



**U.S. NAVY
OCCUPATIONAL SAFETY AND HEALTH PROGRAM
FISCAL YEAR 2010
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:	2010
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:	175,405 U.S. Navy Civilian Workforce
Name of USN Senior Flag Safety & Health Official:	Rear Admiral Arthur J. Johnson, USN
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Executive Summary

The FY 2010 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 September 17, 2010 U.S. Department of Labor (DOL) Memorandum to Designated Agency Safety and Health Officials (DASHO). 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 by our DASHO 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 175,405 U.S. Navy civilians and 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 2009 by approximately 6.8%, from 164,293 employees in FY09 to 175,405 in FY10. The Navy reported 4,345 injury and illness cases for FY10. Of those 4,345 total injuries, 2,147 (almost half) involved lost time. There was a 6.4% decrease in the total case rate from FY09.
- **Fatalities and Catastrophic Accidents** - There was one Navy civilian fatal fall in FY10. (**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 Navy workers (civilians and Sailors) overseas as they would get in the United States.

Occupational Safety and Health (OSH) Initiatives

- **Motor Vehicle/Seat Belt Safety** - There were 21 motor vehicle mishaps involving civilians in an on-duty status in FY10. A total of 24 people were involved in the 21 mishaps. There were 0 fatalities and 22 people suffered injuries. Of the 22 people with injuries, 9 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, on or off base, 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 U.S. Navy adheres to DODI 6055.4, Change 1 (2 Apr 10), DoD Traffic Safety Program and Executive Order 13513 - "Federal Leadership on Reducing Text Messaging While Driving." Behavior modification and enforcement support includes peer and subordinate mentoring programs and various traffic safety awareness campaigns.
- **Integrating OSH & Emergency Response** - For Federally declared disasters or possibly even incidents of national significance, DoD (and subsequently the Department of the Navy) operates under the National Response Framework (which replaced the National Response Plan in 2008). This support, known as Defense Support to Civil

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.

Authorities (DSCA) is coordinated through an established process where military response capabilities are requested and processed through United States Fleet Forces.

Employee & Contractor Support

- **Training** - In FY10, 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 D list training courses and numbers trained by the NAVSAFENVTRACEN and courses through the Enterprise Safety Application Management System (ESAMS) and Navy Knowledge Online (NKO).
- **Councils and Conferences** - During FY10, the Navy encouraged participation in a number of important safety conferences. While involvement in the Field Federal Safety & Health Councils was somewhat limited in FY10, we did have Navy participation in fleet concentration areas. The Navy also encouraged and funded professional certifications, where possible.

FY10 Accomplishments *(listed alphabetically)*

Acquisition Safety/Systems Safety

- Continued review of Joint Requirements (Capabilities) documents and interaction with acquisition program offices, particularly multi-billion dollar ship programs, to influence implementation of system safety during program development.
- Facilitated a DoD 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.
- Navy Clothing and Textile Research Facility (NCTRF) began research projects to provide improved anti-vibration gloves and abrasive blasting helmets with double hearing protection.
- Continued update of the Navy Acquisition Safety website.
<http://www.public.navy.mil/navsafecen/Pages/acquisition/acquisition.aspx>
- Continued use of the System Safety Advisory Board (SSAB) as a forum for Navy review of systems engineering and risk management approaches. The SSAB collaborated with the flag/Senior Executive Service level Navy Systems Engineering Stakeholder's Group and developed a detailed work plan which will provide products that are integrated into Navy engineering and acquisition process management.
- Completed a DoD funded project to evaluate a retrofit device to improve shipboard inclined ladders.

Energy & Safety & Health

- Energy & OSH Study in Aircraft Paint Hangars – Naval Facilities Engineering Command (NAVFAC) and Bureau of Medicine and Surgery (BUMED) completed the first phase of study in partnership with the National Institute for Occupational Safety & Health (NIOSH) to analyze reduction of air flow in fixed wing aircraft paint hangars that will maintain worker safety and health. Work was conducted under the Navy's Environmental Sustainability Development to Integration Program. Finding the correct optimal airflow rate will save over \$1M in energy cost avoidance on an annual basis.
- Naval Facilities Engineering Service Center is one of the Navy's research, development, and testing commands and is actively engaged in the evaluation of the performance, effectiveness, energy consumption, and SOH regulatory compliance associated with abrasive blast facilities upon a variety of facility operational characteristics.

Enterprise Safety Applications Management System (ESAMS)

Several **new ESAMS report capabilities** have been developed. Examples include:

- Program Compliance Report that displays information regarding SOH compliance.
- Training Report Card/Trend reports that give information on training compliance.

Developed many **new ESAMS functionalities and enhancements**. Examples include:

- The Respiratory Protection module was updated to require personnel to have their respirator medical surveillance record put into ESAMS before respirator training/fit testing.
- My Workplace Inspection Checklist link was updated so that supervisors can view, edit, and create workplace inspection checklists.
- The medical portion of the Personal Profile was updated to display more information on an individual's Medical Surveillance and Physical History. All Medical Surveillance stressors, limitations, evaluation results, and medical surveillance due dates are displayed.

- The process of validating and sending a mishap report to the Web Enabled Safety System (WESS) was simplified within ESAMS.

- New ESAMS usage training documents were made available in ESAMS.

Ergonomics Working Group (ERGO WG)

- Added ergonomics requirements to the Design/Build Uniform Facility Guide Specification.
- Updated the Ergonomics Guidelines for Office Chair Selection.
- Finalized and posted nine interactive ergonomics computer-based training modules in “Ergonomics for SOH Personnel” on Navy Knowledge Online eLearning website.

Fall Protection Working Group (FP WG)

- Improved several design criteria documents and unified guide specifications to integrate FP requirements into the Navy acquisition process.
- Developed guidance documents/solutions to fall hazards (e.g., cranes, shipyards, aviation).
- Updated the Navy FP Guide for Ashore Facilities.

<http://www.public.navy.mil/navsafecen/Documents/OSH/FP/AshoreFallProtectionGuide.pdf>

- Finalized criteria and procedures for identification and use of safe anchorages.
- Provided fall protection training to the Navy design architects and engineers. Developed a fall protection requirements document, web based training, and a checklist for the Navy architects, engineers, and inspectors conducting inspection, investigation, and assessment work on roofs.
- Assisted the U.S. Army Corps of Engineers to update and improve the Safety and Requirements Health Manual and to develop an FP guide similar to the Navy Guide.
- Updated several web based FP training courses posted on Navy web sites. Continued to hold semiannual FP WG meetings and invited other DoD agencies to participate.

Global War on Noise (GWON)

- Naval Sea Systems Command (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, Ship-to-Shore Connector, and Mobile Landing Platform - 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 efforts.
 - (5) Funded a pilot project for custom-molded ear plugs for LCS 1 to evaluate their use onboard ships as noise exposure option.
- Naval Air Systems Command (NAVAIR) - NAVAIR and the Office of Naval Research continued 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.

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 the Continental U.S. 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. NAVFAC obligated \$8.9M on mishap prevention and hazard abatement projects in FY10, many of which will be documented on the Navy safety success story website.

Nanotechnology

- Continued to monitor nanotechnology and OSH literature for applicability to the U.S. Navy.

Navy Executive Safety Board (NESB)

- The NESB, chaired by the Vice Chief of Naval Operations, met once in FY10. The meeting addressed firearms safety, driver safety, and risk management.

Occupational Health (BUMED)

- Navy Medicine developed a new SOH website to provide better information to their SOH professionals. This replaced an antiquated on-line file cabinet system.
- Through a focused effort at all levels, communication and integration has been improved between SOH and emergency management planning. Focus on this area will ensure emergency roles for Safety and Industrial Hygiene are appropriately defined and resourced.

OSHA Citation Website

- Continued to monitor OSHA citations issued to Navy and posted them on the Naval Safety Center (NSC) website to assist all installations in identifying areas of potential risk and preventing recurrence.

Fiscal Year	Total # Inspections w/citations	Total # Citations	Willful	Repeat	Serious	Other
2010	24	87	0	0	65	22
2009	14	60	0	0	49	11
2008	14	31	0	0	25	6
2007	12	8	0	0	4	4
2006	23	55	0	1	40	4
2005	34	53	0	0	37	16
2004	29	26	0	1	20	5
2003	18	16	0	0	10	6

Notes:

(1) Citations to Navy activities are readily available at:

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

(2) OSHA citation information is compiled by Navy from a special inquiry report generated by OSHA staff. While every attempt is made to capture all citations issued to Navy activities, it is possible that some may be missed due to limitations in Navy's establishment database.

Personal Protective Equipment (PPE) Working Group (Established in December 2009)

- Reviewed shipboard PPE related mishaps to identify causal factors, procedural errors, and failure of equipment in an attempt to reduce future mishaps.
- Updated Navy Afloat PPE Shopping Guide to include new items available for use to the Fleet. <http://www.public.navy.mil/navsafecen/Documents/afloat/Surface/Resources/References/shpguide2010.doc>
- Updated the PPE Chapter for upcoming update of Navy Afloat Safety Policy.

Policy and Guidance

- Five Navy safety policies were updated and signed out for dissemination in FY10.

Safety Success Stories

- Posted four success stories to the NSC website in FY10 which demonstrate the Navy's commitment to the safety, health, and quality of life of our Navy personnel.

Studies

- Naval Audit Service completed the following reports
 - Reporting of Safety Mishaps.
 - Management of Hazardous Materials at Fleet & Industrial Supply Center Norfolk.
 - Consideration of Hazardous Noise in the Acquisition of Selected Major Department of the Navy Weapon Systems and Platforms.

Web Enabled Safety System (WESS)

- As part of the DON transition to designated Navy server hosting sites, Navy began the transition to the Space and Naval Warfare Systems Command (SPAWAR) San Diego site.

Workers' Compensation

- Commander, Navy Installations Command (CNIC) Human Resources Offices devoted almost 60 work-years of effort to support 10,960 active workers' compensation cases. The FY10 Department of Labor Operations and Maintenance/Operations and Maintenance Navy Reserve (OMN/OMNR) bill paid annually by CNIC was \$140.8M, a \$10M reduction to the FY09 CNIC spending level of \$150.8M and was returned to the CNIC general fund to spend on other priority items. The reduction was due to a combination of initiatives that included fraud/abuse prosecution, medical case reviews by BUMED doctors and contractor nurses, and dedicated case management by the Federal Employees Compensation Act (FECA) staff.

- CNIC began a partnership with Naval Criminal Investigative Service in 2007 to reduce potential fraud/abuse in the program. 280 cases have been assigned to investigators - 28 additional cases during FY10. There have been 40 cases closed with annual cost savings/avoidance of \$1.809M, with a projected cost avoidance of \$32.7M.
- CNIC began a partnership with BUMED in 2006 to review claims for traumatic injuries and occupational diseases and provide reports to DOL. 326 cases have been assigned to BUMED doctors for medical opinions - 40 during FY10. In addition to the BUMED medical review, CNIC hired intervention nurses in Jacksonville, FL and Pearl Harbor, HI to perform follow-on to the highly successful FY09 pilot at the Puget Sound Naval Shipyard.

FY11 Goals

Acquisition Safety/Systems Safety

- Enhance the integration of safety and health considerations into the systems engineering process for acquisition of military systems.
- Improve safety policy guidance in acquisition in SECNAVINST 5000.2E.
- Continue and expand Navy-wide efforts of the PPE WG to improve the availability of state-of-the-art PPE. (See PPE Goals).
- Collaborate with the Defense Acquisition University to improve safety-related acquisition professional training.

Emergency Management

- CNIC Safety review integration of OSH into CNIC emergency management planning and policy documents, per OSHA guidance at <http://www.osha.gov/Publications/3356.html> and OPNAVINST 5100.23 Chap 26.

Energy & Safety & Health

- Energy & OSH Study in Aircraft Paint Hangars - Complete second phase of study in partnership with NIOSH to identify optimal flow rates that will protect health and safety and reduce energy costs for other fixed wing series and rotary wing aircraft paint hangars. Using study results, recommend changes to appropriate OSHA standard and appropriate changes to Navy policy.

Enterprise Safety Applications Management System (ESAMS)

- Complete development of the ESAMS Needs Assessment function to assist in budgeting.
- Modify functionality in ESAMS to support the documentation of a self assessment.
- Increase the speed of the ESAMS system including a separate report server.

Ergonomics Working Group (ERGO WG)

- Continue to develop solutions to ergonomics hazards of high risk occupations.
- Develop a best practices guide for mechanics.
- Update existing ergonomics guidance documents.
- Provide tools and safe work practices to help commands manage their ergonomics programs.
- Continue to improve and integrate ergonomics into facility design criteria documents.

Fall Protection Working Group (FP WG)

- Update the FP Program Chapter as part of OPNAVINST 5100.23H update.
- Finalize Afloat Fall Protection Chapter and Guide in OPNAVINST 5100.19E.
- Integrate FP requirements into design criteria documents/the Navy acquisition process.
- Develop guidance documents/solutions to fall hazards (e.g., cranes, shipyards, aviation).
- Update existing guidance documents including Navy FP Guide for Ashore Facilities.
- Finalize criteria and procedures for identification and use of safe anchorages.
- Continue analyzing fall mishap statistics.

Global War on Noise (GWON)

- Update OPNAV policy to establish an upper limit of double hearing protection, above which engineering or administrative controls are required.
- Deploy an improved aviation support (flight deck) cranial helmet and fit high risk personnel with custom molded earplugs.
- Establish a Navy and Marine Corps Working Group to address noise in design.
- Continue aviation research to reduce noise in tactical fighter jet engine exhaust.
- Continue to deploy custom molded earplugs.
- Develop a Vice Chief of Naval Operations directed Navy Hearing Protection roadmap.
- Provide a list of acoustical engineering reductions planned for proposed Navy ship designs.

