under NMCPHC standardized HC technician training process. Ten Navy audiologists were certified/re-certified during the NMCPHC conference in March 2009 as course directors.

OSHA Citation Website

Continued to monitor OSHA citations issued to Navy and posted them quarterly on the NAVSAFECEN website to assist all installations to identify areas of potential risk and learn from violations that have been cited previously for a substantially similar condition.

http://www.public.navy.mil/navsafecen/Pages/osh/SOH_Metrics/OSHACitations.aspx

Policy and Guidance

A number of policy improvements were initiated in FY09, including updates to OPNAVINST 5100.25B, Navy Recreation and Off-Duty Safety Program; OPNAVINST 1500.75B, Policy and Procedures for Conducting High-Risk Training; and OPNAVINST 3590.24E, Chief of Naval Operations Afloat-Related Safety Awards. These updates and additional policy updates will be completed during FY10. Change 4 to OPNAVINST 3750.6R, Naval Aviation Safety Program was completed on 8 April 2009.

Safety Success Stories

Seven success stories were posted to the 1,001 Safety Success Stories web pages on the NAVSAFECEN website on topics of VPP, heat stress, mishap reduction, fall protection, electrical safety, and ergonomics. The latter story documented a return on investment of over 200%. Two of the stories featured safety at a Navy overseas location in Rota, Spain. The stories demonstrate the Navy's commitment to the safety, health, and quality of life of our Navy personnel. **Attachment J**

provides more details about how the best practices described in the success stories demonstrate the value added by safety.

Studies

- Two studies were completed in FY09 by the Center for Naval Analysis:
 - Navy Safety Lessons Learned Programs
 - Statistical Analysis of Navy Personal Motor Vehicle Fatalities
- One Naval Audit Service report was completed in FY09:
 - Naval Audit Service report N2009-0043, "Risk Management Information System Acquisition," 28 Aug 09.
[http://secnavportal.donhq.navy.mil/portal/server.pt/gateway/PTARGS_0_2_259847_0_0_18/FY%202009%](http://secnavportal.donhq.navy.mil/portal/server.pt/gateway/PTARGS_0_2_259847_0_0_18/FY%202009%20)

WEB Enabled Safety System (WESS)

- Implemented a new open source data extraction/reporting tool, Jasper.
- Implemented a new open source Application Server, JBoss.
- Implemented Google Web Toolkit for application development.
- Development of the Human Factors Analysis and Classification System (HFACS) module for Aviation Mishaps.
- Implementation of a new Access Management module.
- Modified WESS on-line access to be available only by use of PKI.
- Started developing Aviation Mishap Module.
- Added the ability to capture the Fleet Readiness Training Phase (FRTP) for afloat events in support of FFC requirements.
- Implemented procedure for notifying customers of requirement for and tracking WESS customer training on WESS for new and existing customers in response to Naval Audit Services recommendations for High Risk Training.

Workers' Compensation

- During FY09, CNIC Human Resources Offices devoted 60.4 man-years of effort to support 9,900 active workers' compensation cases that incurred a Department of Labor (DOL) bill of \$168M.
- CNIC began a partnership with Naval Criminal Investigative Service in 2007 to reduce potential fraud/abuse in the program. 252 cases have been assigned to investigators – 59 during FY09.
 - Of the 32 cases that have resulted in findings of fraud since the inception of the program, 23 were completed during FY09 with a FY09 savings of \$277,390, a cost avoidance of \$45,307,601, and a recoupment of \$144,413.
 - In addition, there are 13 claims pending prosecution with an expected total recoupment of \$2,046,744 if all are successfully prosecuted.
 - At the end of FY09, there were 131 active cases - 42 of those cases are under criminal investigation.
- CNIC began a partnership with BUMED in 2006 to review claims for traumatic injuries and occupational diseases and provide reports to DOL. 286 cases have been assigned to BUMED doctors for medical opinions – 95 during FY09.
 - The cooperative effort between CNIC and BUMED has resulted in lifetime cost avoidance to the Navy of over \$30.8M since inception of the program.
- CNIC had an 11-month (February 2008 to January 2009) nurse intervention pilot program with the Puget Sound Naval Shipyard. The assigned case nurse had contact with 258 claimants. Of these, 192 cases were closed with a total of 660 lost production days. The industry estimated disability days assigned to these 192 injuries is 2,117 days; this resulted in 1,457 saved days for a cost avoidance of \$439,128 based on the average burdened daily wage at the Puget Sound Naval Shipyard.

VI. Resources

Explain any significant one-time or additional permanent resources allocated to the OSH program(s) in FY 2009 for areas such as workplace hazard abatement, research and development, data systems, staffing, and training.

Voluntary Protection Program (VPP) - The DoD VPP Center of Excellence (CX) continued to support the Navy in FY09 by providing VPP site assessments, onsite counseling, and educational services to approximately 45 separate Navy commands nominated for VPP program implementation. The support was provided as the final stage of a DoD-wide four year, \$20 million Defense Safety Oversight Council initiative to improve safety and health management systems across the military services. CNIC will continue additional funding for the DoD VPP CX for FY10.

VII. Goals

Identify your annual OSH goals and significant OSH initiatives planned for FY 2010 and beyond. Please explain your agency's strategies for achieving those goals. In addition, please provide the timeframe for achieving each goal, and an explanation of how success will be measured.

Acquisition Safety/Systems Safety

- Enhance the integration of safety and health considerations into the systems engineering process for acquisition of military systems. To support this goal, detailed guidelines are being developed for safety review during systems engineering technical reviews. The Navy System Safety Advisory Board is collaborating with the Systems Command Technical Advisory Group.
- Reduce personnel noise exposures associated with new and legacy systems and equipment. This objective is supported by Office of Naval Research/Naval Air Systems Command projects to reduce tactical jet engine noise, including trial retrofit of F18 engine with deploying an improved aviation support (flight deck) cranial helmet and fitting certain high risk personnel, such as the Litoral Coastal Ship with custom molded earplugs.
- Provide improved policy guidance and oversight for safety and health in acquisition. This objective is supported by extensive safety and health inputs into the draft update of the Navy's main acquisition instruction (SECNAVINST 5000.2D), work with the group updating Military Standard 882 (Standard Practice for System Safety), and collaboration in review of capabilities (requirements) documents for new and updated military acquisition programs.
- Establish a Personal Protective Equipment Acquisition Task Action Team (PPE TAT) to improve the availability of state-of-the-art PPE to U.S. Navy sailors and civilians.

Enterprise Safety Applications Management System (ESAMS)

- Continue implementation of anti-terrorism/force protection and emergency management program requirements started in FY09. Since many requirements cross programmatic boundaries, this effort will focus on the integration of all requirements to obtain more complete resource tracking in support of risk management.
- Add functionality to allow for the documentation of work area inspections by supervisors to support deck plate level safety.
- Modify functionality within ESAMS to support the full documentation of a conducted self-assessment using any methodology by each command or at the safety service provider level.
- Continue to improve the timeliness, quality, and availability of safety records for all users in ESAMS.

Ergonomics Task Action Team (ERGO TAT)

- Improve existing design criteria documents to integrate ergonomics into the facility design process and culture.

- Improve existing criteria documents to integrate ergonomics requirements into the Navy acquisition process.
- Identify and develop solutions and alternatives to ergonomics hazards of high risk occupations.
- Improve ergonomics awareness by emphasizing Navy-wide training and education. Format the ten interactive computer-based training modules in “Ergonomics for SOH Personnel” for posting on Navy Knowledge Online eLearning website.
- Provide tools, criteria, and safe work practices to ensure viable ergonomics programs are developed and managed at afloat or ashore commands.
- Interact with Navy and non-Navy organizations on the technical aspects of implementing ergonomics resources for the anticipation, recognition, evaluation, and control of workplace hazards and finding innovative solutions for Navy implementation.

Fall Protection Task Action Team (FP TAT)

- Assist Navy commands to establish and manage viable FP programs.
- Review, update, and improve existing FP Program Chapter as part of OPNAVINST 5100.23H update.
- Finalize Afloat Fall Protection Chapter and Guide.
- Improve existing design criteria documents to integrate FP requirements in the Navy acquisition process.
- Develop guidance documents and solutions to known fall hazards (e.g., cranes and shipyards).
- Update existing guidance documents including Navy FP guide for ashore facilities.
- Continue providing fall protection best work practices from other Governmental Agencies (e.g. ANSI/OSHA/DoD).
- Finalize criteria and procedures for identification and use of safe anchorages.
- Assist other DoD agencies to establish and manage their fall protection programs.
- Continue analyzing fall mishap statistics.
- Improve FP awareness by emphasizing Navy-wide training and education.
- Continue to hold semi annual FP TAT meetings and invite other DoD agencies to participate.

Global War on Noise (GWON)

- Work with DoD to update DODI 6055.12, Hearing Conservation Program, in order to enhance design requirements and data management for noise control. A collaborative effort with technical authorities and the DoD Hearing Conservation Working Group is anticipated.
- Update OPNAV policy to establish an upper limit of double hearing protection, above which engineering or administrative controls are required.
- Continue aviation research to reduce noise in tactical fighter jet engine exhaust.
- Continue to deploy custom molded earplugs.
- Develop a Navy Hearing Protection roadmap as directed by the Vice Chief of Naval Operations.
- Begin initial production and deployment of advanced aviation support flight deck cranial.
- Provide a list of acoustical engineering reductions planned for proposed Navy ship designs.
- Update ship noise control section of acquisition safety website.

Mishap Prevention and Hazard Abatement (MPHA) Program

The Navy’s MPHA program funds mishap prevention initiatives and abatement of hazards for which local activities do not have sufficient funds and addresses hazards at multiple activities that can be corrected with common (global) resolutions. The systematic identification, detailed evaluation, and timely correction of hazards continue to improve personnel safety in Navy workplaces in CONUS and abroad. Emphasis remains on prioritizing and correcting identified hazardous conditions with the highest degree of risk to ensure cost-effective use of available funds.

- Complete Mishap Prevention and Hazard Abatement Program projects approved for FY10.
- Prioritize and select FY11 MPHA Projects.

Occupational Health (BUMED)

- Enhance use of information technology to support SOH mission by developing specific objectives for CY 2010 which will help achieve the goal. Some objectives are to be completed in CY2010 and some will take longer. Some of the objectives will be monitored via annual metrics and some will simply be measured by whether BUMED did them or not.
- Better integrate SOH roles into emergency management planning to enhance mission readiness by developing specific objectives for CY 2010 which will help achieve the goal. Some objectives are to be completed in CY2010 and some will take longer. Some of the objectives will be monitored via annual metrics and some will simply be measured by whether BUMED did them or not.

OSHA Citation Website

Continue to monitor OSHA citations issued to Navy and post them on the NAVSAFECEN website to assist all installations in identifying areas of potential risk and prevent recurrence.

Policy and Guidance

Continue to update and improve OPNAV safety policies.

Safety Success Stories

Post ten success stories to the NAVSAFECEN website that demonstrate the Navy's commitment to the safety, health, and quality of life of our Navy personnel. Demonstrate through the stories the value added by safety and how best business practices result in productivity gains and cost savings. Document return-on-investment.

Studies

Complete Naval Audit Service report begun in FY08, "Navy's Traffic Safety Program."

WEB Enabled Safety System (WESS)

- Complete the Aviation Mishap module in WESS.
- Complete the Informix to Oracle migration.
- Begin rewrite of the Consolidated Mishap module.
- Transition WESS to Navy hosting site.

Workers' Compensation

- Continue to partner with NCIS in fraud/abuse cases identified by Injury Compensation Program Administrators and reviewed by the CNIC Fraud/Abuse coordinator before referral to NCIS. Success will be measured by the number of closed preliminary investigations either through the development of fraud/abuse charges or determination that no fraud/abuse is involved.
- There is no FY10 goal for the BUMED partnership and nurse intervention program - both programs have been suspended due to funding constraints.

VIII. Questions/Comments

Submit any questions or comments you have concerning your agency's OSH program and/or these reporting guidelines.

Requests:

Request OSHA consider adding the following items to future annual reports:

- Hazard specific accomplishments and goals, with particular focus on those hazards causing injury and illness (e.g., falls, ergonomics, noise, etc.).
- Greater focus on safety and health in design.
- We recommend OSHA add worker permanent disabilities to mandatory metrics for the Annual Report to OSHA. Our rationale for this request is:
 - Most federal agencies have very few or no workplace fatalities.
 - Permanent disabilities cost the taxpayer more than workplace fatalities.
 - Permanent disabilities cause suffering to families, co-workers, and anyone involved with these disabling mishaps.
 - Permanent disabilities, like fatalities, are preventable if root cause analyses and corrective actions are taken.
- We recommend OSHA begin asking for quality and quantity of safety and health professionals by asking for the number of GS-018 and GS-690 personnel as well as the number of Certified Safety Professionals and Certified Industrial Hygienists.
- We recommend OSHA develop guidance for their website regarding vibration hazards, both hand-arm and whole body vibration. This "silent" hazard is more prevalent than usually realized in manufacturing, construction, maritime, and maintenance activities. The Navy's recent accomplishments in addressing vibration were described previously in this report. Further information on vibration is available on the acquisition safety website at [http://www.public.navy.mil/navsafecen/Pages/acquisition/vibration_acquisition.aspx]. Since the EU, ISO, ANSI, & ACGIH have all adopted protective standards for vibration, benchmarking against these standards and an OSHA request for information should also be considered to determine if OSHA rulemaking is needed.
- We recommend OSHA request information on workers' compensation costs (see our input on page 3 of this Detailed Report). This financial information attracts leadership attention, which is critical to improving safety performance.

Concluding Comments:

- During FY09, the U.S. Navy continued to move safety upfront in acquisition. Integrating safety into the earliest phases of acquisition (concept and design) will improve cost avoidance for the entire life cycle of acquisitions. Engineered hazard controls designed and acquired into new acquisitions will reduce mishaps and increase productivity. A summary of Navy acquisition safety needs and challenges can be found on the Naval Safety Center's Acquisition Safety web pages at: <http://www.public.navy.mil/navsafecen/Pages/acquisition/acquisition.aspx>. Anything OSHA can do to promote safety in design would be appreciated.
- The U.S. Navy continued to track the value that safety adds to improved worker safety, productivity, and cost avoidance on its Safety Success Stories website. This website shows the breadth and depth of safety. Examples of new stories posted during FY09 were VPP Star awards to Navy installations, automation of heat stress monitoring ashore, and reduction of work-related musculoskeletal disorders through resolution of ergonomics risk factors. http://www.public.navy.mil/navsafecen/Pages/osh/Success_Stories/safety_success_stories_home.aspx
- The U.S. Navy recognizes a number of challenges it faces that make continued safety improvements difficult. These include new hazards brought by continued war against terrorism, changing technology such as nanotechnology, reduced staffing, outsourcing, an aging civilian workforce, a rotating military workforce, increased competition for funding, and difficulty in accurately documenting safety losses, projected savings, and return-on-investment.

ATTACHMENTS:

A. Evaluation Protocol - *Please submit an example of a self-evaluation protocol used in FY 2009 to conduct the self-evaluations required by 29 CFR §1960.79,*

- A1 - Navy Process Review & Measurement System, OPNAVINST 5100.23G, Chap 2, Att. B
- A2 - Safety & Occupational Health Program Assessment Implementation Guide

B. Evaluation Report - *Please provide a copy of an evaluation report that resulted from that evaluation protocol.*

C. Agency OSH Poster - *Please submit a copy of the agency's 29 CFR §1960.12 (c) required poster. A template for federal agencies OSH poster can be found at: <http://www.osha.gov/Publications/fedposter.doc>.*

D. Fatality/Catastrophic Accident Summary Reports - *Please provide copies of the summary reports for all fatality and catastrophic accident investigations, as required under 29 CFR [Part 1960.70](#).*

E. Contract Language - *If your agency uses standard OSH language in your contracts, please provide a copy of that language.*

- E1 Unified Facilities Guide Specifications (UFGS), Governmental Safety Requirements, UFGS-01 35 26 (February 2009)
- E2 NAVFAC Ergonomics in Contract Documents, Unified Facilities Criteria (UFC) 04-610-01
- E3 CNIC OSH Related Contract Language
- E4 Naval Air Systems Command (NAVAIR) Fleet Readiness Center East (FRCEAST) Instruction 5000.1, Visitor Contractor Site Specific Rules and Compliance
- E5 NAVAIR Minimum Contract Requirements, Reference U.S. Army Corps of Engineers Safety and Health Manual (COE-385-1)
- E6 Naval Air Depot Cherry Point, NC Additional Contract Requirements
- E7 SPAWAR Contract Language
- E8 Naval Research Laboratory Requirements for On-Site Contractors

F. Pandemic Flu - *If your agency has incorporated its pandemic flu response plan into its OSH program, please provide a copy of that part of your OSH program.*

G. Lost Time Case Rates Comparison of Federal Agencies

H. Summary of Navy Safety Training

I. Mishap Prevention/Hazard Abatement

J. Safety Success Stories

ATTACHMENT A-1 EVALUATION PROTOCOL

NAVY PROCESS REVIEW AND MEASUREMENT SYSTEM (from Naval Safety & Occupational Health (SOH) Program Manual, OPNAVINST 5100.23G, Chapter 2, Attachment B)

#1 THE MISHAP PREVENTION PROCESS MODEL (30% OF OVERALL RATING)

Mishap Prevention - actions taken to identify and control unacceptable risks.

1. Compile/Report Mishap and Hazard Data
 - Mishap reports
 - FECA data
 - Exposure assessments
 - Medical surveillance
 - Reported hazards
 - Workers
 - Management
 - Staff
 - External agents
 - Literature

2. Analyze Mishap/Hazard Data
 - Frequency
 - Severity (human costs, dollar costs, mission impact)
 - Exposure potential
 - Location
 - Responsibility
 - Type
 - Trends
 - Patterns
 - Any anomaly

3. Analyze Significant Processes/Areas (Various approaches may be employed - Preliminary Hazard Analysis, Systems Safety Review, Job Safety Analysis, Process Safety Analysis, less formal approaches, etc., as appropriate for processes analyzed)
 - Hazards
 - Causes
 - Responsibilities
 - Control alternatives

4. Report Key Data/Analysis to Process Owner

5. Process Owners Review Reports

6. Identify/Consider Potential Controls
 - Administrative/Programmatic
 - Engineering
 - Process

- Training
- PPE
- Procedural
- Product substitution

7. Conduct Relative Value Assessment

- Loss potential
- Cost
- Expected benefit
- Morale implications
- Feasibility
- Customer acceptance
- Public image
- Labor/management implications

8. Select Alternative(s)

- Select control(s)
- Do nothing
- Prioritize implementing actions

9. Implement Control (s)

- Issue policy
- Issue procedures
- Install barriers
- Modify facilities/equipment
- Modify procedures
- Conduct training
- Utilize new product

10. Assess Impact of Controls

- Review data
- Inspect process/worksites
- Solicit customer feedback
- Compare results to expected benefits

11. Modify Control(s) As Needed

- Select alternative control(s)
- Modify existing control(s)
- Eliminate control(s)

Performance Measures for the Mishap Prevention Process

1. Mishap Rates and Measures of Performance - The mishap rate currently used to measure mishap prevention performance in the Process Review and Measurement System (PR&MS) is the Injury/Illness Incidence Rate (IIR). However, with increasing requirements to evaluate performance according to various administration goals, other measurements are needed. The Navy is phasing out the singular use of the IIR, and including other comprehensive statistical measures of performance. One of the objectives of the safety performance evaluation is to align the mishap rates collected from Navy regions and installations with the goals of the 2003 Presidential Safety, Health and Return to Employment (SHARE) Initiative, and future safety related cost reduction goals.

The OSHA final recordkeeping rule made the Federal sector’s recordkeeping and reporting requirements essentially identical to the private sector by adopting applicable provisions from 29 CFR Part 1904 as Federal agency requirements under 29 CFR Part 1960. OSHA amended the basic program elements at 29 CFR 1960, Subpart I, to make pertinent private sector recordkeeping and reporting requirements under Part 1904 applicable to the Federal sector. Under Part 1904, recordable work-related injuries and illnesses are those that result in one or more of the following: death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, loss of consciousness, or diagnosis of a significant injury or illness.

The Naval Safety Center has implemented a web-enable Safety System (WESS) to enhance operations and to improve the safety information obtained for decisions. Embedded in WESS, JReport provides Naval professionals with information to assist in the identification of relationships between mishaps and their root causes. This type of information is used to educate appropriate audiences for equipment design, training, and operational maintenance processes in order to reduce mishap occurrence.

The IIR includes all mishaps causing personal injury, fatalities and first-aid. Since historically a location’s safety performance audit score is partially based on the IIR, the use of the IIR is being kept until the other safety performance measures are integrated into the audit.

The Injury/illness Incidence Rate (IIR) is defined as follows:

$$IIR = \frac{A \times 200,000}{M + C}$$

A = total injuries/occupational illnesses including fatalities, lost/no-lost time cases, first aid cases reported on Form OPNAV 5102/7 (Log of Navy Injuries and Occupational Illnesses), or equivalent form.

M = the command's military personnel and strength for the reporting period multiplied by 2,000 (Note: 2,000 is the appropriate multiplier only when an annual IIR is being calculated. This multiplier should be adjusted up or down in proportion to the time period in question for any IIR calculations for time periods other than annual. For example, use 1,000 for a 6-month IIR, use 10,000 for a 5-year IIR) Note: Under 29 CFR 1904, first aid injuries are exempt from recordkeeping.

C= civilian staffing multiplied by 2000 or the total man hours worked by civilian employees of the command during the reporting period, as provided by the Comptroller

- The IIR score is derived as follows: $0.3(100-IIR) = IIR \text{ Score}$

Note 1: The IIR is a tool designed for individual activities to use as one standardized trailing indicator of possible safety concerns so that the Echelon 2, Inspector General (IG) or anyone else conducting an assessment can identify mishap trends and audit performance with the use of a numeric score that uses the IIR.

Note 2: The safety and occupational health Bureau of Labor Statistics’ (BLS) incident rates are not equivalent to the IIR.

Note 3: Additional Navy and Marine Corps Safety Council metrics to define specific administration goals are maintained by the Navy Safety Center.

On May 19, 2003, the Secretary of Defense sent a memorandum challenging the DoD to reduce the number of mishaps by 50% in the next two years. The Navy is “phasing in” the consistent use of other metrics that are used to evaluate safety performance with respect to achieving these goals and objectives.

Performance measures include, but are not limited to:

Class A Operational Ashore Mishap Rate.

http://www.public.navy.mil/navsafecen/Pages/statistics/navy/navy_all.aspx

Class A operational mishaps are incidents (cases) that cause \$1,000,000 or more in property damage; or, that cause a fatality or a permanent total disability. Class A Mishap Rate is defined as the number of cases per 100,000 personnel per year, and includes military and federal civilian ashore personnel.

Class A Operational Ashore Mishap Rate =

$$\frac{\# \text{ cases}}{\# \text{ affected persons}/100,000}$$

Affected personnel is the number of military personnel plus the number of civilian personnel for the reporting period.

Activities have access to data to produce activities’ specific trends from the WESS JReport module.

PMV Fatality Rate.

http://www.public.navy.mil/navsafecen/Pages/statistics/navy/navy_all.aspx

Private motor vehicle (PMV) includes 2- or 4-wheeled vehicles and includes military on- or off-duty, and civilian on-duty use of motor vehicles. Private Motor Vehicle (PMV) fatality is a motor vehicle death, regardless of the identity of the operator that does not involve a government motor vehicle.

PMV fatality rates are deaths caused by motor vehicle per 100,000 persons per year.

$$\text{PMV Fatality Rate} = \frac{\# \text{ Fatalities}}{(\# \text{ affected personnel}/100,000)}$$

Affected personnel = the command's military personnel plus the civilian staffing, as provided by the Comptroller.

Activities have access to data to produce activities’ specific trends from WESS JReport module.

Federal Civilian Lost Time Case Rate (LTCR).

http://www.public.navy.mil/navsafecen/Pages/statistics/navy/navy_all.aspx

A “lost time case” is a non-fatal traumatic injury that causes any loss of time from work beyond the day or shift it occurred; or a non-fatal, non-traumatic illness or disease that causes disability at any time.

Civilian Lost Time Case Rate =

$$\frac{\# \text{ of on-duty lost time cases} \times 200,000}{\text{Number of civilian hours worked}}$$

The number of civilian hours worked is the total man-hours worked by civilian employees of the command during the reporting period, as provided by the Comptroller. (Hours can be estimated by the civilian staffing multiplied by 2,000 but actual civilian hours should be used.)

The number of lost time/death mishaps is recorded on the Log of Navy Injuries and Illnesses. 2,000 hrs equal 1 person-year (50 wks/year X 40 hrs/wk). Note that 2,000 is used for the entire year.

Activities have access to data to produce activities' specific trends from the WESS Jreport module. This metric corresponds to the SHARE goal to lower lost time injury rates by three percent per year.

Federal Civilian Lost Day Rate

<https://www.dmdc.osd.mil/twi/owa/cop>

And, "top 40" list is at https://www.dmdc.osd.mil/twi/owa/charts.top40_display?rptnum=1

Federal Civilian Lost Day Rate is the number of lost workdays per 100 civilian workers per year. The source is the Defense Manpower Data Center (DMDC).

$$\text{Lost day rate} = \frac{(\# \text{ COP days} + \# \text{ LWOP days}) \times 200,000}{\text{Number of civilian hours worked}}$$

COP is continuation of pay.

LWOP is leave without pay.

Civilian hours worked are the actual number of hours. The number of civilian hours worked is the total hours worked by civilian employees of the command during the reporting period, as provided by the Comptroller. (The number of civilian hours can be estimated by the civilian staffing multiplied by 2,000, but actual civilian hours should be used.)

Activities have access to data from the WESS Jreport module to produce activities' specific trends for logged injuries and illnesses, although this data may differ from DMDC figures, which are based on pay records. Drill-down compatibility is available on the DMDC site.

Military Lost Day Rate

http://amsa.army.mil/AMSA/amsa_home.htm

The military lost day rate is the number of lost production days (medical cases, quarters and limited duty) per 100 military personnel per year. Source is the Army website which is incompatible with the Navy Marine Corps Intranet.

$$\text{Military lost day rate} = \frac{\# \text{ lost production days} \times 200,000}{\text{Personnel hours}}$$

Personnel hours are the command's military personnel for the reporting period multiplied by 2,000 (Note: 2,000 is the appropriate multiplier only when an annual rate is being calculated. This multiplier should be adjusted up or down in proportion to the time period in question for any lost day rate calculations for time periods other than annual. For example, use 1,000 for a 6-month lost day rate, use 10,000 for a 5-year lost day rate.

Activities have access to data to produce activities' specific trends from the WESS Jreport module.

Navy Injury and Illness Incident Rate (NIIR)

http://www.public.navy.mil/navsafecen/Pages/statistics/navy/navy_all.aspx

The Navy lost workday case rate is the total number of OSHA recordable cases that includes military and civilian medical cases, restricted work activity cases, fatalities and lost time cases

$$\text{NIIR} = \frac{A \times 200,000}{M+C}$$

A = total injuries/occupational illnesses including fatalities, lost time cases, medical cases, and restricted work activities' cases (from the Log of Navy Injuries and Occupational Illnesses).

M = the command's military personnel and strength for the reporting period multiplied by 2,000 (Note: 2,000 is the appropriate multiplier only when an annual rate is being calculated. This multiplier should be adjusted up or down in proportion to the time period in question for any NIIR calculations for time periods other than annual. For example, use 1,000 for a 6-month IIR, use 10,000 for a 5-year NIIR.

C = the total man-hours worked by civilian employees of the command during the reporting period, as provided by the Comptroller. (The number of civilian hours can be estimated by the civilian staffing multiplied by 2,000 but actual civilian hours should be used.)

Note: The NIIR correlates with the metric for the SHARE three percent per year reduction in total case rates. The activity NIIR will be significantly lower than the IIR due to recording rule requirements of 29 CFR 1904.

For Ashore statistics, go to

http://www.public.navy.mil/navsafecen/Pages/statistics/ashore/ashore_stats.aspx .

Mishap Classification below is taken per DODI 6055.7, 3 Oct. 2000 available at:

http://www.dtic.mil/whs/directives/corres/pdf/i60557_100300/i60557p.pdf and in OPNAVINST 5102.1D/MCO P5102.1B, paragraph 2002.

- Class A Mishap
 - Property damage of \$1M or more.
 - A fatality or permanent total disability.
- Class B Mishap
 - Property damage of \$200K or more but less than \$1M.
 - A permanent partial disability.
 - In-patient hospitalization of 3 or more personnel.
- Class C Mishap
 - Property damage between \$20K and \$200K.
 - A non-fatal injury resulting in any loss of time from work beyond the day or shift on which it occurred; or a non-fatal occupational illness or disability that causes loss of time from work or disability at any time.

2. Quality Assessment of Command Mishap Prevention Program

Evaluate the command's Mishap Prevention performance by assessing its implementation of specific elements of the Mishap Prevention process model. The process model elements recommended for evaluation, and proposed evaluation methods, are provided below:

- Compile/Report Mishap and Hazard Data -

Is appropriate mishap and hazard data compiled?

- Injuries/illnesses
- Property damage cases
- Stressor exposure
- Safety hazards
- Near misses

- A list of possible sources from which the evaluator may gather actual mishap and hazard data for comparison purposes includes:

1. Clinic logs
2. Material property damage reports (Safety Office)
3. FECA tables
4. JAG reports
5. NAVFAC property loss reports
6. Property accountability reports (Controller)
7. Crane accident reports
8. Ships' CAS reports
9. Inspection Reports
10. Employee Hazard Reports (EHR)
11. Abatement logs
12. Industrial hygiene reports

(Evaluate by taking a sample of mishaps/hazards from the above data sources and then confirming the consideration of those mishaps/hazards in the mishap prevention process. Numerical values should then be assigned to this element, based on the number of sample mishap and hazard items actually included in command mishap prevention analysis databases.)

- Analyze Mishap/Hazard Data and Significant Process Areas

Do the analyses:

- Occur at an appropriate frequency?
- Provide data at appropriate levels of management responsibility?
- Identify the most frequent and/or severe risks?
- Provide a valid comparison of current performance versus expected/historical performance?
- Provide useful recommendations for performance improvement?
- Provide other useful analysis not listed above?

- Process Owner Response to Analyses

Characterize process owner response to reports of mishap analyses as one of the following:

- Unsatisfactory awareness of/response to analyses reports
- Satisfactory awareness of/response to analyses reports
- Takes additional internal analysis/action beyond that suggested by analyses reports

(Evaluate by personal interview with selected process owners, review of process owner documentation, and field confirmation of actions claimed (where appropriate).)

#2 THE REGULATORY COMPLIANCE PROCESS MODEL
(20% OF OVERALL RATING)

Regulatory Compliance - conformance to requirements

1. Determine Regulatory Requirement
 - Review regulations
 - DoD/Navy directives
 - Military exclusions
 - Review, determine if changes needed
 - Legal considerations
 - Regulatory interface
 - Community relations

2. Develop Compliance Strategies
 - Training requirements
 - Feasibility
 - Medical impact
 - Prioritization
 - Time frame for implementation
 - Consequences on non-compliance
 - Difference between new and current requirements
 - System safety review

3. Identify and Provide Resources
 - Organizational structure
 - Cost determination
 - Budgeting
 - Internal
 - Customer cost
 - Facility requirements

4. Execute Compliance Strategy
 - Communicate requirements
 - Training

5. Monitoring
 - Documentation
 - Data analysis
 - Report compliance status
 - Feedback
 - Initiate improvement efforts
 - Confirmation of corrective action

Performance Measures for the Regulatory Compliance Process

- Echelon 2 inspection/assistance results

#3 THE SUPERVISION PROCESS MODEL
(20% OF OVERALL RATING)

Supervision - Those actions taken to plan, organize, direct, oversee and evaluate the region or activities of subordinates and Command personnel to safely accomplish work.

The Supervision Process Model incorporates three different but complementary/interrelated components.

Component #1 - Sequential actions/steps associated with the accomplishment of specific jobs/tasks by subordinates.

1. Analyze Tasks

- Identify hazards
 - Physical (mechanical, heat, vibration, noise, location, radiation, etc.)
 - Chemical (hazardous materials)
 - Biological (disease)
- Evaluate hazards
 - Identify personnel at risk
 - Consult involved employees
 - Consult peers/managers
 - Review technical documentation
 - Consult professional staff
 - Draw upon personal knowledge/experience
- Identify measures needed to control/eliminate hazards
 - Engineering
 - Administrative
 - PPE
- Identify compliance requirements
 - Navy
 - Occupational Safety and Health Administration
 - Local documents
 - Other
- Determine required personal qualifications
 - Training
 - Physical/medical
 - Experience

2. Organize to Safely Accomplish Tasks

- Select qualified personnel
- Determine work sequence
- Coordinate with support organizations

3. Direct the Accomplishment of Tasks

- Communicate objectives to assigned personnel
 - Schedule
 - Interface with other operations
 - Location
 - Problem reporting
- Assign jobs within the task
- Provide job training

- Verbal
 - Written
 - Discuss potential hazards
 - Discuss compliance
4. Evaluate Task Performance
 - Observe workers
 - Identify process variance
 - Enforce proper implementation of controls
 - Receive feedback
 - From employees
 - From related organizations
 - From customers (internal/external)
 - Assess efficiency of controls
 5. Adjust Process As Required

Component #2 - Continuing actions to evaluate the overall performance of personnel over time.

1. Determine General Expectations for Work Unit
 - Injury/illness prevention
 - Process improvement
 - Cost avoidance initiatives
 - Workers Compensation (e.g., Light Duty Work, Lost Time)
2. Set Performance Standards Both Verbally and in Writing
 - Objective/quantifiable
 - Measure behavior, not results, at lower levels in the organization
 - Use subordinates' performance as factor for supervisors
 - Measure positives as well as negatives
3. Acquire Information Needed to Assess Performance
 - Inspections
 - Supervisor
 - Safety staff
 - IH surveys
 - Process reviews
 - Mishap data/information
 - Employee self-assessment
 - Workers compensation
4. Assess Performance Against Standards
5. Discuss with Employee
 - Strengths
 - Weaknesses
 - Improvement strategy
6. Document Final Assessment
7. Initiative Reward/Remedial Actions as Appropriate

Component #3 - Integration of safety throughout the command. Assess how proactively command HQ, command, upper management, supervisors and employees integrate and involve safety and occupational health into core business processes.

1. Review requirements
2. Scope of involvement
 - Meetings/councils/training/strategic planning
3. Level of interface CO has with
 - Upper management, middle management, workforce and unions
 - Assess if Command has an informal CO/upper management walk-through of workspaces
4. Command awareness of compensation costs, property damage assessments, mishap rate reductions, etc.
5. Assess upper echelon strengths, and support/guidance
6. Determine command climate and philosophy related to safety
7. Evaluate customer/command feedback systems
8. Reduction in accidents due to awareness or improved procedures
9. Determine ownership of processes

Performance Measures for The Supervision Process

1. Presence of safety elements in performance standards (% coverage and quality of standards) - the following should be used to evaluate the presence of safety elements in performance standards.

- Is safety addressed?
- Do the standards address communication of safety information and expectations to members of the work unit?
- Is performance monitored to determine if safety requirements and expectations are met?
- Do the standards address actions to be taken to improve the safety performance of the work unit?
- Do the standards require the establishment of safety standards for all members of the work unit?

(Where commands utilize self-directed work teams in lieu of traditional supervisors, performance standards adopted by self-directed work teams will be evaluated)

2. Assessment of Employee Understanding of Safety Expectations
 - Is employee properly using appropriate PPE for the work?
 - Can the employee demonstrate an awareness of hazards in the work area, and hazard control measures?
 - Is the employee using safety resources available to report/address hazards (e.g. supervisor, safety staff, safety committee, EHR, etc.)?

(Evaluate by field observation and interviews of randomly selected employees who perform work

operations which expose them to significant potential hazards.)

3. Assessment of Safety Integration Initiatives or Improved Outcome Measures:

- Is higher echelon providing guidance?
- Has the region or activity asked the next echelon for guidance (on PR&MS)?
- Is there active interchange of information within the chain (both above and below)?
- Does CO's immediate staff show knowledge of safety and occupational health issues?
- Does CO review safety-related reports (i.e., program costs, incident rates, compensation costs)?
- Has command suite attended safety training with subordinates or peers?
- Has command and upper management shown buy-in and open support of the safety program?

#4 THE TRAINING PROCESS MODEL
(15% OF OVERALL RATING)

Training - conveyance of information to enable personnel to carry out their personal responsibilities safely and in compliance with applicable regulations.

1. Identify Requirements and Needs

- Explicit
 - Required by regulations
 - Required by directives
 - Individual development plan
- Implicit
 - Lessons learned
 - Process improvements
 - Process changes
 - Needed to execute work
 - Labor/management/customer relations
- Type
 - Initial
 - Refresher
 - Job qualification
 - Awareness
- Timing/frequency
 - Before assignment
 - Annual
 - Monthly
 - Other
- Recordkeeping

2. Identify Audience

- Upper-level management
- Mid-level management
- Supervisor
- Worker
 - New
 - Journeyman
 - New assignment
- Customer
 - Tenants
 - Contractors
 - Visitors
- Labor organizations

3. Develop Specific Information to be Delivered

- Relate to each target audience
- Limit to applicable requirements for each target audience

4. Identify Media

- Lesson plans
- Classroom
- On-the-job training
- Programmed instructions

- Videotape
 - Correspondence courses
 - Interactive computer assisted
 - Stand-up/tailgate meetings
 - Other
5. Assemble Resources Needed to Provide Training
- Funding
 - Time
 - Media
 - Facilities
 - Qualified instructor
6. Deliver Training
- Schedule
 - Provide
 - OSHA-required hazard communication and other as needed
 - College
 - On-the-job training
 - On-site training
 - Job training
 - Rate training
 - Correspondence and web-based courses
 - Stand-up/tailgate meetings
 - Track completion
7. Evaluate Effectiveness
- Work site observations
 - Retention testing
 - Short-term
 - Long-term
 - Mishap rate for target accident type
 - Student critique
 - Other feedback
 - Safety office
 - Labor organizations
 - Managers
8. Modify Training as Required

Performance Measures for the Training Process

1. Matrix Match Against Requirements
- Compile Data Sources
 - Industrial hygiene surveys
 - Military manning documents
 - Command mission/function statements
 - Command mishap experience
 - Command occupation physical qualification statements
 - Other
 - Determine the following:

- Does a formal training plan exist?
- Would execution of the plan ensure delivery of all required training?
- Would execution of the plan ensure delivery of appropriate specific hazard recognition and control training?
- Is course content documented by formal lesson plans that are approved by appropriate technical personnel?
- Is training executed in accordance with the plan?
- Is the training provided evaluated in terms of:
 1. Appropriateness of course content?
 2. Instructor effectiveness?
 3. Behavior of trainees in the workplace?
 4. Are evaluation results used to improve training?