- Continue to improve mathematical modeling of ship noise in design.

Mishap Prevention and Hazard Abatement (MPHA) Program

- Complete MPHA Program projects approved for FY11 and prioritize and select FY12 MPHA projects.
- Document successes.

Nanotechnology

- Continue to monitor nanotechnology and OSH literature for applicability to the U.S. Navy.

Navy Executive Safety Board (NESB)

- Finalize NESB charter.
- Convene at least one NESB meeting.
- Determine the specifics for integrating ESAMS functionality into the DON's Risk Management Information System (RMIS).
- Develop an implementation plan for the Driver History Profile Program (DHP2).
- Make safety improvements in the Navy's Physical Training program.
- Analyze Enterprise-wide data from Calendar Year 2010 unit self assessments.

Occupational Health

- Develop a Strategic Occupational Medicine Business Plan for the Navy Medicine Enterprise.
- Develop program and processes for deployment medical readiness of civilian workforce.

OSHA Citation Website

- Continue to monitor OSHA citations at Navy activities and post on website.

Personal Protective Equipment (PPE) Working Group

- Develop a chemical glove matrix for Sailors to use when performing preventive maintenance system (PMS) and repairs.
- Recommend appropriate head protection for Sailors performing PMS around aircraft.

Policy and Guidance

- Continue to update and improve OPNAV safety policies, specifically:
 - OPNAV Instruction 5100.23H, Navy Safety and Occupational (SOH) Program Manual.
 - OPNAV Instruction 5100.19F, Navy SOH Program Manual for Forces Afloat

Safety Success Stories

- Complete and post ten stories to the NSC website demonstrating the Navy's commitment to the safety, health, and quality of life of our Navy personnel.

Studies

- Complete the DON Safety Program Staffing Study (Naval Audit Service)

Training

- Complete the five SOH Navy Training System Plan action items and identify new actions.
- Develop a seminar on Radiofrequency Radiation Hazards and Controls.

Web Enabled Safety System (WESS)

- Rewrite the WESS Consolidated modules to include mandated Minimum Data Elements.
- Establish access to authoritative data sources to allow data to be imported from recognized data sources. The import of medical injury/illness data is the first priority, followed by hearing conservation and injury compensation data from the DOL Safety First Event Reporting (SaFER) system. These initiatives will assist activities in identifying OSHA-recordable cases and simplify data entry for customers.

Workers' Compensation

- CNIC will continue to partner with the Naval Criminal Investigative Service (NCIS) on potential fraud/abuse cases and BUMED for medical reviews.
- NAVSEA will continue efforts to reduce workers' compensation costs.

Concluding Comments:

- The U.S. Navy continued to track the value safety adds to worker safety, health, and quality of life on its Safety Success Stories website. The stories also demonstrate how best business practices result in productivity gains and cost savings. Examples of new stories posted during FY10 were VPP Star awards to Navy installations 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

- During FY10, the U.S. Navy continued to move safety upfront in acquisition. Integrating safety into the earliest phases of acquisition (concept and design) will increase cost avoidance for the entire life cycle of acquisitions. 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 will continue to face numerous challenges in its evolution towards world class safety status. These include the continued prosecution and support for two armed conflicts, as well as integrating new and evolving technologies (e.g., nanotechnology, alternative fuels, robotics, and alternative energy ashore). Additionally, the added elements of increasing fiscal constraints and competition for resources and an aging civilian workforce mandate a renewed effort towards reducing inefficiency and optimizing total lifecycle operating costs. Going forward, the Navy seeks to increase the safety capability and capacity of the entire workforce through formal training, education reforms, and new initiatives. The Navy will also develop and field a fully integrated Risk Management System that maximizes early hazard identification, correction, and trend analysis.

For further details on FY10 accomplishments and FY11 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 288 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 demonstrate 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 FY 2010. When reporting your results include a discussion that compares your agency’s current performance to that of the prior fiscal year.

Injury and Illness Trends

The data included in the following table was obtained from the Department of Labor, OSHA Federal Agency Programs and Office of the Under Secretary of Defense (Installations and Environment) for Safety, Health, Fire and Emergency Services. U.S. Navy’s civilian workforce (without the Marine Corps) increased from 2009 by approximately 7%, from 164,293 employees in FY09 to 175,405 in FY10. The Navy reported 4,345 injury and illness cases for FY10. Of those 4,345 total injuries, 2,147 (almost half) involved lost time. There was a 6.1% decrease in the lost time case rate (LTCR) from FY09. These injuries resulted in lost productivity. Lost work days are a measure of lost productivity. The Navy’s lost work days increased 4.5% in FY10 and the lost work day rate increased by 0.55%.

**Navy (without the Marine Corps) Federal Injury and Illness Statistics
for Fiscal Year 2010 End-of-Year Cumulative Totals**

	FY 2009	FY 2010	Change
Number of Federal Civilian Employees¹ (including full-time, part-time, seasonal, intermittent workers)	164,293	175,405	+6.8%
Total Cases Injury/Illness¹ (number of injury/illness cases—no lost-time, first aid, lost-	4,349	4,345	-0.1%

	FY 2009	FY 2010	Change
time and fatalities)			
Total Case Rate ¹ (rate of all injury/illness cases per 100 employees)	2.65	2.48	-6.4%
Lost Time Cases ¹ (number of cases that involved days away from work)	2,130	2,147	+0.8%
Lost Time Case Rate ¹ (rate of only the injury/illness cases with days away from work per 100 employees)	1.30	1.22	-6.1%
Lost Work Days ² (number of days away from work)	54,087	56,541	+ 4.5%
Lost Work Day Rate ² (per 100 employees)	32.80	32.98	+ 0.55%

¹ Department of Labor, OSHA Federal Agency Programs, Injury and Illness Statistics for 2010,

http://osha.gov/dep/fap/statistics/fedprgms_stats10_final.html

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

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

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.

DoD continuously analyzes civilian lost-time 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>.

DoD Top Five Civilian Occupations Project

Sponsored by the Defense Safety Oversight Council (DSOC) Installation and Industrial Operations Task Force (IIO TF), the objectives of this FY2008 initiative are: 1) to evaluate mishap and workers compensation chargeback data for the top five DoD civilian occupation codes with the highest lost productivity, 2) to determine common causes of lost productivity within these occupation codes, and 3) to work with respective community leaders towards developing solutions that eliminate/reduce occupational mishaps.

Using data from the Defense Manpower Data Center, the working group determined the five occupations with the highest lost productivity were:

1. Fire Protection and Prevention (All Services) (Occupation Code: 0081)
2. Police (All Services) (Occ. Code: 0083)
3. Maintenance Mechanic (All Services) (Occ. Code: 4749)
4. Motor Vehicle Operator (All Services) (Occ. Code: 5703)
5. Rigging (Navy only) (Occ. Code: 5210)

Efforts have focused on obtaining and analyzing mishap data for these selected occupations to determine any location-, mishap-, or activity-associated risks. Interaction

with respective community leaders has been essential to finding accurate data for each of these occupation codes. Work has begun to identify the appropriate solutions based on determined causes of lost productivity. Preliminary solutions include:

Fire Protection and Prevention (All Services) (Occupation Code: 0081).

1. Hire or train peer physical trainers for firehouse gyms.
2. Increase implementation of mandatory fitness policy.
3. Annual testing for physical requirements.
4. Heighten awareness of sources of lost productivity.

Police (All Services) (Occupation Code: 0083).

1. Investigate potential for a pan-service wellness program.
2. Investigate legality/practicality of capping employment age and encouraging retirement.
3. Determine if new technologies are available, effective, and feasible for winter footwear.

Maintenance Mechanic (All Services) (Occupation Code: 4749).

1. Perform monthly Job Hazard Analyses in select maintenance shops until risks and hazards are reduced.
2. Implement Voluntary Protection Programs for installations where maintenance mechanics contributed high proportions of lost days.

Motor Vehicle Operator (All Services) (Occupation Code: 5703).

1. Incorporate a comprehensive ergonomics program.
2. Implement a work-conditioning/wellness program.
3. Determine if there are any existing safety programs for stepping up, down, or off vehicles.

Rigging (Navy only) (Occupation Code: 5210).

1. Institute slips, trips and falls awareness training at the six Navy rigging installations.
2. Examine long-term workers' compensation cases to determine what, if any, improvements can be made in case management.
3. Examine the three sites with the greatest number of mishaps and identify specific actions needed.

This initiative should be completed during FY11.

B. Fatalities and Catastrophic Incidents

Use agency data to summarize your agency's fatal and catastrophic incident cases during FY 2010. For each case, please provide information on the date, time, location, description of workplace operations, description of incident, analysis of incident cause, and any resultant programmatic changes or corrective actions such as increased training.

There was one Navy civilian fatality in FY10. **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/ Catastrophic Events	Cause—FY 2010
1	<p><u>Fatality Details, Causal factors & Recommendations/Corrective Actions Taken:</u> 3 December 2009 – Norfolk Naval Shipyard, Portsmouth, VA. A Navy civilian employee was inspecting the rooftop of Bldg 1539 on Norfolk Naval Shipyard for standing water. The employee, who was not wearing fall protection, fell over the edge of the building impacting fire main valves and the ground approximately 37 feet below resulting in his death.</p> <p>Causal Factors: The direct cause of this mishap was undetermined since there were no witnesses to the fall.</p> <p>Corrective Actions:</p> <ul style="list-style-type: none"> • Commander, Naval Sea Systems Command established a fall protection working group to address inconsistencies in the corporate Occupational Safety, Health and Environment control manual, chapter 220, regarding unguarded edges on flat roofs. • All naval shipyards and field activities implemented interim controls to perform and direct work on flat roofs. • Each shipyard revised its fall protection training, based on the expected modifications to the COMNAVSEASYSCOM Occupational Safety, Health and Environment corporate control manual chapter 220. • The shipyard removed the temporary staging on rooftop of bldg 1539. • The Navy's Fall Protection Working Group (FPWG) evaluated the adequacy and clarity of guidance and procedures for fall protection on flat roofs to include individuals who are not fall protection qualified. • The Navy's FPWG determined requirements for fall protection awareness placards and developed appropriate posting requirements.

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 1960.70.

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

Office of Workers' Compensation Programs Costs

CATEGORY	CBY ¹ 2007	CBY ¹ 2008	CBY ¹ 2009	CBY ¹ 2010
Total # Employees	159.5K	165,400	174,492	183,098
Chargeback Cases*	15,976	15,676	15,725	15,493
Total Chargeback (\$ Million)*	221.9	218.7	217.9	212.3
Total Continuation of Pay (COP) (\$ Million)*	2.7	2.7	2.6	2.9
Total Chargeback + COP (\$ Million)	224.6	221.4	220.5	215.2
Avg. Cost per Case (\$)	14,058	14,123	14,022	13,890
Avg. Cost per Employee (\$)	1,408	1,339	1,264	1,175
Chargeback for cases that occurred in the CBY	5.1	5.0	5.4	6.0

¹ Charge Back Year (CBY), July 1 to June 30

* These figures were prepared by Mr. Robert Short, Office of Civilian Human Resources, DON FECA Program Manager from the USDOL OWCP Chargeback bill.

C. Overseas Employees

Please provide a summary of your overseas civilian employees. Include the number overseas employees and how many 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. 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 154 success stories. Our most recent overseas safety success story is "USS Frank Cable (AS 40) Receives Secretary of the Navy 2010 Safety Excellence Award, Auxiliary." The tender is home ported in Guam. The success story was drafted in FY10 and posted to the website in November 2010. A story about the Secretary of the Navy 2010 Safety Excellence Award winner USS Dubuque, home ported in Sasebo Japan, was drafted in FY10 and will be finalized and posted to the website in FY11. All success stories can be viewed at:

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

Additional overseas examples are provided below:

Commander Naval Pacific Fleet (CPF)

- **Ship Repair Facility and Japan Regional Maintenance Center (SRF-JRMC) and SRF-JRMC Detachment Sasebo** are both working toward OSHA Voluntary Protection Programs (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 and plan to have their application ready for OSHA in the April/May 2011 time frame. In addition, SRF-JRMC went through the rigorous process to qualify the first overseas Navy Board Certified Gas Free Engineer. This qualification is in accordance with OSHA's alternate standard requirements and allows the Board Certified Gas Free Engineer to perform the duties of a National Fire Protection Association Certified Marine Chemist.

Bureau of Medicine and Surgery (BUMED)

- **Rota, Spain** - Completed a project to abate ergonomic hazards in the dental operatory. The project involved both training workers and providing better equipment. The improved equipment consisted of chairs specifically designed to allow dental practitioners close access to patients and to assist practitioners to maintain a neutral spinal posture.
- **U.S. Naval Hospital Yokosuka, Japan** began the VPP process.

Commander, U.S. Fleet Forces Command (USFF) - Among USFF and subordinate commands there were approximately 404 Navy civilians working at overseas locations in FY10.

Naval Facilities Engineering Command (NAVFAC) employs a global industrial and non-industrial workforce, with overseas concentrations in Europe and Japan. Status of Forces Agreements and labor agreements that govern the employment of foreign nationals include SOH requirements and accommodations that differ from those required for U.S. military and civilian employees. Site and country specific process management, training, and workplace accommodations are continuously negotiated to address the evolving safety and occupational health requirements of the foreign national component of NAVFAC's workforce.

Space and Naval Warfare Systems Command (SPAWAR)

The *Space and Naval Warfare Systems Center Atlantic (SSCLANT)* has approximately 53 employees overseas in Bahrain, Germany, Guam, Italy, Japan and the United Kingdom.

The *Space and Naval Warfare Systems Center Pacific (SSCPAC)* has about 400 employees at overseas sites. 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. The safety representatives have completed the Naval Safety and Environmental Training Center (NAVSAFENVTRACEN) Mishap Investigation and Reporting Course and are qualified to perform mishap investigations of lost time mishaps. Continuing education is obtained through NAVSAFENVTRACEN or OSHA Training Institute courses. The Hawaii, Guam, and Japan sites receive triennial command inspections, which include oversight of the safety program and also periodic inspections by the SSCPAC Safety Office. The most recent command inspection was conducted in February 2010.

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 FY 2010.

The data in the table below was taken from the Civilian Personnel Management System (CPMS) for FY10. 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 22 November 2010.

Comparison of FY 2009 and FY 2010 Major Trends									
	FY 2009				FY 2010				
Nature (i.e., sprains, contusions, etc.)	% of Total	# of Cases	% of Cost	Cost in Millions	% of Total	# of Cases	% of Cost	Cost in Millions	Description
Musculoskeletal	31	1176	28	67.1	33	1289	28	65	Sprains, sprains, carpal tunnel, pain, swelling of joints
Minor Contusions	29	1085	8	19.6	27	1066	8	19	Cuts and bruises
Back Conditions	15	553	27	63.7	15	607	27	62	Back sprains and strains
Fractures	6	231	5	11	6	232	5	11	Broken bones
Traumatic Injury Unclassified	4	140	10	23.1	4	170	9	21	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	1396	33	78.4	38	1503	33	77	Manually lifting all types of materials
Slips, Trips and Falls	33	1243	24	58.7	35	1369	25	57	Falls of all types from all surfaces
Unclassified, Misc., Unspecified	17	632	30	71.6	15	609	29	68	Unknown
Falling Objects	4	138	2	4.1	3	133	1.5	3.6	Falling objects from machinery, ladders, furniture
Transportation	3	129	4	9.8	3	132	4	10.5	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 continues to have a positive influence on reducing lost time injuries. Our lost time case rates have been continuously decreasing over the last 20 years.

- Navy echelon 2 command safety managers work closely with field activities through site visits, newsletters, and major mishap investigations.
- The Navy's increased emphasis on annual self assessment and review by the Navy Executive Safety Board (NESB) is expected to help focus limited resources on those most important safety issues.
- The Navy's Enterprise Safety Applications Management System (ESAMS) continues to expand. In FY10, the Naval Facilities Engineering Command (NAVFAC) included a contractor mishap module to improve their mishap reporting for contractor personnel; Naval Education and Training Command included their boot camp personnel. This will bring about 315,000 military and civilian employees onto this management system, including a built in self assessment program and many other tools to improve safety processes and programs.
- The Navy continues to emphasize professional certification for safety and industrial hygiene. In FY10, the Navy had 65 Certified Safety Professionals (CSPs) and 77 Certified Industrial Hygienists (CIHs).
- The FY10 COMNAVSPECWARCOM Mishap Trend Analysis indicated a 75 percent reduction in On-Duty Class A Mishaps, a 67 percent reduction in On-Duty Class B Mishaps, a 31 percent reduction in On-Duty Class C Mishaps, and a 36 percent reduction in Off-Duty Class C Mishaps.
- NAVFAC published an update to their strategic plan, making safety one of their guiding principles with a solid safety goal, desired effects, and measurement indicators. Their guiding principle is a succinct "Our People are safe: Always, in all ways." Their management indicators include mishap rates and near-miss reports, Federal Employee Compensation Act (FECA) claims and costs, Days Away, Restricted or Transferred (DART) rate, training and certification, and enforcement checks performed. This plan is operationalized through an annual Strategic Implementation Plan, which includes strategic objectives and actions that are required to achieve the desired effects of the Strategic Plan. Most importantly, NAVFAC has a Safety Program governance structure that is led by the Command senior leadership at the headquarters level and includes similar, tactically focused governance boards at component Commands. These boards have underscored leadership involvement and commitment to developing achievable initiatives that hold people accountable and deliver measurable results.

E. Contract Workers and Volunteers

Please provide the number of contract workers supervised by federal employees and the number of volunteers employed during FY 2010. List the number and type of injuries experienced by each group.

Navy activities in the OSHA VPP submit all contractor injuries and illnesses that occurred at their activities as part of their annual summary report from their OSHA 300 logs. 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).

Historically, volunteer injury and illness experience was not recorded. The Navy safety management tool, ESAMS, currently used by about half of the Navy, has the capability to track volunteer and contractor injury and illness experience.

BUMED - BUMED does not separately track injuries to contractors or volunteers. BUMED has approximately 4,700 personal service contractors (PSC) who are supervised by federal employees. Any injuries to PSC workers are included in BUMED's injury records.

Naval Supply Systems Command (NAVSUP) - There were no known injuries incurred by contract or volunteer employees during FY10.

USFF - Among USFF and subordinate commands, there were an estimated 1,844 contractors supervised by federal employees in FY 2010. There were no volunteers. Per OPNAVINST 5100.23G, Navy Safety & Occupational Health (SOH) Program Manual, USFF and subordinate commands do not document injuries of contract workers. The company to which contract workers belong tracks and documents their injuries.

Commander Naval Reserve Forces (CNRF) - CNRF has 281 contractor employees and zero volunteers. CNRF does not track contractor injuries, individual companies track personnel injuries.

NAVFAC tracks construction contractor injury statistics for Navy and Marine Corps construction projects for which the command provides oversight. In FY10, NAVFAC recorded the supervision of 323 contractor employees. No mishaps were reported for the 323 contractor employees. Construction contractor Days Away, Restricted, or Transferred (DART) rates were 0.47 for FY06, 0.35 for FY07, 0.42 for FY08, and 0.49 for FY09 and 0.56 for FY10.

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. In FY10 NAVFAC continued to emphasize and increase its collection of safety performance data from its contractor community. The significant increase in labor hours can be attributed to a historic workload across NAVFAC as well as the collection of data from environmental, service, and maintenance contractors. During FY10 NAVFAC incorporated its construction, service, environmental and architecture contractor mishap reporting into ESAMS. This centralizes and consolidates the reporting and recording of all mishaps associated with NAVFAC's execution. Reporting via ESAMS also allows NAVFAC to evaluate common issues that impact NAVFAC's in-house and contractor workforce in an effort to develop common SOH solutions.

Commander, Naval Special Warfare Command (COMNAVSPECWARCOM) – Number of contractor employees is 193. There are zero volunteers. No injuries were experienced for FY10.

II. OSH Initiatives

A. Motor Vehicle Safety

1. Number of motor vehicle accidents experienced by employees in FY 2010. *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 21 motor vehicle mishaps, 20 with injuries, involving civilians in an on-duty status in FY10. A total of 24 people were involved in the 21 mishaps. There were 0 fatalities and 22 people suffered injuries. Of the 22 people with injuries, 9 experienced 5 or more lost work days.

	FY 2009	FY 2010	Change
Number of motor vehicle accidents experienced by employees	28	21	-25%
Number of accidents resulting in personal injury	26	20	-23%

2. Seatbelt use. *Executive Order 13043 requires seat belt use by federal employees on the job, including drivers and passengers. Describe how your agency promotes compliance with this requirement and tracks the information, including the usage percentage and the number of employees involved in motor vehicle accidents in FY 2010 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 Navy 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 solicits seat belt usage information from subordinate commands on an annual basis. This information is provided to the DoD by 30 April each year for the preceding calendar year (CY). 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 installations and indicate an average seat belt use of 94%. This surpasses the national average for seat belt use 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 continued to promote national driver safety campaigns and programs (e.g., Click-It-or-Ticket and Buckle Up America, That Guy, Street Smart, HERO, etc.) during FY10 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 is executed by the Commander, Navy Installations Command (CNIC). 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.

3. Motor vehicle safety and distracted driving
Please describe what efforts your agency has taken to comply with E.O. 13513, banning texting while driving, as well as to improve overall motor vehicle safety and decrease distracted driving.

The U.S. Navy adheres to DODI 6055.4, Change 1 (2 Apr 10), DoD Traffic Safety Program and Executive Order 13513 - "Federal Leadership on Reducing Text Messaging While Driving." Behavior modification and enforcement support includes peer and subordinate mentoring programs and various traffic safety awareness campaigns. Additionally, Navy leadership regularly sends traffic safety messages to all Navy

commands providing mishap statistics and safe driving tips prior to holidays and/or seasonally. All efforts are focused on identifying and providing proven approaches for reducing risk factors such as distracted driving, speed, fatigue, lack of seat belt use, and drinking and driving.

The Navy continues to promote national driver safety campaigns and programs in an effort to raise awareness on the hazards of distracted driving and reinforce the requirement to not use cell phones while driving on Navy installations. Cell phone use checkpoints and other jointly supported and coordinated law enforcement activities were conducted during these campaigns.

Trainers have been deployed to Navy installations worldwide, including major hubs in California, Florida, North Carolina, and Virginia, as well as at various overseas locations. Over 56,000 Motor Safety Foundation students have been successfully trained since the program's start. CNIC promulgated policy on distracted driving, prohibiting driver use of hand-held cellular phones and personal listening devices (e.g., headphones) in moving vehicles.

Initiatives that the Navy took to improve motor vehicle safety and distracted driving in FY10:

- Included Distracted Driving in each of the seasonal safety campaigns and in other media products provided to deckplate Sailors and leadership such as: Admiral's Quarterly Update, Facebook postings, E-blasts, ALSAFE messages, web postings, *Sea & Shore* articles, Deck Plate Dialogues, Master Chief's conferences, Defense Safety Oversight Council meetings, Joint Service Safety Chiefs Conferences and others.
- Provided various data and support resources to Regional/Installation traffic safety program managers to conduct safety stand downs and lectures at bases, stations, and tenant units.
- Provided Regional safety managers and traffic safety program managers with information on available traffic safety programs and tools such as Street Smart, Mothers Against Drunk Driving (MADD), Recording Artists, Actors and Athletes Against Drunk Driving (RADD), HERO Campaign, etc.
- Conducted American Automobile Association Driver Improvement Program (AAA-DIP) and Alive @ 25 training.
- Conducted motorcycle training (Basic Rider Course, Experienced Rider Course, Military Sportbike Rider Course).
- Conducted simulator training motorbike sessions to be utilized by Sailors unfamiliar with riding a motorcycle.
- Coordinated "Save a Life Tour" driving simulator training days, motorcycle/bicycle rodeos, and other motorcycle safety events.
- Held safety stand downs to address various traffic safety awareness issues.
- Published numerous articles and newsletters regarding traffic safety awareness.
- Conducted periodic (minimum annually) seat belt usage surveys.
- Supported the establishment of Defense Safety Oversight Council Private Motor Vehicle Task Force (DSOC PMV-TF) 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, banners, and electronic marquees to promote awareness of cell phone use while driving laws and motor vehicle safety.

- Provided 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.
- Partnered with federal, state, and local government entities to promote, and support various safety campaigns (e.g., National 3D (Drunk, Drugged, Driving), Click-it-or-Ticket, Drunk Driving over the Limit, 2010 Japanese National Wide Safe Driving, Drive Drunk Get Nailed, and Arrive Alive), and “On Air” interviews with local news stations regarding local traffic safety awareness.
- Started up a regional Motorcycle Mentorship Association for active duty and Department of the Navy civilian riders.
- Promoted the use of Traffic Risk and Planning System (TRiPS) for Navy personnel planning long road trips.
- Added distracted driving to traffic safety hazards brief for new employee orientations.
- Required the designation of a motorcycle safety representative at each command to maintain a database of motorcycle riders, tracking and monitoring each rider’s training compliance through ESAMS.

B. Integrating OSH and Emergency Response

Please describe how the agency incorporates the safety and health of its employees into its plans for emergency and/or disaster response, continuity-of-operations (COOP), etc. Please provide specific examples of this integration.

For Federally declared disasters or possibly even incidents of national significance, DoD (and subsequently the Department of the Navy) operates under the National Response Framework (which replaced the National Response Plan in 2008). This support, known as Defense Support to Civil Authorities (DSCA) is coordinated through an established process where military response capabilities are requested and processed through USFF.

CNIC

The Navy Installation Emergency Management Program, which operates for localized incidents within the fence line of the installation, operates under the construct established by the National Response Framework, and actively implements the Incident Command System, under the National Incident Management System, for Emergency Operations Center operations and incident response.

All Regional and Installation Emergency Management Plans, including Emergency Action Plans (EAP), Continuity of Operations (COOP), Shelter in Place (SIP) and Evacuation Plans are vetted/coordinated, approved by and reviewed annually by the Regional/Installation Emergency Management Working Group (EMWG) or Public Safety Working Group (PSWG) which includes: Commanding Officer, Executive Officer, Public Safety Program Director, Emergency Management Officer, Security/Anti-Terrorism Officer, Fire Chief, Emergency Operations Center Manager (if assigned), Operations Officer, Engineer, Environmental Coordinator, Public Affairs Officer, Fleet & Family Services Representative, Major Tenant Command Emergency Management Officers, Installation Air Operations Officer, Installation Port Operations Officer, and Explosive Ordnance Disposal Detachment Officer in Charge (if resident onboard Installation). These groups meet quarterly at a minimum.