2. Employee Interface/Challenges

- Compile Data Sources
 - Industrial hygiene surveys
 - Military manning documents
 - Command mission/function statements
 - Command mishap experience
 - Command occupation physical qualification statements
 - Other
- For Target Processes/Occupations, Determine if:
 - Employees are accomplishing their work in a safe manner
 - Employees are aware of job hazards and requirements
 - Employees are complying with regulatory requirements pertinent to their job assignment
 - Employee failures are due to: *
 1. Inadequate training
 2. Employee failure to comply with known requirements
 3. Other factors. (Lack of tools, time, etc., needed to perform work)
 - Employee successes are due to: *
 1. Effective training
 2. Knowledge/experience not attributable to the command's training program
 3. Other factors. (Close supervision, reward system, peer pressure, etc)

* NOTE: For these items, if the failure/success is due to training, utilize the employee observation/interview results to evaluate the TRAINING key process. If the failure/success is due to other (non-training) factors, utilize the employee observation/interview results to support the evaluation of another appropriate key process.

(Evaluate by identifying several appropriate occupations within the command, then observing/interviewing randomly selected employees within each identified occupation or process.)

#5 THE SELF-ASSESSMENT PROCESS MODEL
(15% OF OVERALL RATING)

Self-Assessment - a comprehensive internal evaluation of how a safety and occupational health program meets the requirements of its internal/external customers.

1. Identify Program Elements to be Evaluated

- Mishap Prevention
 - Mishap investigation
 - Risk assessment
 - Hazard abatement
- Adequacy of resources (internal/external)
 - Safety staff
 - Funding
 - Medical/HRO support
 - PWC support
 - FISC support
 - Other
- Supervision
 - Management involvement/example
 - Performance evaluation
- Personnel participation
 - Worker input mechanisms
 - Union involvement
 - PPE use
- Training
 - Formal
 - Informal
 - Communication
- Regulatory Compliance
 - All applicable regulations
 - Deficiency abatement
- Injury Cost Control (process model under development)
- Customer Focused Support (support commands only)

2. Develop Assessment Plan for Each Element

- Develop assessment strategy
- Identify element customers and customers' needs
- Identify element performance criteria and indicators
- Develop assessment tools/procedures
- Develop assessment schedule
- Determine reporting mechanisms and who receives reports
- Identify and provide for resources needed to assess:
 - People
 - Data
 - Time
 - Technical competence

3. Conduct Assessment of Each Element

- Conduct/Compile information
- Analyze
 - Trends

- Patterns
 - Causes
 - Priorities
 - Actual observed performance vs. desired performance
 - Develop conclusions/recommendations
 - Prepare/submit reports
 - Documentation as required by regulations
 - Reports to appropriate responsible persons
4. Adjust/Improve Self-Assessments
- Obtain/Evaluate customer feedback
 - Develop improvements
 - Implement improvements
 - Advise customers of change

Performance Measures for the Self-Assessment Process

1. Quality Assessment of Command Self-Assessment Program
- Has the command established a formal self-assessment process?
 - Is a self-assessment of each key process, adequacy of resources, and personnel participation conducted annually?
 - Does the self-assessment include a data-driven analysis of key safety and occupational process trends/patterns?
 - Does the self-assessment identify/quantify the actions and resources needed to correct process deficiencies?
 - Does the self-assessment drive process improvements?
 - Does the self-assessment identify further process improvement opportunities for programs that already meet basic requirements?

(Evaluate by review of current self-assessment documentation.)

#6 THE CUSTOMER-FOCUSED SUPPORT PROCESS MODEL

(0-100% - TO BE SCORED SEPARATELY, AS APPLICABLE)

Customer-Focused Support - providing safety and occupational health support, services, and guidance that meet customer needs.

1. Identify Your Customers
- Commands receiving service
 - Students
 - Patients
 - Managers within commands
 - Workers/employees
 - Laboratories
 - Contractors
 - Your boss
2. Identify Your Customers' Needs (As Perceived by the Servicing Command)
- Requirements (mandated programs)
 - Non-disruptive service
 - Schedule and frequency

- Reports and documentation
 - Usefulness and reliability of products/services
 - Cost vs. value
 - Consultation with command management
 - Responsiveness
 - Policy/guidance
 - Anticipation of unexpressed customer needs
 - Communication of available services
3. Evaluate Current Product/Services
- Policy/guidance
 - Schedule and frequency
 - Reports and documentation
 - Usefulness and reliability of products/services
 - Requirements (mandated programs)
 - Non-disruptive service
 - Cost vs. value
 - Consultation with command management
 - Responsiveness
 - Communication of services available
4. Determine Resources Required to Provide Product/Services
- People
 - Funding
 - Time
 - Consumables
 - Facilities
 - Contracts
 - Support organizations
 - Procedures and policies
 - Training and education
 - Communication and Information Technology
 - Equipment
5. Develop Customer Survey
- Assess knowledge level of people being surveyed
 - Tailor questions accordingly
 - Develop questions around the following:
 - What do you need from me?
 - What do you do with what I give you?
 - Do gaps exist between what I give you and what you need?
6. Develop Survey Implementation Plan
- Determine survey format and delivery method
 - Identify forms and checklists
 - Develop schedules
 - Train surveyors/conduct dry run
 - Refine survey
7. Conduct Survey

8. Evaluate Survey Results
 - Determine gaps between product/services provided and the customer's needs/requirements/expectations
9. Improve Delivery of Products/Services to Better Meet Customer Needs
 - Develop partnership with customer to eliminate problems
 - Provide new service
 - Eliminate Unneeded services
 - Re-prioritize efforts
 - Improve efficiency/effectiveness of current product/service
 - Adjust customer/supplier expectations
 - Identify alternative provider of service
10. Identify Potential Improvements
 - Customer feedback
 - Data
 - Field Observations
 - Follow-up survey
11. Pursue Continuous Improvement of Process
 - Ensure customer satisfaction

Performance Measures for the Customer-Focused Support Process

- Has the command established a formal process for determining customer needs?
- Has the command determined customer needs (as perceived by the servicing command) and evaluated current service?
- Are customer needs surveyed:
 - At least triennially?
 - At least annually?
 - Significantly more often than annually?
 - By written surveys?
 - By meetings/workshops?
- Do customer surveys/workshops/etc. result in the development of initiatives to improve the products or services being delivered?
- Are customers advised of survey results and improvement initiatives planned/undertaken in response to surveys?
- Are customers involved in the development of improvement initiatives?
- Are improvement initiatives tracked and making progress toward implementation?
- Is customer feedback solicited concerning the effectiveness of changes implemented in response to customer surveys?

**COMMANDER, NAVY INSTALLATIONS
COMMAND**



**SAFETY & OCCUPATIONAL HEALTH
(SOH) PROGRAM SELF-ASSESSMENT
GUIDE**

JANUARY 2008

SAFETY AND OCCUPATIONAL HEALTH (SOH) PROGRAM

Commander, Navy Installations Command
Safety and Occupational Health Program

SELF-ASSESSMENT GUIDE

1. INTRODUCTION. The Office of the Commander Navy Installations Command (CNIC); Operations Directorate; Safety Division is responsible for the safety support of all personnel assigned to tenant commands of these installations receiving Base Operations Support (BOS) Safety services from CNIC regions. The CNIC achieves safe and healthful workplace conditions through a comprehensive Safety and Occupational Health (SOH) program, which includes appropriate levels of command evaluation. The CNIC provides procedures and guidance to Regions so that SOH program evaluations can be used to develop plans of action for improving safety performance and institute the most effective and efficient SOH program relative to the readiness needs of the Navy.

2. PURPOSE. The purpose of this document is to provide general guidance for planning, conducting and ensuring follow-up of SOH self-assessments. Three essential components for self-assessing the SOH program at the shore command level are outlined; 1) the self-assessment plan, 2) the self-assessment procedures, and 3) the annual self-assessment report.

3. BACKGROUND. The Chief of Naval Operations (OPNAVINST 5100.23G) requires comprehensive SOH programs be implemented and managed at all levels of Navy command. The shore command's SOH self-assessment discipline, strongly support comprehensive SOH programs. This SOH self-assessment process should not distract from critical missions or add unnecessary administrative burden to the regions or its facilities. Further, the SOH self-assessment process is a value-added effort, it reinforces a continuous process of self-assessments at all levels of the Navy and improves the overall SOH program by forming an effective "early warning system" for SOH program issues needing DON attention.

4. GOALS & OBJECTIVES. The goal of the SOH self-assessment reinforces Navy SOH requirements so hazards and working conditions are managed to avoid injury or illness and reduce workers' compensation costs, resulting in increased work efficiency and production. Three objectives achieve the goal:

- Objective 1: Perform self-assessment to sustain compliance with requirements and improve SOH programs.

- Objective 2: Monitor CNIC-wide trends for compliance and identify strengths and weaknesses in preventing non-compliance and program deficiencies. Share findings among Navy commands and units.
- Objective 3: Share information at the command level to improve safety and health practices

5. THE SOH SELF-ASSESSMENT PROCESS. The OPNAVINST 5100.23G establishes the requirement for Navy facilities to annually perform a self-assessment of their SOH program. Self-assessment promotes a system of *self-discovery* as a means of alerting command management of emerging or significant SOH issues, regulatory compliance status, and SOH program performance concerns in order to achieve *self-correction* and fully address corrective/preventive actions. The command self-assessment is a vital component for an "early warning system" that helps to identify and ultimately prevent problems having safety and health impacts to the Navy workforce. CNIC Regions are required per OPNAVINST 5100.23 series to complete a self-assessment of the SOH programs to include all tenants receiving BOS SOH services. A separate self-assessment for each tenant is not required as long as tenants are included in the overall self-assessment.

5.1 SELF-ASSESSMENT PLAN

The self-assessment determines the status of the command's overall SOH program and identifies what specific improvements are needed. The self-assessment or internal assessment plan addresses all mission-related regulatory compliance requirements for SOH. Evaluate key SOH requirements such as the following:

- a. The root causes associated with the key injury and illness rate (IIR) metrics.
- b. An assessment of the causal factors associated with workplace mishaps, hazards, and near misses.
- c. A review of Industrial Hygiene Worksite Assessments for recommended medical surveillance, engineering controls and personal protective equipment.
- d. A method to evaluate the integration of safety within the command's culture.
- e. An analysis of employee reports of unsafe or unhealthful working conditions
- f. A schedule for conducting the regulatory compliance program assessment(s) should also be included in the plan.

5.2 SELF-ASSESSMENT PROCEDURES

Processes and procedures for conducting the command self-assessment are readily available. OSHA has considerable information posted under their VPP website and in their VPP Policies and Procedures Manual. Similarly, the Navy has posted guidance on how to conduct an SOH self-assessment in the OPNAVINST 5100.23G as well as on the Naval Safety Center (NSC) website:

<http://www.public.navy.mil/navsafecen/Pages/osh/SMS/SMS.aspx>

Whichever self-assessment method is chosen, it should be of sufficient scope and depth to thoroughly evaluate the status and effectiveness of the command's overall SOH program. Currently, four options could be explored for conducting SOH self-assessments:

- Process Review and Measurement System (PR&MS)
- OSHA's Voluntary Protection Program (VPP)
- A command-unique process, and
- A combination of a command unique process and the key principles from PR&MS and/or VPP.

For facilities that choose to use a unique process, that process must be documented in an instruction or procedure. The "self-assessment procedure" must also account for frequency and record retention requirements.

- Frequency of self-assessment - In accordance with Navy policy and OSHA's VPP Policies and Procedures Manual must be completed annually. The self-assessment can be conducted more than on an annual basis as long as the periodicity is identified and conducted within that timeframe.
- Record retention - Retain all self-assessment records, checklists, and data for a period of three years.

5.3 MINIMUM STANDARDS FOR THE SELF-ASSESSMENT

When self-assessing SOH regulatory compliance, command self-assessments must document:

a. *SOH program areas that were assessed.* Each command should use program checklists. Samples of program checklists are available on the NSC website. These checklists should be updated as needed to fit the command's mission or when regulatory requirements change. Use the table below as a program baseline, and include it in the self-assessment report. Add,

change, or delete programs from the table to align with your mission requirements:

1	Asbestos	20	Medical Surveillance/Occupational Health
2	Bloodborne Pathogens	21	Machine Guarding
3	Cadmium Control	22	Chemical-Biological-Radiological-Nuclear-Explosive (CBRNE)
4	Chemical Hygiene Plan for Laboratories	23	Mercury Program
5	Confined Space	24	Mishap Reporting and Investigating
6	Construction Work Safety	25	Occupational Health
7	Deficiency Hazard Abatement	26	PCB's Control
8	Employee Reports of Unsafe/Unhealthy Working Conditions	27	Personal Protective Equipment (PPE)
9	Energy Control-Electrical Safety	28	Prevention and Control of Workplace Hazards
10	Energy Control-Lockout/Tagout (LOTO)	29	Process Safety
11	Ergonomics Program	30	Reproductive Hazards
12	Fall Protection Program	31	Radiation (Ionizing)
13	Forklift/Material Handling Equipment	32	Radiation (Non-ionizing)
14	Hazardous Material Control and Hazard Communication	33	Respiratory Protection
15	Recreational and Off-Duty Safety (RODS)	34	Sight Conservation
16	Hearing Conservation	35	Thermal Stress
17	Indoor Air Quality (IAQ)	36	Traffic Safety
18	Industrial Hygiene Surveys	37	Training
19	Lead Control	38	Weight Handling Safety

b. *Instances of SOH regulatory noncompliance;*

c. *Actions that are being taken to correct SOH regulatory noncompliance; and*

d. *Methods for verifying SOH compliance actions are completed and effective.*

For the purpose of self-assessing efforts to sustain SOH regulatory compliance and aligning program support to the

readiness needs of the command, self-assessments must evaluate and describe the approaches used to:

e. *Find and analyze SOH program and service deficiencies, and regulatory noncompliance*

f. *Ensure top management's review of emerging and significant SOH program and service deficiencies, and regulatory noncompliance*

g. *Ensure actions for addressing SOH program and service deficiencies and regulatory noncompliance are effective for preventing deficiencies and noncompliance recurrence*

h. *Feed self-assessment results back into the command to promote a "learning organization;" and*

i. *Embed communication, coordination and information sharing in the self-assessment process.*

As applicable, command self-assessment will also describe:

j. *How the annual SOH self-assessment process is coordinated with host commands/regional providers to ensure an effective and efficient "early warning tool."*

k. *The metrics used to communicate to top management SOH performance results and progress towards the elimination and prevention of injuries and mishaps and full compliance with regulations.*

It is stressed that the minimum standards for a self-assessment are to guide command preparations for conveying program status to the command's leadership.

5.4 REPORTING PROCEDURES

A documented annual self-assessment is the basic reporting tool for the command's safety self discovery.

The "self-assessment report" identifies elements of the SOH program which are working well and those requiring attention (strengths and weaknesses of the safety and health management system). It conveys the posture of the command's SOH program to all who have a stake in the effective management of the safety program. The self-assessment report identifies specific time lines, recommendations, and the assignment of responsibility for implementing the recommendations.

The regional/installation safety manager is recommended author of the self-assessment report. The primary audience for the

report is the Installation Commanding Officer (CO), tenant command, and applicable departments.

The self-assessment report should contain the following or similar information:

a. **An Executive Summary.** Summarize the self-assessment results and recommendations. As a minimum, address how many safety programs were reviewed, how many total findings were generated, any significant safety issues or risk areas the CO should be apprised of, overall achievement towards established SOH goals, status on any significant external audit or inspection findings, conclusion summary, and key recommendations, especially those where financial investments are involved.

b. **The Detailed Self-Assessment Report.** The report should answer five key questions regarding the health of the SOH program:

1) Does the self-assessment give a comprehensive review of the safety program?

2) Does the command have all the requisite programs and processes in place and do they address all the regulatory and Department of Navy policy requirements?

3) Have the programs been implemented and are they effective?

4) Is safety integrated with command missions and business culture?

5) What is the solution for those areas needing improvement or what enhancements can be made to make the program better?

c. **The Self-Assessment Report Outline.**

1) **Purpose and Scope:** Self explanatory,

2) **Self-assessment Method:** Briefly describe what method was used to conduct the self-assessment, whether Process Review and Measurement System (PR&MS), OSHA's Voluntary Protection Program (VPP), a command-specific process (must be a documented process), or a combination of the above,

3) **SOH Program Compliance Review:** Identify what programs were reviewed during the self-assessment and address any gaps, findings, shortcomings, or significant process improvements identified during the compliance audit. These deficiencies are listed in a Corrective Action Plan,

4) **SOH Program Performance Analysis:** Address the command's success in meeting last year's improvement plans and goals, describe and discuss key metrics, and discuss the root cause analysis of workplace deficiencies, injuries and near misses. Minimum key metrics are Injury and Illness Rate or Total Case Rate, Lost Time Case Rate, and Lost Day Rate. This is also the place to address any systemic issues, discuss high hazard worksites or work processes, and show status towards integrating safety into the command's mission/business culture.

5) **Conclusions and Recommendations:** Identify key strengths and weaknesses of the SOH program. Recommend process improvements, program changes, funding issues, summarize the new recommended improvement plans, goals, etc., and

6) Other supporting documents and information.

- (a) SOH Corrective Action Plan (required)
- (b) SOH Process Improvement Plan (required)

ATTACHMENT B EVLAUATION REPORT

2007 SELF ASSESSMENT NAVAL STATION ROTA, SPAIN EXECUTIVE SUMMARY

Type of Self-Assessment: Command Level

Executive Summary:

It is a requirement of the OPNAVINST 5100.23G, Navy Safety and Occupational Health (SOH) Program Manual, to conduct a comprehensive self-assessment of the SOH Program on an annual basis. The Naval Station, Rota, SOH Self-Assessment was conducted 1-17 August 2007 by the SOH Program Manager and the respective SOH Process Owners. They used the CNO, Process Review and Measurement System (PR&MS) Self-Assessment Guide for their assessment methodology. PR&MS philosophy is designed to integrate safety responsibility and accountability throughout all levels of the command. This is accomplished through applying the six modules of PR&MS, which are:

- Mishap Prevention
- Compliance
- Training
- Self-Assessment
- Supervision
- Customer-focused support

The overall analysis of the SOH Program using PR&MS evaluates the current status of the SOH Program and identifies future goals and initiatives. The following assessment provides an analytical report of NAVSTA Rota and all customers served by NAVSTA Rota Safety office for FY07.

NAVSTA Rota SOH Mission:

To provide coordinated SOH services while meeting all standards and regulations dictated by OPNAVINST 5100.23 (series), OPNAVINST 5100.12 (series), OPNAVINST 5100.25 (series), NAVSEA OP-5, and other governing Navy, Federal, and Spanish Prevention regulations. To simultaneously pool our collective Safety experiences and resources to create the most effective and efficient safety organization possible to protect our customers from any unnecessary risk.

NAVSTA Rota SOH Vision:

To become the most efficient organization for administration, management, and execution of an effective, comprehensive, and aggressive safety and health program that ensures the protection of our personnel, equipment, and resources throughout our areas of responsibility at NAVSTA Rota and transition our program to meet the elements of OSHA's Voluntary Protection Program (VPP) Star status. We will strive to become the model for safety in government and industry.

Every Process Owner within Safety has identified goals and objectives for program improvement. These goals and objectives may not necessarily be fulfilled within this fiscal year, but represent

our overarching targets we have identified for continuous process/program improvements to be delivered now and within future years as identified by our Plans, Actions, and Milestones (POAM) and their respective timelines. Therefore, this is a baseline document of all of our current needs to obtain an exemplary program. We have also completed a thorough compliance review of our program, which can be seen in Attachment (1) of this document. Within this next FY our main emphasis will be to:

1. Work to our Self-Assessment plan to meet our FY08 goals and objectives within the established timelines.

The self-assessment is designed to guide us into fixing areas that currently are out of regulatory compliance and identifies specific goals, objectives and tasks needed to reduce or eliminate our mishap events. Once these areas are improved upon, the program can focus on future improvements to emphasize zero mishap events.

This next year special emphasis is needed on improvements to the following programs: Fall Protection, Navy Ergonomics, Energy Control (Lockout/Tagout), Personal Protective Equipment, and Safety Awards. These are programs that fall further outside the perimeter of requirements and have been identified to contributing to most of our mishap events.

2. Implement ESAMS NAVSTA Rota wide

With the implementation of ESAMS, ESAMS will guide us to our program requirements. It is a great tool that assists all personnel in what their roles and responsibilities are to the program and how we quantify meeting our requirements.

3. Ensure we are continuing to develop the skills and education of our safety professionals

Currently not all of our safety personnel have received all of the required training courses as identified within our OPNAVINST 5100.23 (series). We will continue to ensure courses are attended for their professional development.

Overall Score: 4

Overall Status: Open

Approved By: On:

Current Safety Manager: Cranney, Darrilyn S

Goal For Mishap Prevention:

The goal for mishap prevention is to continue our efforts to decrease our overall mishap rates by 75% by FY08. This was a Secretary Rumsfeld challenge back in FY03 to take FY02 as our baseline and reach our target reduction rate by FY08. Secretary Gates continued on with this challenge in his memo entitled Zero Preventable Accidents of 30 May 2007. Our goal will continue to be to eliminate all mishap events.

Mishap Evaluation:

A complete review and investigation of all mishaps is conducted as mishaps are reported. One of the areas needing improvement is within our reporting process by our supervisory personnel. We currently have good controls in hunting down the mishaps - controls such as getting copies of the security log reports, copies of reports from the hospital on emergency visits to the hospital, and word of mouth of personnel. This, of course, is reactionary and an area we need to improve upon. Being notified of not only mishaps but also near miss events is what helps us identify where we need to focus our prevention initiatives. Supervisory personnel need to assist us with mishap reporting, record-keeping, investigating and prevention initiatives by notifying us of mishap events and ensuring they are entered into ESAMS.

One of the requirements for our mishap program is to conduct a 5 year trend analysis. We collect our mishap data weekly, analyze this data weekly/monthly/annually, and then compile a historical 5 year trend analysis to identify target areas for development into our improvement goals. A complete review of these events is found in Chap 14 of this document. Additionally, you can see a copy of the Mishap Prevention Plan, which is included within Attachment (2) of this document.

Goal For Regulatory Compliance:

To comply with requirements of the Navy, federal, and Spanish Prevention rules and regulations.

Regulatory Compliance Evaluation:

Within our annual self-assessment we have identified all of our compliance needs through the review of what we call our "shalls, wills, musts" list. This list compiles all of our regulatory requirements into a checklist format and then we use this as a guide to conduct our analysis to identify compliance and non-compliance. Areas found to be deficient are incorporated into our overall program goals and objectives to ensure continuous process and program improvements and that we have a plan to reach full compliance with all regulatory requirements. We then numerically score our overall regulatory compliance within our self-assessment so we can watch our forward progression over the years in a quantitative fashion. Since this is the first year we have used this process, FY07 will be our baseline compliance score. Again, this checklist is found in Attachment (1) of this document.

Goal For Supervision:

Our supervisors goal is to protect our personnel and not subject them to hazardous working conditions without first evaluating any risks associated with work tasks or processes. The process our supervisors will use is first to try to engineer out the hazards, and if that is unfeasible to use administrative controls and finally PPE as the last barrier to protection. All personnel shall be properly trained to conduct their duties prior to commencing work and again when working conditions or processes change or annually as required.

Supervision Evaluation:

In order for the SOH Program to be successful in reducing work related risks and mishaps, the Safety Program needs to permeate every level of the organization. ESAMS has a report card feature that shows us accountability to the program so monitoring the report cards is one way to evaluate successful supervision to the SOH Program. This will be the first year we begin to evaluate our strengths and weaknesses within supervisory accountability. We also have customer perception surveys within ESAMS and one of these surveys is for our personnel to evaluate our

supervisory personnel on their attention to the Safety Program.

One of the areas historically missing within safety accountability is safety included within all performance standards. An evaluation to review personal accountability to the safety program was conducted and found to only be present in supervisor standards within the current performance standard rating system. In order to address this issue this next FY, safety elements will be included within the new NSPS rating system when it comes on line.

Another area for improvement is within our Safety Representative meetings. First line supervisors shall ensure that they have identified their safety rep and that they participate in the monthly safety reps meetings and then pass on that information to their departments. This is the way the Safety personnel get the requirements, news events, and training to the deck plate. Supervisory personnel are also required to ensure monthly safety training is conducted within their work areas.

Supervisory personnel shall use ESAMS to guide them in their requirements and provide tools to ensure we are keeping our personnel safe while meeting our requirements. In order to show we are doing this if we maintain ESAMS report cards above 90% and meet all programmatic elements identified in ESAMS above 90% then we are well on our way to putting controls in place to protect our employees.

Goal For Training:

To conduct a complete SOH training needs assessment for all personnel receiving SOH services from NAVSTA Rota Safety Office and for all personnel to attend or complete all training requirements as identified within the training needs assessment.

Training Evaluation:

When we looked at our overall Safety training program there are many good things in place. We have skilled safety professionals to conduct the training and many training courses are being conducted. We have many training plans already in place, they are updated with the latest information, and are in the process of being translated into Spanish for our Spanish speaking personnel. We also have a database in place to identify when and who attended training. Unfortunately, we found that training was not always provided to all personnel that required the training or was attended by personnel that may not necessarily be required to attend the training. Also the database was a data repository of information on training conducted but did not identify a core training needs assessment for all of NAVSTA Rota and did not have a lot of trending/reporting options to assist us in maintenance of a training program. ESAMS has these features and within this next year our training files will be transferred to ESAMS and a full training needs assessment conducted with classes scheduled for this year and out year requirements.

Goal For Self-Assessment:

To ensure an annual SOH self-assessment is conducted annually as required.

Self-Assessment Evaluation:

NAVSTA Rota had not conducted a complete self-assessment of their program since 2002. Some of the Process Owners had conducted evaluations on their individual programs but there was no

formal process in place to conduct a complete evaluation of all program elements and share this information with our customers. This is the first year we will complete the required self-assessment and get that information to our customers.

Additionally, there had not been a formal Occupational Safety and Health Management Evaluation conducted by NRE or Echelon 2 since October of 2002. This finding was identified within the NAVINSGEN area visit of NRE conducted 23 Oct - 14 Nov 2006.

Goal For Customer Focused Support:

Conduct a customer perception survey through ESAMS, evaluate it and build valid comments into improvement goals and initiatives.

Customer Focused Support Evaluation:

The Safety Office has four surveys that are completed within ESAMS by NAVSTA Rota customers to evaluate safety services. These surveys are voluntary in nature and always available to our customers. On an annual basis we will send out an email generated from ESAMS asking our customers to take the time to fill out a survey and then analyze the results and incorporate comments into our improvement goals and objectives. We will also continue to monitor the surveys on a quarterly basis for those that come in periodically. Results of the surveys are shared with our customers during Safety Rep meetings, at Department Head meetings and through our monthly training. When surveys identify corrective actions those actions will be tracked through ESAMS for feedback to originator and our customers and valid suggestions will be incorporated into our safety processes.



**DEPARTMENT OF DEFENSE
SAFETY AND OCCUPATIONAL HEALTH PROGRAM**

The Occupational Safety and Health Act of 1970, Executive order 12196 and 29 CFR 1960 require the heads of Federal Agencies to establish programs to protect their personnel from job related safety and occupational health hazards

1. The Department of Defense (DoD) Designated Agency Safety and Occupational Health Official (DASHO) is: the Deputy Under Secretary of Defense (Installations and Environment)

2. The Department of Navy DASHO is: ASN (I & E)
(DoD Component) (Title)
1000 Navy Pentagon, Washington DC,20350
(Address)

3. The Secretary of the Navy/ Pentagon
(Name of Installation / Facility)

Safety and Occupational Health Designee is: Mr. Tom Rollow DASN (Safety)
(Name) (Title)

Safety point of contact is: Ms. Darrilyn Cranney (703) 614-5530
(Name) (Telephone Number)

Occupational Health point of contact is: CDR Gary Morris (703) 614-5632
(Name) (Telephone Number)

Secretary of the Navy/Pentagon
(Name of Installation / Facility)

HAS THE RESPONSIBILITY TO:

1. COMPLY with the applicable Occupational Safety and Health Administration (OSHA)/DoD/DoD Component safety and occupational health standards.
2. SET UP PROCEDURES for submitting and responding to employee reports of unsafe and unhealthful working conditions.
3. ACQUIRE, MAINTAIN, AND REQUIRE the use of approved personal protective equipment and safety equipment.
4. INSPECT ALL WORKPLACES with participation by civilian employee representatives to identify potential hazards.
5. ESTABLISH PROCEDURES to assure that no worker is subject to restraint, interference, coercion, discrimination, or reprisal for exercising his/her rights under the DoD safety and occupational health program

6. POST NOTICES of unsafe or unhealthful working conditions found during inspections.
7. ASSURE PROMPT ABATEMENT of hazardous conditions. Workers exposed to the conditions shall be informed of the abatement plan. Imminent danger corrections must be made immediately.
8. SET UP A MANAGEMENT INFORMATION SYSTEM to keep records of occupational accidents, injuries, illnesses and their causes; and to post annual summaries of injuries and illnesses for a minimum of 30 days at each installation/facility.
9. CONDUCT SAFETY AND OCCUPATIONAL HEALTH TRAINING for management, supervisors, workers and worker representatives.

DoD PERSONNEL HAVE THE RESPONSIBILITY TO:

1. COMPLY with the applicable Occupational Safety and Health Administration (OSHA)/DoD/DoD Component safety and occupational health standards.
2. COMPLY with policies and directives relative to safety and occupational health for (Name of Installation / Facility).

3. USE personal protective equipment and safety equipment provided by your installation/facility.
4. REPORT hazardous conditions, injuries, illnesses, or other mishaps promptly to your supervisor or to the safety or occupational health point of contact for your installation/facility.

DoD PERSONNEL AND CIVILIAN EMPLOYEE REPRESENTATIVES HAVE THE RIGHT TO:

1. HAVE ACCESS to applicable OSHA/DoD/DoD Component standards, installation/facility injury and illness statistics, and safety and occupational health program procedures.
2. COMMENT on alternate standards proposed by DoD/DoD Component.
3. REPORT AND REQUEST INSPECTIONS OF UNSAFE AND UNHEALTHFUL WORKING CONDITIONS to appropriate officials who include, in order of preference, the immediate supervisor, the safety or occupational health point of contact, the safety and occupational designee for your installation/facility, the installation/ facility commander, the safety and occupational health designee

3. *(Continued)* for your DoD component, the safety and occupational designee for DoD, and the Secretary of Labor. However, the Secretary of Labor encourages personnel to use DoD procedures for reporting hazardous conditions as the most expeditious means to achieve abatement. The hazard report form provided by your installation/facility should be used for this purpose. Anonymity, when requested, is assured.
4. PARTICIPATE in the installation/facility safety and occupational health program. Civilian workers shall be authorized official time to participate in the activities provided by the DoD safety and occupational health program.

OTHER INFORMATION:

1. When the safety or occupational health point of contact for your installation/facility is notified by a worker of a hazardous worksite

2. *(Continued)* in accordance with applicable appeal procedures, or administrative or negotiated grievance procedures.

condition, he/she will ensure an inspection of the worksite and he/she will report the results of the inspection in writing to the worker making the report.

2. Inspector General channels may be used to investigate complaints from either DoD civilian or military personnel concerning alleged acts of discrimination or reprisal due to participation in safety and occupational health activities. For DoD civilian personnel, allegations of reprisal may also be initiated by them

3. For further information about the installation/facility safety and occupational health program, procedures, standards, committees, Federal laws, or other related matters, contact the safety or occupational health point of contact for your installation/facility as noted on this poster.

4. How well you carry out your safety and occupational health responsibilities will be an important factor in the success of the program.

DD FORM 2272, VERSION 2009

Previous Edition is Obsolete

**ATTACHMENT D
FATALITY CATASTROPHIC ACCIDENT SUMMARY REPORT**

See Section I.B. of the Detailed Report. This section was deemed acceptable by Mr. Francis Yebesi, Director Office of Federal Agency Programs OSHA. The complete Accident Summary Report has been supplied to OSHA's area office by the local Navy activity where the fatality occurred, Naval Amphibious Base Coronado.

ATTACHMENT E1 UNIFIED FACILITIES GUIDE SPECIFICATIONS

 USACE / NAVFAC / AFCEA / NASA UFGS-01 35 26 (February 2009)

 Preparing Activity: NAVFAC Superseding
 UFGS-01 35 29 (November 2008)
 UNIFIED FACILITIES GUIDE SPECIFICATIONS
 References are in agreement with UMRL dated January 2009

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02/09

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USACE / NAVFAC / AFCEA / NASA UFGS-01 35 26 (February 2009)

Preparing Activity: NAVFAC Superseding

UFGS-01 35 29 (November 2008)

UNIFIED FACILITIES GUIDE SPECIFICATIONS

References are in agreement with UMRL dated January 2009

SECTION 01 35 26

GOVERNMENTAL SAFETY REQUIREMENTS

02/09

NOTE: This guide specification covers the requirements for safety and occupational health requirements for the protection of Contractor and Government personnel, property and resources. Edit this guide specification for project specific requirements by adding, deleting, or revising text. For bracketed items, choose applicable items(s) or insert appropriate information. Remove information and requirements not required in respective project, after consulting with Command Safety staff, whether or not brackets are present. Comments and suggestions on this guide specification are welcome and should be directed to the technical proponent of the specification. A listing of **technical proponents**, including their organization designation and telephone number, is on the Internet. Recommended changes to a UFGS should be submitted as a **Criteria Change Request (CCR)**. This guide specification includes tailoring options for NAVY and ARMY. Selection or deselection of a tailoring option will include or exclude that option in the section, but editing the resulting section to fit the project is still required.

This guide specification is intended for use in contracts that specify Federal Acquisition Regulation (FAR) clause 52.236-13, "Accident Prevention", and/or it's Alternate I, to include contracts for construction, dismantling, renovation and demolition; dredging; environmental restoration (investigation, design, remediation); asbestos abatement or lead hazard control; projects in the continental U.S. and overseas.

NOTE: The requirements of this guide specification supplement U.S. Army Corps of Engineers (USACE) Safety and Health Requirements Manual, EM 385-1-1, and clarify safety concerns for high-risk construction activities. All contracts that include FAR clause 52.236-13 require the Contractor to prepare and execute a written Accident Prevention Plan (APP) in accordance with Appendix A of EM 385-1-1 to include Activity Hazard Analyses (AHAs). Some contracts, based upon the work to be performed (environmental restoration, asbestos abatement or lead hazard control), require additional special safety and health plans to be made part of and appended to the APP. Pertinent UFGS contract sections include UFGS Section 01 35 29.13 SAFETY, HEALTH, AND EMERGENCY RESPONSE (HTRW/UST) for environmental restoration project; UFGS Section 02 82 14.00 10(Army), or 02 82 16.00 20(Navy), for asbestos abatement; and, UFGS Section 02 83 19.00 10(Army), or 02 83 13.00 20(Navy), for lead hazard control activities. For Navy environmental restoration contracts, an APP is required with the overall contract and a site specific Health and Safety Plan is required for each task order (contact the FEC Safety Manager for applicability). In addition, when any work under a service, supply or research and development contract is to be performed on Government-owned, leased or controlled real property, or on board Government-owned, leased or controlled plant or equipment, a determination must be made whether to use FAR clause 52.236-13, and/or its Alternate I, and this specification. The need for the use of FAR clause 52.236-13, and/or its Alternate I, and this specification must be determined from the hazards presented by the supplies to be delivered, the services to be provided or the research and development to be performed. The Contracting Officer in consultation with the technical proponent and safety and health personnel will make the determination. Many states and municipalities have more stringent or additional requirements and this section should be modified as required to meet local conditions and regulations.

PART 1 GENERAL

1.1 REFERENCES

NOTE: This paragraph is used to list the publications cited in the text of the guide specification. The publications are referred to in the text by basic designation only and listed in this paragraph by organization, designation, date,

and title.

Use the Reference Wizard's Check Reference feature when you add a RID outside of the Section's Reference Article to automatically place the reference in the Reference Article. Also use the Reference Wizard's Check Reference feature to update the issue dates.

References not used in the text will automatically be deleted from this section of the project specification when you choose to reconcile references in the publish print process.

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN SOCIETY OF SAFETY ENGINEERS (ANSI/ASSE)

ANSI/ASSE [A10.32](#) (2004) Fall Protection

ANSI/ASSE [A10.34](#) (2001; R 2005) Protection of the Public on or Adjacent to Construction Sites

ANSI/ASSE [Z359.1](#) (2007) Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components

ASME INTERNATIONAL (ASME)

ASME [B30.22](#) (2005) Articulating Boom Cranes

ASME [B30.3](#) (2004) Construction Tower Cranes

ASME [B30.5](#) (2007) Mobile and Locomotive Cranes

ASME [B30.8](#) (2004) Floating Cranes and Floating Derricks

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)

NASA [NPG 8621.1](#) (2004a) NASA Mishap Reporting, Investigating and Record Keeping Policy

NASA [NPG 8715.3](#) (2004) NASA Safety Manual

NASA [NSS 1740.12](#) (1993) NASA Safety Standard For Explosives, Propellants and Pyrotechnics

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA [10](#) (2007) Standard

for Portable Fire Extinguishers

NFPA [241](#) (2004) Standard for Safeguarding Construction, Alteration, and Demolition Operations

- NFPA 51B (2009) Standard for Fire Prevention During Welding, Cutting and other Hot Work
- NFPA 70 (2008) National Electrical Code
- NFPA 70E (2009) Standard for Electrical Safety in the Workplace
- U.S. ARMY CORPS OF ENGINEERS (USACE)
- NFPA 306 (2009) Standard for the Control of Gas Hazards on Vessels
- EM 385-1-1 (2008) Safety and Health Requirements Manual
- OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)
- 10 CFR Part 20 Standards for Protection Against Radiation
- 29 CFR Part 1910 Occupational Safety and Health Standards
- 29 CFR Part 1910.146 Permit-required Confined Spaces
- 29 CFR Part 1915 Confined and Enclosed Spaces and Other Dangerous Atmospheres in Shipyard Employment
- 29 CFR Part 1919 Gear Certification
- 29 CFR Part 1926 Safety and Health Regulations for Construction
- 29 CFR Part 1926.500 Fall Protection

1.2 SUBMITTALS

NOTE: Review submittal description (SD) definitions in Section 01 33 00 SUBMITTAL PROCEDURES and edit the following list to reflect only the submittals required for the project. Submittals should be kept to the minimum required for adequate quality control. A "G" following a submittal item indicates that the submittal requires Government approval. Some submittals are already marked with a "G". Only delete an existing "G" if the submittal item is not complex and can be reviewed through the Contractor's Quality Control system. Only add a "G" if the submittal is sufficiently important or complex in context of the project.

For submittals requiring Government approval on Army projects, a code of up to three characters within the submittal tags may be used following the "G" designation to indicate the approving authority. Codes for Army projects using the Resident Management System (RMS) are: "AE" for Architect-Engineer; "DO" for District Office (Engineering Division or other organization in the

District Office); "AO" for Area Office; "RO" for Resident Office; and "PO" for Project Office. Codes following the "G" typically are not used for Navy, Air Force, and NASA projects.

Choose the first bracketed item for Navy, Air Force and NASA projects, or choose the second bracketed item for Army projects.

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are [for Contractor Quality Control approval.][for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government.] Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

NOTE: A "G" followed by "A" indicates that the submittal requires Government acceptance.

Government acceptance is required for submittals with a "G, A" designation.

SD-01 Preconstruction Submittals

Accident Prevention Plan (APP); G, A

Activity Hazard Analysis (AHA); G, A

Crane Critical Lift Plan; G, A

Proof of qualification for Crane Operators; G, A

SD-06 Test Reports

Reports

Submit reports as their incidence occurs, in accordance with the requirements of the paragraph entitled, "Reports."