BUMED - Navy Medicine follows all civilian regulations and statutes including National Institute for Occupational Safety & Health (NIOSH) certification for Personal Protective Equipment (PPE), periodic fit testing, and OSHA First Receiver Guidelines requiring Hazardous Waste Operations and Emergency Response (HAZWOPER) training for all personnel operating in the "warm zone" during hazardous materials mass casualty response. Program management also includes adherence to The Joint Commission (JCO) requirements for periodic training and exercises, testing of recall rosters, and maintenance of certifications and qualifications for response team positions. Force Health Protection and Emergency Management Program standards are aligned with CNIC, the executive agent for the Navy Emergency Management Program. Plans call for safety officers to oversee any responses requiring warm zone/decontamination operations. In addition, active duty personnel and government employees maintain current routine vaccinations.

NAVSUP - Disaster response and COOP plans have been prepared for the command. The well-being of employees is a foremost consideration in trying to establish the required balance between being able to reconstitute operations and the maintenance of safety. However, the plan is generalized, given that the nature of the event which may necessitate implementing a COOP plan is unknown, and may require case-by-case decisions about how to proceed with personnel decisions.

SPAWAR - SSCLANT considers the safety and health of its employees by design in their Business Continuity Plan/COOP. They have devised a phone muster process to account for all employees, enforce evacuations as required, and ensure emergency supplies are on-hand and ready as needed.

- SSCLANT has developed several methods to enhance communication of appropriate information, such as a toll-free information line, all hands email, blog entries, intranet pages, and informational pamphlets (that contain personal/home/family guidance as well as work guidance). Their mission essential functions have COOPs that include lead time to set up the function as required in a safe area before discontinuing the function in the potentially affected area before an event occurs.
- The SSCPAC Safety Office has an Emergency Management Specialist on staff for COOP Plan implementation and coordination. The personnel accountability function is also managed, in coordination with other departments such as Manpower and IT Support. Personnel have dial-in and online mustering options.

CNRF - CNRF has established a disaster preparedness and COOP instruction, CNRFCINST 3440.1B. Personnel receive training to ensure they are safe and help raise their awareness of responsibilities and requirements in the command instruction on emergency procedures.

Strategic Systems Programs (SSP) - SSP has a COOP and an Occupant Emergency Plan.

Naval Air Systems Command (NAVAIR) - NAVAIR site Mission Safety representatives are active members of the base Emergency Response and COOP planning organizations. Safety integration occurs as follows:

- Planning: Safety is incorporated in all phases of planning including, but not limited to, personal protective equipment (PPE), means of egress, traffic safety, reviewing plans for drills, etc.

- Training/Drills: At some sites Safety is responsible for planning, developing, and executing all fire evacuation drills, and a Safety Officer is involved with all drills.
- Emergency/Disaster Response: Some site Safety Officers have responsibility for emergencies or disaster responses for the command. These responsibilities include recommending PPE, setting up egress (in to and out of) for hot zone, and the authority for shutting down the site if life safety hazards are recognized.
- COOP: If the command cannot use any structure on the facility, then they will go out and find one or more structures to use temporarily. Safety's responsibility is to complete a comprehensive OSH inspection to any structure the command desires to use prior to occupancy.

NAVSEA - NAVSEA has its senior manager for Safety on the NAVSEA COOP Emergency Staff Designee team. NAVSEA also has a safety manager on its COOP working groups who provides safety expertise in development of new policy, instructions, and implementation processes, such as the development of the pandemic flu contingency plans.

COMNAVSPECWARCOM - The safety and health of employees is incorporated into emergency and/or disaster preparedness through COMNAVSPECWARCOMINST 3440.1.

NAVFAC - NAVFAC has contingency engineering response teams (CERTs) that provide global contingency engineering support and humanitarian assistance in environments where first-responder activities and response have rendered an environment essentially stable. Members of the CERTs experience work environments and hazards that differ from their normal work environments. These team members undergo contingency response specific training to prepare them for their roles and responsibilities as responders.

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 FY02 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.

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 NAVSAFE-NVTRACEN. NAVSAFENVTRACEN provides safety, occupational health, and environmental training to active duty and DoD civilian employees primarily in the Navy and Marine Corps. NAVSAFENVTRACEN trained 9,136 students during FY10. In FY10, NAVSAFENVTRACEN offered 33 different courses using various delivery methods such as resident training, video-teletraining, synchronous web based and asynchronous web based (see table below) training. A few examples of training initiatives are provided below:

- The Secretary of the Navy Safety Office initiated an effort with the Defense Acquisition University to develop instructional materials for safety and health professionals, particularly those in operational commands, to report design deficiencies to acquisition programs and requirements officers. This will help ensure that requirements for new and modified systems consider and correct design issues present in previous systems and equipment.
- Technical outreach to safety and health professionals has included courses or workshops in system safety taught at the Navy Marine Corps Public Health Conference and Navy Safety Professional Development Course. Additionally, the OPNAV Safety Liaison Office has introduced presentations addressing areas of occupational safety and health into system safety venues such as the International System Safety Conference.
- The SSCPAC Safety Office began offering the OSHA 10 Hour Maritime Safety Course during FY10 for Future Combat Systems personnel who oversee contractors or perform work in shipyards. One member of the Safety Office has completed the OSHA 5400 course and is a qualified OSHA Maritime Safety Outreach trainer. This course has been provided on site in Hawaii, and local San Diego courses are scheduled.

2. Staff Trained

In the table below, list the specific training your agency offered in FY 2010.

The table on the following page lists training provided by NAVSAFENVTRACEN. **Attachment D** lists additional safety related training as documented through Navy Knowledge Online and ESAMS.

Type of Training Provided in FY 2010	Number Trained in FY09	Number Trained in FY10
1. Afloat Environmental Protection Coordinator	158	68
2. Asbestos Inspector Initial	77	41
3. Asbestos Inspector Refresher	159	179
4. Asbestos Management Planner Initial	114	22
5. Asbestos Project Designer Refresher	22	58
6. Asbestos Supervisor Initial	67	15
7. Asbestos Supervisor Refresher	157	162
8. Aviation Safety Specialist	179	173
9. Confined Space Safety	29	59
10. Construction Safety Standards	128	113
11. Electrical Standards	179	162
12. Emergency Asbestos Response Team	57	14
13. Excavation, Trenching and Soil Mechanics	47	N/A
14. Facility Response Team [FRT] Five Day	404	420
15. Facility Response Team [FRT] Three Day	705	640
16. Fall Protection	120	155
17. Fire Protection and Life Safety	152	136
18. General Industry Safety Standards	80	109
19. Hazardous Material Control and Management [HMC&M] Technician	786	956
20. Hazardous Substance Incident Response Management [HSIRM]	364	1130
21. Hazardous Substance Incident Response Management [HSIRM] Refresher	618	N/A
22. Incident Action Planning (IAP)	16	N/A
23. Incident Command System 300 (ICS 300)	199	175
24. Incident Command System 300 (ICS 300) Refresher	102	165
25. Industrial Noise	89	69
26. Introduction to Hazardous Materials [Ashore]	59	257
27. Introduction to Industrial Hygiene for Safety Professionals	100	88
28. Introduction to Navy Occupational Safety and Health [Ashore]	647	459
29. Machinery and Machine Guarding Standards	147	102
30. Mishap Investigation [Ashore]	291	249
31. NAVOSH Assessment Tools & Strategies	102	104
32. Navy Ergonomics Program	125	93
33. Oil Hazardous Substance Spill Response Tabletop Exercise (OHS TTX)	132	265
34. Respiratory Protection Program Management	371	367
35. Safety Programs Afloat	1440	2067
36. Submarine Safety Officer	107	64
37. Worst Case Discharge (WCCD) Triennial Tabletop Exercise	17	N/A
Total	8,546	9,136

B. OSH Conferences/Seminars

OSHA is interested in learning about agencies' plans for OSH conferences/seminars and providing support when possible. Please list any safety seminars or conferences the agency is planning for FY 2011:

NAVSAFENVTRACEN will host the annual Naval Safety professional development conference in San Diego, CA on March 7 - 11, 2011 with attendance of approximately 700. Conference details are available on the NAVSAFENVTRACEN website at: <http://www.public.navy.mil/navsafecen/navsafenvtracen/Pages/default.aspx>.

The Navy greatly appreciates the support at the 2010 conference from OSHA for the following topics:

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

Regarding topics at the conference that support 29 CFR 1960 requirements, Navy has a number of safety courses/seminars that cover the spirit of 29 CFR 1960, such as the Navy/Marine Corps Mishap Reporting and Recordkeeping half 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.

BUMED - The annual Navy and Marine Corps Public Health Center (NMCPHC) Conference was held March 19 - 25, 2010 in Hampton, VA and included a significant OSH component. The conference supported Navy Preventive Medicine, Health Promotion, and Occupational Safety and Health Programs. There were over 1,000 attendees who received professional training, exchanged ideas, promoted a better understanding of intra-service capabilities, and enhanced the management of OSH programs. Examples of seminars and professional papers were: AIHA exposure assessment course, industrial ventilation, and hazard identification or control methods. The next annual public health conference scheduled for March 18 - 25, 2011 will be combined with the U.S. Army and will include 794 papers and 3 full days of various professional level courses. Once again, it will include a significant OSH component. NMCPHC does not currently anticipate needing assistance from OSHA for this conference.

C. Field Federal Safety and Health Councils

The Field Federal Safety and Health Councils (FFSHCs) 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 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 Field Federal Safety and Health Council (FFSHC) meetings, representatives from USFF, SPAWAR, CNRF, NAVAIR, NAVSEA, SPECWARCOM, and BUMED report participation at various locations around the country. Examples are provided below:

USFF - USFF and echelon 3 command SOH personnel are active members of the Hampton Roads Federal Safety and Health Council (HRFSHC), attending meetings on a monthly basis. Various subordinate command SOH personnel participate in other areas outside Hampton Roads, such as personnel from Navy Submarine Support Facility, Groton, CT, and Trident Repair Facility Kings Bay, GA who also participate in local safety councils and committees.

SPAWAR - SPAWAR HQ and SSCPAC participate in the San Diego area FFSHC by supporting safety specialist attendance at meetings and keeping apprised of FFSHC news and developments.

CNRF - CNRF Safety Director is the Vice President of the HRFSHC; another safety specialist attends the Hampton Roads FFSHC monthly meetings.

NAVAIR - NAVAIR commands participate in their local FFSHCs, in some cases on a monthly basis. Depending upon the topic, employees are provided opportunities to attend if the manager does not.

NAVSEA - NAVSEA is a sitting employer member on the current OSHA Maritime Committee for Occupational Safety and Health (MACOSH). 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.

SPECWARCOM - The West and East Coast safety specialists attend the Field Federal Safety and Health Councils.

2. Field Council Support

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

Listed below are some examples of how the U.S. Navy encourages support in Field Councils:

BUMED - BUMED encourages participation during regional oversight visits to subordinate activities but does not track participation.

USFF - USFF encourages its echelon 3 command SOH personnel to actively participate in the Hampton Roads Federal Safety and Health Council. Though attendance is not mandatory, the active participation in the FFSHC at the local level provides USFF SOH

personnel the opportunity to share ideas and learn from colleagues in areas associated with safety programs of common interest.

CNRF - CNRF OSH staff are encouraged to attend FFSHC meetings and events; command provides travel/per diem as necessary.

CNIC - Although encouraged, due to operational constraints and limited resources, CNIC had limited involvement in FFSHCs during FY10. Most involvement is at the local level.

SPECWARCOM – encourages Naval Special Warfare Safety Specialists to attend the FFSHCs.

NAVAIR - FFSHC attendance is encouraged by NAVAIR, and some NAVAIR commands provide travel funds to employees/managers attending the Field Councils when needed.

NAVSEA - 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.

NAVFAC - 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.

D. 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 FY10, the Navy continued to participate in OSHA VPP, achieving Star status at: Naval Air Station, Jacksonville, FL; Naval Station Everett, WA; and Southeast Regional Maintenance Center, Mayport, FL. The Navy encouraged participation in the OSHA Voluntary Protection Programs Participants' Association and DoD Safety Forums at the American Industrial Hygiene Conference & Expo, and the 11th Annual DoD Industrial Hygiene Forum. The Navy also encouraged participation at the Navy and Marine Corps Public Health Center's 49th Naval Public Health Conference, and the 18th Annual Naval Safety Professional Development Conference. Navy system safety personnel and affiliated contractor staff were active participants in the International System Safety Conference (Minneapolis, August 2010) which focuses on design for safety in new and modified systems and equipment.

OPNAV Instruction 5100.23G, Navy SOH 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.” **Attachment G** shows a listing of numbers of CSPs in the Navy as compared with other federal agencies.

Summary of Navy VPP Activity:

To date, the Navy has begun implementation of VPP initiatives at 48 sites, and the results have been impressive. Navy began VPP at some locations well before the DSOC initiative. Portsmouth Naval Shipyard led the way for Navy in the pursuit of VPP, winning their “Star” in 2005. There are now 13 Navy sites (list attached below) that have attained and are maintaining VPP Star recognition.