Accident Reports

Monthly Exposure Reports

Crane Reports

Gas Protection (For NASA Projects)

SD-07 Certificates

Confined Space Entry Permit

Hot work permit

License Certificates

NOTE: Include the following requirement in all Navy projects; Not required for Army projects.

Contractor Safety Self-Evaluation Checklist; G, A
[Third Party Certification of Barge-Mounted Mobile Cranes]
[Certificate of Compliance (Crane)]
Submit one copy of each permit/certificate attached to each
Daily [Production][Quality Control] Report.

NOTE: Include the following requirement in all NAVFAC Marianas projects only; Not required for Army projects.

[Machinery & Mechanized Equipment Certification Form]
1.3 DEFINITIONS

NOTE: Include the following item (a) in NAVY projects only.

- *****
- a. Competent Person for Fall Protection. A person who is capable of identifying hazardous or dangerous conditions in the personal fall arrest system or any component thereof, as well as their application and use with related equipment, and has the authority to take prompt corrective measures to eliminate the hazards of falling.
 - b. High Visibility Accident. Any mishap which may generate publicity and/or high visibility.
 - c. Medical Treatment. Treatment administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment even through provided by a physician or registered personnel.
- *****

NOTE: Include the following two items in NAVY projects only.

- *****
- d. Operating Envelope. The area surrounding any crane. Inside this "envelope" is the crane, the operator, riggers and crane walkers, rigging gear between the hook and the load, the load and the crane's supporting structure (ground, rail, etc.).
 - e. Qualified Person for Fall Protection. A person with a recognized degree or professional certificate, and with extensive knowledge, training and experience in the field of fall protection; who is capable of performing design, analysis, and evaluation of fall protection systems and equipment.
 - f. Recordable Injuries or Illnesses. Any work-related injury or

illness that results in:

- (1) Death, regardless of the time between the injury and death, or the length of the illness;
- (2) Days away from work (any time lost after day of injury/illness onset);
- (3) Restricted work;
- (4) Transfer to another job;
- (5) Medical treatment beyond first aid;
- (6) Loss of consciousness; or
- (7) A significant injury or illness diagnosed by a physician or other licensed health care professional, even if it did not result in (1) through (6) above.

g. "USACE" property and equipment specified in USACE EM 385-1-1 should be interpreted as Government property and equipment.

NOTE: Include the following item on all NAVY projects; Item is optional on ARMY projects.

[h. Weight Handling Equipment (WHE) Accident. A WHE accident occurs when any one or more of the six elements in the operating envelope fails to perform correctly during operation, including operation during maintenance or testing resulting in personnel injury or death; material or equipment damage; dropped load; derailment; two-blocking; overload; and/or collision, including unplanned contact between the load, crane, and/or other objects. A dropped load, derailment, two-blocking, overload and collision are considered accidents even though no material damage or injury occurs. A component failure (e.g., motor burnout, gear tooth failure, bearing failure) is not considered an accident solely due to material or equipment damage unless the component failure results in damage to other components (e.g., dropped boom, dropped load, roll over, etc.). Any mishap meeting the criteria described above shall be documented in both the Contractor Significant Incident Report (CSIR) and using the NAVFAC prescribed Navy Crane Center (NCC) form submitted within five days both as provided by the Contracting Officer.]

1.4 CONTRACTOR SAFETY SELF-EVALUATION CHECKLIST

NOTE: Include this paragraph in all NAVY projects. Not applicable to ARMY projects.

Contracting Officer will provide a "Contractor Safety Self-Evaluation checklist" to the Contractor at the pre-construction conference. The checklist will be completed monthly by the Contractor and submitted with each request for payment voucher. Additionally, monthly exposure reporting to the Contracting Officer is required to be attached to the monthly billing request. This report is a compilation of employee-hours worked each month for all site workers, both prime and subcontractor. The Contracting Officer will provide copies of any special forms. An acceptable score of 90 or greater is required. Failure to submit the completed safety self-evaluation checklist or achieve a score of at least 90, will result in a retention of up to 10 percent of the voucher.

1.5 REGULATORY REQUIREMENTS

NOTE: The specifier will list in the bracket the Federal, state and local laws, regulations and statutes; host nation requirements; Navy, Air Force and Army installations, US Army Corps of Engineers District requirements by authority and document number, which apply to the work to be performed. The specifier should consult with the supporting local safety and occupational health office for assistance in identifying local requirements.

In addition to the detailed requirements included in the provisions of this contract, comply with the most recent edition of USACE EM 385-1-1, and the following [federal, state, and local,] [host nation] laws, ordinances, criteria, rules and regulations[_____]. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting work. Where the requirements of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements govern.

1.6 SITE QUALIFICATIONS, DUTIES AND MEETINGS

1.6.1 Personnel Qualifications

NOTE: Coordinate with the supporting local safety and occupational health office and NAVFAC PWD or ROICC to determine the level of qualifications required for the Site Safety and Health Officer (SSHO) based on the hazards of the project, job complexity, size, and any other pertinent factors. For limited service contracts, the Contracting Officer and Safety Office may modify SSHO requirements and waive the more stringent elements of this section, EM 385-1-1, Section 1, and shall utilize the guidance of EM 385-1-1 Appendix A, paragraphs 4 and 11. For complex or high hazard projects, the SSHO shall have a minimum of ten (10) years of safety-related work with at least five (5) years experience on similar type projects.

1.6.1.1 Site Safety and Health Officer (SSHO)

NOTE: When this safety specification allows the use of the QC person as the SSHO in the following paragraph, tailor the QC specification SECTION 01 45 02 NAVFAC QUALITY CONTROL or 01 45 01 USACE QUALITY CONTROL to ensure consistency.

NOTE: For ALL GUAM PROJECTS AND ONLY FOR GUAM PROJECTS select the bracketed option for the Construction Safety Hazard Awareness provide by the Guam Contractors Association.

The contractor shall provide a Safety oversight team that includes a minimum of one (1) Competent Person at each project site to function as the Safety and Health Officer (SSHO). The SSHO shall be at the work site at all times, unless specified differently in the contract, to perform safety and occupational health management, surveillance, inspections, and safety enforcement for the Contractor, and their training, experience, and qualifications shall be as required by EM 385-1-1 paragraph 01.A.17 and all associated sub-paragraphs. A Competent Person shall be provided for all of the hazards identified in the Contractor's Safety and Health Program in accordance with the accepted Accident Prevention Plan, and shall be on-site at all times when the work that presents the hazard associated with their professional expertise is being performed. The credentials of the Competent Person[s] shall be approved by the Contracting Officer in consultation with the Safety Office.

The Contractor Quality Control (QC) person[cannot be the SSHO on this project, even though the QC has safety inspection responsibilities as part of the QC duties.] [can be the SSHO on this project.]

[All SSHOs performing work for NAVFAC Marianas shall attend the 40 hour Construction Hazard Awareness Course provided by the Guam Contractors Association]

NOTE: For NAVFAC Hawaii and Marianas only

1.6.1.2 Construction Safety Hazard Awareness Training
the training requirements for the Site Safety and Health Officer (SSHO) must include the successful completion of the course entitled "Construction Safety Hazard Awareness Training for Contractors".

If the SSHO does not have a current certification, they must obtain the course certification within sixty (60) calendar days from award. This course is periodically offered by Guam Contractors Association, General Contractors Association of Hawaii, Building Industry Association - Hawaii, and Associated Builders and Contractors - Hawaii Chapter.

[1.6.1.3 Certified Safety Professional (CSP) and/or Certified Industrial Hygienist (CIH)

NOTE: Specify a Certified Safety Professional (CSP) and/or Certified Industrial Hygienist (CIH) only for very large or complex projects based on a preliminary or design analysis of the specific hazards to be encountered. Coordinate with the supporting local safety and occupational health

**office to determine if a CSP and/or CIH is required
on the project.**

Provide a [Certified Safety Professional (CSP)] [and] [Certified Industrial Hygienist (CIH)] at the work site to perform safety and occupational health management, surveillance, inspections, and safety enforcement for the Contractor. The [CSP] [and][or] [CIH] shall be the safety and occupational health "competent person" as defined by USACE EM 385-1-1. [The [CSP and/or CIH] shall have no other duties than safety and occupational health management, inspections, and/or industrial hygiene.]
][1.6.1.4 Associate Safety professional (ASP), Certified Safety Trained Supervisor (STS) and/or Construction Health and Safety Technician (CHST)

NOTE: Specify an Associate Safety Professional (ASP), Certified Safety Trained Supervisor (STS), and/or Construction Health & Safety Technician (CHST) for complex projects as specified by the supporting local safety and health office.

Provide [a/an] [Associate Safety Professional (ASP)] [Certified Safety Trained Supervisor (STS)] [and/or] [Construction Health & Safety Technician (CHST)] at the work site to perform safety management, surveillance, inspections, and safety enforcement for the Contractor. The [ASP] [STS] [and/or] [CHST] shall be the safety and occupational health "competent person" as defined by USACE EM 385-1-1. The [ASP] [STS] [and/or] [CHST] shall be at the work site at all times whenever work or testing is being performed and shall conduct and document daily safety inspections. The [ASP] [STS] [and/or] [CHST] shall have no other duties other than safety and

occupational health management, inspections, and enforcement on this contract.

] [1.6.1.5 Competent Person for Confined Space Entry

NOTE: Include this paragraph in NAVY projects only when confined space(s) are identified in the scope of work.

Provide a competent person for confined space meeting the definition and requirements of EM 385-1-1.

[Since this work involves marine operations that handle combustible or hazardous materials, this person shall have the ability to understand and follow through on the air sampling, PPE, and instructions of a Marine Chemist, Coast Guard authorized persons, or Certified Industrial Hygienist. All confined space and enclosed space work shall comply with OSHA 29 CFR 1915, Subpart B, "Confined and Enclosed Spaces and Other Dangerous Atmospheres in Shipyard Employment" or as applicable, 1910.147 for general industry]

] 1.6.1.6 Crane Operators

Meet the crane operators requirements in USACE EM 385-1-1, Section 16 and Appendix I. In addition, for mobile cranes with Original Equipment Manufacturer (OEM) rated capacities of 50,000 pounds or greater, designate crane operators as qualified by a source that qualifies crane operators (i.e., union, a government agency, or and organization that tests and qualifies crane operators). Provide proof of current qualification.

NOTE: Add the following paragraph for projects in the State of Hawaii only.

[Also meet the crane operator requirements of the State of Hawaii for Crane certification.

]

1.6.2 Personnel Duties

1.6.2.1 Site Safety and Health Officer (SSHO)

- a. Conduct daily safety and health inspections and maintain a written log which includes area/operation inspected, date of inspection, identified hazards, recommended corrective actions, estimated and actual dates of corrections. Attach safety inspection logs to the Contractors' daily [production][quality control] report.
- b. Conduct mishap investigations and complete required reports. Maintain the OSHA Form 300 and Daily Production reports for prime and sub-contractors.
- c. Maintain applicable safety reference material on the job site.
- d. Attend the pre-construction conference, pre-work meetings including preparatory inspection meeting, and periodic in-progress meetings.
- e. Implement and enforce accepted APPS and AHAs.
- f. Maintain a safety and health deficiency tracking system that monitors outstanding deficiencies until resolution. Post a list of unresolved safety and health deficiencies on the safety bulletin board.

g. Ensure sub-contractor compliance with safety and health requirements.

Failure to perform the above duties will result in dismissal of the Superintendent, QC Manager, and/or SSHO, and a project work stoppage. The project work stoppage will remain in effect pending approval of a suitable replacement.

h. Maintain a list of hazardous chemicals on site and their material safety data sheets

[1.6.2.2 [Certified Safety Professional (CSP)] [Certified Industrial Hygienist (CIH)] [Associate Safety Professional (ASP)] [Certified Safety Trained Supervisor (STS)] [and/or] [Certified Construction Health & Safety Technician (CHST)]

NOTE: When the requirement for a CSP, CIH, ASP, STS and/or CHST is included, also include this paragraph .

a. Perform safety and occupational health management, surveillance, inspections, and safety enforcement for the project.

b. Perform as the safety and occupational health "competent person" as defined by USACE EM 385-1-1.

c. Be on-site [at all times] [at least weekly] [at least monthly] [] whenever work or testing is being performed.

d. Conduct and document safety inspections.

e. Shall have no other duties other than safety and occupational health management, inspections, and enforcement on this contract.

If the [CSP] [CIH] [ASP] [STS] [CHST] is appointed as the SSHO all duties of that position shall also be performed.

]1.6.3 Meetings

1.6.3.1 Preconstruction Conference

a. Contractor representatives who have a responsibility or significant role in accident prevention on the project shall attend the preconstruction conference. This includes the project superintendent, site safety and health officer, quality control supervisor, or any other assigned safety and health professionals who participated in the development of the APP (including the Activity Hazard Analyses (AHAs) and special plans, program and procedures associated with it).

b. Discuss the details of the submitted APP to include incorporated plans, programs, procedures and a listing of anticipated AHAs that will be developed and implemented during the performance of the contract. This list of proposed AHAs will be reviewed at the conference and an agreement will be reached between the Contractor and the Contracting Officer's representative as to which phases will require an analysis. In addition, establish a schedule for the preparation, submittal, review, and acceptance of AHAs to preclude project delays.

c. Deficiencies in the submitted APP will be brought to the attention of the Contractor at the preconstruction conference, and the Contractor shall revise the plan to correct deficiencies and re-submit it for acceptance. Do not begin work until there is an accepted APP.

d. The functions of a Preconstruction conference may take place at the Post-Award Kickoff meeting for Design Build Contracts.

1.6.3.2 Safety Meetings

Conduct and document meetings as required by EM 385-1-1. Attach minutes showing contract title, signatures of attendees and a list of topics discussed to the Contractors' daily [production] [quality control] report.

1.7 ACCIDENT PREVENTION PLAN (APP)

Use a qualified person to prepare the written site-specific APP. Prepare the APP in accordance with the format and requirements of USACE EM 385-1-1 and as supplemented herein. Cover all paragraph and subparagraph elements in USACE EM 385-1-1, Appendix A, "Minimum Basic Outline for Accident Prevention Plan" [and show compliance with NASA NPG 8715.3.] Specific requirements for some of the APP elements are described below. The APP shall be job-specific and address any unusual or unique aspects of the project or activity for which it is written. The APP shall interface with the Contractor's overall safety and health program. Include any portions of the Contractor's overall safety and health program referenced in the APP in the applicable APP element and made site-specific. The Government considers the Prime Contractor to be the "controlling authority" for all work site safety and health of the subcontractors. Contractors are responsible for informing their subcontractors of the safety provisions under the terms of the contract and the penalties for noncompliance, coordinating the work to prevent one craft from interfering with or creating hazardous working conditions for other crafts, and inspecting subcontractor operations to ensure that accident prevention responsibilities are being carried out. The APP shall be signed by the person and firm (senior person) preparing the APP, the Contractor, the on-site superintendent, the designated site safety and health officer, the Contractor Quality Control Manager, and any designated CSP and/or CIH. Submit the APP to the Contracting Officer [15] [] calendar days prior to the date of the preconstruction conference for acceptance. Work cannot proceed without an accepted APP.

Once accepted by the Contracting Officer, the APP and attachments will be enforced as part of the contract. Disregarding the provisions of this contract or the accepted APP will be cause for stopping of work, at the discretion of the Contracting Officer, until the matter has been rectified. Once work begins, changes to the accepted APP shall be made with the knowledge and concurrence of the Contracting Officer, project superintendent, SSSH and quality control manager. Should any severe hazard exposure, i.e. imminent danger, become evident, stop work in the area, secure the area, and develop a plan to remove the exposure and control the hazard. Notify the Contracting Officer within 24 hours of discovery. Eliminate/remove the hazard. In the interim, take all necessary action to restore and maintain safe working conditions in order to safeguard onsite personnel, visitors, the public (as defined by ANSI/ASSE A10.34,) and the environment.

Copies of the accepted plan will be maintained at the [Contracting Officer's] [resident engineer's] office and at the job site.

Continuously reviewed and amended the APP, as necessary, throughout the life of the contract. Incorporate unusual or high-hazard activities not identified in the original APP as they are discovered.

1.7.1 EM 385-1-1 Contents

NOTE: Items a, b and e below are for NAVY projects only.

NOTE: Item c below is for both NAVY and NASA projects.

In addition to the requirements outlines in Appendix A of USACE EM 385-1-1, the following is required:

a. Names and qualifications (resumes including education, training, experience and certifications) of all site safety and health personnel designated to perform work on this project to include the designated site safety and health officer and other competent and qualified personnel to be used such as CSPs, CIHs, STSs, CHSTs. Specify the duties of each position.

b. Qualifications of competent and of qualified persons. As a minimum, designate and submit qualifications of competent persons for each of the following major areas: excavation; scaffolding; fall protection; hazardous energy; confined space; health hazard recognition, evaluation and control of chemical, physical and biological agents; personal protective equipment and clothing to include selection, use and maintenance.

c. Confined Space Entry Plan. Develop a confined and/or enclosed space entry plan in accordance with USACE EM 385-1-1, applicable OSHA standards 29 CFR Part 1910, 29 CFR Part 1915, and 29 CFR Part 1926, OSHA Directive 2.100, and any other federal, state and local regulatory requirements identified in this contract. Identify the qualified person's name and qualifications, training, and experience. Delineate the qualified person's authority to direct work stoppage in the event of hazardous conditions. Include procedure for rescue by contractor personnel and the coordination with emergency responders. (If there is no confined space work, include a statement that no confined space work exists and none will be created.)

[d. Crane Critical Lift Plan. Prepare and sign weight handling critical lift plans for lifts over 75 percent of the capacity of the crane or hoist (or lifts over 50 percent of the capacity of a barge mounted mobile crane's hoists) at any radius of lift; lifts involving more than one crane or hoist; lifts of personnel; and lifts involving non-routine rigging or operation, sensitive equipment, or unusual safety risks. Submit 15 calendar days prior to on-site work and include the requirements of USACE EM 385-1-1, paragraph 16.H. and the following:

(1) For lifts of personnel, demonstrate compliance with the requirements of 29 CFR Part 1926.550(g).

(2) For barge mounted mobile cranes, barge stability calculations identifying barge list and trim based on anticipated loading; and load charts based on calculated list and trim. The amount of list and trim shall be within the crane manufacturer's

requirements.]

e. Fall Protection and Prevention (FP&P) Program Documentation. The program documentation shall be site specific and address all fall hazards in the work place and during different phases of construction. Address how to protect and prevent workers from falling to lower levels when they are exposed to fall hazards above 1.8 m (6 feet). A qualified person for fall protection shall prepare and sign the program documentation. Include fall protection and prevention systems, equipment and methods employed for every phase of work, responsibilities, assisted rescue, self-rescue and evacuation procedures, training requirements, and monitoring methods. Revise the Fall Protection and Prevention Program documentation [every six months] for lengthy projects, reflecting any changes during the course of construction due to changes in personnel, equipment, systems or work habits. Keep and maintain the accepted Fall Protection and Prevention Program documentation at the job site for the duration of the project. Include the Fall Protection and Prevention Program documentation in the Accident Prevention Plan (APP).

[f. Occupant Protection Plan. The safety and health aspects of lead-based paint removal, prepared in accordance with Section 02 82 16.00 20 LEAD BASED PAINT HAZARD ABATEMENT, TARGET HOUSING & CHILD OCCUPIED FACILITIES 02 82 33.13 20 REMOVAL AND DISPOSAL OF LEAD CONTAINING PAINT.]

[g. Lead Compliance Plan. The safety and health aspects of lead work, prepared in accordance with Section 02 83 13.00 20 LEAD IN CONSTRUCTION.]

[h. Asbestos Hazard Abatement Plan. The safety and health aspects of asbestos work, prepared in accordance with Section 02 82 14.00 10 ASBESTOS ABATEMENT 02 82 16.00 20 ENGINEERING CONTROL OF ASBESTOS CONTAINING MATERIALS.]

[i. Site Safety and Health Plan. The safety and health aspects prepared in accordance with Section 01 35 29.13 HEALTH, SAFETY, AND EMERGENCY RESPONSE PROCEDURES FOR CONTAMINATED SITES.]

[j. PCB Plan. The safety and health aspects of Polychlorinated Biphenyls work, prepared in accordance with Sections 02 84 33 REMOVAL AND DISPOSAL OF POLYCHLORINATED BIPHENALS and 02 61 23 REMOVAL AND DISPOSAL OF PCB CONTAMINATED SOILS.]

[k. Site Demolition Plan. The safety and health aspects prepared in accordance with Section 02 41 00 DEMOLITION and referenced sources. [Include engineering survey as applicable.]]

[l. Excavation Plan. The safety and health aspects prepared in accordance with Section 31 00 00 EARTHWORK.]

1.8 ACTIVITY HAZARD ANALYSIS (AHA)

The Activity Hazard Analysis (AHA) format shall be in accordance with USACE EM 385-1-1, Section 1. Submit the AHA for review at least [15] [_____] calendar days

prior to the start of each phase. Format subsequent AHAs as amendments to the APP. The analysis should be used during daily inspections to ensure the implementation and effectiveness of the activity's safety and health controls.

The AHA list will be reviewed periodically (at least monthly) at the

Contractor supervisory safety meeting and updated as necessary when procedures, scheduling, or hazards change. Develop the activity hazard analyses using the project schedule as the basis for the activities performed. Any activities listed on the project schedule will require an AHA. The AHAs will be developed by the contractor, supplier or subcontractor and provided to the prime contractor for submittal to the Contracting Officer.

1.9 DISPLAY OF SAFETY INFORMATION

Within [1] [] calendar days after commencement of work, erect a safety bulletin board at the job site. Where size, duration, or logistics of project do not facilitate a bulletin board, an alternative method, acceptable to the Contracting Officer, that is accessible and includes all mandatory information for employee and visitor review, shall be deemed as meeting the requirement for a bulletin board. Include and maintain information on safety bulletin board as required by EM 385-1-1, section 01.A.06. Additional items required to be posted include:

- a. Confined space entry permit.
- b. Hot work permit.

1.10 SITE SAFETY REFERENCE MATERIALS

Maintain safety-related references applicable to the project, including those listed in the article "References." Maintain applicable equipment manufacturer's manuals.

1.11 EMERGENCY MEDICAL TREATMENT

Contractors will arrange for their own emergency medical treatment. Government has no responsibility to provide emergency medical treatment.

1.12 REPORTS

1.12.1 Accident Reports

a. Conduct an accident investigation for recordable injuries and illnesses as defined in 1.3.h, and property damage accidents resulting in at least \$2,000 in damages, to establish the root cause(s) of the accident, complete the Navy Contractor Significant Incident Report (CSIR) from USACE Accident Report Form 3394 and provide the report to the Contracting Officer within [5] [] calendar day(s) of the accident. The Contracting Officer will provide copies of any required or special forms.

NOTE: Include this requirement in all Navy projects; this is an option for Army projects.

[b. Conduct an accident investigation for any weight handling equipment accident (including rigging gear accidents) to establish the root cause(s) of the accident, complete the WHE Accident Report (Crane and Rigging Gear) form and provide the report to the Contracting Officer within 30 calendar days of the accident. Do not proceed with crane operations until cause is determined and corrective actions have been implemented to the satisfaction of the contracting officer. The Contracting Officer will provide a blank copy of the accident report form.]

1.12.2 Accident Notification

NOTE: For NAVY projects only, any deviation from the 4-hour notification requirement must be approved by the Navy Crane Center.

Notify the Contracting Officer as soon as practical, but not later than [four hours] [____], after any accident meeting the definition of Recordable Injuries or Illnesses or High Visibility Accidents, property damage equal to or greater than \$2,000, [or any weight handling equipment accident in accordance with NASA NPG 8621.1]. Within notification include contractor name; contract title; type of contract; name of activity, installation or location where accident occurred; date and time of accident; names of personnel injured; extent of property damage, if any; extent of injury, if known, and brief description of accident (to include type of construction equipment used, PPE used, etc.). Preserve the conditions and evidence on the accident site until the Government investigation team arrives on-site and Government investigation is conducted.

1.12.4 Crane Reports

Submit crane inspection reports required in accordance with USACE EM 385-1-1, Appendix I and as specified herein with Daily Reports of Inspections.

[1.12.5 Certificate of Compliance

NOTE: Include this requirement in all Navy projects; this is an option for Army projects.

Provide a Certificate of Compliance for each crane entering an activity under this contract (see Contracting Officer for a blank certificate). State within the certificate that the crane and rigging gear meet applicable OSHA regulations (with the Contractor citing which OSHA regulations are applicable, e.g., cranes used in construction, demolition, or maintenance comply with 29 CFR Part 1926 and USACE EM 385-1-1 Section 16 and Appendix I. Certify on the Certificate of Compliance that the crane operator(s) is qualified and trained in the operation of the crane to be used. [For cranes at DOD activities in foreign countries, certify that the crane and rigging gear conform to the appropriate host country safety standards.] Also certify that all of its crane operators working on the DOD activity have been trained in the proper use of all safety devices (e.g., anti-two block devices). Post certifications on the crane.

] [1.12.6 Third Party Certification of Barge-Mounted Mobile Cranes

NOTE: Include this paragraph in NAVY projects only.

Certify barge-mounted mobile cranes in accordance with 29 CFR Part 1919 by an OSHA accredited person.

]1.13 HOT WORK

Submit and obtain a written permit prior to performing "Hot Work" (welding, cutting, etc.) or operating other flame-producing/spark producing devices, from the [Fire Division][_____]. A permit is required from the Explosives Safety Office for work in and around where explosives are processed, stored, or handled. CONTRACTORS ARE REQUIRED TO MEET ALL

CRITERIA BEFORE A PERMIT IS ISSUED. The Contractor will provide at least two (2) twenty (20) pound 4A:20 BC rated extinguishers for normal "Hot Work". All extinguishers shall be current inspection tagged, approved safety pin and tamper resistant seal. It is also mandatory to have a designated FIRE WATCH for any "Hot Work" done at this activity. The Fire Watch shall be trained in accordance with NFPA 51B and remain on-site for a minimum of 30 minutes after completion of the task or as specified on the hot work permit.

When starting work in the facility, require personnel to familiarize themselves with the location of the nearest fire alarm boxes and place in memory the emergency [Fire Division][_____] phone number. ANY FIRE, NO MATTER HOW SMALL, SHALL BE REPORTED TO THE RESPONSIBLE [FIRE DIVISION][_____] IMMEDIATELY.

NOTE: Specifier will include the following paragraph in USACE marine operation projects involving fuel tank/pipes that have the potential for explosive atmospheres, and NAVY projects as applicable.

[Obtain services from a NFPA Certified Marine Chemist for "HOT WORK" within or around flammable materials (such as fuel systems, welding/cutting on fuel pipes) or confined spaces (such as sewer wet wells, manholes, vaults, etc.) that have the potential for flammable or explosive atmospheres.]

NOTE: Include the following subpart for NASA projects only.

1.14 RADIATION SAFETY REQUIREMENTS

License Certificates for radiation materials and equipment shall be submitted to the Contracting Officer and Radiation Safety Officer (RSO) for all specialized and licensed material and equipment that could cause fatal harm to construction personnel or to the construction project.

Workers shall be protected from radiation exposure in accordance with 10 CFR Part 20. Standards for Protection Against Radiation

Loss of radioactive material shall be reported immediately to the Contracting Officer.

Actual exposure of the radiographic film or unshielding the source shall not be initiated until after 5 p.m. on weekdays.

In instances where radiography is scheduled near or adjacent to buildings or areas having limited access or one-way doors, no assumptions shall be made as to building occupancy. Where necessary, the Contracting Officer will direct the Contractor to conduct an actual building entry, search, and alert. Where removal of personnel from such a building cannot be accomplished and it is otherwise safe to proceed with the radiography, a fully instructed employee shall be positioned inside such building or area to prevent exiting while external radiographic operations are in process. Transportation of Regulated Amounts of Radioactive Material will comply with 49 CFR, Subchapter C, Hazardous Material Regulations. Local Fire authorities and the site Radiation Safety Officer (RSO) shall be notified of any Radioactive Material use

Transmitter Requirements: The base policy concerning the use of transmitters such as radios, cell phones, etc. must be adhered to by all contractor personnel. They must also obey Emissions Control (EMCON) restrictions

1.15 FACILITY OCCUPANCY CLOSURE

Streets, walks, and other facilities occupied and used by the Government shall not be closed or obstructed without written permission from the Contracting Officer.

NOTE: Include the following subpart for NASA projects only.

1.16 GAS PROTECTION

Contractor shall have one or more employees properly trained and experienced in operation and calibration of gas testing equipment and formally qualified as gas inspectors who shall be on duty during times workers are in confined spaces. Their primary functions shall be to test for gas and operate testing equipment. Unless equipment of constant supervisory type with automatic alarm is employed, gas tests shall be made at least every 2 hours or more often when character of ground or experience indicates gas may be encountered. A gas test shall be made before workmen are permitted to enter the excavation after an idle period exceeding one-half hour.

Readings shall be permanently recorded daily, indicating the concentration of gas, point of test, and time of test. Submit copies of the gas test readings to the Contracting Officer at the end of each work day.

Special requirements, coordination, and precautions will apply to areas that contain a hazardous atmosphere or, by virtue of their use or physical character, may be oxygen deficient. A check by Government is required prior to entering confined space. Surveillance and monitoring shall be required in these types of work spaces by both Contractor and Government personnel.

NOTE: Include the following subpart for NASA projects only.

1.17 HIGH NOISE LEVEL PROTECTION

Operations performed by the Contractor that involve the use of equipment with output of high noise levels (jackhammers, air compressors, and explosive-actuated devices) shall be scheduled for [weekends] [after duty working hours] during the hours [_____] at [_____]. Use of any such equipment shall be approved in writing by the Contracting Officer prior to commencement of work.

1.18 SEVERE STORM PLAN

In the event of a severe storm warning, the Contractor must:

- a. Secure outside equipment and materials and place materials that could be damaged in protected areas.
- b. Check surrounding area, including roof, for loose material, equipment, debris, and other objects that could be blown away or against existing facilities.
- c. Ensure that temporary erosion controls are adequate.

1.19 CONFINED SPACE ENTRY REQUIREMENTS. Contractors entering and working in confined spaces performing shipyard industry work are required to follow the requirements of OSHA 29 CFR Part 1915 Subpart B. Contractors entering and working in confined spaces performing general industry work are required to follow the requirements of OSHA 29 CFR Part 1910.146. Contractors entering and working in confined spaces performing construction work are required to follow the requirements of OSHA 29 CFR Part 1926.

Navy personnel entering and working in confined spaces performing naval maritime facility work are required to follow the requirements of NAVSEA S6470-AA-SAF-010 Rev. 03. Navy personnel entering and working in confined spaces performing non-maritime facility work are required to follow the requirements of OPNAVINST 5100.23G Chapter 27.

PART 2 PRODUCTS

Not used.

2.1 CONFINED SPACE SIGNAGE

NOTE: Include following paragraphs in NAVY projects only.

Provide permanent signs integral to or securely attached to access covers for new permit-required confined spaces. Signs wording: "DANGER--PERMIT-REQUIRED CONFINED SPACE - DO NOT ENTER -" in bold letters a minimum of 25 mm one inch in height and constructed to be clearly legible with all paint removed. The signal word "DANGER" shall be red and readable from 1520 mm 5 feet.

2.2 FALL PROTECTION ANCHORAGE

Leave in place fall protection anchorage, conforming to ANSI/ASSE Z359.1, installed under the supervision of a qualified person in fall protection, for continued customer use and so identified by signage stating the capacity of the anchorage (strength and number of persons who may be tied-off to it at any one time).

PART 3 EXECUTION

3.1 CONSTRUCTION AND/OR OTHER WORK

Comply with USACE EM 385-1-1, NFPA 241, the APP, the AHA, Federal and/or State OSHA regulations, and other related submittals and activity fire and safety regulations. The most stringent standard prevails.

3.1.1 Hazardous Material Use

NOTE: Include the following item in Navy projects only.

Each hazardous material must receive approval from the Contracting Office or their designated representative prior to being brought onto the job site or prior to any other use in connection with this contract. Allow a minimum of 10 working days for processing of the request for use of a hazardous material.

3.1.2 Hazardous Material Exclusions

Notwithstanding any other hazardous material used in this contract, radioactive materials or instruments capable of producing ionizing/non-ionizing radiation (with the exception of radioactive material and devices used in accordance with USACE EM 385-1-1 such as nuclear density meters for compaction testing and laboratory equipment with radioactive sources) as well as materials which contain asbestos, mercury or polychlorinated biphenyls, di-isocyanates, lead-based paint are prohibited. The Contracting Officer, upon written request by the Contractor, may consider exceptions to the use of any of the above excluded materials. The Radiation Safety Officer (RSO) must be notified prior to excepted items of radioactive material and devices being brought on base.

3.1.3 Unforeseen Hazardous Material

The design should have identified materials such as PCB, lead paint, and friable and non-friable asbestos and other OSHA regulated chemicals (i.e. 29 CFP Part 1910.1000). If [additional] material, not indicated, that may be hazardous to human health upon disturbance during construction operations is encountered, stop that portion of work and notify the Contracting Officer immediately. Within [14] [_____] calendar days the Government will determine if the material is hazardous. If material is not hazardous or poses no danger, the Government will direct the Contractor to proceed without change. If material is hazardous and handling of the material is necessary to accomplish the work, the Government will issue a modification pursuant to "FAR 52.243-4, Changes" and "FAR 52.236-2, Differing Site Conditions."

3.2 PRE-OUTAGE COORDINATION MEETING

Contractors are required to apply for utility outages at least [_____] days in advance. As a minimum, the request should include the location of the outage, utilities being affected, duration of outage and any necessary sketches. Special requirements for electrical outage requests are contained elsewhere in this specification section. Once approved, and prior to beginning work on the utility system requiring shut down, attend a pre-outage coordination meeting with the Contracting Officer [and the [Installation representative] [Public Utilities representative]] to review the scope of work and the lock-out/tag-out procedures for worker protection. No work will be performed on energized electrical circuits unless proof is provided that no other means exist.

3.3 CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT)

Contractor shall ensure that each employee is familiar with and complies with these procedures and USACE EM 385-1-1, Section 12 Control of Hazardous Energy. Contracting Officer will, at the Contractor's request, apply lockout/tagout tags and take other actions that, because of experience and knowledge, are known to be necessary to make the particular equipment safe to work on for government owned and operated systems.

No person, regardless of position or authority, shall operate any switch, valve, or equipment that has an official lockout/tagout tag attached to it, nor shall such tag be removed except as provided in this section.

No person shall work on any energized equipment including, but not limited to activities such as erecting, installing, constructing, repairing, adjusting, inspecting, un-jamming, setting up, trouble shooting, testing, cleaning, dismantling, servicing and maintaining machines equipment or processes until an evaluation has been conducted identifying the energy source and the procedures which will be taken to ensure the safety of personnel.

When work is to be performed on electrical circuits, only qualified personnel shall perform work on electrical circuits.

A supervisor who is required to enter an area protected by a lockout/tagout tag will be considered a member of the protected group provided he notifies the holder of the tag stub each time he enters and departs from the protected area.

Identification markings on building light and power distribution circuits shall not be relied on for established safe work conditions.

Before clearance will be given on any equipment other than electrical (generally referred to as mechanical apparatus), the apparatus, valves, or systems shall be secured in a passive condition with the appropriate vents, pins, and locks.

Pressurized or vacuum systems shall be vented to relieve differential pressure completely.

Vent valves shall be tagged open during the course of the work.

Where dangerous gas or fluid systems are involved, or in areas where the environment may be oxygen deficient, system or areas shall be purged, ventilated, or otherwise made safe prior to entry.

3.3.1 Tag Placement

Lockout/tagout tags shall be completed in accordance with the regulations printed on the back thereof and attached to any device which, if operated, could cause an unsafe condition to exist.

If more than one group is to work on any circuit or equipment, the employee in charge of each group shall have a separate set of lockout/tagout tags completed and properly attached.

When it is required that certain equipment be tagged, the Government will review the characteristics of the various systems involved that affect the safety of the operations and the work to be done; take the necessary actions, including voltage and pressure checks, grounding, and venting, to make the system and equipment safe to work on; and apply such lockout/tagout tags to those switches, valves, vents, or other mechanical devices needed to preserve the safety provided. This operation is referred to as "Providing Safety Clearance."

3.3.2 Tag Removal

When any individual or group has completed its part of the work and is clear of the circuits or equipment, the supervisor, project leader, or individual for whom the equipment was tagged shall turn in his signed lockout/tagout tag stub to the Contracting Officer. That group's or individual's lockout/tagout tags on equipment may then be removed on authorization by the Contracting Officer.

3.4 FALL HAZARD PROTECTION AND PREVENTION PROGRAM

Establish a fall protection and prevention program, for the protection of all employees exposed to fall hazards. Within the program include company policy, identify responsibilities, education and training requirements, fall hazard identification, prevention and control measures, inspection,

storage, care and maintenance of fall protection equipment and rescue and evacuation procedures.

3.4.1 Training

Institute a fall protection training program. As part of the Fall Hazard Protection and Prevention Program, provide training for each employee who might be exposed to fall hazards. Provide training by a competent person for fall protection in accordance with USACE EM 385-1-1, 2008 Section 21.B.

3.4.2 Fall Protection Equipment and Systems

Enforce use of the fall protection equipment and systems designated for each specific work activity in the Fall Protection and Prevention Plan and/or AHA at all times when an employee is exposed to a fall hazard. Protect employees from fall hazards as specified in EM 385-1-1, Section 21. In addition to the required fall protection systems, safety skiff, personal floatation devices, life rings etc., are required when working above or next to water in accordance with USACE EM 385-1-1, Paragraphs 21.N through 21.N.04. Personal fall arrest systems are required when working from an articulating or extendible boom, swing stages, or suspended platform. In addition, personal fall arrest systems are required when operating other equipment such as scissor lifts if the work platform is capable of being positioned outside the wheelbase. The need for tying-off in such equipment is to prevent ejection of the employee from the equipment during raising, lowering, or travel. Fall protection must comply with 29 CFR Part 1926.500, Subpart M, USACE EM 385-1-1 and ANSI/ASSE A10.32.

3.4.2.1 Personal Fall Arrest Equipment

Personal fall arrest equipment, systems, subsystems, and components shall meet ANSI/ASSE Z359.1. Only a full-body harness with a shock-absorbing lanyard or self-retracting lanyard is an acceptable personal fall arrest body support device. Body belts may only be used as a positioning device system (for uses such as steel reinforcing assembly and in addition to an approved fall arrest system). Harnesses shall have a fall arrest attachment affixed to the body support (usually a Dorsal D-ring) and specifically designated for attachment to the rest of the system. Only locking snap hooks and carabiners shall be used. Webbing, straps, and ropes shall be made of synthetic fiber. The maximum free fall distance when using fall arrest equipment shall not exceed 1.8 m 6 feet. The total fall distance and any swinging of the worker (pendulum-like motion) that can occur during a fall shall always be taken into consideration when attaching a person to a fall arrest system.

3.4.3 Fall Protection for Roofing Work

Implement fall protection controls based on the type of roof being constructed and work being performed. Evaluate the roof area to be accessed for its structural integrity including weight-bearing capabilities for the projected loading.

a. Low Sloped Roofs:

NOTE: The following paragraph contains NAVY tailoring options. Tailoring for ARMY projects will remove the last sentence of (1).