NAVSEA

NAVSEA implemented VPP at all of its shipyards and is moving now to include the rest of its commands in this effort. NAVSEA issued policy clarifying this intention and has the most Navy VPP sites. NAVSEA’s Star sites are:

Southeast Regional Maintenance Center (SERMC), Mayport, FL	VPP Star Aug 2010
Portsmouth Naval Shipyard, Portsmouth, NH	VPP Star 2005 and Recertified 2008
Puget Sound Naval Shipyard & Intermediate Maintenance Facility (IMF) Bremerton, WA	VPP Star 2006 and Recertified 2009
Norfolk Naval Shipyard, Norfolk, VA	VPP Star 2006 and Recertified 2009
Pearl Harbor Naval Shipyard and IMF, Pearl Harbor, HI	VPP Star 2007
Puget Sound Naval Shipyard and IMF Bangor WA	VPP Star 2008

Recommended for Star

- Naval Surface Warfare Center Ship Systems Engineering Station Philadelphia Recommended for Star to OSHA HQ by OSHA Region 3 – 2010

VPP Challenge

- NAVSEA Headquarters/Program Executive Officer Site - 70% complete overall (as of 30 June 2010 VPP Challenge Report to OSHA). Washington Baltimore Area Office has identified VPP Challenge Stage 1 complete.

CNIC

CNIC has two regions, Southeast, with five Star sites and Northwest, which recently attained its first Star, that are aggressively pursuing implementation across their numerous sites. Leadership support for VPP within the Southeast and Northwest regions is significant and consistent. CNIC's Star sites are:

Naval Air Station Jacksonville, FL	VPP Star July 2010
Naval Station Mayport, FL	VPP Star Sept 2009
Naval Weapon Station Charleston, SC	VPP Star Sept 2009
Naval Air Station Key West , FL	VPP Star Jun 08
Naval Submarine Base Kings Bay, GA	VPP Star Apr 2007
Naval Station Everett, WA	VPP Star Aug 2010

BUMED

BUMED has one Naval Health Clinic that has attained Star status and has three other commands that are actively pursuing it. BUMED's Star site is:

Naval Health Clinic Corpus Christi, TX	VPP Star Feb 2009
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NAVFAC

NAVFAC has one site that is actively seeking VPP Star recognition and expects to attain that early in 2011. There were approximately 20 NAVFAC sites that started implementing VPP in 2006, 2007 and 2008 but then discontinued the implementation process in lieu of an alternate internally developed safety management system in 2009.

Navy Sites Pursuing VPP under DoD VPP Center of Excellence

Navy sites pursuing VPP via support from the DoD VPP Center of Excellence are listed below with percent complete and Chain of Command (status as of 10/29/10):

Name	Chain of Command	Current % Complete
NAVFAC Northwest Public Works Department Kitsap, WA*	NAVFAC	100%
NAVFAC Northwest, Silverdale, WA*	NAVFAC	100%
NAVFAC Northwest Public Works Department Everett, WA*	NAVFAC	100%
NAVFAC Northwest Public Works Department Whidbey Island, WA*	NAVFAC	100%
Naval Surface Warfare Center Indian Head,	NAVSEA	100%

Name	Chain of Command	Current % Complete
MD		
Naval Weapons Station Seal Beach, CA	CNIC	96%
Naval Undersea Warfare Center Keyport, WA	NAVSEA	84%
Joint Expeditionary Base Little Creek/Fort Story, Virginia Beach, VA	CNIC	82%
Naval Submarine Support Facility, New London, CT	USFF	80%
Fleet Readiness Center East Cherry Point, NC	NAVAIR	74%
Naval Air Station Whidbey Island, WA	CNIC	74%
Naval Explosives Ordnance Technical Division, Stump Neck, MD	NAVSEA	71%
Command Navy Region Northwest, Bangor, Washington	CNIC	69%
Naval Hospital Yokosuka-Japan	BUMED	66%
Naval Air Station Oceana, Virginia Beach, VA	CNIC	64%
Naval Undersea Warfare Center Division Newport, RI	NAVSEA	62%
Ship Repair Facility-Japan Regional Maintenance Center Sasebo, Japan	COMPACFLT	59%
Ship Repair Facility-Japan Regional Maintenance Center Yokosuka, Japan	COMPACFLT	51%
Naval Surface Warfare Center Port Hueneme, CA	NAVSEA	49%
Navy Expeditionary Medical Support Command, Fort Detrick, MD	BUMED	48%
Naval Air Station Joint Reserve Base Ft Worth, TX	CNIC	44%
Naval Magazine Indian Island, WA	CNIC	42%
Naval Air Station Patuxent River, MD	CNIC	41%
Naval Air Station Lemoore, CA	CNIC	37%
Naval Surface Warfare Center Carderock, MD	NAVSEA	33%
Navy Support Activity Panama City, FL	CNIC	30%
Naval Base Pearl Harbor, HI	CNIC	28%
Naval Station San Diego, CA	CNIC	26%
Naval Air Station Corpus Christi, TX	CNIC	26%
Naval Surface Warfare Center Crane, IN	NAVSEA	25%
Naval Communication Detachment, Cutler, ME	USFF	24%
Southwest Regional Maintenance Center San Diego, CA	NAVSEA	24%

Name	Chain of Command	Current % Complete
Naval Air Station North Island, Coronado, CA	CNIC	23%
Naval Support Activity, Crane, IN	CNIC	21%
Naval Surface Warfare Center, Panama City, FL	NAVSEA	21%
Naval Surface Warfare Center, Corona, CA	NAVSEA	19%
Naval Hospital Camp Lejeune, NC	BUMED	17%
Naval Surface Warfare Center Dahlgren, VA	NAVSEA	16%
Naval Surface Warfare Center Dam Neck, VA	NAVSEA	14%
Naval Station Great Lakes, Waukegan, IL	CNIC	11%

Note: “*” indicates these four activities will apply for Star recognition as a single site.

Below are examples of other support activities:

NAVAIR - Fleet Readiness Center East is the first NAVAIR activity to pursue VPP Star recognition (see table above).

BUMED - Navy Medicine continues to encourage professional training and certifications. At the headquarters level, BUMED tracks the number of Certification Education Units (CEUs) their industrial hygiene and safety personnel receive in order to drive subordinate activities to achieve 4-8 CEUs per person per year. Approximately 50 of their 77 safety personnel attended the Navy Safety Professional Development Conference in FY10, and a large number of their occupational health personnel attended the annual Navy Public Health Conference.

NAVSUP - NAVSUP encourages individuals pursuing career broadening activities such as the training which may result in professional level group memberships and potential certifications.

USFF - USFF supports echelon 3 commands and subordinate commands involvement on various SOH activities as follows:

- Commander Naval Surface Force Atlantic (CNSL) has been recently added to the Navy’s Personal Protective Clothing Working Group (PPE WG). CNSL is a member of the DSOC Electrical Safety Working Group whose focus is to discuss current trends, identify electrical safety shortfalls, and develop initiatives to reduce electrical safety related mishaps. CNSL also participated in a Naval Audit Service study of the Navy’s Traffic Safety Program. CNSL had a success story article covering the USS NASSAU (LHA-4) as a 2010 SECNAV Safety Award recipient, which was posted on the NAVSAFECEN Success Story website.
- Navy Submarine Support Facility (NSSF) Groton, CT, participates in the local FECA/Supervisors Working Group hosted by Submarine Base New London Safety Council.
- Command Submarines Atlantic (CSL) strongly encourages civilians and military to obtain professional certifications. Recently OSH & Environmental Director, Trident Repair Facility Kings Bay, GA, completed certification requirements for CSP.
- Naval Munitions Command (NMC) provides a Fleet Ordnance Support mission. Its promotion of staff involvement is primarily targeted towards enhanced knowledge and continuing education of explosives safety principles and procedures. NMC safety assurance

personnel and operations personnel actively participate in the Department of Defense Explosives Safety Board's (DDESB) and Naval Ordnance Safety and Security Activity's annual safety conferences. Additionally, NMC is represented in the DDESB Working Group on Explosives Safety Training and Education.

- Military Sealift Command (MSC) continues to actively participate in the National Safety Council Waterborne Transportation Group. The group is made up of safety managers from numerous companies that operate ships. The group meets twice a year, but stays in contact throughout the year on emergent safety issues. Other groups MSC participates in include the American Society of Safety Engineers, Navy Fall Protection Working Group, Annual Naval Safety Professional Development Conference, and the DoD Electrical Safety Special Interest Initiative Group.

- All USFF echelon 3 and subordinate commands are encouraged to participate in the Annual Naval Safety Professional Development Conference. This conference provides Navy safety professionals an opportunity to meet with other military counterparts in order to share ideas and obtain new knowledge in areas associated with safety products and services of common interest.

- USFF headquarters and Type Commanders are active participants of the NESB.

SPAWAR - SSCLANT and SSCPAC fund training for safety staff. Professional certification is encouraged and supported. SSCLANT has one CSP and SSCPAC has one CSP and one Associate Safety Professional on staff.

CNRF - CNRF OSH personnel attended the Safety Professional Development Conference and the National Safety Council/Federal Safety and Health Congress/Expo.

SSP - SSP representatives at Norfolk Naval Shipyard and Puget Sound Naval Shipyard participate in VPP, and onsite contractors participate as well.

E. Certified Committees

For those agencies with Certified Safety and Health Committees (see 29 CFR Part 1960, Subpart F) provide a summary of the CSHC's activities during FY 2010. Please include a membership list, dates of meetings and their topics, and a discussion of the CSHC's impact on the agency's OSH program.

U.S. Navy has no Certified Safety and Health Committee per 29 CFR Part 1960, Subpart F

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 1960.78(b), please provide a synopsis of the findings of your agency's FY 2010 self-evaluation, and your agency's plans to implement any corrective actions or changes to its OSH program.

The Department of Navy (DON) issued a Safety Vision on 22 January 2009 that required self assessments using any appropriate safety management system. In February 2010, a NAVADMIN was released directing commands/units to implement the DON Safety Vision into their annual safety self-assessment process and to complete their self-assessment by 31 December of each year beginning with 2010. The Naval Safety Center (NSC), in coordination with echelon 2 safety managers, developed the "Safety Self-Assessment Guidance" document to assist commands. The NSC also released an ALSAFE message in October re-emphasizing the importance of safety self-

assessments and informing commands of the website location of the "Safety Self-Assessment Guidance" document.

<http://www.public.navy.mil/navsafecen/Documents/OSH/oshdata/sag.doc>

The effectiveness of the SOH Program agency-wide is measured by the Naval Inspector General (NAVINSGEN) for shore and by the Board of Inspection and Survey for ships and submarines. During FY10, the NAVINSGEN conducted two echelon 2 command inspections and five geographical area visits. The NAVINSGEN "Annual Naval Inspector General Safety and Occupational Health (SOH) Oversight Inspection Report for FY10" highlights seven issues:

- (1) Self-Assessments
- (2) Headquarters Oversight
- (3) DoD 75% Mishap Reduction
- (4) Training
- (5) Fall Protection
- (6) Base Operation Support (BOS) Safety Services
- (7) Motorcycle Safety

Also during FY10, a Navy policy change was written to better define and outline the conduct and reporting of the self-assessment process for SOH programs. This revised section of OPNAVINST 5100.23G, Change 1 describes self-assessment, improvement plan requirements, timelines for regions, field activities and headquarters commands, and reporting on progress made toward the DON Safety Vision. It requires Naval activities to conduct annual self assessments and forward major issues up the chain of command and ultimately to be briefed at the NESB. **This policy will be signed out in FY11.**

Finally, developing this Annual Report to OSHA affords the Navy an excellent opportunity to conduct a self-evaluation of the Navy's SOH Program. As you can see from this report, some of the strengths of the Navy's SOH program are: growing numbers of certified safety professionals (CSPs) and certified industrial hygienists (CIHs), our technical working groups, centralized mishap prevention and hazard abatement funding, Navy safety websites, occupational health care, safety policy with clear roles and responsibilities, increased focus on safety in design/acquisition, and a management system (ESAMS).

Further details on our self assessment are provided in the mandatory **Attachment A**.

V. **Accomplishments for FY 2010**

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

- Continued 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.
- 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. An extension of this project was funded and will focus upon integrating improved products into requirements and procedures for key operations. The effort

has been opened to industry partners in order to increase awareness and possible market demand for improved (low vibration) power tools and suitable (certified) protective equipment.

- Continued participation in technical outreach and exchange, including coordination/teaching of workshops at the Navy Safety Professional Development Conference (March 2010), and anticipated presentations at the International System Safety Conference (August 2011).
- Initiated Research, Development, Training, and Education projects by the Navy Clothing and Textile Research Facility (NCTRF) to provide improved abrasive blasting helmets accommodating double hearing protection and improve anti-vibration gloves.
- A member of the OPNAV staff continued to act as the intersociety liaison for the System Safety Society.
- Continued update of the Navy Acquisition Safety website and development of new sections on hazardous energy (electrical safety) and nanotechnology.
<http://www.public.navy.mil/navsafecen/Pages/acquisition/acquisition.aspx>
- 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 (SSAB) as a forum for Navy review of systems engineering and risk management approaches. The SSAB initiated collaboration with the flag/Senior Executive Service level Navy Systems Engineering Stakeholder's Group and developed a detailed work plan which will provide products that are integrated into Navy engineering and acquisition process management. These include guidance for system safety evaluations during varied stages of acquisition program reviews (external evaluations of programs for design and procurement of major defense systems).
- 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 Naval Sea Systems Command (NAVSEA) technical authority.
- 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. (Signature is pending).
- Initiated high level monitoring and management of Navy-wide efforts to address noise control in systems designs and acquisitions. The effort was stimulated by a directive from the Vice Chief of Naval Operations and an evaluation by the Naval Audit Service. The initiative is being managed by the Applied Logistics and Material Office of the Assistant Secretary of Navy for Research Development and Acquisition.
- Completed publication of the Prohibited and Controlled Chemical list and incorporation through system safety principles in numerous specifications and Contract Data Requirements Lists. NAVSEA updated Specification 077 for more comprehensive inclusion of system safety principles and new standards that includes all current OSH and environmental OPNAV instructions.