(1) For work within 1.8 m (6 feet) of an edge, on low-slope roofs, Protect personnel from falling by use of personal fall arrest systems, guardrails, or safety nets. A safety monitoring system is not adequate fall protection and is not authorized.

(2) For work greater than 1.8 m (6 feet) from an edge, erect and install warning lines in accordance with 29 CFR 1926.500 and USACE EM 385-1-1.

b. Steep-Sloped Roofs: Work on steep-sloped roofs requires a personal fall arrest system, guardrails with toe-boards, or safety nets. This requirement also includes residential or housing type construction.

3.4.4 Existing Anchorage

Certified (or re-certified) by a qualified person for fall protection existing anchorages, to be used for attachment of personal fall arrest equipment in accordance with ANSI/ASSE Z359.1. Existing horizontal lifeline anchorages must be certified (or re-certified) by a registered professional engineer with experience in designing horizontal lifeline systems.

3.4.5 Horizontal Lifelines

Design, install, certify and use under the supervision of a qualified person horizontal lifelines for fall protection as part of a complete fall arrest system which maintains a safety factor of 2 (29 CFR 1926.500).

3.4.6 Guardrails and Safety Nets

Design, install and use guardrails and safety nets in accordance with EM 385-1-1 and 29 CFR 1926 Subpart M.

3.4.7 Rescue and Evacuation Procedures

When personal fall arrest systems are used, the contractor must ensure that the mishap victim can self-rescue or can be rescued promptly should a fall occur. Prepare a Rescue and Evacuation Plan and include a detailed discussion of the following: methods of rescue; methods of self-rescue; equipment used; training requirement; specialized training for the rescuers; procedures for requesting rescue and medical assistance; and transportation routes to a medical facility. Include the Rescue and Evacuation Plan within the Activity Hazard Analysis (AHA) for the phase of work, in the Fall Protection and Prevention (FP&P) Plan, and the Accident Prevention Plan (APP).

[3.5 SHIPYARD REQUIREMENTS

NOTE: Add for projects at the Norfolk Naval Shipyard (NNSY) and Portsmouth Naval Shipyard (PNSY).

All personnel who enter the Controlled Industrial Area (CIA) shall wear mandatory personal protective equipment (PPE) at all times and comply with PPE postings of shops both inside and outside the CIA. PPE is governed in all other areas by the nature of the work the employee is performing. They will also use personal hearing protection at all times in designated noise hazardous areas or when performing noise hazardous tasks. Mandatory PPE

includes:

- a. Hard Hat
- b. Safety Glasses
- c. Appropriate Safety Shoes
- d. Reflective Vests

]3.6 SCAFFOLDING

Provide employees with a safe means of access to the work area on the scaffold. Climbing of any scaffold braces or supports not specifically designed for access is prohibited. Access scaffold platforms greater than 6 m (20 feet) maximum in height by use of a scaffold stair system. Do not use vertical ladders commonly provided by scaffold system manufacturers for accessing scaffold platforms greater than 6 m (20 feet) maximum in height. The use of an adequate gate is required. Ensure that employees are qualified to perform scaffold erection and dismantling. Do not use scaffold without the capability of supporting at least four times the maximum intended load or without appropriate fall protection as delineated in the accepted fall protection and prevention plan. Stationary scaffolds must be attached to structural building components to safeguard against tipping forward or backward. Give special care to ensure scaffold systems are not overloaded. Side brackets used to extend scaffold platforms on self-supported scaffold systems for the storage of material is prohibited. The first tie-in shall be at the height equal to 4 times the width of the smallest dimension of the scaffold base. Place work platforms on mud sills. Scaffold or work platform erectors shall have fall protection during the erection and dismantling of scaffolding or work platforms that are more than six feet. Delineate fall protection requirements when working above six feet or above dangerous operations in the Fall Protection and Prevention (FP&P) Plan and Activity Hazard Analysis (AHA) for the phase of work.

3.7 EQUIPMENT

3.7.1 Material Handling Equipment

- a. Material handling equipment such as forklifts shall not be modified with work platform attachments for supporting employees unless specifically delineated in the manufacturer's printed operating instructions.
- b. The use of hooks on equipment for lifting of material must be in accordance with manufacturer's printed instructions.
- c. Operators of forklifts or power industrial trucks shall be licensed in accordance with OSHA.

3.7.2 Weight Handling Equipment

- a. Equip cranes and derricks as specified in EM 385-1-1, section 16.

NOTE: Include the following item in NAVY projects only. The bracketed sentences are required for NAVFAC Marianas Projects only.

- b. Notify the Contracting Officer 15 days in advance of any cranes entering the activity so that necessary quality assurance spot checks can be coordinated. [Prior to cranes entering federal activities, a Crane Access Permit must be obtained from the Contracting Officer. A copy of the permitting process will be provided at the Preconstruction Conference.] Contractor's operator shall remain with the crane during the spot check.
- c. Comply with the crane manufacturer's specifications and limitations for erection and operation of cranes and hoists used in support of the work. Perform erection under the supervision of a designated person (as defined in ASME B30.5). Perform all testing in accordance with the manufacturer's recommended procedures.
- d. Comply with ASME B30.5 for mobile and locomotive cranes, ASME B30.22 for articulating boom cranes, ASME B30.3 for construction tower cranes, and ASME B30.8 for floating cranes and floating derricks.
- e. Under no circumstance shall a Contractor make a lift at or above 90% of the cranes rated capacity in any configuration.
- f. When operating in the vicinity of overhead transmission lines, operators and riggers shall be alert to this special hazard and follow the requirements of USACE EM 385-1-1 Section 11 and ASME B30.5 or ASME B30.22 as applicable.
- g. Do not crane suspended personnel work platforms (baskets) unless the Contractor proves that using any other access to the work location would provide a greater hazard to the workers or is impossible. Do not lift personnel with a line hoist or friction crane.
- h. Inspect, maintain, and recharge portable fire extinguishers as specified in NFPA 10, Standard for Portable Fire Extinguishers.
- i. All employees must keep clear of loads about to be lifted and of suspended loads.
- j. Use cribbing when performing lifts on outriggers.
- k. The crane hook/block must be positioned directly over the load. Side loading of the crane is prohibited.
- l. A physical barricade must be positioned to prevent personnel from entering the counterweight swing (tail swing) area of the crane.
- m. Certification records which include the date of inspection, signature of the person performing the inspection, and the serial number or other identifier of the crane that was inspected shall always be available for review by Contracting Officer personnel.
- n. Written reports listing the load test procedures used along with any repairs or alterations performed on the crane shall be available for review by Contracting Officer personnel.

o. Certify that all crane operators have been trained in proper use of all safety devices (e.g. anti-two block devices).

NOTE: Include the following item in NAVY projects only.

p. Take steps to ensure that wind speed does not contribute to loss of control of the load during lifting operations. Prior to conducting lifting operations set a maximum wind speed at which a crane can be safely operated based on the equipment being used, the load being lifted, experience of operators and riggers, and hazards on the work site. This maximum wind speed determination shall be included as part of the activity hazard analysis plan for that operation.

3.7.3 Equipment and Mechanized Equipment

NOTE: Use this paragraph in NAVY projects only; Not required in ARMY projects.

a. Proof of qualifications for operator shall be kept on the project site for review.

b. Manufacture specifications or owner's manual for the equipment shall be on-site and reviewed for additional safety precautions or requirements that are sometimes not identified by OSHA or USACE EM 385-1-1. Incorporate such additional safety precautions or requirements into the AHAs.

NOTE: Include the following item in NAVFAC Marianas projects only.

[c. Submit a Machinery & Mechanized Equipment Certification Form for acceptance by the Contracting Officer prior to being placed into use. A copy of the certification form will be provided during the Pre-construction Conference.]

3.7.4 USE OF EXPLOSIVES

Explosives shall not be used or brought to the project site without prior written approval from the Contracting Officer. Such approval shall not relieve the Contractor of responsibility for injury to persons or for damage to property due to blasting operations.

Storage of explosives, when permitted on Government property, shall be only where directed and in approved storage facilities. These facilities shall be kept locked at all times except for inspection, delivery, and withdrawal of explosives.

(For NASA projects only) Explosive work shall be performed in accordance with NASA NSS 1740.12. This document is available at:

<http://www.hq.nasa.gov/office/codeq/doctree/871912.htm>

3.8 EXCAVATIONS

Perform soil classification by a competent person in accordance with 29 CFR 1926.

3.8.1 Utility Locations

Prior to digging, the appropriate digging permit must be obtained. All underground utilities in the work area must be positively identified by a private utility locating service in addition to any station locating service and coordinated with the station utility department. Any markings made during the utility investigation must be maintained throughout the contract.

3.8.2 Utility Location Verification

The Contractor must physically verify underground utility locations by hand digging using wood or fiberglass handled tools when any adjacent construction work is expected to come within three feet of the underground system. Digging within 610 mm 2 feet of a known utility must not be performed by means of mechanical equipment; hand digging shall be used. If construction is parallel to an existing utility expose the utility by hand digging every 30.5 m (100 feet) if parallel within 1.5 m (5 feet) of the excavation.

3.8.3 Shoring Systems

Trench and shoring systems must be identified in the accepted safety plan and AHA. Manufacture tabulated data and specifications or registered engineer tabulated data for shoring or benching systems shall be readily available on-site for review. Job-made shoring or shielding must have the registered professional engineer stamp, specifications, and tabulated data. Extreme care must be used when excavating near direct burial electric underground cables.

3.8.4 Trenching Machinery

Operate trenching machines with digging chain drives only when the spotters/laborers are in plain view of the operator. Provide operator and spotters/laborers training on the hazards of the digging chain drives with emphasis on the distance that needs to be maintained when the digging chain is operating. Keep documentation of the training on file at the project site.

3.9 UTILITIES WITHIN CONCRETE SLABS

Utilities located within concrete slabs or pier structures, bridges, and the like, are extremely difficult to identify due to the reinforcing steel used in the construction of these structures. Whenever contract work involves concrete chipping, saw cutting, or core drilling, the existing utility location must be coordinated with station utility departments in addition to a private locating service. Outages to isolate utility systems must be used in circumstances where utilities are unable to be positively identified. The use of historical drawings does not alleviate the contractor from meeting this requirement.

3.10 ELECTRICAL

3.10.1 Conduct of Electrical Work

Underground electrical spaces must be certified safe for entry before entering to conduct work. Cables that will be cut must be positively identified and de-energized prior to performing each cut. Positive cable identification must be made prior to submitting any outage request for electrical systems. Arrangements are to be coordinated with the Contracting Officer and Station Utilities for identification. The Contracting Officer will not accept an outage request until the Contractor satisfactorily documents that the circuits have been clearly identified. Perform all high voltage cable cutting remotely using hydraulic cutting tool. When racking in or live switching of circuit breakers, no additional person other than the switch operator will be allowed in the space during the actual operation. Plan so that work near energized parts is minimized to the fullest extent possible. Use of electrical outages clear of any energized electrical sources is the preferred method. When working in energized substations, only qualified electrical workers will be permitted to enter. When work requires Contractor to work near energized circuits as defined by the NFPA 70, high voltage personnel must use personal protective equipment that includes, as a minimum, electrical hard hat, safety shoes, insulating gloves with leather protective sleeves, fire retarding shirts, coveralls, face shields, and safety glasses. In addition, provide electrical arc flash protection for personnel as required by NFPA 70E. Insulating blankets, hearing protection, and switching suits may also be required, depending on the specific job and as delineated in the Contractor's AHA.

3.10.2 Portable Extension Cords

Size portable extension cords in accordance with manufacturer ratings for the tool to be powered and protected from damage. Immediately removed from service all damaged extension cords. Portable extension cords shall meet the requirements of NFPA 70E and OSHA electrical standards.

3.11 WORK IN CONFINED SPACES

Comply with the requirements in Section 34 of USACE EM 385-1-1, OSHA 29 CFR 1910.146 and OSHA 29 CFR 1926.21(b)(6). Any potential for a hazard in the confined space requires a permit system to be used.

a. Entry Procedures. Prohibit entry into a confined space by personnel for any purpose, including hot work, until the qualified person has conducted appropriate tests to ensure the confined or enclosed space is safe for the work intended and that all potential hazards are controlled or eliminated and documented. (See Section 34 of USACE EM 385-1-1 for entry procedures.) All hazards pertaining to the space shall be reviewed with each employee during review of the AHA.

b. Forced air ventilation is required for all confined space entry operations and the minimum air exchange requirements must be maintained to ensure exposure to any hazardous atmosphere is kept below its' action level.

c. Sewer wet wells require continuous atmosphere monitoring with audible alarm for toxic gas detection.

-- End of Section --

ATTACHMENT E2

NAVFAC ERGONOMICS IN CONTRACT DOCUMENTS

The Unified Facilities Criteria (UFC) system is prescribed by MIL-STD 3007 and provides planning, design, construction, sustainment, restoration, and modernization criteria, and applies to the Military Departments, the Defense Agencies, and the DoD Field Activities in accordance with [USD\(AT&L\) Memorandum](#) dated 29 May 2002. UFC will be used for all DoD projects and work for other customers where appropriate.

UFC 04-610-01 Administration Facilities

2-10.4 Workstation/Office Design.

The basic building blocks of an administrative facility are the workstations and private offices. The sizes and features of these elements are critical to the efficiency of each worker, and the grouping or layout is critical to the efficiency of the organization. It is essential to understand the relationships between workstation/office design and the building design and systems. Refer to *Air Force Interior Design Guide*, Chapter 5, "Ergonomics in the Work Environment."

3-8 ERGONOMICS.

Provide an ergonomic work environment.

For **Navy** and **Marine Corps**, refer to OPNAVINST 5100.23G, Chapter 23, "Ergonomics Program."

3-8.1 Facilities, processes, job tasks and materials shall be designed to reduce or eliminate work-related musculoskeletal (WMSD) injuries and risk factors or stressors in the workplace. Refer to *Air Force Interior Design Guide*, Chapter 5.

3-8.2 Designs must ensure facility maintenance access is designed to reduce WMSD risk factors/stressors to the lowest level possible.

3-8.3 Special purpose spaces such as Mail Rooms and Shipping/Receiving where heavy lifting may be encountered must include manual materials handling equipment when feasible. For example, a roll top surface on the mail room receiving desk to accept heavy packages allow packages to be rolled rather than lifted to their next point of handling. Or for Shipping/Receiving, include a Loading Dock Scissor Lift/dock Lever at the receiving dock to assure the delivery truck level matches the receiving bay allowing materials to be moved with a pallet lifter.

NAVFAC Uniform Facilities Guide Specification (UFGS) 01 35 29.05 20 Safety and Occupational Health Requirements for Design-Build

3.9 ERGONOMICS CONSIDERATIONS DURING DESIGN PHASE

Facilities, processes, job tasks, tools and materials shall be designed to reduce or eliminate work-related musculoskeletal (WMSD) injuries and risk factors in the workplace. Designs shall ensure facility maintenance access is designed to reduce WMSD risk factors to the lowest level possible. In addition to the detailed requirements included in the provisions of this contract, the design work shall incorporate the requirements of MIL-STD-1472F.

Performance Technical Specifications**E2020 1.3 BEST VALUE DETERMINATION**

A best value determination is required by FAR 8.404 when placing orders against Federal Supply Schedules for the selection of furniture and furnishings. Best Value is defined in FAR 2.101 as ensuring that the order to be placed under a Federal Supply Schedule results in the lowest overall cost alternative (considering price, special features, administrative costs and client's needs) to meet the Government's needs.

The NAVFAC SW Interior Designer is responsible for two written justifications: 1) a specific justification for large value items such as systems furniture, A/V equipment, and dorm and quarters furniture if applicable and 2) an overall project justification certifying best value procedures were used by the contractor in the selections of the FF&E and vendors which is always required. The best value determination shall address issues such as space planning; human factors data related to anthropometrics (reach, clearance, and adjustability), space, and acoustics; ergonomics; product quality (including construction and materials); sustainability features, product warranties; history of the product and/or manufacturer; ability to service products through dealers or...

ATTACHMENT E3
OSH-RELATED CONTRACT LANGUAGE
FROM CNIC JOINT REGION MARIANAS

- Partnering: To most effectively accomplish this contract, the Government requires the formation of a partnership in accordance with the NAVFAC Partnering System Guidance. Key members of the prime and subcontractor teams, from senior management to working level, must participate. The partnership will draw on the strength of each organization in an effort to achieve a quality project done right the first time, within budget, on schedule, and without safety mishaps.
- Contractor-Furnished Items: Except for items listed as GOVERNMENT PROPERTY, the Contractor shall provide all equipment, tools, materials, parts, supplies, consumables, components, services, and facilities to perform the requirements of this contract. The ACO or authorized Government Representative may inspect Contractor-furnished items for adequacy and compliance with contract requirements. Inadequate or unsafe items shall be removed and replaced by the Contractor. Materials containing asbestos, lead, and PCBs shall not be brought on site. The ACO may at any time require samples, Material Safety Data Sheets (MSDS); manufacturer's data cut sheets, etc., of materials used in this contract.
- Key Personnel: Key personnel are responsible for and critical to the successful performance of the contract and shall include the Project Director, Deputy Project Director, Public Works Director, Quality Management Manager, Business/Contract Manager, Industrial Property Manager/Administrator, Safety Manager, Finance Director and AAFB Site Manager. The Contractor shall submit with their Technical Proposal the names and qualifications of potential candidates for all key personnel for Government approval. Within 30 days after contract award, the Contractor shall fill key personnel positions with Government-approved candidates. Key personnel positions shall be filled with twelve separate individuals.
- Safety Manager:
 - The Contractor shall provide a Safety Manager who shall be responsible for administering the Contractor's Safety Program and certifying subcontractors adhere to safety policies, and Government rules, regulations and law. The position shall be at a level equivalent to Staff Special Assistant or Department Head to maintain integrity and autonomy of the Safety Program.
 - Education: The Safety Manager must have a Bachelor's degree in Safety, Industrial, Electrical, or Mechanical Engineering, Industrial Hygiene, Health Physics, Fire Prevention Engineering, or other related engineering or scientific fields, based on a four-year course of study from a U.S. accredited college, university or equivalent institution. Equivalent work experience may be substituted for the degree at the discretion of the Government. The quality, extent and applicability of the experience will be considered. In addition, the Safety Manager shall be a Certified Safety Professional (CSP).
 - Experience: The Safety Manager should have at least three (3) years experience as a Safety Engineer or Safety and Occupational Health Management Specialist. Equivalent experience gained by performing specialized work in a closely related professional occupation such as Industrial Hygiene, Industrial Engineer, Health Physics, Fire Prevention Engineering and other engineering and scientific fields may be substituted at the discretion of the Government. Prior management experience is highly desirable, but not mandatory.

- Availability: The Safety Manager, or designated alternate, shall be readily available during regular working hours.
- Employee Requirements: The Contractor shall provide experienced, qualified, and capable personnel to perform the work in this contract. Personnel shall be fully knowledgeable of all safety and environmental requirements associated with the work they perform.
- Vehicles: Vehicles shall meet all requirements of the Territory of Guam Vehicle Code, such as safety standards, and shall carry proof of insurance and registration.
- Safety & Health Program: The Contractor shall develop, establish and implement a comprehensive Safety & Health and Industrial Hygiene Program that apply to Contractor operations and Contractor employees. This program shall provide controls to protect the safety and health of all personnel including subcontractors (e.g., gas free engineering); to prevent damage to property, materials, supplies and equipment; and to minimize work interruptions in the performance of this contract. Comply with the safety regulations and directives listed as they apply to the Contractor's operation. The Contractor shall be subject to safety inspections of its work sites by the Government. Contractor safety records shall be available upon request by the ACO/ (A) COR/(S) PAR. Contractor Personnel Protective Equipment (PPE) and all safety equipment and incidentals required to perform work and/or comply with safety standards shall be Contractor-furnished.
- Accident Reporting: The contractor shall notify the ACO, (A)COR, (S)PAR and other designated representative (Command Duty Officer during non-core duty hours), of all accidents meeting the definition of OSHA Recordable Injuries or Illnesses, property damage equal to or greater than \$5000, or any weight handling equipment accident within four hours, after any accident. Notification shall include the following, where applicable:
 - 1) Name of activity, installation, or location where incident occurred
 - 2) Type of work being performed
 - 3) Date and time of incident
 - 4) Corrective action at initial notification and when follow up will be provided
 - 5) Extent of property damage
 - 6) Safety investigators
 - 7) Name of contractor
 - 8) Name and number of contract
 - 9) Name of injured personnel
 - 10) Extent of injuries
 - 11) Brief description of the incident
 - 12) The initial lessons learned include
- The contractor shall report all on-duty fatalities to the nearest OSHA area or regional office within eight hours of obtaining knowledge of the mishap. The OSHA toll-free telephone number is 800-321-OSHA. This requirement applies to each fatality or hospitalization of three or more employees, which occurs within 120 days of a mishap.
- The contractor shall provide and maintain metric scorecard, which must be configured to accurately view current DART (Days Away, Restricted duties, Transfer of duties) rates and measure whether or not these rates fall within acceptable thresholds."
- The contractor shall ensure that a drug/alcohol test is performed on all operators of vehicles, equipment, or machinery involved in any mishap that results in death, serious injury, and/or significant damage to property, materials, and/or supplies.

- Safety & Health Plan: Prepare and execute a Safety & Health Plan. The Plan shall comply with 29 CFR 1910, 29 CFR 1926, EM-385-1-1 and OSHA required program requirements.
- Occupational Safety & Health Inspection Plan: Prepare and execute an Occupational Safety & Health Inspection Plan for the inspection of all Contractor-occupied facilities on a one (1) year cycle.
- Monthly Occupational Safety & Health Inspection Report: Ensure corrective actions are initiated on all safety deficiencies identified during inspections, industrial hygiene surveys, workplace monitoring, and performance assessments. Commence correction within five (5) working days for routine items and one (1) working day for major (serious) safety discrepancies. Submit a report of all deficiencies identified during inspections conducted from the previous month and the status of all outstanding deficiencies against those facilities from previous inspections. In addition, include all deficiencies against any facility corrected for that month.
- Deficiency Abatement Plan: Submit a semi-annual Deficiency Abatement Plan on all outstanding deficiencies with a Risk Assessment Code (RAC) of 1, 2, or 3 that cannot be corrected within 30 days. All RAC 1, 2, or 3 deficiencies shall be posted at the worksite.
- Industrial Hygiene Plan: Prepare and execute an Industrial Hygiene Plan. A Certified Industrial Hygienist (CIH) shall conduct a baseline survey and annual reevaluation of Contractor operations and workspaces.
- Medical Surveillance Program: Develop a Medical Surveillance Program based on the IH survey results. Coordinate the Program with the Contractor medical facility. Prepare and execute a Medical Surveillance Plan.
- Personnel Protective Equipment (PPE) Hazard Assessment Report: Perform an annual Hazard Assessment survey to identify PPE requirements as required by 29 CFR 1910. Document and provide the results of the survey. Provide/issue personnel with the approved type of PPE as required by the operation.
- Hazardous Materials Authorized Use List (HMAUL) Report: Ensure compliance with the requirements of 29 CFR 1910.1200 and EM 385-1-1. Provide a list of all hazardous materials used by Contractor personnel in the workspaces. Ensure only materials and quantities listed on the HMAUL are used.
- Asbestos Control Program: Develop an asbestos exposure control program for Contractor's personnel that are involved in operations that use and have potential to disturb asbestos containing materials (ACM), i.e. Class I, II, III, IV asbestos work. Prepare and execute an Asbestos Control Plan that will define specific work practices and procedures that will be employed when dealing with or disturbing all types of ACM. All specific asbestos abatement program project plans must be written, signed and sealed by Asbestos Hazardous Emergency Response Act (AHERA) qualified Certified Industrial Hygienist. Routine asbestos Operations and Maintenance (O&M) work (i.e., Class III and IV work) will be accomplished under this contract.
- Lead Control Program Develop a lead control program for Contractor's personnel that are involved with operations that use and have potential to disturb in place lead-containing materials. Prepare and execute a Lead Control Plan that will define specific work practices and procedures that will be employed when dealing with or disturbing lead.



DEPARTMENT OF THE NAVY
FLEET READINESS CENTER EAST
PSC BOX 8021
CHERRY POINT, NC 28533-0021

FRCEASTINST 5000.1
Code 6.3.3-TLB
SEP 28 2009

FRCEAST INSTRUCTION 5000.1

From: Commanding Officer

Subj: VISITOR/CONTRACTOR SITE SPECIFIC RULES AND COMPLIANCE

Ref: (a) NAVAIRDEPOTINST 5100.2H
(b) FRCEASTINST 5090.1B
(c) FRCEASTINST 11200.1D
(d) FRCEASTINST 4790.11G
(e) NAVAIRDEPOTINST 10290.1L
(f) FRCEASTINST 5500.1F
(g) NAVAIRDEPOTINST 4855.1K
(h) OPNAVINST 5100.23G
(i) USACE Army Corps of Engineers Safety and Health Requirements Manual (EM 385-1-1)
(j) 29 Code of Federal Regulations 1926, Construction Industry Regulations
(k) CSP 03-01-003 (Voluntary Protection Programs: Policies and Procedures Manual)
(l) 29 CFR 1904 (Recording and Reporting Occupational Injuries and Illnesses)

Encl: (1) FRC East Information Brochure
(2) Contract Performance Requirements

1. Purpose. The Commanding Officer of Fleet Readiness Center East (FRC East) has established a goal of providing a safe, secure, and environmentally sound workplace for every civilian, military, contractor, and visitor at all FRC East facilities. A successful implementation of the Voluntary Protection Program (VPP) is one of the tools being employed to achieve this result. This instruction is in support of the VPP by providing guidance concerning the communication and compliance with safety, environmental, and security rules by all visitors/nested contractors who are authorized by security to enter an FRC East facility. This instruction defines visitors as those who are not performing tasks under a contract and not a full time employee at FRC East. Visitors include vendors who are coming in for a job purchased via a credit card or purchase card, military, auditors, instructors, family, and friends. Visitors are not issued payroll numbers. A nested contractor is defined as a contractor that has a payroll number and performs/clocks work in the same manner dictated of permanent shop employees. All rules documented in this instruction are in accordance with references (a) through (l).

2. Application. This instruction applies to all FRC East supervisors, managers, and individuals involved in the contracting process, such as, but not limited to, individuals who provide

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requirements for the Performance Work Statements or who are involved in the Source Selection process.

3. Policy. All individuals who enter the facility are required to comply with all federal, state, local, and site specific safety, environmental, and security requirements and the terms and conditions of the FRC East Information Brochure (enclosure 1). FRC East supervisors, managers, and employees are to ensure the compliance of visitors and nested contractors with safety, security, and environmental policies, laws, rules, and regulations.

Any visitor/contractor not willing to comply will not be authorized to enter. Any individual found to not comply with this instruction and the rules herein will be asked to immediately halt work and non-compliance issues will be brought to the attention of the appropriate Contracting Officer Representative, Contracting Officer Technical Representative, or sponsor. Actions that may be taken in response to visitor/contractor noncompliance may include removal of authorization to enter the facility and addition of company into "Excluded Parties List System" maintained on the intranet or internet by General Services Administration.

4. Scope. This instruction applies to all FRC East supervisors, managers, and those employees involved in developing contract requirements.

5. Responsibilities

a. All Individuals with Purchase Cards.

(1) Responsible Supervisors/Employees. All levels of supervision and employees of this Command with purchase cards will be thoroughly familiar with the contents of this instruction and its enclosures. They will ensure implementation and enforcement of this instruction.

(2) Purchase Card Procurements Limitations. Purchase card holders will ensure that if any provision set out in enclosure (2) is relative to a planned purchase card procurement, then the requirement will not be procured with a purchase card and the procurement will be via a written contract as "terms and conditions" are not allowed under a purchase card transaction.

b. All Individuals Writing Statements of Work.

(1) Inclusion of Requirements into Contract. Individuals providing requirements to be included in Performance Work Statements or contracts will review enclosure (2) and request that any relevant provisions be included in the Performance Work Statement, the contract, or the Source Selection Plan. The individual will check the relevant provision on enclosure (2) and forward it to the appropriate Procurement Office with the Procurement package.

(2) Ensure Relevant Provisions are Included. Those individuals writing work statements will work closely with the Contracting Officer who is processing and awarding the specific contract to ensure all of the relevant provisions in enclosure (2) are included in the appropriate contracts.

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(3) Ensure Safety and Health Considerations are Addressed. Safety and health considerations shall be addressed during the process of selecting contractors.

(4) Ensure Environmental Considerations are Addressed. Environmental considerations shall be addressed during the process of selecting contractors.

c. Managers who Utilize Nested Contractors

(1) Verification of Nested Contractor Required Training. Management will verify, based on contractor reports, that all nested contractors have completed FRC East required security, safety, and environmental training, as well as area/specific training.

(2) Accident Reporting of Nested Contractors. Management will report accidents of nested contractors in the same manner as dictated for other shop employees. Job hazard analysis requirements will be performed as needed, in a like manner as all shop accidents.

d. Industrial Security Division (Code 6.5.2)

(1) Distribution. The Industrial Security Division will ensure distribution of required information in enclosure (1) prior to authorization of FRC East entrance and ensure that visitor/contractor is aware that individual signatures in the security log book constitute that enclosure (1) has been received and agreed to. This information may be communicated via a brochure, DVD, or enclosure (1).

(2) Maintaining Agreements. Security will maintain a database or written documents that memorialize the agreement of visitors/contractors indicating their compliance with all requirements of the enclosure (1).

(3) Investigate Noncompliance. Security will investigate any report of visitor, contractor, or nested contractor noncompliance with security issues. They will forward a copy of the Incident Complaint form (FRC East 5521/7) to those who administer the contract or sponsor a visitor/contractor and advise contract administrator or sponsor if immediate removal is required.

(4) Providing Expertise. Security will provide expertise in security requirements for developing statements of work/contract development.

e. Industrial Occupational Safety and Health Division (Code 6.5.1)

(1) Investigate Noncompliance. The Industrial Safety and Health Division will promptly investigate any report of a visitor/contractor noncompliance with safety issues; forward a copy of the findings to those who administer the contract or sponsor said visitor/contractor; and advise contract administrator or sponsor if immediate removal is required.

(2) Provide Expertise. The Industrial Safety and Health Division will provide expertise in safety and occupational health requirements for developing statements of work/contract development.

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SEP 28 2009f. Environmental Program Division (Code 6.5.3)

(1) Investigate Noncompliance. The Environmental Program Division will promptly investigate any report of a visitor/contractor noncompliance with environmental issues; forward a copy of the findings to those who are administrating the contract or sponsor of said visitor/contractor; and advise the contract administrator or sponsor if immediate removal is required.

(2) Provide Expertise. The Environmental Program Division will provide expertise in environmental requirements for developing statements of work/contract development.

(3) Training. The Environmental Program Division shall make relevant FRC East Environmental Management System information available for contractors.

6. Forms.

a. Visitor Request (OPNAV 5521/27) is located on the Navy Forms Online.

b. Visitor Log (FRC EAST 5512/42) is located on Navy Forms Online.

c. Incident Complaint Report (FRC EAST 5521/7) is located on Navy Forms Online. This form can only be accessed with a password.

7. Instruction Responsibility. The Industrial Plant Maintenance Division (Code 6.3.3) shall maintain this instruction in a current status.


L.S. LOCH

Distribution:

FRCEASTINST 5000.1
SEP 28 2009**Fleet Readiness Center East Information Brochure**

Fleet Readiness Center East (FRC East) wishes to welcome you and ensure that all personnel are aware of the conditions and factors that affect the well-being of all those within this facility. This information brochure contains important information that is vital to the safety and health of yourself, and all others of this facility. If personnel are non-compliant with this information brochure they may be asked to leave the facility.

FRC East is registered to the ISO 9001, ANSI 9100, ISO 14001, and OHSAS 18001 standards. In addition to these, registration under the Occupational Safety and Health Administration's Voluntary Protection Program is also in progress. To adhere to the standards required of these programs, the FRC East must ensure that all individuals accessing the facility are aware of the conditions and factors that affect the well-being of all employees, temporary workers, contractor personnel, visitors, and any other person in the workplace.

The "Business Policy" of FRC East is:

"Unsurpassed Service to the Fleet and Relentless Focus on Quality, Environment, and Occupational Health and Safety."

ALL PERSONNEL

- In the event of an emergency, including hazardous material spills, the individual discovering the emergency shall call 911 from any FRC East phone. Relay the grid number listed on the phone for location assistance. If you are calling from a cell phone, call (252) 466-3616; Fire Department Dispatch.
- Badges will be displayed at all times and shall be returned upon completion of visit/work. Every badge is considered Government Property and all lost badges will be reported to the Badge and Decal Office, located in Trailer 32.
- Report any injury/illness occurring on site to the FRC East Safety Office immediately via e-mail or phone number listed in this brochure.
- The facility must be kept clean and orderly at all times. Ensure that you place all waste in proper receptacles so that the facility is maintained in a "Clean as you go" condition.
- When in the FRC East industrial areas, wear the personal protective equipment (PPE) required for that area. PPE requirements are generally marked but if there is uncertainty, check with the area supervisor. Typically, safety glasses with side shields and steel toed shoes are required in most shops.
- Smoking is NOT authorized while traveling from one facility location to another while walking or in a vehicle being operated anywhere within the FRC East compound. **Absolutely No Smoking** on the property except in the "Designated Smoking Areas".
- Extra caution shall be taken around the flight line and aircraft turn-up areas to control trash, debris, and materials. Additionally all personnel on the flight line must be continuously alert and stay clear of helicopter and jet operations in progress.
- Vehicles must not obstruct aircraft movement or other daily operations.

Enclosure (1)

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- Safety, security, and environmental infractions shall be reported to the appropriate office immediately via the telephone number provided herein.
- If an emergency situation occurs which would endanger the health or safety of personnel, the area shall be evacuated. Reentry to affected buildings will be at the direction of uniformed guards, fire department, or safety office personnel only.
- Decisions to evacuate will be from FRC East Commanding Officer or his/her representative. Visitors/contractors along with non-essential facility personnel, south of Harrison Drive, adjacent to Building 4224, will evacuate the facility first. Fifteen minutes later, the visitors/contractors south of Curtiss Road, between Buildings 83 and 84, will evacuate the facility. Fifteen minutes later the visitor/contractors north of Curtiss Road will evacuate the facility.
- Cellular phones and photographic equipment are not authorized within FRC East unless they are approved in advance by the Security Office. Cellular phones may be used on roof areas for emergency purposes only.
- All vehicles must have proper passes, and no pass may be transferred between vehicles.
- All vehicles will follow posted speed limits which are, "Do not exceed 5 mph on the outside of buildings, nor 3 mph inside of any building."
- Vehicle headlights must be on at all times within the facility.
- All vehicles are required to slow down, sound horn, and proceed with caution at all cross aisles and other locations where vision is obstructed.
- Personnel are strictly forbidden to introduce any substance into the storm drain system including catch basins, roof drains, and floor drains.
- All facility entrants are responsible for all materials they bring into the facility and shall handle them in such a manner to ensure they are not left as "foreign objects" anywhere in the facility.
- In case of a utility emergency on weekends or after normal work hours, call the Facilities Maintenance trouble call desk, 466-4363.
- The use of gasoline is prohibited for any purpose other than fueling motor vehicles. All gasoline-powered vehicles are prohibited inside FRC East buildings.

Points of Contact

- Safety Office – 464-7015
- Fire Department – 911
- Fire Department Dispatch – 466-3616
- Plant Engineering – 464-7640
- ISO 14001 Management Representative – 464-9814 or 464-8412
- Security – 464-7999

SPECIAL NOTES FOR WORK PERFORMED UNDER GOVERNMENT PURCHASE CARD:

1. Access requirements applicable to visitors are identified as a condition for entry to the facility and not as work performance requirements. As such, they apply to all persons entering the facility for all purposes.
2. Purchase card transactions do not provide for special terms and conditions. Therefore, any work performed under a purchase card that encounters work site risks involving safety, health,

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security, foreign object debris, and environmental concerns shall be immediately halted and the appropriate office identified in this brochure shall be immediately contacted/notified of the issue. Also, the purchase card holder shall be contacted for guidance before returning to work.

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Contract Performance Requirements

All personnel drafting Performance Work Statements (PWSs) or other contract work requirements documents shall ensure that all mandatory requirements identified herein are included in all PWSs. The drafter shall also review the Optional Requirements, make a determination if they apply to the work document being developed or if they should be included as source selection criteria and include those that apply. The optional requirements that apply should be marked in the block provided to document their inclusion and enclosure (2), as marked and signed by the originator shall be included in the Procurement Package forwarded to the cognizant Procurement Office.

1. Mandatory Items - Enclosure (1) to FRCEASTINST 5000.1 must be included as an attachment in all contracts requiring on-site performance at Fleet Readiness Center (FRC East). All documents will include the following language:

(a) All personnel working on site at FRC East under this contract must document their receipt and review of the information listed in FRCEASTINST 5000.1, enclosure (1) annually. The Industrial Security Division will provide a means of completing initial review prior to FRC East entrance.

(b) All contractors performing work on our behalf and who have 10 employees at any time during the past calendar year, whose employees worked 1,000 or more hours in any quarter shall furnish FRC East their Total Case Incidence Rate for recordable nonfatal injuries and illnesses and their Days Away from Restricted work activity, and/or job Transfer rate for the past three years."

(c) Foreign object (FO) is defined as any article or substance alien to the aircraft or assembly which is allowed to invade the product. Foreign object damage (FOD) is the damage that occurs due to these FOs. All FRC East work sites will be maintained in such a manner as to prevent FOD to aircraft and/or aircraft components. Work sites shall be kept clean at all times. All debris, scrap material, tools, and equipment will be cleared from the work site as work progresses. At no time will hoses, power cords, materials, etc. be permitted to create tripping hazards in areas of the work site.

(d) In those cases where a contractor supervisor determines that solving a safety or health problem is beyond their control, but within the control of the FRC East, the contractor shall notify the appropriate point of contact identified in the contract.

(e) All contractor employees performing work on site at FRC East shall immediately report any safety, security, or environmental violation to their contractor supervisor, as well as the cognizant FRC East Safety/Security/Environmental Office. The initial FRC East notification can be made via phone or e-mail and should include as many applicable details as possible (date, time, identification numbers, tags, company, etc.). This initial notification will be made as soon as possible. A safety incident will require the contractor to complete and submit an incident memo to the appropriate point of contact identified in the contract, with a copy to FRC East Safety Office within twenty-four hours of the accident/incident." This incident memo will

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the full name of the person involved in the incident, age, sex, job title, the name of the employing company and the contract number and title. In addition, this memo will include the severity of the illness or injury, indirect cause(s) or the accident and whether personal protective equipment was available and used.

(f) Contractor supervisors shall attend FRC East Environmental Management System Annual Refresher and convey the information to their personnel annually.

(g) All contractors and sub-contractors working within FRC East must develop and operate effective safety and health programs.

2. Optional Items. Check all that apply.

If work being performed requires tasks performed above occupied areas, work documents will include the following language: "Work above or anywhere near aircraft or passageways shall be avoided whenever possible. If this is not possible, the cognizant shop supervisor will be informed so arrangements can be made to protect, move, or evacuate assets from the area to minimize foreign object debris potential. The area below the elevated work area will be adequately marked and barricaded at all times. Under no circumstances will work be performed over unprotected spaces. Standards listed in the Department of the Navy Fall Protection Guide for Ashore Facilities shall be complied with."

If work being performed takes place in the following critical areas: Shop 94304 Rotor Head Shop; Shop 94601 Ordnance/Survival Shop; Shop 93117 Aircraft Paint Shop; Shop 93111 Aircraft Clean Shop; Shops 96552, 96555, and 96556 Engine Shops; all shops in Building 4225 (Blade Vane); and all 95000 division aircraft hangers, work documents will include the following language: "Constant control of tools and materials is required at all times."

If work takes place in other than the above listed areas, work documents will include the following language: "Tools and hardware will be controlled at all times to prevent migration out of the work site. Lost tools shall be reported to the tool control manager at 464-9741. Tools found unattended will be confiscated and reported to the contracting officer."

If the work taking place is construction work, work documents will include the following language: "You must comply with the Safety and Health Requirements Manual published by the U.S. Army Corps of Engineers (EMM 385-1-1)."

If work performed includes hot work, work documents will include the following language: "Contractors will not perform hot work until the MCAS Fire Department issues a Hot Work Permit. The Fire Department number is 466-2241."

If work causing airborne hazards will take place, work documents will include the following language: "Work causing airborne hazards will be controlled as directed by EM 385-1-1, section 06.A.04b."

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- If work performed is considered construction, repair or maintenance work, the work documents will include the following language: "Construction, repair, or maintenance work requires the contractor designation of an on-site safety representative in accordance with EM 385-1-1."
- If work performed includes construction, demolition, roofing, scaffolding, high voltage electrical, confined space, painting, paint removal, asbestos and other high hazards work, the work document will include the Accident Prevention Clause as stated in Federal Acquisition Regulation and require compliance with reference (j). By adding this requirement, the contractor is to implement EM-385-1-1 and provide an Accident Prevention Plan and develop an Activity Hazard Analysis for each phase of work at least fifteen days prior to the scheduled pre-construction meeting. Additionally, as directed by reference (i), all contractors requiring Lock-out/Tag-out processes and entering a confined space are required to submit their Lock-out/Tag-out Program and Confined Space Program to the FRC East Program Managers for review. These FRC East Program managers will also share any required information of FRC East like programs as required. Contact numbers for these items is included on FRCEASTINST 5000.1, enclosure (1).
- If work on the flight line is performed, the work documents will include the following language: "Personnel working on the flight line must be continuously alert, and stay clear of helicopter and jet operations in progress."
- If work performed requires use of hazardous materials, the work document will include the following language: "The contractor will maintain an inventory of hazardous material used on the Maintenance Contractor Hazardous Material Inventory, FRC EAST 5090/20. A copy of this will be submitted to the Hazardous Material Program Manager in the Industrial Environmental Program Division (Code 6.5.3), Building 154, monthly, or at the completion of the job, whichever occurs first. Copies of all Material Safety Data Sheets (MSDS) shall be maintained on site at all times and in the contractor's on site office or in the contractor's work truck (if used as a field office). These MSDSs are required in the event of emergency or spill incident."
- If work performed requires any modification to an air pollution control device, the work document will include the following language: "Work requiring any modification to an air pollution control device must be approved in advance by the Air Quality Program Manager. These devices are marked with a 5" x 9" red placard and a contact number, 464-7690."
- If work performed will impact ventilation systems or fans, the work document will include the following language: "Work accomplished that will impact ventilation systems or fans will require prior notification of the Air Quality program manager at 464-7690 or 464-8412. These systems are continuously monitored."
- If work will be performed by a nested contractor, the work document will include the following language: "The contractor will report completion of required training as well as area/task specific training by nested contractors. Information on completion of this training will be forwarded to the FRC East shop supervisor of the area where the contractor is nested within."

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A nested contractor is defined as a contractor that has a payroll number and performs/clocks work in the same manner dictated of permanent shop employees.”

If work performed entails the use of fuels, work documents will include the following language: “Gasoline is prohibited for any purpose other than fueling motor vehicles. All gasoline-powered vehicles/equipment are prohibited inside FRC East buildings. In addition, diesel or propane-powered equipment or vehicles used inside must have an approved Exposure Control Plan in place before work can begin. Approval of this Exposure Control Plan is accomplished through the contractors Accident Prevention Plan, reviewed by FRC East Industrial Hygiene, 464-7037.”

If work performed generates a hazardous waste, work documents will include the following language: “The contractor is responsible for collection, storage, and disposal of all hazardous waste generated. Additionally all hazardous waste shipped off site, requires a Hazardous Waste Manifest. This manifest must be signed by The Marine Corps Air Station Cherry Point's Environmental Affairs Department. The Marine Corps Air Station Cherry Point's Environmental Affairs Department's phone number is 466-3631. Contractor's requiring additional information regarding the proper collection, storage and disposal of hazardous waste can contact FRC East Industrial Environmental Programs Division at 464-8412.”

MINIMUM CONTRACT REQUIREMENTS

Ref: US Army Corps of Engineers Safety & Health Manual (COE-385-1)

Prior to starting work, provide to the designated ROICC representative the following:

1. Background Information: Contractor name, contract number, project name, brief description of work to be performed, name of on-site designated competent person/ superintendent and a 24 hour emergency point-of-contact phone number.
2. Statement of acknowledgement that the prime contractor is totally responsible for compliance with all Federal, State, Local laws, rules, and regulations including OSHA, U.S. Army Corps of Engineers Safety and Health Manual (COE 385-1-1).
3. Prior to the start of work, the contractor will prepare and submit for approval to the designated authority an Activity Hazard Analysis (AHA) for each specific phase of work on the project. No work is to be performed until the activity hazard analysis for the work activity has been accepted by the government's designated authority and discussed with all engaged in the activity including the contractor, subcontractor(s), and Government on-site representatives. (01.A.09)
4. Statement of Acknowledgement that the contractor may be required to prepare for review and acceptance any specific safety and occupational health submittal items. These submittal items may be specifically required by Federal, State, or Local Laws, rules, or regulations or may be identified in the contract or by the Government's representative. (01.A.11)
5. Complete submittals will be required for any high hazard work. (i.e., Confined Space, High Voltage work/cable splicing, trenching/excavation work and any work involving fall protection requirements). Work involving any crane/derrick must comply with COE 385-1-1 Section 16.
6. Existing utilities. It shall be the responsibility of the contractor to locate all existing underground utilities that are within the limits of the work prior to any excavation activities. These include but are not limited to the following buried utilities: water lines, sanitary and storm sewers, condensate, fuel lines, gas lines, electrical ducts and direct buried conductors, commercial telephone, base telephone, commercial cable TV, base instructional cable TV, EMCS, and fire alarm. The contractor shall employ the services of a qualified utility locating company to locate, identify and mark all underground utilities. The entire construction limits shall be thoroughly scanned and researched to determine existing utility locations. Any existing utilities that are indicated on the project drawings shall be considered for reference use by the locating company and shall be verified. All underground utilities shall be clearly marked with flags, paint to stakes prior to any digging operation except that required to determine exact utility location and depth. All existing underground utilities shall be accurately recorded on the as-built drawings. CAUTION shall be used when trenching or excavating around or near buried utilities. The contractor shall be responsible for the timely repair and/or replacement of direct and collateral damage of any and all underground utilities that are severed, crushed, broken, displaced or otherwise disturbed by the construction operation. The Government shall not incur any additional cost for such repair or replacement. The contractor shall notify the ROICC a minimum of three (3) working days prior to the utility location.
7. Deliver weekly, to the designated government representative, a Contractor Production Report. Deliver the report no later than 10:00 a.m. the first workday that starts a new work week. Form (to be duplicated by contractor) is attached. Form to be completed in black ink only. The government will provide a copy of the required production report form, which the contractor can use to duplicate.

MINIMUM SAFETY REQUIREMENTS

8. Minimum Insurance Requirements. Procure and maintain during the entire period of performance under this contract the following minimum insurance coverage:

- a. Comprehensive general liability: \$500,000 per occurrence.
- b. Automobile liability: \$200,000 per person, \$500,000 per occurrence for bodily injury, \$20,000 per occurrence for property damage.
- c. Workmen's compensation as required by Federal and State workers' compensation and occupational disease law.
- d. Employer's liability coverage of \$100,000, except in States where workers compensation may not be written by private carriers.
- e. Others as required by North Carolina law.

9. Documentation Required to Grant Access to Commercial and Contract Employees

- a. Commercial and contract employees may be issued access to MCAS Cherry Point on an individual basis.
- b. Commercial and contract employees must possess a picture identification card from a state or federal agency.
- c. Commercial and contract employees must provide full name, social security number, date of birth, and mailing address.
- d. Commercial and contract employees must provide a complete 50 state criminal records check on an annual basis. This records check may be obtained from any of the following internet investigative services: Kroll (former Infolink Screening Services, Castle Branch, Accurate Background Investigations, Inc.) or any other investigative services company that provides records checks of all 50 states. These services also validate social security card numbers. All criminal history checks must be completed no more than 30 days prior to start date of contract. (Note: These internet screening services are listed as possible sources for obtaining a criminal background check. The United States government and the United State Marine Corps do not endorse nor are they affiliated with any of these services.)
- e. Commercial and contract employees must provide proof of citizenship/immigration status. Acceptable documents include birth certificates, Immigration and Naturalization Service (INS) forms, and passports.
- f. Commercial and contract employees must provide proof of employment and a list of all their employees requiring access.
- g. Commercial and contract employees must provide an approved contract and sponsorship letter from the MCAS Cherry Point employer/Contracting Officer identifying the following:
 - 1) The name of the company/business awarded the contract.
 - 2) Contract Number (if applicable).
 - 3) Contract expiration/termination date.
 - 4) Flight line access with specification location (if required).
- h. Installation Access will be denied if it is determined that an individual:
 - 1) Is on the National Terrorist Watch List.
 - 2) Is illegally present in the United States.
 - 3) Any reason the Installation Commander deems reasonable for the good order and discipline.
 - 4) Is subject to an outstanding warrant.

MINIMUM SAFETY REQUIREMENTS

- 5) Has knowingly submitted an employment questionnaire with false or fraudulent information.
 - 6) Has been issued a debarment order and is currently banned from military installations.
 - 7) Is a registered sex offender.
 - 8) Has been convicted of a felony or a drug crime within the past five years.
 - 9) Individuals who have received a DUI/DWI in the last year will be allowed access to the installation, but will not be permitted to drive on the installation.
- i. Commercial and contract employees will be issued a contractor's badge good for one (1) year. Commercial and contract employees are required to resubmit a complete 50 state criminal records check in order to renew their contractor badge.
 - j. All appeals shall be directed to the Installation Commander (Attn: Inspector's Office) for any individual that has been denied access to the installation.

ATTACHMENT E6
ADDITIONAL CONTRACT REQUIREMENTS
FOR
NAVAL AIR DEPOT, CHERRY POINT, NORTH CAROLINA

1.0 General: Contractors performing work at the Naval Air Depot (NAVAIRDEPOT) Cherry Point are required to comply with all Occupational Safety and Health Act (OSHA) and Environmental Protection Agency (EPA) requirements, as well as the following Navy and the NAVAIRDEPOT Cherry Point policies and instructions related to the following compliance areas:

- a. Industrial Occupational Safety and Health Division (Code 6.5.1) (Building 143)
- b. Industrial Security Division (Code 6.5.2) (Trailer 32)
- c. Industrial Environmental Program Division (Code 6.5.3) (Building 154)
- d. Industrial Production Activity Control Division (Code 6.3.2) (Building 137)
- e. Industrial Customer Liaison Division (Code 6.4.3) (Building 143)

The purpose of this compliance requirements supplement is to identify areas of special interest to ensure a safe workplace for all employees. Additionally, the NAVAIRDEPOT Cherry Point is registered to the ISO 9001, ISO 9100, ISO 14001, and OHSAS 18001 standards and must ensure contractors working on our behalf are aware of the conditions and factors that affect the well-being of all employees, temporary workers, contractor personnel, visitors, and any other person in the workplace.

2.0 Applicability: Each contractor performing construction, repair, or maintenance shall designate an on-site compliance representative, whose responsibility it will be to, comply with this document. Typically this function will be performed by the project manager or site superintendant, who is appropriately qualified. This individual shall, as a minimum, take the OSHA 10-hour Construction Safety course, which is commercially available. The name and telephone number of the Compliance Representative shall be designated in writing and submitted to the NAVAIRDEPOT Cherry Point Industrial Operations Compliance Department (Code 6.5) on contract award via the contracting officer.

2.1. When in the NAVAIRDEPOT Cherry Point industrial or shop areas, contractor employees shall wear personal protective equipment (PPE) required for that area. PPE areas are generally marked, but contractors should check with the NAVAIRDEPOT area supervisor if they are unsure of the appropriate PPE. Typically, safety glasses with side shields and steel-toed shoes are required in most shops.

2.2. Contractor caused mishaps and injuries involving, government facilities, equipment or personnel shall be reported immediately to the ROICC contracting officer and the NAVAIRDEPOT Cherry Point Safety Office at 464-7015.

2.3. NAVAIRDEPOT safety/environmental personnel continuously monitor conditions throughout the plant. Should they observe a contractor engaging in an unsafe act or creating an unsafe condition, documentation will be prepared and submitted to the contracting officer responsible for administering the applicable contract. Should the contractor act in an unsafe or unhealthy manner, work will be stopped and the contracting officer will be notified. Work will not resume until the contractor has properly demonstrated ability to resume work in compliance with all applicable safety requirements. Unsafe or unhealthful conditions will be documented in contract performance evaluations and will be considered when awarding future contracts.

2.4 All contract employees shall report occupational safety and health/environmental concerns directly to their supervisor for resolution. If the contractor supervisor determines that the problem resolution is beyond his/her level of control (within the NAVAIRDEPOT Cherry Point control), he/she will call the Contracting Officer, Contracting Officers Representative, the NAVAIRDEPOT Cherry Point Safety Office, or Environmental Office to report the concern. The telephone number for the NAVAIRDEPOT Cherry Point Occupational Safety and Health office is 464-7015; Environmental Division is 464-8412. There is someone in the office from 0500 - 1600 every weekday. Should the contractor or his/her employees notice an emergency (fire, medical, chemical spill, security incident); they should evacuate the area and call 911.

3.0 Occupational Safety and Health: It is the depot's policy to have a comprehensive Occupational Safety and Health Management System that ensures a workplace as free from safety and health hazards as possible. Safety and health shall be planned, resourced, and provided for at the same priority as quality, cost, schedule, and production. Safety is not something to do in addition to the work; it needs to be how work is done.

3.1. The contractor is responsible to comply with the U. S. Army Corps of Engineers Safety Manual (USACOE EM 385-1-1), 29 CFR 1910 - General Industry Standards and 29 CFR 1926 - Construction Standards (whichever applies) and NAVAIRDEPOTINST 5100.2 series. While this list is not all-inclusive, your attention is directed to the following examples of frequently overlooked responsibilities and requirements:

3.1.1. The contractor is responsible for training his/her employees in the safe use, handling, storage, and disposition of hazardous materials.

3.1.2. All hazardous materials, hazardous waste, and their containers shall be removed from the work site upon completion of the contract.

3.1.3. The contractor shall ensure that permit required confined space procedures are performed prior to confined space entry to meet safe conditions for entry/work. All confined space work will be in accordance with USACOE EM 385-1-1 and 29 CFR 1910.146. Confined spaces at the NAVAIRDEPOT include tanks, manholes, sewers, underground vaults, tunnels, and similar structures. Government employees cannot provide confined space permits for contractors nor may contractors provide confined space permits for government employees.

3.1.4. The contractor shall ensure all OSHA required air sampling is conducted, i.e. on asbestos or lead paint related jobs. Personnel conducting the air sampling shall meet all OSHA/EPA qualifications required for the task.

3.1.5. The contractor shall not perform hot-work (welding, burning, or cutting) until a Hot Work Permit has been issued by the Marine Corps Air Station Fire Department, who may be reached at (252) 466-2241.

3.1.6. The use of gasoline is prohibited for any purpose other than the fueling of motor vehicles. Unless there is no alternative, gasoline engines shall not be operated inside any building at the NAVAIRDEPOT Cherry Point. Should a situation arise where there are no alternatives to gasoline powered equipment or vehicles, a written exposure control plan shall be established and submitted to the Industrial Occupational Safety and Health Division (Code 6.5.1) for approval at least two business days prior to equipment use. Refer to enclosure (1) found in Chapter 3 of the NAVAIRDEPOTINST 5100.2 series for assistance in preparing the written exposure plan. Diesel engines may be used or driven through well-ventilated buildings when necessary. Propane engine operations will require a written exposure control plan as described above. Examples of propane engine operations that are likely to exceed the OSHA permissible exposure limit of 50 parts per million include the use of forklifts and man-lifts indoors.

3.1.6.1 Contract employees or NADEP personnel that attempt to use gasoline or propane engines indoors without submitting a written exposure plan to the NADEP Safety Office and receiving approval prior to operation are subject to having their process terminated. Operations may resume only when a written exposure plan has been submitted and approved by the NADEP Safety Office. If a propane or gasoline engine will be used, monitoring the air for carbon monoxide concentration is required.

3.1.6.2 Monitoring of diesel engines will not be required when the engine is operated in a large open area that is sufficiently ventilated. Monitoring of diesel engines will be required when the engine will be used in a small, confined area with limited ventilation. Guidance for monitoring for carbon monoxide is provided in Enclosure (3) of Chapter 3 of the NAVAIRDEPOTINST 5100.2 series. Contract personnel must indicate plans for monitoring in the exposure plan and forward monitoring results to the NADEP Safety Office. Contracts where powered equipment is required inside buildings should specify preference for electric engines.

3.1.7. In coordination with the Depot contract representative, All air intakes, including roof vents, in the vicinity of construction related work that generates dust, vapor, smoke, spray, or odors will be closed and sealed with plastic prior to the start of work. In addition, openings that permit such items to escape into adjacent spaces will be sealed off.

3.1.8. **SMOKING IS PROHIBITED** in all buildings and is authorized **ONLY** in specifically designated areas outlined in NAVAIRDEPOTINST 12600.1 (or most current version). Smoking is also **NOT** authorized while traveling from one facility location to another while walking or in a vehicle being operated anywhere within the NAVAIRDEPOT compound. Please note that this requirement will be strictly enforced.

3.1.9. Work above occupied areas or passageways shall be avoided whenever possible. If this is not possible, the area below the elevated work area will be adequately marked and barricaded at all times. Under no circumstances will work be performed over unprotected spaces.

3.1.10. Contractors performing work at a level of four feet or more above the working surface, shall comply with all fall protection requirements of USACOE EM385-1-1 and Code of Federal Regulations 29 CFR 1926 Subpart M. Personnel are to be supervised under the direction of a OSHA defined competent person (20 CFR 1926.32 Subpart C).

3.1.11. Control of Hazardous Energy/Lock Out / Tag Out Program: All sources of energy must be de-energized, tagged, and locked out in accordance with USACOE EM 385-1-1 and 29 CFR 1910.147 prior to work. The NAVAIRDEPOT Control of Hazardous Energy (Lockout/Tagout) Plans are available for review in the Safety Office. Each contractor shall submit their company Energy Control Plan to the NAVAIRDEPOT Safety Office via the contracting officer for review and approval. The NAVAIRDEPOT locks are green, therefore no contractor will be permitted to use green locks.

3.1.12. Contractors must ensure separation of actual construction sites from areas where NADEP personnel are working with barricades and signs in order to control workplace hazards.

3.1.13. Work sites shall be kept clean at all times. All debris, scrap material, tools, and equipment will be cleared from the work site as work progresses. At no time will hoses, power cords, materials, etc. be permitted to create tripping hazards in areas of the work site. Therefore, all surfaces will be maintained as level as possible. The contractor must be especially diligent with housekeeping during hurricane season.

3.1.14. Extra caution shall be taken during any work on or around the flight line and aircraft turn-up areas so that trash, debris, and materials are not blown by wind, jet blast, or helicopter rotor wash. Additionally, personnel working on the flight line must be continuously aware and stay clear of helicopter and jet operations in progress.

3.1.15. Any contractor who finds potential asbestos containing material shall immediately report it to the Asbestos Program Manager at 464-7015 via the contracting officer for evaluation and removal/disposal.

4.0 Environmental Protection:

4.1 Air Quality:

4.1.1. Any modification to an air pollution control device must be approved in advance. These devices are marked with a 5" x 9" red placard and a contact number, 464-7690.

4.1.2. Air pollution control equipment is monitored continuously through the Johnson Control Metasys computer monitor system. Differential pressure is the primary parameter, recorded every 15 minutes. A computer-generated alarm is sent to computer monitoring stations in the environmental program offices, Buildings 423 and 154.

4.2 Hazardous Materials:

4.2.1. The contractor will maintain a folder with a current list of hazardous material on board, on form number 5090/20. A copy of this list will be submitted to the Hazardous Material Program Manager in the Industrial Environmental Program Division (Code 6.5.3), in Building 154, monthly.

4.2.1. The contractor will complete the Maintenance Contractor Hazardous Waste Turn-In Inventory form (NAVAIRDEPOT CP 5090/19), and turn in usage information to the Industrial Environmental Program Division (Code 6.5.3).

4.2.2. Copies of all Materials Safety Data Sheets (MSDS) shall be maintained on site at all times and in the contractor's on-site office trailer or in the contractor's work truck (if used as a field office). These MSDS are required in the event there is an emergency or spill incident. (ASM 2-4-05).

4.2.3 Contractors with approval to store hazardous materials on site, shall ensure accurate MSDS are readily available.

4.3 Hazardous Waste: Must be disposed of in accordance with applicable regulations.

4.4 Water Quality: Contractors shall never pour anything into any drain, catch basin, or ditch.

4.5 Solid Waste: Solid waste should be recycled, when at all possible, to reduce material sent to landfills and shall be disposed of in accordance with applicable State, Federal, and Marine Corp Air Station requirements.

4.6 EMS/ISO 14001: All contract personnel shall be aware of the Environmental Policy and their role as it impacts the environment. All personnel shall:

- a. Use hazardous materials in a safe and secure manner, maintaining proper storage, and handling.
- b. Manage hazardous waste in an approved manner.
- c. Recycle solid waste where programs are in place.
- d. Report chemical spills promptly to 911.

5.0 Security Requirements:

5.1. Contractors shall obtain, maintain, and display identification badges at all times.

5.2. Badges shall be returned to the NAVAIRDEPOT Badge and Decal Office immediately upon departure of employee from the company. Every badge is considered Government Property.

5.3 Cellular and/or photographic phones are prohibited items, not authorized inside the NAVAIRDEPOT Facility, unless vehicle mounted, or the Security Office has given prior approval. Roof area use is authorized for emergency purposes only. All companies will designate cell phone requirements, for each employee, on their submitted visit request. "NO" photographic cellular phones are authorized in any type situation, unless prior authorized is given. All unauthorized cellular phones will be confiscated by the Security Office and returned to the company, or individuals will be asked to depart the facility. Reference NAVAIRDEPOTINST 5500.1 (current series).

5.4. Work vehicles are to be used for transporting equipment and material to and from the work site. They are not to be parked or left inside the facility unless the Security Office has given prior authorization. Each company will restrict the amount of vehicles inside the facility so as not to restrict aircraft and operational equipment movement.

5.5 Privately Owned Vehicles used, as work vehicles by a Contractor will be screened. Any POV a contractor wants to have authorized for admittance to the Depot shall be listed on an attachment to the company's visit request, showing the contracting company assumes liability, when submitted. The individual owner will be the only authorized driver of that vehicle. Requests determined to be illegitimate will be changed to a drop-off and pick-up status.

5.6. Vehicles with drop-off/pick-up passes are authorized travel time to destination, off-load, and departure time "ONLY". These vehicles are not to remain inside the facility for any length of time. These passes will be returned upon departure of the facility.

5.7. Observe the posted speed limits.

5.8. Headlights should be on at all times while moving within the facility.

5.9 "NO PHOTOGRAPHY" will be conducted by "any" contracting company or their representative(s) without prior approval of the Security Office.

6.0 Tool Control:

6.1. All contractors are responsible for their tools, tool containers, and materials while working in the NAVAIRDEPOT Cherry Point compound. Contractors shall ensure that when a job or task is being performed, and when a job or task is completed the area affected is free of foreign objects such as tools, hardware, trash, job site material, and hazardous waste.

6.2. In critical areas (listed below) contractors shall ensure constant control of their tools and materials at all times. Upon entry and exit into a critical area contractors will contact the responsible depot supervisor anytime work is being performed and when work is completed. A critical area by definition is an area designated by the NAVAIRDEPOT that foreign objects could cause significant damage to or loss of an aircraft and or its crew. Tools discovered unattended in these critical areas will be confiscated and turned into the NAVAIRDEPOT Cherry Point Tool Control Program Manager. Any confiscated tools will be documented and reported to the contracting officer for appropriate action.

6.3. Critical Areas

a. All Test Cells and Shops involved with Flight Checks throughout the Plant Shop 94303 Rotor Head Shop

b. Shop 94304 Rotor Blade/Whirl Tower Shop

c. Shop 94601 Ordinance/Survival Shop

d. Shop 93117 Paint/Rubber Shop

e. Shop 93111 Clean, Strip, and Corrosion Shop

f. Shops 96552, 96555, and 96556 Engine Shops

g. All Shops in Bldg. 4225 (Blade Vane)

h. All 95000 Division aircraft hangars.

7.0 Foreign Object Damage (FOD):

7.1. A foreign object is defined as any article or substance alien to the aircraft or assembly which is allowed to invade the product.

7.2. Contractors performing work at the NAVAIRDEPOT Cherry Point are required to maintain their work site (s) in such a manner as to prevent FOD to aircraft and/or aircraft components.

7.3. Barriers shall be erected when working above or anywhere around aircraft or in industrial shops to prevent construction debris from migrating around, on, or in aircraft, components, or transportation wagons. Work sites, equipment, and company vehicles shall be kept clean at all times. All tools, hardware will be controlled at all times to prevent migration out of work site. Debris, trash, scrap material will be picked up and disposed of during and at end of work day as required to maintain a clean work site.

7.4. When working in buildings above/around aircraft, aircraft components, or equipment inform the cognizant shop supervisor so arrangements can be made to protect, move or evacuate assets from the area to minimize FOD potential.

8.0. Any questions regarding any of the above subject matter, not addressed herein or not made sufficiently clear from review of local policies and instructions, may be addressed to your contracting officer or the Contracts Office (Code 2.5.1.6.3)

ATTACHMENT E7 SPAWAR CONTRACT LANGUAGE

C-324 OCCUPATIONAL SAFETY AND HEALTH REQUIREMENTS (NOV 2008)

(a) If performance of any work under this contract is required at a _____ [Contracting officer insert SPAWAR Headquarters, SPAWARSYSCEN Pacific, or SPAWARSYSCEN Atlantic] facility, the Contractor shall contact the _____ [**Contracting officer insert appropriate code for SPAWAR Headquarters or applicable SPAWAR Systems Center Office with cognizance over safety and environmental requirements**] prior to performance of ANY work under this contract. *The purpose of contacting the Safety and Environmental Office is to obtain and become familiar with any local safety regulations or instructions and to inform the local Safety Officer of any work taking place on base.* **Safety and Occupational Health personnel can not assume a regulatory role relative to oversight of the contractor safety activities and performance except in an imminent danger situation. Administrative oversight of contractors is the primary responsibility of the Contracting Officer and/or the Contracting Officer's designated representative.**

(b) Contractors are responsible for following all safety and health related State and Federal statutes and corresponding State, Federal and/or Navy regulations protecting the environment, contractor employees, and persons who live and work in and around contractor and/or federal facilities.

[SPAWARSYSCEN Pacific contracting officers may insert in paragraph (b) after the phrase "State, Federal and/or Navy regulations", the parenthetical phrase "(i.e., **SSCSDINST 5100.5D**, Occupational Safety and Health Manual)".]

(c) Contractors shall monitor their employees and ensure that they are following all safety regulations particular to the work areas. Contractors shall ensure that their employees (i) wear appropriate safety equipment and clothing, (ii) are familiar with all relevant emergency procedures should an accident occur, and (iii) have access to a telephone and telephone numbers, to include emergency telephone numbers, for the _____ [Contracting officer insert SPAWAR Headquarters, SPAWARSYSCEN Pacific, or SPAWARSYSCEN Atlantic] facility where work is performed].

(End of clause)

PRESCRIPTION: All solicitations and contracts when work will be performed on any SPAWAR Headquarters, SPAWARSYSCEN Pacific, or SPAWARSYSCEN Atlantic facility or tenant activity; in particular when work will be performed on SPAWARSYSCEN Pacific facility or tenant activity.

REFERENCE: FAR 23.302
SPAWARSYSCEN Pacific Local Policy

LAN LOCATION: SPAWAR CLAIMANCY CLAUSEBOOK/SECTION C CLAUSES

252.246-7003 Notification of Potential Safety Issues.

As prescribed in 246.371(a), use the following clause:

NOTIFICATION OF POTENTIAL SAFETY ISSUES (JAN 2007)

(a) *Definitions.* As used in this clause—

“Credible information” means information that, considering its source and the surrounding circumstances, supports a reasonable belief that an event has occurred or will occur.

“Critical safety item” means a part, subassembly, assembly, subsystem, installation equipment, or support equipment for a system that contains a characteristic, any failure, malfunction, or absence of which could have a safety impact.

“Safety impact” means the occurrence of death, permanent total disability, permanent partial disability, or injury or occupational illness requiring hospitalization; loss of a weapon system; or property damage exceeding \$1,000,000.

“Subcontractor” means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for the Contractor or another subcontractor under this contract.

(b) The Contractor shall provide notification, in accordance with paragraph (c) of this clause, of—

(1) All nonconformances for parts identified as critical safety items acquired by the Government under this contract; and

(2) All nonconformances or deficiencies that may result in a safety impact for systems, or subsystems, assemblies, subassemblies, or parts integral to a system, acquired by or serviced for the Government under this contract.

(c) The Contractor—

(1) Shall notify the Administrative Contracting Officer (ACO) and the Procuring Contracting Officer (PCO) as soon as practicable, but not later than 72 hours, after discovering or acquiring credible information concerning nonconformances and deficiencies described in paragraph (b) of this clause; and

(2) Shall provide a written notification to the ACO and the PCO within 5 working days that includes—

(i) A summary of the defect or nonconformance;

(ii) A chronology of pertinent events;

(iii) The identification of potentially affected items to the extent known at the time of notification;

(iv) A point of contact to coordinate problem analysis and resolution; and

(v) Any other relevant information.

(d) The Contractor—

(1) Is responsible for the notification of potential safety issues occurring with regard to an item furnished by any subcontractor; and

(2) Shall facilitate direct communication between the Government and the subcontractor as necessary.

(e) Notification of safety issues under this clause shall be considered neither an admission of responsibility nor a release of liability for the defect or its consequences. This clause does not affect any right of the Government or the Contractor established elsewhere in this contract.

(f) Subcontracts

(1) The Contractor shall include the substance of this clause, including this paragraph (f), in subcontracts for—

(i) Parts identified as critical safety items;

(ii) Systems and subsystems, assemblies, and subassemblies integral to a system; or

(iii) Repair, maintenance, logistics support, or overhaul services for systems and subsystems, assemblies, subassemblies, and parts integral to a system.

(2) For those subcontracts described in paragraph (f)(1) of this clause, the Contractor shall require the subcontractor to provide the notification required by paragraph (c) of this clause to—

(i) The Contractor or higher-tier subcontractor; and

(ii) The ACO and the PCO, if the subcontractor is aware of the ACO and the PCO for the contract.

ATTACHMENT E8
NAVAL RESEARCH LABORATORY
REQUIREMENTS FOR ON-SITE CONTRACTORS

8 December 2008

8. CONTRACTOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) PROGRAM COMPLIANCE

(a) GENERAL

The Contractor is responsible for employee's safety and health and shall comply with OSHA regulations and perform in accordance with applicable regulations including 29 Code of Federal Regulations (CFR) Part 1910, *Occupational Safety and Health Standards*, 29 CFR 1925, *Safety and Health Standards for Federal Service Contracts*, 29 CFR 1926 *Safety and Health Regulations for Construction* and EM-385-1-1, U.S. Army Corps of Engineers' Safety and Health Requirements Manual. The most stringent standards will apply.

The contractor shall submit a written Accident Prevention Plan (APP) as required, when FAR 52.236-13 is included in the contract. The minimum outline for an APP is provided in EM 385-1-1.

The NRL Safety Branch may require the contractor to stop performance, with no additional price or cost to the contract, when it is determined the contractor operation on an NRL site does not comply with an applicable OSHA regulation, and is a threat to the safety and health of on-site personnel and/or the public. Should unforeseen hazards become evident during the performance of work, the contractor shall make a formal request to the Contracting Officer, both verbally and in writing, to provide a resolution as soon as possible. In the interim, all necessary action shall be taken by the contractor to restore and maintain safe working conditions in order to safeguard on-site personnel, visitors, the public and the environment.

(b) ACCIDENTS

The contractor shall preserve the conditions and evidence of the accident site until the Government investigation team arrives on site and the investigation is conducted.

For recordable injuries and illness, and property damage resulting in at least \$2000 in damage, the Prime Contractor shall conduct an accident investigation to establish the root cause(s) of the accident, complete the [Navy Contractor Significant Incident Report \(CSIR\)](#) and provide the report to the COR within one business day of the accident. The Prime Contractor must notify the COR as soon as practical, but no later than 4 hours after the accident. The CSIR form is

available at <https://www.navfac.navy.mil/safety/site/construc/csir.pdf>, through the COR or by contacting the Safety office identified in the contract.

For weight handling equipment accidents, the Prime Contractor shall conduct an accident investigation to establish the root cause(s) of the accident, complete the [WHE Accident Report](#) and provide the report to the COR within 30 days of the accident. The form is at <http://ncc.navfac.navy.mil/>, through the COR or by contacting the Safety office identified in the contract.

(c) CONSTRUCTION TYPE WORK

Any construction type work performed by contractors shall comply with 29 CFR 1926 and EM 385-1-1.

(d) CONFINED SPACE WORK

All confined spaces, as defined in 29 CFR 1910.146, are considered to be permit-required confined spaces. Manholes such as storm drains, sewers, utility vaults, steam pits, crawl spaces, etc. are examples of a permit-required confined space at NRL. Contractors shall comply with 29 CFR 1910.146 for all confined space work and submit a site-specific safety plan for review and approval by Code 3540 prior to the work. In addition, for construction contracts, compliance with EM 385-1-1 is required. The site specific safety plan shall meet the requirements of NRLINST 5100.22 (as revised) Requirements For Entry Into Confined Spaces and OPNAVINST 5100.23 (as revised).

9. RADIATION SAFETY

(a) OCCUPATIONAL EXPOSURE TO RADIATION

In accordance with NAVMED P-5055 (as revised), Radiation Health Protection Manual, medical examinations may be required for contractor personnel being considered for routine assignment to duties or occupations under this contract that requires exposure to ionizing radiation or the handling of radioactive materials.

The Contractor is responsible for ensuring required medical examination(s) is/are conducted. The examinations such as Preplacement Examinations (PE), Situational Examinations (SE), and Termination Examinations (TE) will be conducted in accordance with NAVMED P-5055 (as revised), Radiation Health Protection Manual.

As a result of this examination, a pass/fail determination will be made by the Examining Physician and a written report identifying the type of examination (PE,SE,TE) and the results (pass/fail) forwarded no later than 45 days after each

examination to the NRL Safety Branch, Code 3540 (for the NRL-DC site) and to the NRL-SSC, Code 7030.5 (for the NRL site at Stennis Space Center, MS).

For any work to be performed at any NRL site, contractor personnel may be required to wear an NRL issued radiation dosimeter. A radiation dosimeter will not be issued to any contractor personnel until the written test report indicating that the employee passed the examination is received by the Safety Branch as noted in the above paragraph.

For contracts already in place, a Preplacement Examination shall be performed within 60 days.

(b) RADIOACTIVE MATERIAL OR RADIATION PRODUCING DEVICES

The Contractor shall notify, in writing, the NRL Safety Branch, Code 3540 (for the NRL-DC site) and NRL-SSC, Code 7030.5 (for the NRL Stennis Space Center, MS site) at least two(2) weeks in advance of all shipments to and from any NRL site of radioactive material or radiation producing devices (e.g., x-ray machines). Shipments of radioactive material received without this may be rejected and returned to the point of origin with no additional price or cost to the contract and any costs associated with this rejection borne by the contractor.

(c) LASER SAFETY

In accordance with OPNAVINST 5100.23 (as revised) *Navy Safety and Occupational Health (SOH) Program Manual*, medical examinations are required for contractor personnel being considered for routine assignment to duties or occupations under this contract that requires work with Class IIIb, Class IV, and certain Class IIIa lasers.

The Contractor is responsible for ensuring the required medical examination(s) is/are conducted. The examinations, such as Preplacement Examinations (PE), Situational Examinations (SE), and Termination Examinations (TE) will be conducted in accordance with BUMEDINST 6470.23 (as revised), Medical Management of Non-Ionizing Radiation Casualties. As a result of this examination, a pass/fail determination will be made by the Examining Physician and a written report identifying the type of examination (PE, SE, TE) and the results (pass/fail) forwarded no later than 45 days after each examination to NRL Safety Branch, Code 3540 (for the NRL-DC site) and to the NRL-SSC Code 7030.5 (for the NRL site at Stennis Space Center, MS.).

For contracts already in place, a Preplacement Examination shall be performed within 60 days.

In addition to medical examinations, initial laser safety training is required to work with Class IIIb, Class IV, and certain Class IIIa lasers. Annual refresher training

is also required for these systems. Contact the Safety Branch, Code 3540 (for the NRL-DC site) and contact the NRL-SSC, Code 7030.5 (for the NRL site at Stennis Space Center , MS.) for details of the training and medical surveillance programs.

(d) RADIOFREQUENCY SAFETY

In accordance with OPNAVINST 5100.23 (as revised), Navy Safety and Occupational Health (SOH) Program Manual, all contractor personnel being considered for routine assignment to duties or occupations under this contract that require work with systems that emit radio frequency (RF) radiation above the permissible exposure limits of DoDINST 6055.11 (as revised), *Protection of DoD Personnel from Exposure to Radio Frequency Radiation and Military Exempt Lasers* shall receive initial and biennial safety training. Contact the Safety Branch, Code 3540 (for the NRL-DC site) and contact the NRL-SSC, Code 7030.5 (for the NRL site at Stennis Space Center , MS) for details of the training program.

(e) STOP WORK

The NRL Safety Branch Head (Code 3540) or the Health Physics Section Head (Code 3544) may require the contractor to stop performance with no additional price or cost to the contract when either determines contractor operation on any NRL site does not comply with an applicable radiation safety law, regulation or directive, and is a threat to the health and welfare of NRL employees.