Energy & Safety & Health

- Energy & OSH Study in Aircraft Paint Hangars - NAVFAC and BUMED completed the first phase of study in partnership with NIOSH to analyze reduction of air flow in fixed wing aircraft paint hangars that will maintain worker safety and health. Work was conducted under the Navy's Environmental Sustainability Development to Integration Program. Finding the correct optimal airflow rate will save over \$1M in energy cost avoidance on an annual basis.
- Naval Facilities Engineering Service Center is one of the Navy's research, development, and testing commands and is actively engaged in the evaluation of the performance, effectiveness, energy consumption, and SOH regulatory compliance associated with abrasive blast facilities upon the variation of a variety of facility operational characteristics.

Enterprise Safety Applications Management System (ESAMS)

Several **new ESAMS report capabilities** have been developed. Examples include:

- Traffic Command Class Summary that allows administrators to view the total number of personnel trained.
- Command Motorcycle Coordinator Report that displays the personnel with ESAMS Motorcycle Safety Representative access.
- National Fire Protection Association (NFPA) 1500 Master report that provides a detailed list of results of all completed NFPA 1500 checklists.
- Program Compliance Report that displays information regarding compliance for selected SOH programs.
- Training Report Card and Training Report Card Trend reports that give information on training compliance.

Developed many **new ESAMS functionalities and enhancements**. Examples include:

- The Respiratory Protection module was updated to require that personnel enrolled in a respirator program have their respirator medical surveillance record entered in the ESAMS system before respirator training and fit testing can be recorded.
- Motorcycle Coordinator Dashboard was updated with additional functionality.
- My Workplace Inspection Checklist link was updated so supervisors can view, edit, and create workplace inspection checklists. Workplace inspection checklists can be used to determine if any safety issues exist in the supervisor's organization and actions taken by the supervisor to correct those issues.
- Medical portion of the Personal Profile was updated to display more information on an individual's Medical Surveillance and Physical History. All Medical Surveillance stressors, limitations, evaluation results, and medical surveillance due dates are displayed.
- The process of validating and sending a mishap report to WESS was simplified within the ESAMS system.
- Automatic generation of Property Damage reports from a National Fire Incident Reporting System report was developed.
- New ESAMS usage training documents was made available in ESAMS.
- Initiated development of Needs Assessment functionality as part of the ESAMS Self Assessment Module, which is completed and validated annually. This functionality will allow CNIC to document Needs Assessment per CNIC 5100.3, Control of Mercury.

Ergonomics Working Group (ERGO WG)

- Added to the Design/Build Uniform Facility Guide Specification (UFGS) Section 01 33 10.05 20 under Section 1.8 Design Procedures: "1.8.6 Ergonomic Design Analysis: Facilities, processes, and job tasks shall be designed to reduce or eliminate work-related musculoskeletal (WMSD) injuries and risk factors in the workplace. Identify ergonomic design considerations in the basis of design with the Design Development and Pre-final submittals. The Basis of Design shall include a comprehensive ergonomic risk analysis of WMSD factors. Refer to RFP Part 2, UFGS Section 01 35 29.05 20, *SAFETY AND OCCUPATIONAL HEALTH REQUIREMENTS FOR DESIGN-BUILD* for ergonomic protection requirements."
- Updated the Ergonomics Guidelines for Office Chair Selection.
- Formatted the nine interactive ergonomics computer-based training modules in "Ergonomics for SOH Personnel" and posted on Navy Knowledge Online eLearning website.
- Updated the ergonomics program chapter for the upcoming revision of OPNAVINST 5100.23G, Navy Safety and Occupational Health Program Manual.

- Submitted ergonomics success stories to Naval Safety Center for posting on the Success Stories web pages.

Fall Protection Working Group (FP WG)

- Provided fall protection expertise and technical assistance to Navy commands to establish and manage viable FP programs.
- Reviewed, updated, and improved existing FP Program Chapter as part of OPNAVINST 5100.23G future update to 5100.23H.
- Improved several design criteria documents and unified guide specifications to integrate FP requirements into the Navy acquisition process.
- Developed guidance documents and solutions to known fall hazards (e.g., cranes, shipyards, aviation).
- Updated the Navy FP Guide for Ashore Facilities.
<http://www.public.navy.mil/navsafecen/Documents/OSH/FP/AshoreFallProtectionGuide.pdf>
- Continued providing fall protection best work practices from other Governmental Agencies (e.g., ANSI/OSHA/DoD).
- Finalized criteria and procedures for identification and use of safe anchorages.
- Provided fall protection expertise and assisted other DoD agencies to establish and manage their fall protection programs.
- Provided fall protection training to the architects and engineers involved in design of building and facilities to provide safer design.
- Assisted the US Army Corps of Engineers to update and improve the Safety and Requirements Health Manual.
- Updated several web based fall protection training courses posted on Navy web sites. Continued to hold semiannual FP WG meetings and invited other DoD agencies to participate.
- Developed fall protection requirements document, web based training and a checklist for the Navy architects, engineers and other inspectors conducting inspection, investigation and assessment work on roofs.
- Assisted the US Army Corps of Engineers to develop a fall protection guide identical to the Navy Guide.

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.
 - (6) NAVSEA included OPNAVINST 5100.19E requirements in new design specifications and updates to existing build programs through cost based estimates for meeting lower

noise requirements. Increased the use of noise modeling to identify areas for noise control technology.

- NAVAIR - NAVAIR and the Office of Naval Research (ONR) continued 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.

Occupational safety risk to personnel from exposure to U.S. Navy jet aircraft noise is a long standing problem. The F/A-18 and EA-18G Program Office's (PMA265) acknowledgement of these issues is reflected in a commitment to review and pursue feasible noise reduction technical solutions. PMA265 continues to engage the Propulsion and Power Department (NAVAIR 4.4) and the Human Systems Department (NAVAIR 4.6), Office of Naval Research (ONR), and Original Equipment Manufacturers to research and develop technical solutions that reduce community noise levels and minimize personnel exposure to jet noise levels. PMA265 has embarked on a robust engine noise reduction program using mechanical chevrons on the F414 jet engine nozzle. In partnership with ONR and General Electric (GE) Aviation, it is implementing a Rapid Technology Transfer project for variable exhaust nozzle (VEN) chevrons, a promising and viable solution to reducing jet engine noise for the F414/F404 engine, as well as other DoD tactical aircraft. VEN chevrons help mix the jet plume faster to reduce noise. This increased mixing and reduction of noise also reduces the extent and strength of the shock cells in the jet plume, which are known to generate noise through their interaction with the turbulent airflow. GE has successfully developed chevrons for the commercial aircraft engines, CFM56-5B and CF34, currently in revenue service.

This technology was recently tested by NAVAIR Propulsion & Power/GE Aviation at Naval Air Warfare Center Lakehurst, New Jersey and demonstrated an approximate 2.5-3 decibel (dB) reduction over much of the frequency range. In the 3-6 KHz frequency range (identified as most susceptible to hazardous noise exposure), up to 7 dB reduction was demonstrated and encouraging noise reductions in this frequency range are made by this technology. This configuration also shows no thrust impact through maximum afterburner engine settings at sea level static conditions, a critical criterion for Fleet acceptance of these technologies. PMA265 has secured \$2 million in research and development funding from ONR; an additional \$3.3 million of PMA265 funds are committed to complete the testing, design engineering, and manufacturing development phase. In addition, \$98 million has been requested in the FY12 budget to complete retrofit/installation on the F/A-18E/F and EA-18G inventory. If the funds are provided, this will be the first installation of jet noise reduction technology on any DoD high performance tactical aircraft.

- Office of Naval Research (ONR) – ONR sponsored its first technical review under the Noise Induced Hearing Loss (NIHL) Program. The presentations highlighted current developments in shipboard and jet noise reduction and modeling, pharmacological approaches, hair cell regeneration, developments in hearing loss assessments and hearing protection equipment. A hearing conservation panel discussed improvements and state-of-the-art in hearing conservation. Participants included NAVSEA, NAVAIR, BUMED, NMCPHC, Marine Corps, Air Force, Army, Telemedicine and Advanced Technology Research Center (TATRC), St Jude Children's Research Hospital, academia, and other NIHL players. Several new collaborations were formed as a result of the meeting. Noise research efforts are focused into the following areas:

- Enabling technology for prediction of NIHL incidence and economic cost.
- Development and evaluation of a military hearing conservation toolkit based on high-quality hearing loss simulations.
- Assessing an Enhanced Hearing Conservation Program (HCP) longitudinally in LCS1 crews.
- Identifying individual susceptibility to NIHL with Otoacoustic Emissions.
- Small Business Innovation Research/Small Business technology Transfer Research Program.

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 the Continental U.S. 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. [See **Attachment E** for more details on the MPHA Program and FY10 projects]

- Completed or awarded MPHA projects approved for FY10.
- Prioritized and selected FY11 MPHA projects.

Navy Mishap Prevention & Hazard Abatement Program
Funding FY04 through FY10*

FUNDING YEAR	APPROPRIATION	AUTHORIZATION (\$ Million)	OBLIGATED (\$ Million)
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	9.3
FY 2010	9.5	8.9	8.9

*Notes. Obligation FY 2010 is provided by NAVFAC documentation.

Nanotechnology

- Updated technical poster on “Nanotechnology Occupational Health Challenges” and presented at the American Industrial Hygiene Conference in Denver, CO.
- Continued to monitor nanotechnology and SOH literature for applicability to the U.S. Navy.

Navy Executive Safety Board (NESB)

- The NESB, chaired by the Vice Chief of Naval Operations, met once in FY10, on 15 December. The meeting addressed firearms safety, driver safety, and risk management.

Occupational Health (BUMED)

- Navy Medicine developed a new SOH website to provide better information to their SOH professionals. This replaced an antiquated on-line file cabinet system and will dramatically improve communication with BUMED SOH staffs worldwide.
- Through a focused effort at all levels, communication and integration has been improved between SOH and emergency management planning. Focus on this area which will to ensure emergency roles for safety and Industrial Hygiene are appropriately defined and prepared for.

OSHA Citation Website

- Continued to monitor OSHA citations issued to Navy and posted them on the NSC website to assist all installations in identifying areas of potential risk and preventing recurrence.

Fiscal Year	Total # Inspections w/citations	Total # Citations	Willful	Repeat	Serious	Other
2010	24	87	0	0	65	22
2009	14	60	0	0	49	11
2008	14	31	0	0	25	6
2007	12	8	0	0	4	4
2006	23	55	0	1	40	4
2005	34	53	0	0	37	16
2004	29	26	0	1	20	5
2003	18	16	0	0	10	6

Notes: (1) Citations to Navy activities are readily available at:

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

(2) OSHA citation information is compiled by Navy from a special inquiry report generated by OSHA staff. While every attempt is made to capture all citations issued to Navy activities, it is possible that some may be missed due to limitations in Navy's establishment database.

Personal Protective Equipment (PPE) Working Group

- Reviewed shipboard PPE related mishaps to identify causal factors, procedural errors, and failure of equipment in an attempt to reduce future mishaps.
- Updated Navy Afloat PPE Shopping Guide to include new items available for use to the Fleet.
<http://www.public.navy.mil/navsafecen/Documents/afloat/Surface/Resources/References/shpguide2010.doc>
- Reviewed and updated applicable PPE Chapter for upcoming update of Navy Afloat Safety Policy, OPNAVINST 5100.19.

Policy and Guidance

A number of Navy safety policies were updated and signed out for dissemination in FY10:

- OPNAV Instruction 1500.75B, Safety Policy and Procedures for Conducting High-Risk Training.
- OPNAV Instruction 3500.39C, Operational Risk Management (ORM).
- OPNAV Instruction 3590.24E, Chief of Naval Operations (CNO) Afloat Safety Awards Program.
- OPNAV Instruction 5100.25B, Navy Recreation and Off-Duty Safety Program.
- OPNAV Instruction 5102.1D, Changes 1 and 2 to Navy and Marine Corps Mishap and Safety Investigation Reporting and Recordkeeping Manual.

Safety Success Stories

- Posted four success stories to the Naval Safety Center website in FY10 that demonstrate the Navy's commitment to the safety, health, and quality of life of our Navy personnel. An additional nine stories, completed in FY10, were approved and posted to the website in October and November 2010. The stories demonstrated the value added by safety and how best business practices result in productivity gains and cost savings. The success stories web pages are located on the Naval Safety Center website at:

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

[See **Attachment F** for more about the success stories and FY10 examples].

Studies

- Naval Audit Service completed the following reports:
 - Reporting of Safety Mishaps - Report N2010-0016, 12 March 2010.
 - Management of Hazardous Materials at Fleet and Industrial Supply Center Norfolk - Report :N2010-0029, 26 May 2010
 - Consideration of Hazardous Noise in the Acquisition of Selected Major Department of the Navy Weapon Systems and Platforms, Report: N2010-0038, 22 June 2010

(The studies can be found on the Naval Audit Service website at:

<http://secnavportal.donhq.navy.mil/portal/server.pt?space=CommunityPage&control=SetCommunity&CommunityID=303>)

Web Enabled Safety System (WESS)

- During FY10, completed the first web-based mishap reporting module in WESS for Aviation mishaps. This module was made available on 3 October 2010 providing a greatly enhanced look and feel for the WESS customers while utilizing leading-edge technologies to enhance the user experience. The current modules, including OSH, operational and off-duty/recreational and motor vehicle mishaps are being re-written to take advantage of the newer technologies as well as the improved user interface. The updated module will be made available the beginning of CY 2012.
- As part of the DON transition to designated Navy server hosting sites, Navy has started the transition to the SPAWAR San Diego site. The move to the site will improve the capability for the command as well as provide improved reliability and performance. The move should be completed by summer of 2011.

Workers' Compensation

- During FY10, CNIC Human Resources Offices devoted 58.5 work-years of effort to support 10,960 active workers' compensation cases. The FY10 Department of Labor Operations and Maintenance/Operations and Maintenance Navy Reserve (OMN/OMNR) bill paid annually by CNIC was \$140.8M. This was a \$10M reduction to the FY09 CNIC spending level of \$150.8M and was returned to the CNIC general fund to spend on other priority items. The reduction was due to a combination of initiatives that included fraud/abuse prosecution, medical case reviews by BUMED doctors and contractor nurses, and dedicated case management by the Federal Employees Compensation Act (FECA) staff. Based on this extraordinary reduction in the chargeback bill, the CNIC FECA Program was recognized by the Deputy Assistant Secretary of the Navy (Civilian Human Resources) with the 2010 DON Civilian Human Resources Community Award for Team Excellence.
- CNIC began a partnership with Naval Criminal Investigative Service in 2007 to reduce potential fraud/abuse in the program. 280 cases have been assigned to investigators - 28 additional cases during FY10. There have been 40 cases closed with annual cost savings/avoidance of \$1.809M and a cost avoidance over the lifetime of the claimants of \$32.7M. There are currently 29 open Naval Criminal Investigative Service criminal cases and 88 cases under preliminary review.
- CNIC began a partnership with BUMED in 2006 to review claims for traumatic injuries and occupational diseases and provide reports to DOL. 326 cases have been assigned to BUMED doctors for medical opinions - 40 during FY10. In addition to the BUMED medical review, CNIC hired intervention nurses in Jacksonville, Florida and Pearl Harbor, Hawaii to perform follow-on to the highly successful pilot at the Puget Sound Naval Shipyard in FY09.

- COMNAVSPECWARCOM continues to work with the Region Compensation Program Administrators in regard to Worker Compensation claims.

VI. Resources

Explain any significant one-time or additional permanent resources allocated to the OSH program(s) in FY 2010 for areas such as workplace hazard abatement, research and development, data systems, staffing, and training.

VPP - The DoD VPP Center of Excellence (CX) continued to support the Navy in FY10 by providing VPP site assessments, onsite counseling, and educational services to approximately 40 separate Navy commands nominated for VPP implementation. The support was provided as part of the continuing DoD, DSOC initiative to improve safety and health management systems across the military services.

VII. Goals

Identify your annual OSH goals and significant OSH initiatives planned for FY 2011 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 were developed for safety review during systems engineering technical reviews. The Navy SSAB is collaborating with the Systems Command Technical Advisory Group.
- Reduce personnel noise exposures associated with new and legacy systems and equipment. Deployment of an improved aviation support (flight deck) cranial helmet and fitting certain high risk personnel, such as the Littoral Coastal Ship with custom molded earplugs is continuing.
- 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 5000.2E) (release is pending), 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.
- Continue and expand Navy-wide efforts of the Personal Protective Equipment Acquisition Working Group (PPE WG) to improve the availability of state-of-the-art PPE to U.S. Navy Sailors and civilians.
- Collaborate with the Defense Acquisition University to improve safety-related inputs for acquisition professional training, and develop training improving safety professionals understanding of how to communicate design-related issues to the acquisition community.

Emergency Management

- CNIC Safety review integration of OSH into CNIC emergency management planning and policy documents, per OSHA guidance at <http://www.osha.gov/Publications/3356.html> and OPNAVINST 5100.23 Chap 26.

Energy & Safety & Health

- In partnership with NIOSH, evaluate reduced air flow rates in aircraft paint hangar booths (from 100 cubic feet per minute) to determine optimal air flow rate that will protect health and safety and reduce energy costs.
- Energy & OSH Study in Aircraft Paint Hangars - Complete second phase of study in partnership with NIOSH to identify optimal flow rates for other fixed wing series and rotary wing aircraft paint hangars. Using study results, recommend changes to appropriate OSHA standard and appropriate changes to Navy policy.
- As one of the Navy's research, development, and testing commands Naval Facilities Engineering Service Center will continue to be actively engaged in the evaluation of the performance, effectiveness, energy consumption, and SOH regulatory compliance associated with abrasive blast facilities affects on a variety of facility operational characteristics.

Enterprise Safety Applications Management System (ESAMS)

- Complete development and testing of the ESAMS Needs Assessment function by the end of FY11. Success will be measured by testing that shows ease of use and accurate recording of safety service requirements and associated budget and manning requirements via Program Objective Memorandum Tool.
- Increase use of ESAMS by CNIC commands and tenants. Examples of success measures include determining if CNIC personnel are entered into ESAMS by comparing the number of CNIC personnel in Total Workforce Management System to the number in ESAMS.
- Draft an ESAMS instruction by second quarter FY11 that clarifies the scope of data requirements and roles and responsibilities for ensuring complete and accurate entry of data into ESAMS.
- 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.
- Increase Fire & Emergency Services (F&ES) data accuracy by refining data coding, business rules, and application interface to standardize data fidelity.
- Revise and incorporate new F&ES modular ESAMS duty tasks to more truthfully reflect the individual duties.
- Implement key system improvements to include authentication/service labels (i.e., Station, Installation, District, Region, Enterprise) and modify the E-Tracker module.
- Implement the F&ES dashboard design in accordance with CNIC.
- Make substantial progress on the CNIC ESAMS and National Fire Incident Reporting System (NFIRS) work/punch list.
- Increase the speed of the ESAMS system to include database and application efficiencies along with the implementation of a separate report server.
- Implement duty roster/daily log to support F&ES administration along with the population of NFIRS records.

Ergonomics Working Group (ERGO WG)

- Continue to identify and develop solutions and alternatives to ergonomics hazards of high risk occupations.
- Develop best practices guide for mechanics.
- Update existing ergonomics guidance documents.
- Provide tools, criteria, and safe work practices to ensure viable ergonomics programs are developed and managed at Navy commands.

- Continue to improve existing design criteria documents to integrate ergonomics into the facility design process and culture.
- 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.
- Improve ergonomics awareness by posting best practices news items and emphasizing Navy-wide training and education.

Fall Protection Working Group (FP WG)

- Provide fall protection expertise and technical assistance to 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, shipyards, aviation).
- Update existing guidance documents including Navy FP Guide for Ashore Facilities.
- Continue providing fall protection best work practices from other government 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.
- Interact with other boards, committees, and working groups, both internal and external to the Navy, on technical aspects for FP and prevention, resources for anticipation, recognition, evaluation and control of fall hazards, and innovative solutions for Navy implementation.
- Continue analyzing fall mishap statistics.
- Improve FP awareness by emphasizing Navy-wide training and education.
- Continue to hold semiannual FP WG meetings and invite other DoD agencies to participate.

Global War on Noise (GWON)

- Update OPNAV policy to establish an upper limit of double hearing protection, above which engineering or administrative controls are required.
- Establish a Navy and Marine Corps Working Group to address noise in design, including guidance and training for acquisition professionals.
- 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.
- Continue efforts to improve mathematical modeling for calculation and control of ship noise in design.
- Release a report reviewing available respiratory protective equipment and affiliated communications systems for abrasive blasting and providing guidance for procurement of optimal equipment on a Navy-wide basis.
- NAVSEA continue to push design criteria to OPNAVINST 5100.19E standards and begin work on individual equipment elements. Continue with noise modeling efforts.

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 the continental U.S. and abroad. Emphasis remains on prioritizing and correcting identified hazardous conditions with the highest degree of risk and greatest exposure to ensure cost-effective use of available funds.

- Complete Mishap Prevention and Hazard Abatement Program projects approved for FY11.
- Prioritize and select FY12 MPHA Projects.

Nanotechnology

- Continue to monitor nanotechnology and OSH literature for applicability to the U.S. Navy.

Navy Executive Safety Board (NESB)

- Finalize NESB charter.
- Convene at least one NESB meeting.
- Determine the specifics for integrating ESAMS functionality into the DON's Risk Management Information System (RMIS).
- Develop an implementation plan for the Driver History Profile Program (DHP2).
- Make safety improvements in the Navy's Physical Training program.
- Analyze Enterprise-wide data from CY 2010 unit self assessments.

Occupational Health

- Develop a Strategic Occupational Medicine Business Plan for the Navy Medicine Enterprise.
- Explore the feasibility of creating standardized position descriptions for the Occupational and Environmental Medicine professional positions (600 series).
- Integrate regional Hearing Conservation Program managers into the BUMED SOH team and strategic goals.
- Develop program and processes for deployment medical readiness of civilian workforce.
- Identify and communicate current efforts regarding Occupational Medicine electronic recordkeeping.

OSHA Citation Website

- Continue to monitor OSHA citations at Navy activities and post on Naval Safety Center website to encourage all Navy activities to learn from these citations.

Personal Protective Equipment (PPE) Working Group

- Collaborate with Navy Protective Clothing Board to recommend improvements to PPE.
- Develop a chemical glove matrix for Sailors to use while performing preventive maintenance system (PMS) and repairs.
- Recommend appropriate head protection for personnel performing PMS and repairs around aircraft.

Policy and Guidance

- Continue to update and improve OPNAV safety policies. Anticipating several policy updates in FY11:

- OPNAV Instruction 5100.23G, Change One to Navy Safety and Occupational (SOH) Program Manual.
- OPNAV Instruction 5100.23H, Navy Safety and Occupational (SOH) Program Manual.
- OPNAV Instruction 5100.19F, Navy Safety and Occupational (SOH) Program Manual for Forces Afloat.

Safety Success Stories

- Complete and post ten stories to the Naval Safety Center website demonstrating the Navy's commitment to the safety, health, and quality of life of our Navy personnel.

Studies

- Naval Audit Service to conduct a Department of Navy Safety Program Staffing Study.

Training

- Complete five Safety and Occupational Health Navy Training System Plan action items assigned during the FY10 Working Group meeting for completion by March 2011.
- Develop a four hour seminar of Overview of Non-Ionizing Radiation (radiofrequency radiation) Hazards and Controls for the 2011 Naval Safety Professional Development Conference in March. The training will cover the electromagnetic spectrum; types and sources of non-ionizing radiation; hazards and exposure limits; Navy electromagnetic radiation surveys and control procedures; how to use surveys; and how to investigate a suspected non-ionizing radiation exposure.

Web Enabled Safety System (WESS)

- Complete WESS Aviation module by the end of FY11 to include a second and third spiral release to provide full functionality.
- NSC to continue re-write of the WESS Consolidated modules to include DoD-mandated Minimum Data Elements for all Services, which should be completed by 3rd quarter FY12.
- Naval Safety Center has established the access to authoritative data sources as a priority for the coming years. This allows for data to be imported from recognized data sources in DON to minimize the data fields WESS customers are required to provide in submitted mishap and hazard reports. The import of medical injury/illness data is the first priority and should be completed early in CY11. Additional sources will be imported in FY11 to include hearing conservation and OWCP injury compensation data from the DOL Safety First Event Reporting (SaFER) system. These initiatives will assist activities in identifying OSHA-recordable cases and simplify data entry for customers.

Workers' Compensation

- NAVSUP goal will be to reduce or eliminate as practicable the need and utilization of Workers' Compensation claims (19 work days lost to injury this year).
- SPAWAR – Systems Center Atlantic (SSCA) has a new FECA Program Coordinator and SSCA Mishap Program Manager plans to meet monthly to discuss mishaps. SSCPAC has a close working relationship with the Regional FECA Program Manager and tracks FECA Program cost information from the CBY reports. The SSCPAC Safety Office, Occupational Health, and the FECA Program Manager all participate in training for supervisors. A representative from each function will speak at the Civilian Personnel Management Academy (CPMA), which is a training course for newly appointed supervisors.
- SSP will improve SSP program execution in this area, in accordance with SSP policy (SSPINST 12810.1D).

- CNIC will 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.
- CNIC will monitor the effectiveness of the nurses on the Human Resources Office staffs in Jacksonville, Florida and Pearl Harbor, Hawaii. Success will be measured against the results of the pilot at the Puget Sound Naval Shipyard in FY09.
- NAVSEA will continue efforts to reduce worker's compensation costs.

VIII. Questions/Comments

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

- 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 require statistics regarding agency workers' compensation costs in future agency reports (see our input on page 4 of this Detailed Report). This financial information attracts leadership attention, which is critical to improving safety performance.
- We recommend OSHA cancel the goal for federal agencies to reduce total case rates. Mandating a reduction in total case rates (i.e., both lost time and non-lost time mishaps) is counterproductive, because it implies to workers and supervisors that they should not report mishaps in order to meet the goal. Instead, what we need is that more non-lost time mishaps, including near misses, be reported so that we can identify root causes and prevent the more serious lost-time mishaps. Tracking lost time mishaps and lost productivity should continue as effective metrics.
- We recommend OSHA complete the OSHA Strategic Plan that was due out 30 September 2010. The U.S. Navy would welcome any further opportunities to participate in this effort, recognizing that it will enable OSHA to more effectively leverage their limited resources.