10. ACQUISITION AND HANDLING OF AMMUNITION, ENERGETIC, AND EXPLOSIVE MATERIALS/ORDNANCE/DEVICES, PYROPHORICS, AND INERT ITEMS

When working with ammunition, energetic or explosive materials or devices, the Contractor is responsible for ensuring that its personnel comply with the safety regulations and instructions in NAVSEA OP5, Volume 1 (as revised), *Ammunition and Explosives Ashore*; NAVSEAINST 8020 (as revised), *Ammunition and Explosives Handlers Qualification and Certification Program*; NRLINST 8020.1 (as revised) Explosives Safety Manual; NAVMED P-117 (as revised) *Manual of the Medical Department*; 49 CFR Part 391.41-49, *Physical Qualifications and Examinations*; and 48 CFR DFARs 252.223-7002 and 252.223-7003. The contractor shall forward to the NRL Explosives Safety Officer, Code 3546, acquisition information for these items during the period of performance of the contract including the following information:

- (1) Name, nomenclature of the material(s) or device(s);
- (2) Quantity (Number and type of material(s) or device(s) being acquired);

- (3) Net Explosive Weight (NEW) per item and a total for the shipment;
- (4) Location where the materials will be stored;
- (5) Personnel involved in the handling of the materials;
- (6) Reference Standard Operating Procedures (SOP) for subject items;
- (7) Material Safety Data Sheet (MSDS) for each item;
- (8) Transportation documentation (to include Interim Hazard Classification(s) or Final Classification information);
- (9) Date of shipment and anticipated delivery date to the Naval Research Laboratory (Shipments received without prior approval or notification will be returned to the point of origin);
- (10) Contract number;
- (11) Name and Code of the COR/AGR/TM, NRL Project Officer, or Point of Contact as listed in the contract

The Contractor shall notify the NRL Explosives Safety Officer, Code 3546, in writing (for all NRL sites) at least 2 weeks in advance of all shipments to NRL of energetic or explosive materials, explosive ordnance/devices, pyrophorics and pyrotechnics. Shipments received without notification may be rejected and returned to the point of origin. Any costs associated with this rejection will be borne by the contractor.

The Contractor shall notify the NRL Explosives Safety Officer, Code 3546, in writing (for all NRL sites) at least 2 weeks in advance of all shipments of empty, inert, or "dummy explosive devices. Documentation must accompany each item when shipped or they may be rejected and returned to the point of origin with no additional price or cost to the contract and any costs associated with this rejection borne by the contractor.

The contractor shall:

- (a) Certify the required training for his/her employee(s);
- (b) Provide a letter to the COR/AGR/TM stating that employees who use explosives (or who supervise employees who work with explosives) are trained and qualified to perform the work;
- (c) Renew the certification annually and whenever operations are significantly changed.

The NRL Safety Branch Head (Code 3540) or the Explosives Safety Officer (Code 3546) may require the contractor to stop performance with no additional price or cost to the contract when either determines contractor operation on any NRL site does not comply with an applicable explosive safety law, regulation or directive, and is a threat to the health and welfare of NRL employees.

11. HAZARDOUS MATERIAL CONTROL AND MANAGEMENT

See the contract clause entitled Hazardous Material Identification and Material Safety Data (FAR 52.223-3) for definition of "hazardous material."

For purpose of complying with the contract clause entitled Hazardous Material Identification and Material Safety Data, any hazardous material used or stored by the contractor at any NRL site shall be considered to be delivered under this contract.

After contract award, MSDSs required by the contract clause shall be submitted to the COR or AGR identified in the contract and NRL Safety Branch, Code 3540 (for the NRL-DC site) and to the NRL-SSC, Code 7030.5 (for the NRL site at Stennis Space Center , MS).

The contractor shall comply with NRLINST 4110.1 (as revised), *NRL Hazardous Material Control and Management (HMC&M) Program*, when using or storing hazardous material at any NRL site. Copies of the instruction may be obtained from NRL Safety Branch, Code 3540, Telephone (202) 767-2232 (for the NRL-DC site) and from NRL-SSC, Code 7030.5, Telephone (228) 688-5561 (for the NRL site at Stennis Space Center , MS).

If hazardous material is to be used or stored by the contractor at any NRL site, the contractor shall provide the following information to the COR or AGR at the time the material is ordered or no later than the time the materials are delivered to any NRL site.

- a). A copy of the Material Safety Data Sheet (MSDS) for each hazardous material (HM) used or stored at NRL. (In addition, contractors must ensure that MSDSs are readily available either in hardcopy form in a central location or by the use of electronic devices (i.e., CD-ROMs or Internet) in the workplace.
- b). The precautionary measures implemented to protect personnel using HM.
- c). The labeling system used by the contractor. (The labeling system must meet the requirements of 29 CFR 1910.1200 and 29 CFR 1910.1450).
- d). The procedures used to evaluate personnel exposure.
- e). An inventory (initial and updated annually, thereafter) of all HM used or stored at NRL. The inventory must include the location (building and room) of storage, quantity at NRL, chemical name, manufacturer, MSDS unique identifier, and a point of contact.

12. EXPOSURE TO HAZARDOUS MATERIALS

In accordance with 29 CFR 1910.1200, Hazard Communication, the Contractor is hereby advised that a wide variety of hazardous materials are used and stored at NRL and that some contractor personnel may be exposed to these materials under normal working conditions or foreseeable emergencies. MSDSs for materials currently used at NRL are available at the NRL Safety office. The NRL Safety Branch (Code 3540) may also be contacted for information on the hazardous material labeling system used in the NRL workplace and for required protective measures to be observed by the contractor personnel when working with or near such materials. It is the responsibility of the contractor to provide information and training to their employees as required in 29 CFR 1910.1200(h) (Ref: NRLINST 4110.1 {as revised}) NRL Hazardous Material Control and Management (HMC&M) Program.

13. ON-SITE "HOT-WORK"

Whenever performing "hot work", such as soldering, welding or cutting with open flame torches, on any NRL, Washington, D. C. site, prior to beginning work, the contractor is required to coordinate with:

- (1) Resident Officer-in-Charge of Construction (ROICC-9040)
Phone (202) 767-1037
- (2) Naval District Washington Fire Department
Fire Protection Inspector, (202) 685-0209/0211.

Whenever performing "hot work", such as soldering, welding or cutting with open flame torches on the NRL-SSC site, prior to beginning work, the contractor is required to coordinate with:

- (1) National Space and Aeronautics Administration
John C. Stennis Space Center Fire Department
Phone (228) 688-3639

.....

15. WEIGHT HANDLING EQUIPMENT AND OPERATION

Contractor crane and forklift operations shall comply with NAVFAC P-307 (as revised), Management of Weight Handling Equipment and OSHA requirements.

16. BIOLOGICAL SAFETY

Contractors who perform biological research work on site at NRL-DC and /or NRL-CBD shall comply with NRLINST 5100.1 (as revised) *Biological Safety*. These contractors shall provide the COR or AGR and the NRL Biosafety

Committee with proof of compliance with OPNAVINST 5100.23 (as revised), 29 CFR 1910.1030, Bloodborne Pathogens and NRL Bloodborne Pathogen Exposure Control Plan and documentation for laboratory specific biological training required under 29 CFR 1910.1450, Occupational Exposure To Hazardous Chemicals In Laboratories

<http://heron.nrl.navy.mil/contracts/15onsite.htm>

ATTACHMENT F - PANDEMIC FLU



Influenza and Safety & Occupational Health



During an influenza pandemic, transmission of the pandemic virus can be anticipated in the workplace, not only in healthcare settings, but also between co-workers in general work settings. This guidance highlights the important occupational safety and health support that can be provided by safety managers and all other occupational health professionals. It also provides recommended training that should be provided to all employees and supervisors. Every individual can make a positive difference and reduce potential exposures to influenza in the workplace.

Safety and Occupational Health Professionals

- Become familiar with the “Department of Defense Implementation Plan for Pandemic Influenza” with an emphasis on personnel health and safety. Please refer to: http://fhp.osd.mil/aiWatchboard/pdf/DoD_PI_Implementation_Plan_August_2006_Public_Release.pdf . Also, become familiar with local plans.
- Become familiar with OPNAVINST 3500.41, “Pandemic Influenza Planning” (<http://doni.daps.dla.mil/Directives/03000%20Naval%20Operations%20and%20Readiness/03-500%20Training%20and%20Readiness%20Services/3500.41.pdf>), upper Echelon guidance and the appropriate geographic combatant commander’s instructions.
- Categorize workplaces into very high, high, medium and lower risk with assistance from industrial hygiene and other occupational health professionals as needed. Refer to the Occupational Safety and Health Administration (OSHA) Guidance on Preparing Workplaces for an Influenza Pandemic at: http://www.osha.gov/Publications/influenza_pandemic.html#lower_exp_ensure_risk
- In concert with line management, apply the hierarchy of control measures. Refer to <http://www.osha.gov/Publications/employers-protect-workers-flu-factsheet.html> or OSHA Fact Sheet, (2009, May). [47 KB [PDF](#)]; and the American Society of Heating, Refrigeration and Air Conditioning Engineers, “Airborne Infectious Diseases” available at: <http://www.ashrae.org/aboutus/page/335>

Worker Safety Training (All Navy Military and Civilians):

ACTION: Please read the one page OSHA Quick Card “How to Protect Yourself in the Workplace during a Pandemic.”

WHEN: As soon as possible, preferably before a pandemic starts, but it is never too late to learn prevention tips.

WHERE: Go to: <http://www.osha.gov/Publications/protect-yourself-pandemic.html> or OSHA Quick Card, 3365-05N-09. [27 KB [PDF](#)]

References

Federal Government Websites:

Primary Government Website:
<http://www.flu.gov/> and
<http://www.flu.gov/professional/federal/index.html>

OSHA (Workplace Guidance):
<http://www.osha.gov/dsg/topics/pandemicflu/index.html>

OPM (Civilian Human Resource Guidance):
http://www.opm.gov/pandemic/OPM-Pandemic_Allissuances.pdf

Homeland Security (National Strategy for Pandemic Flu):
http://www.dhs.gov/files/programs/editorial_0760.shtm

- Network and provide assistance to other players (e.g., human resources and emergency management).
- Ensure all workers are trained.
- Refer to the worker training information from OSHA from the weblinks below.
- Ensure all supervisors at all levels are trained. Refer to the Supervisor/Management training information below.
- Provide consultation regarding ventilation or other engineering controls, administrative controls, work practices and personal protective equipment, including respirators.
- Assist with risk assessments and risk communication for the influenza virus to ensure that risks from influenza are not grossly over or underestimated and that workers are provided accurate information to reduce the risk.
- Network and provide safety and occupational health assistance to other major players (e.g., other medical professionals, human resources, emergency management personnel).

Supervisors/Management Safety Training (All Navy Military and Civilian Supervisors from Top Leadership to Deck Plate):

ACTION: Please read the one page OSHA Fact Sheet “What Employers Can Do to Protect Workers from Pandemic Flu.”

WHEN: As soon as possible, preferably before a pandemic starts, but it is never too late to learn workplace prevention tips.

WHERE: Go to: <http://www.osha.gov/Publications/employers-protect-workers-flu-factsheet.html> or OSHA Fact Sheet, (2009, May). [47 KB [PDF](#)]

CDC Pandemic Influenza Information for Health Professionals: <http://www.cdc.gov/flu/pandemic/healthprofessional.htm>

CDC Recommendations for Respiratory Protection: <http://www.cdc.gov/h1n1flu/masks.htm>

Military Websites:

Department of Defense Implementation Plan for Pandemic Influenza: http://fhp.osd.mil/aiWatchboard/pdf/DoD_PI_Implementation_Plan_August_2006_Public_Release.pdf

Navy and Marine Corps Public Health Center:
H1N1 Influenza: http://www-nmcphe.med.navy.mil/Diseases_Conditions/swine_flu.aspx

Pandemic Influenza: http://www-nehc.med.navy.mil/diseases_conditions/influenza.aspx

IH Field Operations Manual, Respiratory Protection: http://www.nmcphe.med.navy.mil/downloads/ih/ihfom/IHFOM_CH9.pdf

Navy Pocket Guide for Health Care Providers – Pandemic Influenza Protection Procedures: <http://www-nehc.med.navy.mil/downloads/IH/NMCPHC%20PANDEMIC%20INFLUENZA%20Pocket%20Guide%2022May07.pdf>

Naval Safety Center: <http://www.safetycenter.navy.mil/osh/index.asp>

Further Information: The safety roles and responsibilities listed in OPNAVINST 5100.23G, Chapter 26 can also apply to Pandemic Flu. <http://safetycenter.navy.mil/instructions/osh/510023/index.asp>

Thank you for improving your workplace safety and health!

ATTACHMENT G
TABLE OF FY08 AND FY09 LOST TIME CASES AND LOST TIME CASE RATE FOR NAVY AND OTHER GOVERNMENT AGENCIES RANKED FROM LOWEST (BEST) TO HIGHEST (WORST)

Dept. or Agency	Lost Time Cases		Lost Time Case Rate	
	FY 08 ¹	FY 09 ²	FY 08 ¹	FY 09 ²
National Aeronautics & Space Admin.	34	32	0.18	0.17
Environmental Protection Agency	77	53	0.43	0.29
Dept of Housing and Urban Development	63	39	0.66	0.41
Dept. of State	206	191	0.58	0.52
Dept. of Education	33	26	0.79	0.63
Dept. of Energy	109	103	0.74	0.67
General Services Admin.	91	83	0.76	0.69
Dept. of Health & Human Services	483	472	0.78	0.73
Dept. of Treasury	839	786	0.74	0.73
Emergency Preparedness & Response (FEMA)	148	131	0.90	0.78
Social Security Admin.	498	523	0.81	0.82
Dept. of Labor	121	137	0.74	0.85
Dept. of Transportation	655	545	1.20	0.98
Navy (without Marine Corps)	2,029	2,130	1.27	1.30
Dept. of Commerce	216	768	0.52	1.35
Dept. of the Navy (Incl. Marine Corps)	2,551	2,633	1.44	1.44
Dept. of Defense	10,309	10,359	1.52	1.48
Bureau of Immigration & Customs Enforcement	523	290	3.00	1.48
Dept. of the Air Force	2,285	2,313	1.47	1.49
Defense Logistics Agency	370	347	1.72	1.52
Dept. of the Army (Incl. Corps of Engineers)	4,114	4,142	1.64	1.56
Federal Government (Includes Executive, Legislative, Judicial Branches & Postal Service)	47,317	45,277	1.74	1.64
Dept. of Agriculture	1,818	1,705	1.88	1.85
Dept. of Veterans Affairs	4,914	5,001	1.81	1.71
Defense Commissary Agency	383	331	2.37	2.02
Postal Service (Excludes Postal Rate Commission)	16,428	14,921	2.20	2.08
Dept. of Justice	2,567	2,591	2.38	2.35
U.S. Coast Guard	216	191	2.78	2.37
Dept. Homeland Security	5,398	4,580	3.10	2.48
Marine Corps	522	503	3.14	2.71
Transportation Security Admin.	2,072	1,701	3.37	2.80
Bureau of Customs and Border Protection	2,212	2,097	4.38	3.70

1. Reference: U.S. Department of Labor, Occupational Safety and Health Administration, *Federal Injury and Illness Statistics FY 08(Final)*.

http://www.osha.gov/dep/fap/statistics/fedprgms_stats08_final.html

2. Reference: U.S. Department of Labor, Occupational Safety and Health Administration, *Federal Injury and Illness Statistics For Fiscal Year 2009, (End of Year Cumulative Totals)*.

http://osha.gov/dep/fap/statistics/fedprgms_stats09_final.html

Note:

The Lost Time Case Rate (LTCR) is calculated by dividing the number of lost time cases by the number of employees. The resulting number is then multiplied by 100, for a rate per 100 employees.

ATTACHMENT H SUMMARY OF NAVY SAFETY TRAINING

Course	Course ID	Retrain Period (Mos)	Course Length (Hrs)	Personnel Completed Training	Total Man Hrs Trained	Available
Navy Knowledge Online (NKO) ¹						
Bird Aircraft Strike Hazard	A-4A-0028-1.0	0	0	323	205	NKO (E-Learning)
Hazardous Material/ Explosives Driver	CNATT-HMED-010	0	8	447	1379	NKO (E-Learning)
Laser Safety Fundamentals	CNATT-LSF-010	0	5	233	494	NKO (E-Learning)
How To Perform Danger Tag-Out Procedures	CNET11442	0	1	1807	765	NKO (E-Learning)
EPA Refrigerant Technician Course	CNET11913	0	15	340	2401	NKO (E-Learning)
NCC CRANE RIGGING AND CAT 3 CRANE SAFETY	CNET1314	0	40	10	400	NKO (E-Learning)
NCC GENERAL CRANE SAFETY REFRESHER	CNET1305	12	8	8	64	NKO (E-Learning)
NCC RIGGING GEAR INSPECTION	CNET1315	0	8	14	112	NKO (E-Learning)
ORM All Navy Essentials For Leaders Course	CNET11969	0	1	18898	10202	NKO (E-Learning)
ORM All Navy Executive Overview Course	CNET11973	0	1	2442	649	NKO (E-Learning)
ORM All Navy Fundamentals	CNET11977	0	1	33375	14919	NKO (E-Learning)
ORM Aviation Fundamentals Course	CNET1198	0	1	11647	5688	NKO (E-Learning)
ORM Aviation Executive Overview Course	CNET11985	0	1	907	146	NKO (E-Learning)
ORM Aviation Essentials For Leaders Course	CNET11989	0	1	7545	3846	NKO (E-Learning)
ORM Aviation Applications And Integration Course	CNET11993	0	1	2056	1075	NKO (E-Learning)
ORM All Navy Application And Integration Course	CNET11997	0	1	5870	2549	NKO (E-Learning)
Submarine HAZMAT Inv and Mgmt Sys (SHIMS)	CNET12723	0	1	99	76	NKO (E-Learning)
Firefighter Injury Prevention	CNIC-FSIPP-003	0	1	1587	1720	NKO (E-Learning)
Driving For Life	CPD-DFL-01	0	5	38884	37672	NKO (E-Learning)
Handling And Disposition Of Batteries	CSFE-HDB-1	0	1	237	142	NKO (E-Learning)
Overview Of Lead-Based Products	CSFE-OLBP-001	0	2	196	70	NKO (E-Learning)
PCB Management	CSFE-PCBM-001	0	2	567	105	NKO (E-Learning)
Cultural Resources Training For PWO's and ROICCs	CSFE_CRTPR_1	0	2	47	40	NKO (E-Learning)
Overview Of Asbestos Management	ES-OAM-001	0	2	219	53	NKO (E-Learning)
Overview Of Radon	ES-OR-001	0	2	166	25	NKO (E-Learning)
HAZMAT Awareness	HMA-NAVAIR-1.01	0	9	2379	37672	NKO (E-Learning)
Marine Species Awareness Training	MSAT-2.0	0	1	176	244	NKO (E-Learning)
General Ergonomics Awareness	NFEC-A-M1-GEA-1.0	0	1	413	176	NKO (E-Learning)
Health Aspects Of Marine Sanitation Devices	NMETC-HAMSD-1.0	0	2	1240	482	NKO (E-Learning)
VPP – DoD Safety And Occupational	NSC-SAF-	0	1	632	709	NKO (E-

Course	Course ID	Retrain Period (Mos)	Course Length (Hrs)	Personnel Completed Training	Total Man Hrs Trained	Available
Health Program	0010-V1					Learning)
VPP - Overview Of The Voluntary Protection Programs	NSC-SAF-0020-V1	0	1	383	269	NKO (E-Learning)
VPP - The Voluntary Protection Programs 101	NSC-SAF-0030-V1	0	1	288	376	NKO (E-Learning)
VPP - Contractor Safety	NSC-SAF-0040-V1	0	1	317	209	NKO (E-Learning)
VPP - Safety And Health Program Evaluation	NSC-SAF-0050-V1	0	1	274	450	NKO (E-Learning)
VPP - The Voluntary Protection Pgms For Industrial Hygiene/B	NSC-SAF-0060-V1	0	1	202	167	NKO (E-Learning)
VPP - The Occ Sfty And Health Admin (OSHA) Recordkeeping	NSC-SAF-0070-V1	0	1	234	235	NKO (E-Learning)
VPP - Workplace Safety	NSC-SAF-0080-V1	0	1	1842	1656	NKO (E-Learning)
VPP - Mishap Investigations	NSC-SAF-0090-V1	0	1	1284	937	NKO (E-Learning)
VPP - Job Safety Analysis (JSA)	NSC-SAF-0100-V1	0	1	1230	618	NKO (E-Learning)
VPP - History And Trend Analysis	NSC-SAF-0110-V1	0	1	157	101	NKO (E-Learning)
VPP - Safety And Health Training	NSC-SAF-0120-V1	0	1	1213	658	NKO (E-Learning)
VPP - Sports Safety	NSC-SAF-0130-V1	0	1	1489	888	NKO (E-Learning)
VPP - How To Form And Manage A Safety Committee	NSC-SAF-0140-V1	0	1	172	108	NKO (E-Learning)
Joint Fleet Quality Assurance Officer / Supervisor Course	SCO12_9613D 9F7	0	0	63	146	NKO (E-Learning)
E3 And Spectrum Supportability For Acquisition Professionals	SPAWAR-E3SSAP-1.0	0	1	82	136	NKO (E-Learning)
SubTotal				141,994	131,034	
Enterprise Safety Applications Management System (ESAMS)² - Traffic Safety						
AAA Bus Driver Safety Training (30 + passengers)	1247	0	8	3	24	Classroom
AAA 15-Passenger Van Safety Training	251	0	4	4	16	Classroom
AAA Driving Improvement Program (DIP)	209	12	8	7753	62024	Classroom
AAA Driving Improvement Program (DIP) for Instructors	312	36	40	49	1960	Navy Safety Center
Accident Avoidance Course	2651	48	2	748	1496	WEB (Non-ESAMS)
ATV (All Terrain Vehicle Safety Training)	1092	0	4	210	840	Classroom
ATV Safety Institute (ATV) Training (For Instructors)	1376	24	40	1	40	Motorcycle Safety Foundation
AVOC Airfield Vehicle Operator Init/Recert	1164	12	4	366	1464	Navy Safety Center
Driver Awareness Safety Training (DAST)	2037	12	4	1288	5152	Classroom
Emergency Vehicle Instructor (EVO) (Initial and Recert)	178	36	40	363	14520	Navy Safety Center
Emergency Vehicle Master Instructor (EVO) (Initial and Recert)	2300	0	40	8	320	Navy Safety Center
Emergency Vehicle Operators Course (EVO) Basic Initial/Refresher	113	36	40	5690	227600	Classroom
Intermediate Traffic Safety Training	2653	15	2	25	50	Classroom
Local Hazards Training	2652	0	1	305	305	Classroom
Low Speed Vehicle Training	2302	0	1	1593	1593	ESAMS Web
Motorcycle Safety Foundation (MSF) Basic Rider Course (BRC)	244	36	16	6614	105824	Classroom
Motorcycle Safety Foundation (MSF) Basic Rider Course Rider Coach	1112	24	20	19	380	Navy Safety Center

Course	Course ID	Retrain Period (Mos)	Course Length (Hrs)	Personnel Completed Training	Total Man Hrs Trained	Available
Trainer Prep						
Motorcycle Safety Foundation (MSF) Dirt Bike School (DBS)	1255	0	16	57	912	Classroom
Motorcycle Safety Foundation (MSF) Experienced Rider Courses (ERC)	1254	36	8	5376	43008	Classroom
Motorcycle Safety Foundation (MSF) Instructor Trainer (Master)	2298	0	10	3	30	Navy Safety Center
Motorcycle Safety Foundation (MSF) Military Sportbike Rider Coach Trainer	2382	0	24	1	24	Navy Safety Center
Motorcycle Safety Foundation (MSF) Military Sportbike Rider Course (MSRC)	2359	36	8	4533	36264	Classroom
Motorcycle Safety Stand Down	2290	0	2	239	478	Classroom
Motorcycle Simulator Training (Honda Smart Trainer)	2791	0	2	12	24	Classroom
National Safety Council Defensive Driving Course	2827	0	8	85	680	Classroom
Pre-Trip Safety Checklist (OJT by Supervisor)	1162	0	0.5	1709	854.5	ESAMS OJT
Save a Life Tour	2355	0	4	95	380	Classroom
Traffic Safety Briefs Prior to Holidays, Liberty, or Extended Weekends	1176	3	6	18795	112770	ESAMS OJT
Traffic Safety Committee	2150	0	2	36	72	Classroom
Traffic Safety Entry Point Training (Military under 26 years of age)	216	0	4	2	8	Classroom
Traffic Safety Training Indoc	1742	0	1	1031	1031	Classroom
Traffic Safety, Train the Trainer (OJT By Supervisor)	1163	0	1	347	347	ESAMS OJT
Traffic Safety (OJT By Supervisor)	1739	0	1	914	0	ESAMS OJT
SubTotal				60,591	632,075	
ESAMS² – Safety and Occupational Health (SOH)						
40 Hour Contractor Safety/Hazard Identification	74	0	40	97	3880	Classroom
Advanced Accident Investigation	65	0	40	14	560	Classroom
Advanced ESAMS Training	2477	0	16	114	1824	Classroom
Advanced Indoor Environmental Quality	2771	0	16	1	16	Classroom
Aerial Lift/Powered Work Platform Operational Certification	1290	36	0.5	47	23.5	Classroom
Aerial Lift/Powered Work Platform Operational Classroom Training	1288	0	2	98	196	Classroom
Aerial Lift/Powered Work Platform Operational Safety Practical	1289	0	1	81	81	Classroom
All Hands Annual Safety Training	1393	12	4	143	572	Classroom
Aloft Procedures at NAS JRB Ft. Worth	2745	0	1	5	5	Classroom
American Red Cross CPR/AED for Lifeguards	2792	12	8	43	344	Classroom
Annual Safety Training (for Industrial Personnel)	206	12	4	40	160	Classroom
Anthrax Exposure and Awareness	1071	0	1	4046	4046	ESAMS Web
Arc Flash Training	2304	12	1	14	14	Classroom
Asbestos and Man-made Vitreous Fibers (MMVF) Hazard Awareness (CNRSW)	1238	12	1	365	365	ESAMS Web
Asbestos Awareness	1725	0	1	3825	3825	ESAMS OJT
Asbestos Awareness - OSHA Class IV Asbestos Training	14	12	2	13439	26878	ESAMS Web
Asbestos Awareness Required Reading (Specific to WPNSTACHAS)	2148	0	1	178	178	ESAMS Web
Asbestos Project Designer [304]	35	12	40	4	160	Navy Safety

Course	Course ID	Retrain Period (Mos)	Course Length (Hrs)	Personnel Completed Training	Total Man Hrs Trained	Available
						Center
Asbestos Project Monitor Initial	308	12	16	4	64	Navy Safety Center
Asbestos Project Monitor Refresher	309	12	8	1	8	Navy Safety Center
Asbestos Worker Initial	2082	12	32	6	192	Classroom
Asbestos Worker Refresher	2083	12	8	58	464	Classroom
Aviation Confined Space Awareness	2191	12	1.5	170	255	Classroom
Back Injury Prevention Training	40	0	1	39562	39562	ESAMS Web
Base Indoctrination for Safety	2544	0	2	186	372	Classroom
Basic HAZCOM Training (One Time Only)	1169	0	3	21899	65697	ESAMS Web
Basic Operational Risk Management (ORM)	228	0	1	16837	16837	ESAMS Web
Battery Safety for COMNAVAIRFOR 4790.2 (Quarterly)	1103	3	0.5	9170	4585	ESAMS OJT
Beryllium Awareness Training (OJT by supervisor)	384	12	1	929	929	ESAMS OJT
Bloodborne Pathogen Instructor Training	400	0	0.5	61	30.5	Classroom
Bloodborne Pathogen Training	98	12	1	19175	19175	ESAMS Web
Bloodborne Pathogens Exposure Control Plan (Site Explanation)	2395	12	1	7404	7404	ESAMS OJT
C-9B Pilot Electrical System Safety Training	1100	0	2	14	28	ESAMS Web
Cadmium Awareness Training (OJT by Supervisor)	385	12	1	344	344	ESAMS OJT
Carbon Monoxide Awareness Training (OJT given by the Supervisor)	405	12	1	10632	10632	ESAMS OJT
CAT 3 WHE Crane Operator Initial	2199	24	8	32	256	Classroom
CAT 3 WHE Crane Operator Refresher	2205	24	10	116	1160	Classroom
CBRNE Respirator User Training	1243	12	1	5795	5795	Classroom
Chromate Awareness Training (OJT by Supervisor)	397	12	1	2641	2641	ESAMS OJT
Cold Weather Injuries	2156	0	1	771	771	Classroom
Collateral Duty Safety Officer (16 Hours) Training	1101	0	16	40	640	Classroom
Collateral Duty Safety Officer Meetings	2069	0	1	321	321	Classroom
Command Safety Introduction	2620	0	1	54	54	Classroom
Competent Person/Scaffold Builder/Scaffold Inspector	1828	0	8	20	160	Classroom
Compressed Gas Cylinders (May receive instruction from Supervisor)	92	12	1	3678	3678	ESAMS OJT
Confined Space / Entry Supervisor, Attendant, and Entrant	11	12	1	536	536	Classroom
Confined Space / Entry Supervisor, Attendant, and Entrant (one time only)	1651	0	2	18	36	Classroom
Confined Space Awareness Training	2570	12	1	235	235	Classroom
Confined Space Awareness Training (OJT by Supervisor)	1273	12	1	2200	2200	ESAMS OJT
Confined Space Entry/Emergency and Rescue	114	12	8	88	704	Classroom
Confined Space Rescue and Emergency Training	59	12	4	3248	12992	Classroom
Confined Space Rescue Drill Practical Exercise	1205	12	2	2796	5592	Classroom
Confined Space Safety Training (SWRMC)	2656	12	1	17	272	ESAMS Web
Confined Space Shipyard, competent Person and Industrial	2010	12	8	1	8	Classroom
Confined Space Training for Qualified Person Initial and Annual Refresher	57	12	8	653	5224	Classroom
Confined Space Worker Training (Entrant, Attendant, Supervisor)(OJT by	404	12	1	6537	6537	ESAMS OJT

Course	Course ID	Retrain Period (Mos)	Course Length (Hrs)	Personnel Completed Training	Total Man Hrs Trained	Available
Supervisor)						
Construction Quality Management - QA	375	0	8	6	48	Classroom
Construction Safety QA/Construction Safety - There is No Substitute	1297	0	4	529	2116	Classroom
Contract Safety Training (EM 385-1-1 On-line Course)	2305	0	20	6	120	Classroom
Contractor Safety/ U.S. Army COE/EM-385-1-1 [345]	76	0	20	20	240	Classroom
CPR - Automated External Defibrillator (AED) - (Red Cross 1Yr)	1236	12	8	695	5560	Classroom
CPR - Automated External Defibrillator (AED)/(Am. Heart Assoc. Heart Saver-2Yr)	1011	24	3	2769	8307	Classroom
CPR American Heart Association (BLS for Healthcare Providers)	2059	24	8	1458	11664	Classroom
CPR American Heart Association (Child and Infant)	1059	24	4	235	940	Classroom
CPR American Heart Association (Heart Saver- 2 Yr Requal)	227	24	4	2624	10496	Classroom
CPR American Red Cross (Adult)	103	12	4	2229	8916	Classroom
CPR American Red Cross (Child and Infant)	210	12	4	1575	6300	Classroom
CPR and First Aid for Security Personnel (Initial and Refresher)	1788	24	16	605	9680	Classroom
CPR For the Professional Rescuer (American Red Cross)	1762	12	8	369	2952	Classroom
CPR Instructor Training (American Heart Association)	1098	24	4	146	584	Classroom
CPR Instructor Training (American Red Cross)	226	24	10	87	870	Classroom
CPR MTN Resuscitative Program Adult Child and Infant with AED	1175	24	4	563	2252	Classroom
CPR National Safety Council	2016	24	4	49	196	Classroom
Crane Safety	93	0	32	64	2048	Navy Safety Center
Depleted Uranium (DU) General Awareness Training	1796	0	1	31	31	Classroom
DOD VPP CX - Hazard Analysis of Routine Activities	2357	0	1	1313	1313	ESAMS Web
DOD VPP CX 101	2281	0	1	3613	3613	ESAMS Web
Electrical - High Voltage	13	0	8	28	224	Classroom
Electrical Safety - Low Voltage	1766	0	1	35	35	Classroom
Electrical Safety Work Practices	1926	0	2	188	376	Classroom
Electrical Safety Work Practices for Workers (OJT by Supervisor)	67	12	1	5450	5450	ESAMS OJT
Electrostatic Discharge (ESD) Safety Training	1928	0	2	66	132	Classroom
Electrostatic Discharge (ESD) Safety Training	1030	12	1	2746	2746	ESAMS Web
Emergency Action Plan (EAP) Walk Through	2172	3	1	995	995	Classroom
Employee Reports of Unsafe/Unhealthful Working Conditions (OJT By Supervisor)	1726	0	1	1833	1833	ESAMS OJT
Equipment Specific Operator Training	2589	0	1	15	15	Classroom
Ergonomic Awareness (OJT By Supervisor)	1727	12	1	2180	2180	ESAMS OJT
Ergonomic Awareness Training	371	0	1	25953	25953	ESAMS Web
Ergonomic Awareness Training	1938	12	1	140	140	ESAMS Web
Ergonomic Baseline (conducted by the Supervisor)	373	0	1	23836	23836	ESAMS OJT
Ergonomics Awareness Training for Supervisors	372	0	1	10381	10381	ESAMS Web
Excavation and Trenching Basics (Instruction may be provided by	235	12	1	1273	1273	ESAMS OJT

Course	Course ID	Retrain Period (Mos)	Course Length (Hrs)	Personnel Completed Training	Total Man Hrs Trained	Available
Supervisor)						
Extension Ladder	2562	12	1	1	1	ESAMS OJT
Fall Protection - Annual (OJT by Supervisor)	1073	12	1	13809	13809	ESAMS OJT
Fall Protection (Classroom)(SWRMC)	2763	0	2	143	286	Classroom
Fall Protection and Prevention Safety Awareness Training for Architects and Engineers	1900	0	4	73	292	Classroom
Fall Protection for Workers (Authorized User)	1257	0	4	421	1684	Classroom
Fall Protection Qualified Person	2469	0	40	11	440	Classroom
Fire Prevention and Portable Fire Extinguisher Training and Education	1024	12	0.5	27438	13719	ESAMS Web
Fire Prevention, Protection, Emergency Evacuation and Safety Procedures	1281	12	1	275	275	Classroom
Fire Retardant and Alarm Training	2907	12	1	15	15	Classroom
Fire Safety In The Workplace	1063	0	1	329	329	Classroom
First Aid and Survival Training	1107	12	0.5	342	171	Classroom
First Aid Training (1 Year Retrain)	2364	12	24	696	16704	Classroom
First Aid Training (3 Year Retrain)	240	36	4	2064	8256	Classroom
First Aid/CPR/AED Red Cross Instructor Training	390	24	16	92	1472	Classroom
Food Handler Training	1022	12	2	1644	3288	Classroom
Forklift Driving Procedures	2569	12	1	2	2	Classroom
General Safety Training for COMNAVAIRFOR 4790.2	1178	12	4	6233	24932	ESAMS Web
Generator Testing	1141	12	1	7	7	ESAMS OJT
Ground Safety For Marines (GSM)	2588	0	80	1	80	Classroom
Hand Safety (OJT by Supervisor)	2014	0	1	636	636	ESAMS OJT
Hazard Recognition and Risk Analysis for Supervisors	2906	0	4	53	212	Classroom
Hazard Recognition Training	2650	1	2	2812	1406	ESAMS OJT
Hazardous Materials	2358	0	32	632	20224	Classroom
Hazardous Materials Control/Safety	69	0	2	80	160	Classroom
Hazardous Materials Handling Cert. for DOT 49 CFR Trans. Reg.	195	0	40	13	520	Classroom
Hazardous Waste Handling [322]	55	12	40	47	1880	Classroom
Hazards of Electromagnetic Radiation to Ordnance (HERO)	1369	0	1	109	109	Classroom
HAZCOM Annual Refresher	1387	12	0.5	200	100	Classroom
HAZCOM Training for Supervisors (Initial and Annual Refresher)	1058	12	1	6335	6335	ESAMS Web
HAZCOM Training Job/Chemical Specific (OJT by Supervisor)	100	12	1	52208	52208	ESAMS OJT
HAZWOPER / ERT - First Responder Operations Level	118	12	8	54	432	Classroom
HAZWOPER for Uncontrolled Hazardous Waste Site Workers	1253	12	40	32	1280	Classroom
Hearing Conservation Training	110	12	1	49993	49993	ESAMS Web
Heartsaver First Aid (American Heart Association - 2 year)	2409	24	3.5	214	749	Classroom
Heat Stress - Heat Illness (OJT by Supervisor)	58	12	1	8319	8319	ESAMS OJT
Hot Weather Injuries	2157	0	1	127	127	Classroom
Housekeeping (OJT By Supervisor)	1729	0	1	787	787	ESAMS OJT
Hurricane Awareness	2102	0	4	6	24	Classroom
Hurricane Response Pre-Deployment Safety Briefing	1794	0	1	114	114	ESAMS Web
Indoor Air Quality Awareness	1072	0	1	7	7	ESAMS Web
Industrial Hygiene Survey Training	196	0	1	11	11	Classroom
Introduction to the OSHA Voluntary Protection Program (VPP)	2297	0	1	1002	1002	ESAMS Web
Ionizing Radiation Program (Refresher Training)	2179	12	4	9	36	Classroom

Course	Course ID	Retrain Period (Mos)	Course Length (Hrs)	Personnel Completed Training	Total Man Hrs Trained	Available
Isocyanate Training (OJT by Supervisor)	1106	12	0.5	1844	922	ESAMS OJT
Job Hazard Analysis Training	326	0	0.5	984	492	ESAMS Web
Ladder Safety (OJT By Supervisor)	1730	0	1	3345	3345	ESAMS OJT
Laser Safety Awareness (OJT by Supervisor)	1074	12	1	6401	6401	ESAMS OJT
Laser Safety Refresher Training	2293	12	1	129	129	ESAMS Web
Laser System Safety Officer (ALSO Administrative)	1053	0	16	15	240	Navy Safety Center
Lead Awareness - Basic	1260	0	0.5	150	75	Classroom
Lead Awareness - Non-Lead Workers (Possible Contact)	322	12	1	13843	13843	ESAMS Web
Lead Awareness (OJT By Supervisor)	1731	0	1	1285	1285	ESAMS OJT
Lead Inspector/Risk Assessor Training	183	12	40	4	160	Classroom
Lead Supervisor	85	12	32	120	3840	Classroom
Lead Worker	84	12	24	90	2160	Classroom
Lifeguard Training and First Aid	1193	36	4	109	436	Classroom
Lockout/Tagout Awareness	1213	0	1	461	461	Classroom
Lockout/Tagout for Affected Employees (OJT by Supervisor)	22	0	1	13806	13806	ESAMS OJT
Lockout/Tagout For Authorized Employees - Annually	1097	12	8	883	7064	Classroom
Lockout/Tagout For Authorized Employees (3 YR) CNRH	1832	36	1	273	273	Classroom
Lockout/Tagout For Authorized Employees (CNRSW)	1603	0	1	612	612	ESAMS Web
Lockout/Tagout For Authorized Employees (OJT by Supervisor) (CNRF)	62	12	8	2331	18648	ESAMS OJT
Lockout/Tagout For Authorized Employees (One Time Only)	1240	0	1	246	246	Classroom
Machine Guarding Safety and Operation	1286	12	1	5	5	Classroom
Management Safety Training	1368	0	1.5	132	198	Classroom
Manager / Supervisor Safety Training	2270	0	1	27	27	Classroom
Man-Made Vitreous Fibers (MMVF)	1043	12	16	24	384	Classroom
Man-Made Vitreous Fibers (OJT by Supervisor)	398	12	1	4269	4269	ESAMS OJT
MCBCL Supervisor Safety Training (SST) - (Initial and Refresher)	2540	12	4	8	32	Classroom
Mercury Awareness Training (OJT by Supervisor)	383	12	0.5	134	67	ESAMS OJT
Methylene Chloride Awareness Training (OJT by Supervisor)	399	12	0.5	3407	1703.5	ESAMS OJT
Military Safety Indoc	1201	0	1	1644	1644	Classroom
Mishap Recordkeeping Seminar	1046	0	8	25	200	Navy Safety Center
Mishap Reduction Required Reading (One-time Only)	1146	0	1	2426	2426	ESAMS Web
Monthly Environmental and Safety Staff Meeting	295	1	1	5	5	Classroom
Monthly Safety Talks - Given	291	1	1	99359	99359	ESAMS OJT
Monthly Safety Talks - Received	292	0	1	555908	555908	Classroom
Motor Vehicle Operator Driving Initial and Refresher (5 Yr)	243	60	1	441	441	Classroom
MSA MMR C.A.R.E. Technician	2113	0	2	14	28	Classroom
Naval Aviation Maintenance Program (NAMP) Indoc	2592	0	3	785	2355	Classroom
Naval Aviation Maintenance Program (NAMP) NAS Whiting Field	1635	0	8	2	16	WEB (Non-ESAMS)
Naval Aviation Maintenance Program (NAMP) Semi Annual Follow-On	2747	6	1	416	416	Classroom
Naval Aviation Maintenance Program (NAMP) Yearly Follow-On Training	2746	12	1	421	421	Classroom
NAVFAC Bloodborne Pathogens (OJT)	2097	0	0.05	1026	51.3	ESAMS OJT

Course	Course ID	Retrain Period (Mos)	Course Length (Hrs)	Personnel Completed Training	Total Man Hrs Trained	Available
By Supervisor)						
NAVFAC Contract Hazard Awareness Training Course (5 days)	329	0	40	483	19320	Classroom
NAVFAC Contract Safety and Health Correspondence Course Part 1	1298	0	16	413	6608	Classroom
NAVFAC Contract Safety and Health Correspondence Course Part 2	1299	0	4	391	1564	Classroom
NAVFAC Equipment Safety (OJT By Supervisor)	2098	0	0.05	45	2.25	ESAMS OJT
NAVFAC Facility Support Contract (FSC) Construction/Alteration/Repair Safety and Health Requirements Course.	2012	0	8	13	104	Classroom
NAVFAC Fire Safety (OJT By Supervisor)	2099	0	0.05	1264	63.2	ESAMS OJT
NAVFAC Mishap Investigation and Reporting (OJT By Supervisor)	2101	0	0.5	1050	525	ESAMS OJT
NAVFAC Operational Risk Management (ORM) Training	1718	0	1	6640	6640	ESAMS Web
NAVFAC SAFETY ORIENTATION FOR TOP MANAGERS	1822	0	1	157	157	ESAMS Web
NAVFAC Safety Orientation Training for Employees (Administrative/Professional)	1293	0	1	3099	3099	ESAMS Web
NAVFAC Safety Orientation Training for Employees (Industrial)	1237	0	2	2071	4142	ESAMS Web
NAVFAC Safety Orientation Training for Supervisors (Administrative/Professional)	1294	0	1	569	569	ESAMS Web
NAVFAC Safety Orientation Training for Supervisors (Industrial)	1295	0	2	457	914	ESAMS Web
NAVFAC Scaffold Safety (OJT By Supervisor)	2100	0	0.5	1329	664.5	ESAMS OJT
NAVOSH for New Employees	1202	0	1	663	663	Classroom
NAVOSH for Safety Advisors	2011	0	8	368	2944	ESAMS Web
NAVOSH Orientation	1356	0	1	6551	6551	ESAMS Web
Navy Fall Protection (Slips, Trips and Falls) Awareness (One Time Only)	1259	0	1	4360	4360	ESAMS Web
Navy Fall Protection Awareness Training for End Users Working at Heights and Supervisors of End Users	2018	0	1	2667	2667	ESAMS Web
NCC CATEGORY 2 and CAB OPERATED CAT 3 CRANE SAFETY	1304	0	16	34	544	Classroom
NCC CATEGORY 3 NON CAB OPERATED CRANE TRAIN THE TRAINER	1309	0	12	14	224	Classroom
NCC CRANE ELECTRICAL INSPECTOR	1308	0	8	2	16	Classroom
NCC CRANE ELECTRICIAN	1300	0	32	2	64	Classroom
NCC CRANE MECHANIC	1301	0	28	3	84	Classroom
NCC GENERAL CRANE SAFETY	1302	12	40	12	480	Classroom
NCC MECHANICAL CRANE INSPECTOR	1312	0	16	2	32	Classroom
NCC MOBILE CRANE MECHANIC	1311	0	12	5	60	Classroom
New Employee Indoctrination Training CNRMA	1370	50	1	237	237	Classroom
New Employee Indoctrination Training CNRNE	1285	0	1	330	330	Classroom
New Employee Indoctrination Training CNRSE	1377	0	1.5	341	511.5	Classroom
New Employee NAVOSH Orientation	1933	0	2	201	402	Classroom
New Employee Safety Orientation Training for Region Hawaii	1341	0	2	886	1772	Classroom
Occupational Reproductive Hazard Awareness	1242	0	1	2073	2073	ESAMS Web

Course	Course ID	Retrain Period (Mos)	Course Length (Hrs)	Personnel Completed Training	Total Man Hrs Trained	Available
New Supervisor OSH	1936	0	2	39	78	Classroom
OFFICE AREA GENERIC JHA	1720	1	1	2	2	ESAMS OJT
Office Safety (OJT By Supervisor)	1732	0	1	2287	2287	ESAMS OJT
Office Safety: Property Inventory and excessing	2399	0	1	1	1	ESAMS OJT
Office/Supply	1129	0	1	7	7	ESAMS OJT
Operational Risk Management ORM (OJT By Supervisor)	1733	0	1	640	640	ESAMS OJT
Orientation For Safety Coordinators (Classroom by Safety Office)	2022	0	8	17	136	Classroom
ORM All Navy Fundamentals	2216	0	1	5	5	Classroom
OSH Policy Council Meeting	1274	0	1	109	109	Classroom
OSHA Compliance and Workplace Safety	2609	0	6	22	132	Classroom
OSHA VPP Challenge	1384	0	1	1237	1237	ESAMS Web
Pediatric CPR and First Aid for Children, Infants, and Adults Version (Medic First- 2 yr requal)	2398	24	6	181	1086	Classroom
Pediatric CPR and First Aid Instructor - NSC	2034	12	8	6	48	Classroom
Permit Required Confined Space Entry	2760	12	1	10	10	Classroom
Polychlorinated Biphenyls (PCBs) (OJT By Supervisor)	1734	0	1	11	11	ESAMS OJT
Portable Hand Tool Safety (OJT by Supervisor)	82	0	1	5473	5473	ESAMS OJT
Portable Power Tool Safety (OJT by Supervisor)	83	0	1	4855	4855	ESAMS OJT
Powder Actuated Tools [331]	38	0	1	23	23	Classroom
Powered Industrial Lift Trucks (332)	271	60	2	23	46	Classroom
Powered Industrial Trucks (Forklift) Class Room Training	2015	36	8	40	320	Classroom
Powered Industrial Trucks (Forklift) Familiarization	1110	36	4	977	3908	Classroom
Powered Industrial Trucks (Forklift) Familiarization (For Explosive Handlers)	1131	36	4	73	584	Classroom
Powered Industrial Trucks (Forklift) Formal Instruction - 29 CFR 1910 178(l)(2)(ii)	1109	36	2	2624	5248	ESAMS Web
Powered Industrial Trucks (Forklift) Formal Instruction (For Explosive Handlers)	1130	36	8	31	248	Classroom
Powered Industrial Trucks (Forklift) Practical Working Exam	1111	36	4	1009	4036	Classroom
Powered Industrial Trucks (Forklift) Practical Working Exam (For Explosive Handlers)	1132	36	2	64	128	Classroom
PPE Job Specific Usage - Conducted by your supervisor (OJT by Supervisor)	239	12	1	48320	48320	ESAMS OJT
PPE Training (General - One Time Only)	1398	0	1	6243	6243	ESAMS Web
Preventing Slips, Trips and Falls	81	0	1	207	207	ESAMS Web
Process Review and Measurement System (PRMS)	1397	0	1	520	520	ESAMS Web
Quarterly First Aid Training (4790.2J)	2354	3	0.5	853	426.5	Classroom
Quarterly Mail Safety, Security and Emergency Plan Brief (OJT by Supervisor)	2074	3	0.5	214	107	ESAMS OJT
Radiation Safety for Emergency Response Personnel	1033	12	0.5	3736	1868	Classroom
Radiation Safety Health Training	1036	6	3	62	186	Classroom
Radiation Safety Officer Course	402	0	80	8	640	Classroom
Radiation Safety Training for Baggage Inspectors	1038	12	1.5	237	355.5	ESAMS Web

Course	Course ID	Retrain Period (Mos)	Course Length (Hrs)	Personnel Completed Training	Total Man Hrs Trained	Available
Radiation Safety Training for Limited Radiation Workers	1039	12	1	170	170	ESAMS OJT
Radiation Safety Training for Organizational Personnel	1034	12	1	119	119	ESAMS OJT
Radiation Safety Training for X-Ray Radiographer (6-hr refresher).	1040	12	6	22	132	Classroom
Radiation Safety Training for XRF Operators	1035	12	2	150	300	ESAMS OJT
Radiofrequency Radiation Safety Training (OJT by Supervisor)	1037	12	1	5185	5185	ESAMS OJT
Reproductive Hazards Job Specific Training - Annual (OJT by Supervisor)	197	12	1	21128	21128	ESAMS OJT
Respirator Fit Test Protection Instructor Training (Train the Trainer)	1272	0	8	199	1592	Classroom
Respirator Protection Manager Training (Assistant or RPPA)	1020	12	2	586	1172	ESAMS Web
Respirator User Training	112	12	1	12462	12462	Classroom
Respiratory Protection Fit Testing	5	12	0.5	12789	6394.5	Classroom
Respiratory Protection Fit Testing SCHEDULING ONLY (Not for recording actual Fit Test)	2479	0	0.5	298	149	Classroom
Roll Call Training	1767	0	1	897	897	ESAMS OJT
Safety Attitude for Supervisors	2471	0	1	21	21	ESAMS Web
Safety Committee Meeting	2070	0	1	852	852	Classroom
Safety HAZMAT Representative	1765	0	4	16	64	Classroom
Safety Management I	2294	0	3	18	54	Classroom
Safety Management II	2295	0	6	4	24	Classroom
Safety Orientation for Administrative Supervisors	2228	0	1	132	132	Classroom
Safety Orientation for Non-Supervisors	1093	0	4	13225	52900	ESAMS Web
Safety Orientation for Supervisor (CJRM)	1647	0	4	16	64	Classroom
Safety Orientation for Supervisors - Annual	1388	12	2.5	31	77.5	Classroom
Safety Orientation for Supervisors (Web or Classroom)	1077	0	4	9173	36692	ESAMS Web
Safety Orientation For Top Managers	1361	0	2	22	44	Classroom
Safety Orientation Training for New Supervisors and Employee Representatives	1233	0	1.5	28	42	Classroom
Safety Stand Down	211	12	4	25230	100920	Classroom
SCBA (Self Contained Breathing Apparatus) Training	121	12	1	5502	5502	Classroom
SCBA (Self Contained Breathing Apparatus) Training (Non-CBRNE Certified)	2797	12	1	7	7	Classroom
Servicing Multi-Piece and Single Rim Wheels [336]	12	0	1	16	32	Classroom
Servicing Single and Multi-piece Rims (OJT By Supervisor)	1736	0	2	14	28	ESAMS OJT
Sight Conservation Training	111	0	1	18453	18453	ESAMS Web
Slips, Trips and Falls (OJT By Supervisor)	1738	0	1	3146	3146	ESAMS OJT
Spill Management Team	1184	0	15	26	390	Classroom
STOP for Supervisors Unit 5	1269	6	1.5	18	27	ESAMS OJT
Supervisor Annual Training - Industrial (CNRSW)	1396	12	1.5	1437	2155.5	ESAMS Web
Supervisor Safety Training - VPP	2370	0	3	36	108	Classroom
Supervisor Safety Training for Industrial Supervisors (Includes HAZCOM Initial)	1365	12	4	623	2492	Classroom
Supervisor Safety Training for Industrial Supervisors Refresher (Includes HAZCOM Refresher)	1366	12	2	286	572	Classroom

Course	Course ID	Retrain Period (Mos)	Course Length (Hrs)	Personnel Completed Training	Total Man Hrs Trained	Available
Supervisor Training - Non-Industrial (CNRSW)	1395	0	1	1123	1123	ESAMS Web
SUPERVISORS/CDSO, HM / HW Coord, Fire Warden Training	2050	3	1	6	6	Classroom
Supplemental Training for New Collateral Duty Safety Personnel	2527	0	3	50	150	Classroom
Tag-Out Users Manual (TUMS) Training Afloat	2190	0	1	275	275	ESAMS Web
Take 10 For ORM	2828	0	1	5329	5329	Classroom
Technical Laser System Safety Officer (TLSO)	1052	0	40	7	280	Navy Safety Center
Top Management Brief	1138	0	0.5	142	71	Classroom
Trainer Course in OSHA Standards for Construction	2105	48	32	2	64	WEB (Non-ESAMS)
Trainer Course in OSHA Standards for General Industry	2106	48	20	2	40	WEB (Non-ESAMS)
Use of Portable Hand Truck Or Pallet Jack	2568	0	1	2	2	ESAMS OJT
UV Radiation Safety	1686	0	1	1	1	Classroom
VLS Missile Blast Residue HAZCOM	2147	12	2	17	34	ESAMS Web
Voluntary Protection Program (VPP)	1373	0	0.5	3851	1925.5	ESAMS Web
Voluntary Protection Program (VPP) Passport Incentive Program	2286	0	1	676	676	ESAMS OJT
Voluntary Respirator Use Training	2049	12	1	223	223	Classroom
VPP - My Personal Commitment to Safety Letter	2303	0	1	1374	1374	ESAMS OJT
VPP Training Session I (SERMC)	2352	0	1	20	20	Classroom
West Nile Virus Awareness Training	1234	0	1	1283	1283	ESAMS Web
SubTotal				1,431,331	1,835,453	
ESAMS² – Emergency Management						
CJIS TRAINING	2614	0	8	5	40	Classroom
Emergency Medical Dispatch (EMD) (APCO)	2930	24	32	7	224	Assoc of Public Safety Comms Official
EMERGENCY MEDICAL DISPATCH CONCEPTS (APCO)	2611	24	32	1	32	Assoc of Public Safety Comms Official
Emergency Personnel Alert System	2615	0	8	63	504	Classroom
Emergency Preparedness (Operation Prepare)	2591	0	1	1114	1114	Classroom
FIRE SERVICES COMMUNICATIONS (APCO)	2610	0	80	19	1520	Assoc of Public Safety Comms Official
ICS 200 Incident Command System 200	1716	0	8	88	704	National Fire Academy
ICS Basic (IS-195)	1196	0	1	38	304	FEMA
ICS-300 Intermediate Incident Command System (ICS) for Expanding Incidents	2386	0	0	49	882	National Fire Academy
ICS-800 National Response Plan (NRP), an Introduction	1830	0	8	156	1248	FEMA
IS 200 Applying ICS to Healthcare Organizations	2045	0	1	9	9	FEMA
IS-00200 Incident Command System, Basic I-200 for Federal Disaster Workers	2391	0	3	3	9	FEMA
IS-1 Emergency Manager: An Orientation to the Position	2390	0	10	6	60	FEMA
IS-100 Introduction to Incident Command System	1197	0	1	365	365	FEMA
IS-100.a Introduction to Incident	2542	0	1	218	218	FEMA

Course	Course ID	Retrain Period (Mos)	Course Length (Hrs)	Personnel Completed Training	Total Man Hrs Trained	Available
Command System						
IS-100.FWa Introduction to Incident Command System for Federal Workers	2388	0	1	1	1	FEMA
IS-100.HC Introduction to Incident Command System for Healthcare/Hospitals	2042	0	1	648	648	FEMA
IS-100.LEa Introduction to Incident Command System for Law Enforcement	2043	0	1	136	136	FEMA
IS-100.PWa Introduction to Incident Command System for Public Works	2044	0	1	3	3	FEMA
IS-100.SCa Introduction to Incident Command System for Schools	2373	0	1	73	73	FEMA
IS-139 Exercise Design	2375	0	1	15	15	FEMA
IS-15A Special Events Contingency Planning for Public Safety Agencies	2123	0	5	5	25	FEMA
IS-1900 NDMS Federal Coordinating Center Operations Course	2769	0	3.5	4	14	FEMA
IS-2 Emergency Preparedness, USA	2392	0	3	101	303	FEMA
IS-200 ICS for Single Resources and Initial Action Incidents	2371	0	3	216	648	FEMA
IS-200.a ICS for Single Resources and Initial Action Incidents	2543	0	3	197	591	FEMA
IS-22 Are You Ready? An In-depth Guide to Citizen Preparedness	2950	0	4	1	4	FEMA
IS-230 Principles of Emergency Management	2389	0	3	4	12	FEMA
IS-235 Emergency Planning	2376	0	1	10	10	FEMA
IS-240 Leadership & Influence	2385	0	1	2	2	FEMA
IS-241 Decision Making and Problem Solving	2377	0	1	5	5	FEMA
IS-242 Effective Communication	2125	0	8	6	48	FEMA
IS-244 Developing and Managing Volunteers	2378	0	1	2	2	FEMA
IS-275 The EOCs Role in Community Preparedness, Response and Recovery Activities	2124	0	8	14	112	FEMA
IS-301 Radiological Emergency Response	2383	0	1	1	1	FEMA
IS-546 Continuity of Operations (Awareness)	2026	0	1	17	17	FEMA
IS-547 Introduction to Continuity of Operations (COOP)	2029	0	0	12	0	FEMA
IS-55 Household Hazardous Materials - A Guide for Citizens	2384	0	3	1	3	FEMA
IS-700 National Incident Management System (NIMS): An Introduction	1804	0	0	161	1288	FEMA
IS-700.a National Incident Management System (NIMS): An Introduction	2648	0	8	613	4904	FEMA
IS-701 NIMS Multiagency Coordination Systems	2767	0	5	13	65	FEMA
IS-775 EOC Management and Operations	2606	0	4	41	164	FEMA
IS-800.A National Response Plan (NRP): An Introduction	1805	0	8	82	656	FEMA
IS-800.B National Response Framework (NRF), An Introduction	2350	0	3	320	960	FEMA
Q463 ICS-200 Basic NIMS ICS for Operational First Responders	1198	0	8	111	888	National Fire Academy
Q466 ICS-400 Fundamentals Review for Command and General Staff	2030	0	1	9	9	National Fire Academy
Q466 ICS-400 Fundamentals Review for Command and General Staff	2075	0	14	127	1778	National Fire Academy
SFTC - Emergency Management (EM)	2753	0	8	45	360	Surface Force Training Center

Course	Course ID	Retrain Period (Mos)	Course Length (Hrs)	Personnel Completed Training	Total Man Hrs Trained	Available
SFTC - Emergency Operations Center Incident Management Team (EOC-IMT)	2752	0	32	10	320	Surface Force Training Center
Spill Management Team Basic (SMT Basic)	1715	36	8	12	96	Navy Safety Center
Telecommunicator I	2126	0	16	4	64	Classroom
CJIS TRAINING	2614	0	8	5	40	Classroom
Emergency Medical Dispatch (EMD) (APCO)	2930	24	32	7	224	Assoc of Public Safety Comms Official
<i>SubTotal</i>				<i>5163</i>	<i>21458</i>	
Total				1,639,079	2,620,020	
¹ wwwa.nko.navy.mil ² esams.navy.mil						

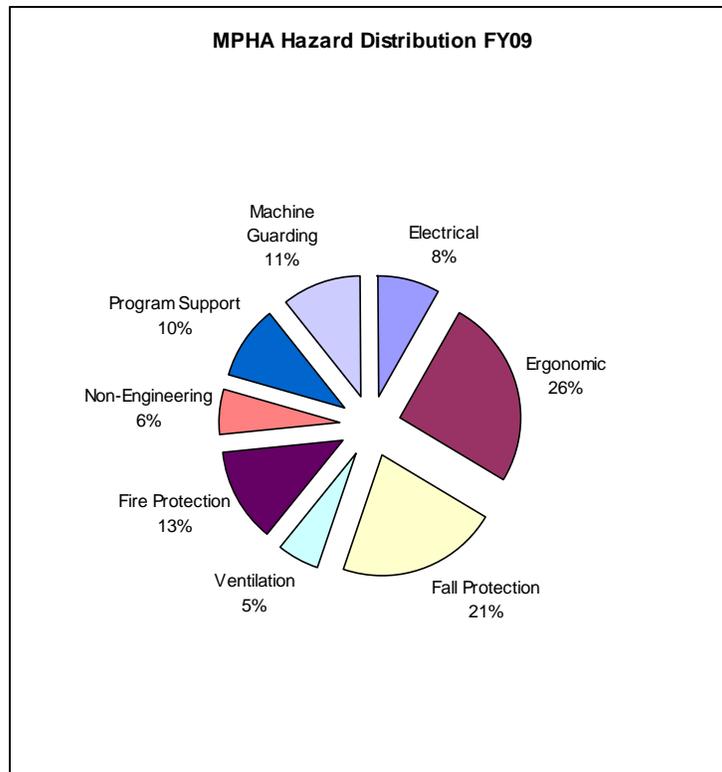
ATTACHMENT I MISHAP PREVENTION/HAZARD ABATEMENT

The Navy's Mishap Prevention and Hazard Abatement (MPHA) Program is available to fund mishap prevention initiatives, abatement of hazards for which local activities do not have sufficient funds and to address hazards at multiple activities that can be corrected with common designs. The Navy Safety and Occupational Health (SOH) Program requires commands to identify workplace hazards during self assessments, investigations, evaluations, oversight inspections, and through employee reports. The program also requires commands to evaluate and correct identified hazards. Navy commands were able to correct some identified workplace hazards in FY09 with funding secured through the Navy's MPHA Program that is administered by the Naval Facilities Engineering Command (NAVFAC). Priority for funding was given to areas connected with the highest degree of risk and affecting the greatest number of workers.

Approximately 40 HA projects were approved and awarded during FY09. The majority of these HA projects fit into the categories of fall protection, ergonomics, electrical, machine guarding, and industrial ventilation. Examples of FY09 HA projects are listed at the end of this attachment.

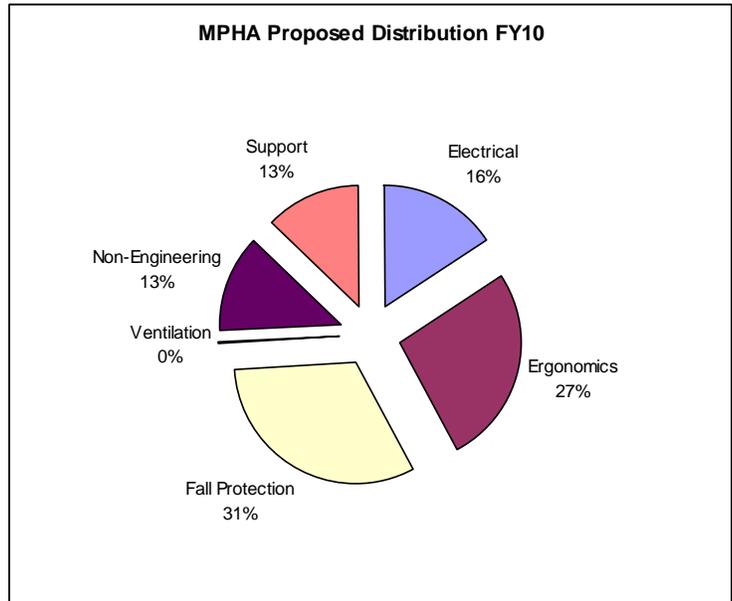
Pie Chart 1 illustrates the cost percentages for the breakdown of FY09 MPHA Program projects.

Program Distribution FY09	
Electrical	\$ 769,243
Ergonomic	\$2,366,173
Fall Protection	\$2,000,178
Ventilation	\$ 498,249
Fire Protection	\$1,192,481
Non-Engineering	\$ 593,283
Program Support	\$ 914,292
Machine Guarding	\$ 989,500



Pie Chart 2 illustrates the cost percentages breakdown of the FY10 proposed projects for the MPHA Program by hazard category for both design and construction.

Proposed Program Distribution FY10	
Electrical	\$1,350,000
Ergonomics	\$2,273,070
Fall Protection	\$2,715,000
Ventilation (design)	\$10,000
Non-Engineering	\$1,115,000
Program Support	\$1,105,000



[Navy MPHA Program Highlights for FY09](#)

[Navy Ergonomics Program](#)

Naval Facilities Engineering Command (NAVFAC) manages the Ergonomics Subject Matter Expert (SME), in support of the Chief of Naval Operations MPHA Program. NAVFAC provides a wide range of no-cost products, services, and technical knowledge to activities Navy-wide offering aid in mission readiness, prevention of musculoskeletal disorders, and reduction of associated costs.

The Navy Ergonomics SME provides ergonomics program and technical support to all Navy commands, represents the Navy on the Department of Defense Ergonomics Working Group and is the ergonomics technical representative to the Defense Safety Oversight Committee, Installation and Industrial Operations Task Force. In FY09 the SME continued to provide ergonomics expertise, present at the Applied Ergonomics Conference and provide training to NAVFAC Architects and Engineers on ergonomics of facility design. The SME also served as the Chair for the Ergonomics Task Action Team (Ergo TAT), which is under the auspices of the Navy Executive Safety Board.

[Navy Ergonomics Training](#)

Through a Memorandum of Understanding between Naval Facilities Engineering Command Southwest (NAVFAC SW) and the Naval Safety and Environmental Training Center, NAVFAC SW develops and presents the Navy Ergonomics Program Course (A-493-0085). This course is required training to all Navy SOH personnel. The course is provided to 40 students five to seven times a year at various sites across the U.S. and abroad. The Navy recognizes the need to present the best training possible to the Navy and has provided two Certified Professional Ergonomists (CPE's) under contract to present the course. Since 2000, the course has been conducted by two CPE's with the direction of the Ergonomics SME.

The course is a hands-on, practical approach to ergonomics with extensive class exercises and case studies of Navy and Marine Corps work environments. Upon completion, students have a firm understanding of the ergonomics principles affecting their work environment. The course content includes information on work-related musculoskeletal disorders (WMSDs); workstation and task design; ergonomics policy; establishing an ergonomics program; computer and industrial workstation set-up and evaluation; and utilization of the Ergonomics Survey Tools from the Navy Safety and Occupational Health (SOH) Program Manual, OPNAVINST 5100.23 (series). Participants conduct an ergonomics assessment in the field at a work activity, analyze the data, and present their findings.

In addition to the above courses, the CPEs present two four hour ergonomics sessions at the Navy Safety Professional Development Conference (PDC) every year and host an information booth with the Ergonomics SME.

[MPHA Electrical Program/Navy Electrical Program](#)

MPHA electrical specialists continue to investigate and resolve electrical safety hazards at shore facilities across the U.S. In FY09, electrical hazards that exposed personnel to risk of shock or worse were completed at ten Marine Aviation Logistics Squadrons (MALS) at nine continental United States (CONUS) locations with training and/or material support for the remaining three outside CONUS (OCONUS) locations planned for early FY10. The NAVFAC Team has also continued their support for hangar and flight line electrical surveys and has provided numerous cost/time-saving recommendations for hazard resolutions related to the introduction of the MH-60R/S Seahawk helicopter in Navy shore sites in the U.S. and abroad; all U.S. sites have been surveyed with the OCONUS sites scheduled for FY10. As a result of this support, NAVFAC received a letter from Commander Helicopter Maritime Strike Wing U.S. Pacific Fleet, which extended the commands appreciation for the contractor's overall support to operational readiness and specifically for a recommendation which will save an estimated \$1M during rehabilitation of one of the H-60 Hangars at Naval Air Station (NAS) North Island, CA. Other projects on the FY10 agenda include resolving grounding/bonding and lightning protection hazards at NAS Joint Reserve Base New Orleans; grounding/bonding issues at NAS Mayport; and validation of potential electrical safety issues at Naval Base Ventura County Point Mugu, Marine Corps Base Hawaii Kaneohe, HI (for fixed and rotary wing aircraft), and Naval Station (NAVSTA) Pearl Harbor, HI.

A new chapter has been drafted for the next revision of OPNAVINST 5100.23 (series) which establishes U.S. Navy policy and procedures for both Electrical Safety and Electrical Safety Training.

[Navy Fall Protection Program](#)

The Navy Fall Protection SME provides fall protection program and technical support to all Navy commands and represents the Navy on the American National Standards Institute (ANSI) Z359 Standards Committees for developing fall protection standards as part of the National Fall Protection Code and serving as the Vice Chairman for the main Z359 Committee. The National Fall Protection Code became effective in November 2007. Several other standards are presently being developed by the ANSI Z359 Committee. In FY09, the SME continued to provide fall protection expertise and deliver fall protection training Navy-wide and to other DoD agencies. The SME also served as the Chair for the Fall Protection Task Action Team (FP TAT), which is under the auspices of the Operational Safety and Health Working Group as part of the Navy

Operations Safety Support Committee. The FP TAT also continued to address fall protection initiatives by providing parameters, tools and intervention strategies to reduce fall mishaps within the Navy Ashore and Afloat Commands.

Fall Protection/Abatement projects completed in FY09 include Naval Computer and Telecommunications Station (NCTS) Cutler North Helix House, NAVSTA Norfolk and NAS Mayport (H-60 maintenance stands), NAS JRB New Orleans and NAS Jacksonville (fixed wing aircraft), and a prototype Brow stand. Projects underway include Fall Protection for NAS Key West, FL loading docks, NAS North Island, CA Water Tanks, and NAS Oceana, VA Air Traffic Control Tower.

[Examples of Mishap Prevention and Hazard Abatement Projects for FY 08](#)

[Fall Protection](#)

[Global Fall Abatement Resolutions for Fixed and Rotary Wing Aircraft](#)

The NAVFAC MPHA Program funds the investigation and resolution of a wide variety of fall hazards at Navy shore sites in the U.S. and abroad. A major area of interest centers on fall abatement resolutions for fixed and rotary wing aircraft.

Navy fixed wing (C-2, C-9, C-20, C-37, C-40, C-130, P-3/EP-3, E-2C, EA-6B, F/A-18, and F-105) and rotary wing (H-53 and H-60 variants) squadrons have reported issues with maintenance at height on their respective aircraft. Personnel are required to maintain various aircraft external structural/mechanical components and internal electrical/electronic equipment that are located at heights over four feet.

When maintenance is performed within hangars, using a combination of horizontal lifelines (HLLs) and self-retracting lifelines (SRLs) is a viable option. The restriction is that the aircraft must be sited at specific locations so that the HLLs/SRLs can be accessed and used within their respective performance envelopes.

The risk of falling arises when use of the HLL/SRL combination is not feasible or when maintenance must be performed outside of the hangars or on the flight line. For these cases, alternate fall abatement solutions are required. Over the past eight years, NAVFAC has been successful in introducing a number of OSHA compliant Commercial-Off-The-Shelf (COTS) items that resolve the majority of fall abatement issues on both types of aircraft.

HSL-60, a Navy Reserve Light Airborne Multi-Purpose System (LAMPS) squadron flying SH-60B LAMPS MK III Seahawk helicopters out of NAS Mayport, FL, reported the same at-height issues, but with an additional problem. Because the available floor space in their assigned hangar is limited, a COTS H-60 stand would be too large. The NAVFAC MPHA Fall Abatement engineers worked closely with the original equipment manufacturer and site personnel to modify the typical design and narrow the stand footprint. A short time after delivery, assembly, and training on the new stand, the following comment was received from HSL-60 maintenance personnel: "... equipment meets and exceeds expectations and requirements. The purpose, flexibility and utility we requested were incorporated and exceeded requests where quality and ease of use were concerned."

The MPHA Program also provided fixed wing aircraft squadrons at NAS Key West, NAS Jacksonville, Navy Air Facility (NAF) Washington and NAS JRB New Orleans with vacuum

based fall arrest/fall restraint systems, mobile horizontal rail systems, mobile access platforms (See photos 1, 2, and 3 below), and personnel training which will significantly reduce the fall hazards during at height maintenance on their fixed wing aircraft.



1 - Vacuum-based Fall Arrest/Fall Restraint system



2 - Mobile Horizontal Rail System



3 - Mobile Access Platform

NAS Key West Loading Docks

NAS Key West is located four miles east of Key West, FL on Boca Chica Key, the southernmost island in the Florida Keys. Prior research by NAS Key West safety personnel identified a variety of fall hazards related to three buildings at this site.

NAVFAC MPHA Fall Abatement Engineers conducted a site visit in May 2007. Assisted by site personnel, the Engineers evaluated the unprotected edges at each building's loading docks from the aspect of applicable OSHA requirements, to better understand the accessibility requirements during loading and unloading evolutions.

The results of this study formed the basis for a Site Analysis that described each identified hazard, proposed several OSHA compliant resolutions for each hazard, and provided recommendations for “best value” solutions. The similarity of the three buildings resulted in a recommendation to fabricate and install steel guardrails comparable to those provided on several previous successful fall abatement projects (Portsmouth and Pearl Harbor Naval Shipyards).

In one respect, the implementation at Key West became somewhat easier than the earlier projects because all but a handful of the guardrails could be flush mounted to the surface of the loading docks (see photo below). This meant that the previous guardrail concept (expanded to five basic lengths) could be simplified by incorporating the guardrail flush mount adaptor used at Pearl Harbor into the rails themselves. This reduces the number of parts that need to be manufactured, will allow a more efficient implementation, and still retains the interchangeability approach (i.e., a 4½ foot rail can be placed into any 4½ foot opening on any of the three docks). Key West personnel were involved in all aspects of design and installation planning to ensure the finished product would not impede loading or unloading operations and still meet the OSHA guidelines for fall protection.



Typical loading dock at NAS Key West

Through a full and open competitive bid process, a vendor was selected to fabricate the rails, flush mount inserts and unique side mount anchors (for stairs/ramps), and a purchase order was issued in September 2009 for material delivery by the end of January 2010.

Global Hazard - Brows

Brows are movable bridges used by personnel to board or leave a ship, submarine, or other vessel while in port. They're generally used between a vessel and a pier, but may be used between two vessels as well. Brow configurations vary in width and length, and the location on the ship - fantail, amidships, or bow - determines which is used. Once installed, they may extend from the vessel horizontally, or at an upward or downward angle.

In addition to the brow itself, a variety of other materials are often used. The vessel end of a brow is often placed atop wooden pallets, blocks, or other materials in order to elevate it above a deck, bulwark, or gunwale. This prevents the brow from abrading the ship's paint and deck nonskid.

The same materials may also be used as steps or stairs in cases when a brow is elevated well above a deck or pier.

Wooden pallets, although used for many years, have inherent features which make them unsuitable for use with brow installations. They have a discontinuous surface which has caused personnel to trip, fall, or otherwise injure themselves. They often sustain latent damage that isn't discovered until they're stepped on. Undamaged wooden pallets have also been known to fail underfoot due to insufficient strength. In 2005 four injuries, including a broken ankle, were reported due to wooden pallets that were used in brow installations.

Prior research by NAVSTA Mayport, FL safety personnel identified a variety of fall hazards due to the use of wooden pallets in brow installations at their site - situations in which personnel leaving or boarding the ship could be in danger of falling.

The MPHA Program funded a "proof-of-concept" project to investigate the extent of the hazard and develop prototype brow stand(s) that would eliminate the need for currently used transition materials, i.e., wood/metal pallets, steps, etc.

NAVFAC MPHA Safety/Design engineers made several visits to NAVSTA San Diego, CA to gather information on the different configurations of brows and "adaptors." In most cases, the pier end of the brow had some moveable mechanism (wheels or rollers) that allowed some limited movement to accommodate changes in the local tide. The ship ends were secured to guardrails or nearby ship structures with chains or rope and had one or more wood or metal pallets stacked between the brow and ship deck. The photos below show typical ship to pier (Photo 1) and pier to ship (Photo 2) configurations.



Photo 1



Photo 2

The MPHA engineers worked through several design iterations before the first prototype was fabricated and subjected to field tests at NAVSTA San Diego. Comments from ship's company resulted in subsequent design changes which reduced the weight and increased stability. The final prototype subjected to field tests has resulted in very positive feedback from ship's company. Final "as-built" drawings, including options for fabrication of three sizes to accommodate various brow widths, are available for follow-on development and deployment. Photos 3 and 4 below show the final design as delivered and in field testing.



Photo 3 – as delivered



Photo 4 – Undergoing final field tests

Dry Dock #1, Pearl Harbor Naval Shipyard (PHNSY) & Intermediate Maintenance Facility (IMF)

The PHNSY & IMF was built in the early 1900’s as the Pearl Harbor Navy Yard. It is the largest ship repair facility between the West Coast and Far East consisting of 114 buildings and 4 dry docks on 112 acres. The shipyard’s primary mission is to provide regional maintenance to keep surface ships and submarines “Fit to Fight.”

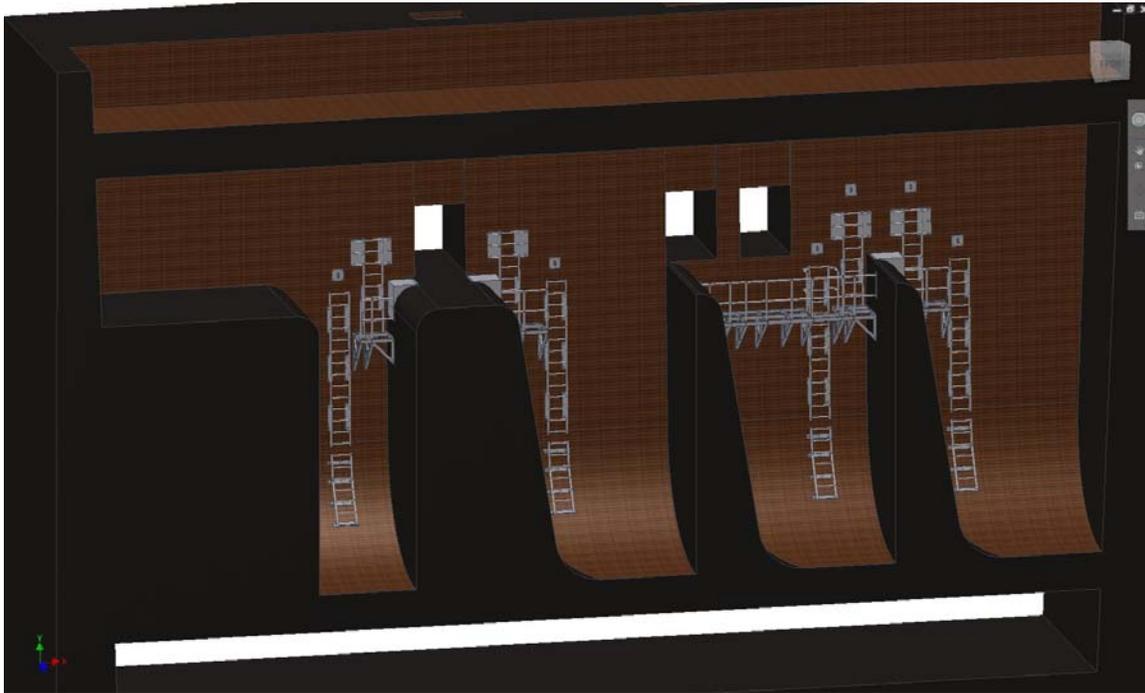
Dry dock Pumpwell and Engineering Section personnel conduct regular inspection and maintenance to ensure that the dry docks are in operational condition. At Dry Dock #1, this includes Sluice Gates SG-13, 14, & 15 and Main Pumps 1, 2, 3, & 4. The sluice gates are 22-1/2 feet below street level, and the main pump discharge chambers are another 24-1/2 feet below the sluice gates. When performing maintenance and inspection of the sluice gates and main pumps and their respective discharge chambers, personnel must access each space via extension ladders and/or rope ladders, which are set up from street level. Entry into these spaces presents a serious fall hazard which is exacerbated by limited access and wet conditions.

Rails and walk platforms were designed to provide safe access to the Dry Dock #1 spaces.

View: Looking down access ladder.



Schematic diagram displays proposed ladder and walk platforms.



EA-6B Prowler Tail Maintenance



The tail of the EA-6B electronic warfare aircraft contains control mechanics as well as a pod for various electronics. As such, there is longer than average maintenance performed on the tail section. This had been accomplished with the use of a scissor lift, or maintenance stands. Because neither the lift nor the stands provided access to all portions of the tail without bypassing their guardrails, conducting certain maintenance procedures on some portions of the tail exposed personnel to fall hazards – situations where there was a potential to fall more than four feet.

Following an information gathering site visit, NAVFAC MPHA design engineers conducted an analysis which compared the costs and trade-off benefits of several potential OSHA compliant solutions. The result was a recommendation to NAVFAC to procure a maintenance stand from a proven vendor that would allow access to three sides of the tail section and provide the fall protection required.

The stand was delivered, assembled and personnel training held in January 2009. At this point, the stand is still being evaluated, but NAVFAC is aware that other Navy bases with EA-6Bs have expressed their desire for a large stand which can be used for longer term phase maintenance and the current design could also be modified to provide fall protection to other high tail aircraft. If sufficient interest is relayed to NAVFAC, this could be a candidate for designation as a “global” HA project. The photos below show the stand as assembled and in use at NAF Washington.



Tail Stand assembled



Tail Stand in place

Ergonomics

EA-6B Prowler Tactical Jamming System (TJS) Project, Fleet Readiness Center Northwest (FRC NW)



FRC NW, Oak Harbor, WA, is the primary maintenance and repair facility for the EA-6B Prowler. The heart of the EA-6B is the AN/ALQ-99 Tactical Jamming System (TJS). Receiving equipment and antennas are mounted in a fin-tip pod while electronic counter-measure equipment (assets) is located in under-wing pods. The system is capable of intercepting, automatically processing, and jamming received radio frequency signals. Depending on mission requirements,

the EA-6B can carry any mix of five pods (one under the belly and two under each wing) consisting of jamming pods, fuel tanks and/or anti-radiation missiles.

Maintenance personnel initially remove the pods containing the assets (weighing up to 1,075 pounds depending on the configuration) from the aircraft using a bomb hoist. The assets are then extracted from the pod manually and transferred onto a transportation fixture, Photo 1. The previous transportation fixture, weighing up to 600 pounds, had to be carried by two people. A previous MPHA project mitigated the hazards associated with manually carrying the assets by retro-fitting the transportation fixtures with dollies (Photo 2) that were provided to the two main asset handling shops at FRC NW.



Photo 1 - manual carry configuration



Photo 2 - retro-fit added wheeled dolly

Electronics technicians are responsible for maintaining and repairing the assets. Once in the repair area, technicians remove the asset from the transportation fixture by lifting it with a crane and positioning it onto the Holding Rotating Unit (HRU), part of the Consolidated Automated Support System (CASS), to perform repair and maintenance. The technicians noted a number of design deficiencies with the existing HRU that introduced unnecessary ergonomics stressors. An ergonomic HRU (eHRU) was designed, tested and fabricated to eliminate these stressors during shore repair and maintenance operations.

The existing HRU wheel design incorporates a large ball bearing set in a cup with smaller ball bearings and a lever brake mechanism that allows the operator to effectively secure the HRU to prevent it from rolling (Photo 3). This design also allows the HRU to be positioned close to the floor which facilitates securing the HRU to the CASS bench while at sea. On shore, the braking mechanism is never used. The wheel spring ball bearing design on the HRU breaks down over time making the entire unit extremely difficult to move around and has resulted in damage to shop and hallway floors and also exposed the technicians to high pushing forces.

The HRU is, in a word 'bulky,' but was purposely designed this way to survive potential combat situations or high sea states. Since the eHRU is only intended for shore operations, the eHRU design incorporated an actual wheeled design as shown in Photo 4. In addition, access was greatly improved through alternative bracing, providing full access of the asset from both sides of the eHRU.

The HRU allows the assets to rotate 360 degrees on an interface device holding the fixture assembly. This feature was not changed on the eHRU. Other improvements to the eHRU include:

pushing handles, clips to hold the Radiation Hazard Monitor probe, additional grounding points, height adjustability, a drip tray that slides out and a cradle that attaches to the interface device holding fixture for power supply repair – Photo 5.

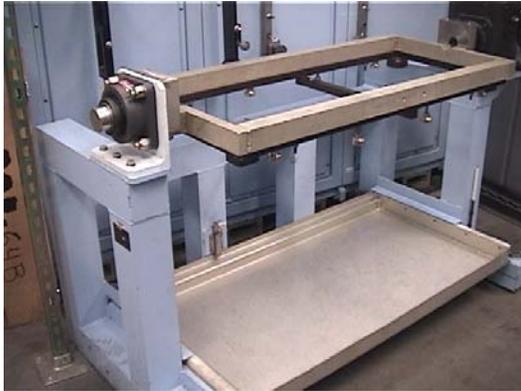


Photo 3 –The existing HRU.



Photo 4 - eHRU added features that ease transportation demands and allow for easy access in more neutral postures.



Photo 5 – AR1 cradle attachment to eHRU for power supply repair.

Representatives from NAVAIR were on site in mid October to collect documentation, test the eHRU and discuss ideas on how to integrate the eHRU into the AN/ALQ-99 community. While on site, NAVAIR performed tests and found that the eHRU outperformed the existing equipment (HRU) relative to electrical grounding as well as reduced many ergonomics risk factors. A follow on project Ergo FY10 plan was discussed with site personnel and NAVAIR who both expressed interest in using this same eHRU equipment, with minor design changes, for ‘on-board’ implementation and throughout the entire AN/ALQ-99 community.

Ergonomics Resolutions to Emergency Medical Responses at Naval Air Station (NAS) Lemoore, CA, NAS Fallon, NV, and NAS Jacksonville, FL.

Federal firefighters are faced with an ever-changing, uncontrolled work environment when manning ambulances. Patients are commonly moved from homes and barracks with narrow passageways and multiple flights of stairs. Once at the hospital, the ambulance crew transfers the patient from the ambulance to the emergency room, and then to a short-term care ward stretcher for treatment.

During the loading process, the technician at the foot of the gurney bears the weight of both the gurney and the patient while pushing the gurney into the ambulance. The process may be complicated if the feet of a tall patient interfere with the gurneys' base controls and hand-holds.

During the unloading process, the gurney is removed from the ambulance with one technician outside the ambulance at the foot of the gurney and the other technician inside the ambulance. The technician at the foot pulls the gurney out until the base drops and supports the gurney weight. Again, the patient's feet can obstruct the handhold which requires the technician to flex forward while bearing all the weight of the gurney and patient.

Technicians noted stress fractures on the gurneys from this operation and back fatigue at the end of a shift even if the 'best posture' was maintained, Photos 1 and 2.



Photo 1 - ascending stairs



Photo 2 - exiting the back of the ambulance

The major ergonomics risk factor for the ambulance technicians is excessive lifting forces due to manual handling of the gurney. To reduce the risk of injury, powered gurneys were provided to federal firefighters at NAS Lemoore, NAS Fallon and NAS Jacksonville. The powered systems raise and lower the patient using electro-hydraulics. The gurneys also incorporate fold down features, which enable them to be easily maneuvered in constrained spaces such as elevators, tight hallway corners, and small rooms. The new gurneys are capable of handling 700 lbs which enables the technicians to respond to virtually any emergency without having the patient wait for special bariatric equipment/units.

After using the powered gurney for a week, one technician stated, "At the end of the week my lower back was not feeling the normal fatigue we all know so well. When lifting a regular gurney, even with proper body mechanics you still bend and lean forward to lift and grasp the manual release levers; with the power gurney this was not necessary."



Photo 3 - powered ambulance gurney
uses hydraulic power

As shown in Photo 3 above, the powered ambulance gurney raises and lowers patients with an electric hydraulic power reducing the forceful exertion in awkward postures typically found in the emergency response community. The adjustable load height with jog function allows the operator to preset the height of the load wheels to meet the ambulance deck. The jog function assists operators when loading on an incline by jogging past the preset load height. The high-speed hydraulic lift raises and lowers the patient with the touch of a button and fully retracts in 2.4 seconds, reducing load and unload times.

The Bureau of Labor and Statistics, estimates that a lower back injury costs \$27,000 (2007 data). The MPHA Program purchased two gurneys and two stair chairs for each of the three locations, Lemoore, Fallon and Jacksonville. If one back injury is prevented at each site with this new equipment, there is an immediate return on investment.

Material Handling and Storage Solutions at Naval Submarine Support Facility (NSSF) New London, Groton, CT

Naval Submarine Base New London is the Navy's primary submarine base. All submariners in today's Navy will be stationed at Naval Submarine Base New London (SUBASE NLON) for training and perhaps a tour onboard a fast attack submarine or with a pre-commissioning crew while their new submarine is under construction. SUBASE NLON is home to more than 40 tenant commands, including the submarines and crews of Submarine Group TWO, the faculty and students of the Submarine School, and the NSSF. The base supports 21 attack submarines and the Navy's nuclear research deep submersible vessel NR-1. NSSF provides repair and maintenance assistance to vessels home ported at SUBASE NLON.



Photo 1:: Before the index unit, round stock retrieval was time consuming and required multiple pieces to be moved using a sling and hoist in order to locate the correct pieces. Workers risked injury from the repeated material handling in less than optimal postures.



Photo 2: Stock stored in the horizontal plane

Various raw metals are used during the maintenance and repair processes. Manual material handling and storage issues with angle iron, round stock and sheet metal were identified by the safety office in 2004. NSSF requested an ergonomics assist visit after submitting an MPHA Project for the round stock. Subsequent projects were submitted and approved for the angle iron and sheet metal. A vertical index system virtually eliminates the manual handling storage and retrieval tasks. The storage system houses all the raw materials, and delivers it to the personnel around elbow height. Elbow height handling of material typically results in less back bending.

The index system delivers the sheet metal quickly, improves sheet metal quality, and reduces handling time and unnecessary finish work because storage will be exclusively indoors and in one unified location. This saves time and effort when completing a project due to less preparation work through product specific storage and quicker product access time. The round stock system has security controls to limit access to level one stock and incorporates a grabbing claw

and overhead hoist Systems have inventory control functions to track stock in real time.

NSSF recognized the benefits of manual material handling aids in reducing wasteful human effort and injury potential and implemented a number of ergonomics solutions to include the crane rail system shown in Photo 7 below.



Photo 3 (Left): Level-one round stock is difficult and time consuming to move because of the storage location on a platform up seven feet from the ground requiring the operators to push or pull while using a stepladder or balancing on the storage unit. Level-one stock must be stored in a secure locker. Once the team pushes the stock from the storage receptacle, it is transported with the sling attachment. Retrieving stock from the level-one receptacle or horizontal rack takes three operators half a day. There is a high risk for personnel injury during this evolution due to swinging and moving of stock as it is retrieved and from pushing the stock out far enough to use the crane.

Photo 4 (Right): MPHA 869AR - Vertical index unit for round stock has security for level one stock and incorporates a jib crane.



Photo 5 (L due to unnecessary preparation. Index system for angle iron installation projected Feb 2010.

Photo 6 (Right): The index system delivers the sheet metal quickly and eliminates risk associated with carrying sheet metal long distances or lifting in awkward postures. The system reduces waste by improving sheet metal quality and reduces handling time and unnecessary finish work because storage will be exclusively indoors and in one unified location.



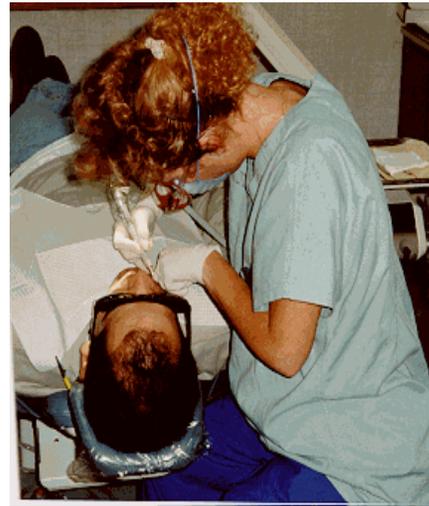
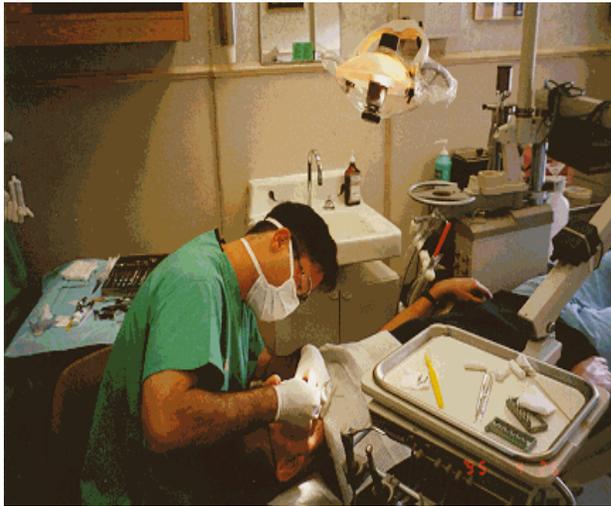
Photo 7: NNSF crane rail

Ergonomic Resolutions to the Dental Community at Naval Hospital Rota, Spain

Naval Station Rota covers more than 6,000 acres in an area recognized for its strategic and maritime importance over the centuries. Of the many services offered by Naval Hospital (NH) Rota to NAVSTA Rota's 5,000 active duty and civilian employees, the Dental Directorate is tasked with preventing and treating oral disease or injury that may interfere with military duties and early diagnosis of oral disease to decrease cost, time, and improve combat readiness.

Ergonomics studies of the dental work force have documented significant occurrences of chronic ergonomics stressors, WMSDs and discomfort. In numerous clinical studies, musculoskeletal disorders were cited by almost one-third of the dentists as the primary cause of early retirement (ahead of cardiovascular disease, neurotic symptoms and tumor causes). Over 50% of dental hygienists surveyed report suffering from chronic shoulder, back and neck pain with almost identical percentages for these same body regions among both male and female dentists.

The industrial hygiene department at NH Rota recognized the opportunity to take a proactive approach to reducing the identified ergonomics stressors that affect their personnel. A Certified Industrial Hygienist for the Industrial Hygiene Department initiated a follow-up ergonomics field survey and then consulted the Navy SMEs at the request of the treating physical therapist. As part of this field evaluation, the dental technicians were asked to complete a discomfort survey. The results disclosed significant discomfort in the upper-mid-lower back and pelvis and indicated a high exposure to the ergonomics risk factors of prolonged static and awkward seated postures shown in Photos 1, 2, and 3.



Photos 1 & 2: Complicated dental procedures force dentists and technicians into maintaining prolonged awkward postures while bending over patients. Other ergonomics stressors include highly repetitious movements of the hands while exerting high forces from using dental tools with small diameter grips.



Photo 3: Some dental procedures can last from 2 to 3 hours during which staff are chair bound attending to patients and assisting dentists in non-neutral postures.

The NAVFAC Ergonomics SME worked remotely with the NH Rota Dental clinic leadership and the industrial hygiene department to research, test, and purchase specialty dental seating with new innovative designs. The new seats (Photo 4) offer staff members optimal lumbar support and adjustability and torso/arm support during patient care (Photo 5).



Photo 4 - Dentist (left) and assistant chair (right) were selected for trial testing under actual patient care conditions



Photo 5 – Dentists improved posture during actual patient care

From initial exposure at a dental equipment trade show and other recommendations from previous dental interventions, dentist and assistant chairs (left & right, respectively) were selected for trial testing at the Rota clinic under actual patient care conditions. The MPHA Program provided \$15,000 to replace Rota Clinic’s patient-side chairs.

Initial reaction from the Rota dental providers has been highly positive. The knowledge gained from this real-world field test will now be provided by the Navy SMEs to dental clinics Navy-wide that are also intent on making similar improvements toward providing ergonomically sound working conditions and maximizing productivity and comfort.

In terms of gross financial Return-on-Investment, a cost/benefit analysis used \$15,000 for an estimated cost for 17 dental chairs. In light of the fact that lost time for one back, shoulder, or neck WMSD injury, according to Bureau of Labor and Statistics data, can cost the Navy up to \$27,000 in lost work days and rehabilitation costs, such an investment represents an immediate ROI of nearly 200% if one such injury is avoided.

Naval Health Center, Kaneohe Marine Corps Air Station (KMCAS), HI

The Naval Health Center at KMCAS services Navy and Marine Corps personnel stationed at the there. Records are kept on all patients, which must be filed by Medical Records clerks. With the existing four Space Saver filing shelves, clerks must bend low to reach the bottom shelf and use a stool to reach the top shelf. Files are packed so tightly, workers have to constantly shove records aside to file or retrieve a record. The shelves contain about 14,500 records. Approximately 250-275 records are pulled daily and must be re-filed the next day. 80-100 chits must be filed into the records daily. Medical Records clerks have reported pain and discomfort in their backs and wrists. Clerks performing similar type work at two other clinics have filed ergonomic mishap reports.

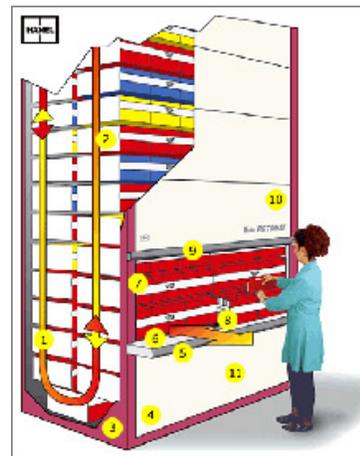
The solution for Naval Health Center KMCAS was installation of an electronic filing system, which provided access to medical files at a convenient level, allowing clerks to avoid awkward postures and providing more space so clerks no longer have to push and shove to fit files.

BEFORE PHOTOS:



Clerks bent low to reach the bottom shelf and used a stool to reach the top shelf producing pain in backs and wrists.

AFTER:



New electronic filing system provides access to medical files at a convenient level.

[Electrical Safety](#)

Marine Aviation Logistics Squadrons (MALS)

In March of 2008, at the request of the MALS Program Office, NAVFAC MPH Electrical Safety Specialists visited Marine Corps Air Station (MCAS) Miramar, CA, Marine Aviation

Logistics Squadrons (MALS) 11 & 16 to validate the implementation of Support Equipment Bulletin (SEB) 881 dealing with the proper ground and neutral (G/N) separation of electrical circuits inside the Integration Unit (INU) and Mobile Facility (MF) vans. The original SEB contained very specific procedures to follow to accomplish the G/N separation and did not allow for circuit anomalies that might prevent proper G/N separation. Because of personnel training limitations and material funding constraints, more than half of the vans had not been properly repaired. Allowing these improper configurations to remain uncorrected would continue to subject MALS personnel (US Navy and Marine Corps technicians) to possible injuries and/or fatalities and expose mission critical avionics to catastrophic failures.

Deficiencies due to non-compliance with the SEB were violations of Space and Naval Warfare System Command Instruction (SPAWARINST) 5100.9D, Navy Shore Electronics Safety Precautions and Naval Air System Command (NAVAIR) 01-1A-512, Design Guide for Avionics Shop Power Distribution that put both personnel and sensitive electronic equipment at risk.

Discrepancies and hazards included:

- Ground circuits and neutral circuits tied together
- 400 Hz and 60 Hz neutrals tied together
- Ground loops that allowed current flow through equipment housings
- Corroded or improper fittings and connections
- Improperly bonded ground fittings

The MPHA Program subsequently funded an effort to evaluate and authenticate the implementation of SEB 881 and provide instruction to on-site Navy and Marine Corps MALS personnel on the correction of wiring deficiencies in the INU and MF vans in order to bring them into compliance with the SEB. Sufficient funding was provided to allow procurement of materials to implement the required corrections, including necessary tools to facilitate the corrections and metering equipment to monitor current levels on the corrected configurations.

The MPHA Team, familiar with the theory and practice of proper grounding and bonding, provided instruction and support to MALS 990 (maintenance shop) personnel to accomplish electrical separation of ground and neutral circuits and separation of the 60Hz and 400Hz neutral circuits.

Building on lessons learned at Miramar and to realize some cost efficiency, two "kits" were created; one that includes parts and materials for 400 vans and a second kit for 100 vans. Both kits included sufficient cable/wiring, hardware, test equipment, anti-corrosion compound, and tools. The tools provided, particularly the Amprobe ACDC 100TRMS multimeter and a heavy-duty Shure-Stake Ratchet crimping tool, will be very useful to Shop 990 personnel for the G/N separation effort, as well as for future work. The crimper ensures the proper connection of electrical lugs essential for maintaining a sound electrical system and will reduce some of the ongoing maintenance needed to sustain the alternative mechanical connectors. The clamp-on multimeter will aid in troubleshooting and analysis beyond the capabilities of the conventional multimeters in the current MALS inventories.

Following the initial Miramar activity, the MPHA Team, in coordination with a NAVAIR representative, provided instruction and material support to the CONUS MALS complexes at: MCAS Beaufort, SC, MALS 31; MCB Camp Pendleton, CA, MALS 39; MCAS Cherry Point, NC, MALS 14; NAS JRB FT Worth, TX, MALS 41; MCAS New River, NC, MALS 29; MCAS Quantico, VA, HMX – 1; MCAS Yuma, AZ, MALS 13, and Steward ANGB, NY, MALS 49 (materials only).

The initial step at each facility was to provide a brief instructional period to familiarize the trainees with the theory behind, and reasons for, G/N separation in the MF vans. The MPHA Team then provided hands-on G/N separation training to small groups of Shop 990 personnel. These small groups would then apply this training to the G/N separation of their vans while the Team observed and provided guidance in trouble shooting unforeseen issues (see photo 1 below).

As an example, it was common to find 60Hz & 400Hz neutral circuits sharing a common neutral bus. In order to prevent noise crossover between the two systems, this connection had to be broken through the installation of a separate bus or by physically splitting the bus and separating the two parts. One of the many problems that hampered this effort was the use of white wires for ground circuits. White wire is normally used for neutral circuits and green for ground. Occasionally the Team found that white wire had been used for the Environmental Control Unit (ECU) ground circuit and as a result inadvertently hooked up to the neutral bus. This circuit is bonded to the case of the ECU and therefore to ground. When the other end is hooked to the neutral bus there is a direct and incorrect connection to ground. These circuits were pulled off the neutral and moved to the ground bus (see photo 2 below).

During the eight months spent assisting the MALS complexes, the Team was directly involved in correcting the G/N separation problem in 141 vans and training approximately 40 personnel. It was left to the leadership at each MALS complex to ensure these trained personnel complete the G/N separation in approximately 2,200 vans remaining in the CONUS locations. Tasking is in place and planning underway to complete the personnel training and provide necessary materials/equipment to the three remaining OCONUS MALS sites (with approximately 600 vans) by March 2010.



Photo 1 - Correcting Panel Wiring

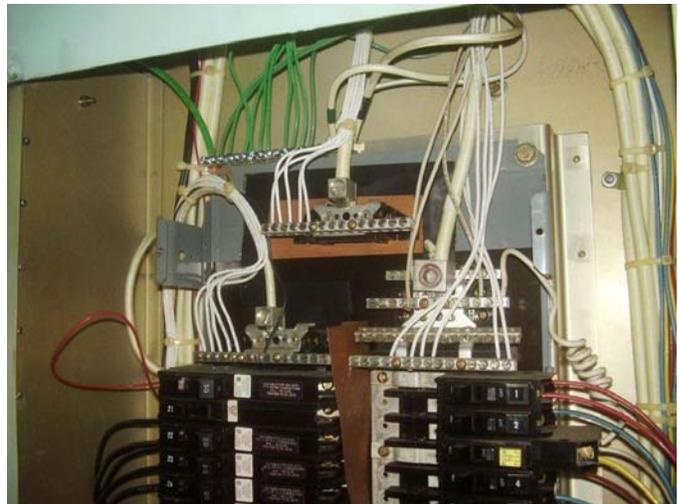


Photo 2 - Ground/Neutral Separation Completed

ATTACHMENT J - SAFETY SUCCESS STORIES

The *1,001 Safety Success Stories* web pages were developed and posted on the public domain portion of the Naval Safety Center website, to communicate the Navy’s commitment to the safety and quality of life of our personnel. The purpose of the Success Stories is to inform Sailors, their families, Navy civilians, and the general public about what the Navy is doing to protect the military and civilian work force from workplace fatalities, life-threatening injuries and illnesses, and crippling disabilities. Of the 146 success stories on the website, 25 were from overseas locations. By providing real examples at Navy field activities, the stories widely disseminate valuable lessons learned, innovative technologies, and successful programs and initiatives.

http://www.public.navy.mil/navsafecen/Pages/osh/Success_Stories/safety_success_stories_home.aspx

The examples of SOH successes reported in the Safety Success Stories also demonstrate the value added by safety and best business practices, and how such initiatives result in productivity gains and cost savings. An additional feature of the Success Stories web pages is the *Safety Stories Cost/Time Savings Chart* (see sample from chart on page 4 below), which highlights in table form the challenges, improvements, and cost, time and labor savings of selected stories. The chart helps the Navy to build the “business case for safety.” A conservative estimate is that for every dollar invested in safety, the return is between three and ten dollars.

<http://www.public.navy.mil/navsafecen/Documents/SuccessStories2/CostSavings.pdf>

An easy guide to the Success Stories is the Executive Summaries, which contains a synopsis of each story and a link to the full story.

http://www.public.navy.mil/navsafecen/Pages/osh/Success_Stories/Safety_SS_Exec_Summ.aspx

An excerpt from the Success Stories Executive Summaries containing the FY09 stories is shown on page 4 below.

In FY09, seven new stories were posted to the *Safety Success Stories* web pages, two of which were from overseas locations. The stories focused on OSH areas of concern, such as ergonomics, fall protection, electrical safety, heat stress, and the Navy installations that have achieved *Star* status in OSHA’s Voluntary Protection Programs. Summaries of two stories are provided as examples:

Voluntary Protection Programs Star Awarded to Naval Health Clinic Corpus Christi - On 12 June 2009, Naval Health Clinic Corpus Christi (NHCCC) became the first military treatment facility in the Department of Defense (DoD) to be awarded Occupational Safety and Health Administration (OSHA) Voluntary Protection Programs (VPP) Star status.

NHCCC injury rates are far below the industry average of other similar healthcare facilities.

Year	Hours Worked	Total Cases	Total Case Incident Rate (TCIR)	Days Away/Restricted/Transferred Cases	Days Away/Restricted/Transferred Incident Rate (DART)
2005	1040000	1	.19	4	.769
2006	1097200	0	0	0	0

Year	Hours Worked	Total Cases	Total Case Incident Rate (TCIR)	Days Away/Restricted/Transferred Cases	Days Away/Restricted/Transferred Incident Rate (DART)
2007	1095760	1	.16	9	1.64
Total	3,232,960	2		13	
Three-Year Rate (2004-2006):			0.11		0.80
BLS Average for NAICS 2004/2005/2006: 325199	Year used:		3.5		1.4
	2006				
Percent Above/Below BLS Rate:			-300		-60

The Star award culminated a process that was the result of several years of promoting a safe working environment, coupled with an extensive application and training procedure.

The following examples illustrate the types of actions taken by Naval Health Clinic Corpus Christi toward attaining VPP Star recognition:

Chain of Command Commitment: The safety culture at NHCCC starts at the top with the Commanding Officer who places safety among one of his top priorities. He believes that people are NHCCC’s most important asset. As stated in his Safety and Occupational Health Policy Statement, he is committed to ensuring all NHCCC employees enthusiastically participate in the command’s safety program. Additionally, he is fully committed to reducing mishaps and hazards within the command. The Commanding Officer reinforces his emphasis on safety at home and in the workplace by personally visiting worksites and regularly distributing e-mails on a variety of safety related topics.

The Safety and Occupational Health policy statement signed by the Commanding Officer clearly states management’s commitment to safety. Each Supervisor has safety-related responsibilities and objectives linked to their job assignments and performance evaluations are completed at least annually and most semi-annually.

Command Safety Petty Officers and daily Duty Crews along with Environment of Care (EOC) Managers conduct and participate in EOC meetings, safety promotions and safety inspections/walk-throughs. In 2007, each EOC member was assigned areas of improvement and focus points. The SOH Department audits included topics such as, lock out/tag out, contractor safety, hazard communication, personal protective equipment, and leadership/accountability. Each audit is scored by the use of a Customer Survey form and the results are reviewed. NHCCC continues to show safety commitment to employees, contractors, visitors and patients through numerous safety programs. There is a consistent open line of communication with all employees, contractors, and the beneficiaries.

Development of the VPP Committee: In preparation for achieving Star status, command volunteers in 2007 established the NHCCC VPP Committee, a deck plate driven team. The committee created a command-training program that allowed departments to participate in weekly competitions in hazard recognition as well as hazard abatement. Each week, teams would enter a space, identify all the hazards and then provide corrective actions to a variety of simulated healthcare industry related hazards. The committee awarded scores and the timed exercises became highly competitive events throughout the command. Each department took an active role in the competition, and the winning department each week received a rotating trophy symbolic of the Star status award that the command was striving to achieve. The VPP Committee also took part in the command inspection process by providing a monthly inspection report of the facility that identified all deficiencies found.

Automation of Shore Installation Heat Stress Monitoring at Naval Station Rota Spain - A combined Naval Health Research Center (NHRC) and Naval Sea Systems Command Smart Ship initiative simplified the process of monitoring heat stress conditions on board Navy ships. A new meter, the Automated Heat Stress System (AHSS) WBGT Unit, has been installed on DDG Class and other ships for several years now. The new meter continuously records ambient dry/wet bulb temperatures, radiant heat globe temperature, and relative humidity to calculate the WBGT. This real-time data is then passed to a personal computer, which graphically documents the WBGT environmental conditions and automatically identifies the appropriate exposure time guidance.

In 2002 NHRC developed a shore version of the AHSS mounted in a wood cabinet. Using the same technology as the shipboard AHSS, the shore unit monitors “Flag Condition” on Navy/Marine Corps shore commands that meet the heat stress prevention requirements of the Manual of Naval Preventive Medicine (NAVMED-P5010) and the Marine Corps Heat Injury Prevention Program (MCO 6200.1E). Hazard warning “Flag Conditions” range from none to black flag for imminently dangerous ambient heat stress.

At U.S. Naval Station, Rota Spain hot summer temperatures can present community health risks to workers and family members alike. In past years, the Industrial Hygiene Department at Naval Hospital (NH) Rota manually collected WBGT data. The procedure was performed hourly during the summer season using the departments’ traditional WBGT heat stress meter mounted on a tripod to monitor Flag Condition guidance. The extremely labor-intensive effort required setting up and taking down the unit each work day, keeping its wet bulb sensor continually saturated for accurate readings, and someone to physically read the data and record it. The recorded data was then posted to the hospital’s internal local area network intranet webpage to advise staff and community members about current heat stress threat conditions.

Working together with Naval Engineering Command Mishap Prevention and Hazard Abatement Project Manager Ms. Glenna Humphrey and the Naval Health Research Center AHSS Environmental Physiologist Mr. Jay Heaney, Mr. David Hiipakka of the NH Rota Industrial Hygiene Department successfully solicited funding to purchase and install two AHSS units for the Rota Naval base. One unit was located on the hospital campus, and the other outside the base’s Fitness Center.



NAVSTA, Rota AHSS unit #2 deployed to the base Fitness Center for staff and patron awareness of ambient heat stress warning conditions in real-time.

Acceptance of the AHSS units at the Rota Naval base was immediate. The Fitness Center staff posts the respective heat stress warning flag (white, green, yellow, red, or black) on the main entrance to the gym for all members to see before they begin their summer work out regimens.

At the hospital, a dedicated ADSL modem line enables posting of real time Heat Stress Flag warnings on NH Rota’s external non-restricted public webpage. The posted warning flag allows any community member to instantly consult outdoor ambient heat stress risk conditions and make informed decisions when planning club, family, or personal outdoor summer activities.

**SAMPLE SAFETY SUCCESS STORIES COST/TIME SAVINGS CHART
FY 2009**

ACTIVITY	CHALLENGE	IMPROVEMENT	COST SAVINGS	TIME/LABOR SAVINGS
Naval Hospital Dental Clinic Rota Spain	Prolonged awkward postures, static positions. 	Dentist and dental assistant chairs that promoted staff member mobility and patient access; and that accommodated different body sizes.	Reduced risk of WMSDs of the neck, back, and shoulders with resulting workers' compensation costs.	Return on investment of over 200% if one lost time back, shoulder, or neck WMSD injury is avoided.

EXECUTIVE SUMMARY FOR FY 2009 SAFETY SUCCESS STORIES

[Note: If reading an electronic file of this report, click on title to view the entire story]

Automation of Shore Installation Heat Stress Monitoring at Naval Station Rota Spain - At U.S. Naval Station, Rota Spain hot summer temperatures can present community health risks to workers and family members alike. In past years, the Industrial Hygiene Department at Naval Hospital Rota manually collected heat stress data. The effort was extremely labor-intensive. Upon learning of a new Automatic Heat Stress System for shore use, the IH Department applied to the Navy Mishap Prevention and Hazard Abatement (MPHA) Program and was provided funding to purchase and install two AHSS units for the Rota Naval base - one located on the hospital campus, and the other outside the base's Fitness Center. The Fitness Center staff posts the respective heat stress warning flag on the main entrance to the gym for all members to see before they begin their summer work out regimens. At the hospital, the real time Heat Stress Flag warning is posted on NH Rota's external non-restricted public webpage.



Heat Stress Flag warning is posted in real time on Naval Hospital Rota Spain's external non-restricted public webpage.

Hazard Abatement Funds Improve Naval Hospital Rota Spain Dental Provider Comfort - At Naval Hospital Rota Dental Clinic an initiative was started to research specialty dental provider seating for new innovative designs, which offered NH Rota staff members optimal seating adjustability and torso/arm support during patient care. The goal of the search was to find a chair that promoted staff member mobility and patient access; and that accommodated different body sizes. Dentist and dental assistant chairs were selected for trial testing at the Rota clinic under actual patient care conditions. Mishap Prevention Hazard Abatement Program funding was solicited to replace the Rota Clinic’s dental provider chairs.



Following trial testing at a dental equipment trade show, a dentist and dental assistant chair (left & right, respectively) were selected for trial testing at the NH Rota clinic under actual patient care conditions.

Voluntary Protection Program Star Awarded To Naval Health Clinic Corpus Christi - On 12 June 2009, Naval Health Clinic Corpus Christi became the first military treatment facility in the Department of Defense to be awarded Occupational Safety and Health Administration Voluntary Protection Programs Star status. The command worked hard to achieve injury rates far below the industry average. Through chain of command commitment and formation of the NHCCC VPP Committee, a deck plate driven team, NHCCC followed a process of promoting a safe working environment culminating in Star status.



Capt. R. G. Kelley, commanding officer NHCCC, lifts the OSHA VPP Star Award during a presentation by OSHA representative Tony Fuentes, assistant director for the Corpus Christi area.

Mishap Reduction Success at Naval Air Weapons Station, China Lake, CA - The impressive mishap reduction trend at China Lake is the cornerstone of its Mishap Program's success. NAWSCL stood up a "Mishap Reduction Team," a collaborative effort that promoted a better understanding of program challenges and increased communication between each key agency involved when a mishap occurred. Through timely notification and immediate investigation of all mishaps, devoted Command attention in the review of every recordable mishap, innovative publicity efforts, and increasing field time while decreasing desk time, NAWSCL has made a connection.



Fall Abatement Resolutions for Fixed and Rotary Wing Aircraft - Navy fixed wing aircraft squadrons and rotary wing squadrons have reported potential fall hazard risks related to personnel performing maintenance while working at height. The Naval Facilities Engineering Command Mishap Prevention and Hazard Abatement Program Team has introduced a number of OSHA compliant solutions that successfully mitigate or eliminate fall abatement risks for maintenance personnel working on both fixed and rotary wing aircraft. These include Mobile Horizontal Rail Systems featuring mobile stands with portable overhead anchor points and Self-Retracting Lifelines (SRLs) that allow workers to move around safely on a horizontal line without needing to unhook; and Mobile Access Platforms (portable overhead anchor points with an elevated working platform and multiple SRLs) that permit maintenance access for the larger fixed wing aircraft.



Mobile Horizontal Rail Systems featuring portable overhead anchor points with Self-Retracting Lifelines are being used successfully at NAS Key West, FL to abate fall hazards during aircraft maintenance.

Electrical Safety Hazards Resolved at Fleet Readiness Center Mid-Atlantic Detachment, Naval Station Norfolk, VA - Electrical and power quality specialists from the Navy Mishap Prevention and Hazard Abatement Program Team inspected work centers at Fleet Readiness Center (FRC) Mid- Atlantic Detachment Building SP-300. The inspection validated hazards dealing with improper wiring and grounding measures and incorrect labeling/circuit identification. A contract was awarded to a local Norfolk contractor to provide qualified personnel and code compliant materials to correct the electrical safety hazards. The bulk of the repair work centered on rewiring over 220 workbenches. The entire repair process was completed in less than five weeks, eliminating all the identified hazards with no major disruptions to FRC operations or maintenance activities.



Green ground wires and clips, used for equipment grounding, were installed at four foot intervals along the workbenches.

Fall Abatement Resolutions at Naval Computer & Telecommunication Station (NCTS), Cutler, ME - A study by Naval Computer & Telecommunication Station Cutler safety personnel revealed significant fall hazards for maintenance technicians working at height in Helix Houses where radio signals generated in transmitter arrays are tuned. The challenge involved designing and fabricating fall protection systems that would not conduct or re-radiate an electromagnetic field generated within the Helix Houses. The Naval Facilities Engineering Command Mishap Prevention and Hazard Abatement Team was tasked to evaluate the fall hazards in the NCTS Cutler North and South Helix Houses, and to develop, design and implement “best value” resolutions to the validated hazards.



Customized anchored ladder and platform with fall protection guard rails provide safe access to deicing switch.