Concluding Comments:

- The U.S. Navy continued to track the value safety adds to worker safety, health, and quality of life on its Safety Success Stories website. The stories also demonstrate how best business practices result in productivity gains and cost savings. Examples of new stories posted during FY10 were VPP Star awards to Navy installations 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

- During FY10, the U.S. Navy continued to move safety upfront in acquisition. Integrating safety into the earliest phases of acquisition (concept and design) will increase cost avoidance for the entire life cycle of acquisitions. 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 will continue to face numerous challenges in its evolution towards world class safety status. These include the continued prosecution and support for two armed conflicts, as well as integrating new and evolving technologies (e.g., nanotechnology, alternative fuels, robotics, and alternative energy ashore). Additionally, the added elements of increasing fiscal constraints and competition for resources and an aging civilian workforce mandate a renewed effort towards reducing inefficiency and optimizing total lifecycle operating costs. Going forward, the Navy seeks to increase the safety capability and capacity of the entire workforce through formal training, education reforms, and new initiatives. The Navy will also develop and field a fully integrated Risk Management System that maximizes early hazard identification, correction, and trend analysis.

ATTACHMENTS:

Attachment A - Self-Evaluation - Please submit a synopsis of the findings of your agency's FY 2010 self-evaluation, required by [§1960.79](#), and your agency's plans to implement any changes to its OSH program.

Attachment B - 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](#) (date, time, location, description of workplace operations, description of incident, analysis of incident cause, any resultant programmatic changes or corrective actions such as increased training).

Attachment C - Lost Time Cases and Case Rates Comparison of Federal Agencies

Attachment D - Summary of Navy Safety Training

Attachment E - Mishap Prevention/Hazard Abatement

Attachment F - Safety Success Stories

Attachment G - Navy Certified Safety Professionals Compared to Other Federal Agencies

Navy Establishment List - Please submit and/or update your agency's establishment list and provide the North American Industry Classification System (NAICS) code for each establishment. (You can go to <http://www.census.gov/eos/www/naics/> for an explanation of NAICS codes and a link to a current

listing.) In addition, we have included the original guidance that OSHA provided to agencies concerning this issue.

Note: Navy Establishment List will be provided by separate correspondence.

ATTACHMENT A

SYNOPSIS OF THE FINDINGS OF DEPARTMENT OF THE NAVY FY 2010 SELF-EVALUATION

Developing the Annual Report to OSHA affords the Navy an excellent opportunity to conduct a self-evaluation of the Navy's SOH Program. As you can see from the Detailed Report, some of the strengths of the Navy's SOH program are: growing numbers of certified safety professionals (CSPs) and certified industrial hygienists (CIHs), our technical working groups, centralized mishap prevention and hazard abatement funding, Navy safety websites, occupational health care, safety policy with clear roles and responsibilities, increased focus on safety in design/acquisition, and a management system (ESAMS).

During FY10, the Naval Inspector General (NAVINSGEN) conducted two Echelon 2 command inspections and five geographical area visits. The NAVINSGEN "Annual Naval Inspector General Safety and Occupational Health (SOH) Oversight Inspection Report for FY10" highlights seven issues:

- (1) Self-Assessments: Progress has been made on self-assessment guidance. Additional improvement is needed in self assessment implementation.
- (2) Headquarters Oversight: All Echelon 2 commands need to conduct oversight of their field activities. NAVSEA was recognized as a positive model for other Echelon 2 commands to follow.
- (3) DoD 75% Mishap Reduction: Data system inadequacies need to be corrected to enable all commands to show documentation in reducing mishap rates.
- (4) Training: Activities need to ensure that personnel who are assigned collateral duty safety responsibilities receive required training to function effectively.
- (5) Fall Protection: The NAVADMIN "Fall Protection Programs for Aviation" provides much needed guidance to the aviation maintenance community.
- (6) Base Operation Support (BOS) Safety Services: Commander Naval Installations Command issued a BOS Safety Service instruction in August 2010 to standardize BOS Safety Services. NAVINSGEN will evaluate the effectiveness of this instruction in future inspections.
- (7) Motorcycle Safety: Activities visited were tracking compliance with motorcycle safety requirements and had assigned a motorcycle safety representative.

View the "Annual Naval Inspector General Safety and Occupational Health (SOH) Oversight Inspection Report for FY10" at:

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

Self-Assessment Guidance:

In February 2010, a NAVADMIN was released directing commands/units to implement the DON Safety Vision into their annual safety self-assessment process and to complete their self-assessment by 31 December of each year beginning with 2010.

The Naval Safety Center, in coordination with Echelon 2 safety managers, developed the "Safety Self-Assessment Guidance" document to assist commands. The guide provides a collection of metrics and tools, including leading and lagging indicators that can be used to assess command safety posture and to plan and execute a unit self-assessment. The guidance document was posted to the Naval Safety Center's website in October 2010 for ease of access. The Naval Safety Center also released an ALSAFE message in October re-emphasizing the importance of safety self-

assessments and informing commands of the website location of the “Safety Self-Assessment Guidance” document.

<http://www.public.navy.mil/navsafecen/Documents/OSH/oshdata/sag.doc>

Policy Change:

During FY10, a Change One to OPNAVINST 5100.23G, Navy Safety & Occupational Health (SOH) Program Manual was instituted and is in review prior to signature and dissemination. Section 0505 of the Change One instruction was redeveloped to better define and outline the conduct and reporting of the self-assessment process for Safety Occupational and Health programs. This rewritten section describes self-assessment, improvement plan requirements, timelines for regions, field activities and headquarters commands, and reporting on progress made toward the Department of the Navy Safety Vision. It requires Naval activities to conduct annual self assessments and forward major issues up the chain of command and ultimately to be briefed at the Navy Executive Safety Board. In addition, a requirement was added to ensure activities are conducting risk assessments using a disciplined approach (e.g., operational risk management (ORM), job hazard analyses (JHA), etc.), and the responsibilities of the Naval Facilities Engineering Command (NAVFAC) were clarified to ensure that “application of system safety engineering principles and techniques shall be based on an assessment of potential hazards to personnel safety, on mission continuity, and on property protection from loss.”

Examples of self assessment as reported by Echelon 2 commands follow:

Commander, U.S. Fleet Forces Command (USFF) - Roll up of subordinate command self-assessments is a new Navy requirement directed in COMNAVSAFECEN 011550Z OCT 10; therefore, USFF self-evaluation results of USFF domain SOH program will not be available until 1 Mar 2011. USFF plan is to participate in a soon to be established Navy working group in order to analyze self-assessment result areas of Navy concern and draft a plan to implement prospective changes to the Navy’s SOH program.

SPAWAR - SSCLANT and SSCPAC self assessments are currently being performed.

SSP - SSPHQ Self-Assessment is still in progress and will be completed by 31 Dec 2010, as required.

NAVFAC - NAVFAC’s annual self-assessments have traditionally highlighted process and program implementation challenges and shortcomings. Annual self-assessments have resulted in plans of action that highlight the need for emphasis on process standardization, enforcement, additional oversight to verify and insure implementation, and the development and documentation of deficiency abatement plans to achieve increased program compliance and performance.

**ATTACHMENT B
FATALITY CATASTROPHIC ACCIDENT SUMMARY REPORT**

See Section I.B. of the Detailed Report. The complete Accident Summary Report has been supplied to OSHA's area office by the local Navy activity where the fatality occurred, Norfolk Naval Shipyard, Portsmouth VA.

**ATTACHMENT C - TABLE OF FY09 AND FY10 LOST TIME CASES AND
CASE RATES FOR NAVY AND OTHER GOVERNMENT AGENCIES
RANKED FROM LOWEST (BEST) TO HIGHEST (WORST)**

Dept. or Agency	Lost Time Cases		Lost Time Case Rates	
	FY 09 ¹	FY 10 ²	FY 09 ¹	FY 10 ²
National Aeronautics & Space Admin.	32	37	0.17	0.20
Environmental Protection Agency	53	63	0.29	0.37
Dept of Housing and Urban Development	39	44	0.41	0.45
Dept. of Energy	103	89	0.67	0.53
Emergency Preparedness & Response (FEMA)	131	97	0.78	0.59
General Services Admin.	83	80	0.69	0.62
Dept. of Education	26	24	0.63	0.55
Dept. of Treasury	786	790	0.73	0.68
Dept. of Health & Human Services	472	551	0.73	0.67
Social Security Admin.	523	515	0.82	0.74
Dept. of Labor	141	149	0.87	0.90
Dept. of Transportation	545	547	0.98	0.95
Navy (without Marine Corps)	2,130	2,147	1.30	1.22
Dept. of Agriculture	1,705	1,583	1.85	1.41
Dept. of State	191	171	0.52	1.43
Bureau of Immigration & Customs Enforcement	290	283	1.48	1.44
Dept. of the Navy (Incl. Marine Corps)	2,633	2,668	1.44	1.37
Dept. of Defense	10,359	10,674	1.48	1.51
Dept. of the Air Force	2,313	2,447	1.49	1.43
Dept. of the Army (Incl. Corps of Engineers)	4,142	4,157	1.56	1.44
Defense Logistics Agency	347	417	1.52	1.62
Federal Government (Includes Executive, Legislative, Judicial Branches & Postal Service)	45,281	47,226	1.64	1.70
Dept. of Veterans Affairs	5,001	5,177	1.71	1.70
Dept. of Justice	2,591	2,632	2.35	2.28
Dept. of Commerce	768	1,704	1.03	2.29
U.S. Coast Guard	191	201	2.37	2.43
Defense Commissary Agency	331	381	2.02	2.44
Transportation Security Admin.	1,701	1,507	2.80	2.51
Dept. Homeland Security	4,580	4,726	2.48	2.53
Postal Service (Excludes Postal Rate Commission)	14,921	15,311	2.08	2.58
Marine Corps	503	521	2.71	2.60
Bureau of Customs and Border Protection	2,097	2,362	3.70	4.09

1. Reference: U.S. Department of Labor, Occupational Safety and Health Administration, *Federal Injury and Illness Statistics For Fiscal Year 2009*)

http://www.osha.gov/dep/fap/statistics/fedprgms_stats09_final.html

2. Reference: U.S. Department of Labor, Occupational Safety and Health Administration, *Federal Injury and Illness Statistics For Fiscal Year 2010*

http://osha.gov/dep/fap/statistics/fedprgms_stats10_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 D
SUMMARY OF NAVY SAFETY TRAINING
FROM NAVY KNOWLEDGE ONLINE (NKO)
AND THE NAVY ENTERPRISE SAFETY APPLICATION
MANAGEMENT SYSTEM (ESAMS)

E-Learning Courses	Course ID	Personnel Completed Training FY10
Bird Aircraft Strike Hazard	A-4A-0028-1.0	290
Hazardous Material/Explosives Driver	CNATT-HMED-010	303
Laser Safety Fundamentals	CNATT-LSF-010	469
How To Perform Danger Tag-Out Procedures	CNET11442	1740
EPA Refrigerant Technician Course	CNET11913	326
ORM All Navy Essentials For Leaders Course	CNET11969	10955
ORM All Navy Executive Overview Course	CNET11973	1410
ORM All Navy Fundamentals	CNET11977	31854
ORM Aviation Fundamentals Course	CNET1198	10188
ORM Aviation Executive Overview Course	CNET11985	631
ORM Aviation Essentials For Leaders Course	CNET11989	6694
ORM Aviation Applications And Integration Course	CNET11993	1775
ORM All Navy Application And Integration Course	CNET11997	2984
Submarine HAZMAT Inv and Mgmt Sys (SHIMS)	CNET12723	74
Firefighter Injury Prevention	CNIC-FSIPP-003	715
Driving For Life	CPD-DFL-01	59233
Handling And Disposition Of Batteries	CSFE-HDB-1	232
Overview Of Lead-Based Products	CSFE-OLBP-001	152
PCB Management	CSFE-PCBM-001	0
Cultural Resources Training For PWO's and ROICCs	CSFE_CRTPR_1	0
Overview Of Asbestos Management	ES-OAM-001	273
Overview Of Radon	ES-OR-001	159
HAZMAT Awareness	HMA-NAVAIR-1.01	1322
Marine Species Awareness Training	MSAT-2.0	1778
General Ergonomics Awareness	NFEC-A-M1-GEA-1.0	4604
Health Aspects Of Marine Sanitation Devices	NMETC-HAMSD-1.0	1050
VPP – DoD Safety And Occupational Health Program	NSC-SAF-0010-V1	914
VPP - Overview Of The Voluntary Protection Programs	NSC-SAF-0020-V1	644
VPP - The Voluntary Protection Programs 101	NSC-SAF-0030-V1	1423
VPP - Contractor Safety	NSC-SAF-0040-V1	557
VPP - Safety And Health Program Evaluation	NSC-SAF-0050-V1	412
VPP - The VPP For IH/Bioenvironmental	NSC-SAF-0060-V1	276
VPP - The OSHA Recordkeeping	NSC-SAF-0070-V1	303
VPP - Workplace Safety	NSC-SAF-0080-V1	1901
VPP - Mishap Investigations	NSC-SAF-0090-V1	879
VPP - Job Safety Analysis (JSA)	NSC-SAF-0100-V1	861
VPP - History And Trend Analysis	NSC-SAF-0110-V1	375
VPP - Safety And Health Training	NSC-SAF-0120-V1	807
VPP - Sports Safety	NSC-SAF-0130-V1	827
VPP - How To Form And Manage A Safety Committee	NSC-SAF-0140-V1	463
E3 And Spectrum Supportability For Acq Professionals	SPAWAR-E3SSAP-1.0	87

Course	Course ID	Course Length (Hrs)	Retrain Period (Mos)	Personnel Completed Training	Total Man Hours Trained	Availability
ESAMS² – Emergency Management						
IS-700.a National Incident Management System (NIMS): An Introduction	2648	8	0	1108	8864	FEMA
IS-230 Principles of Emergency Management	2389	3	0	17	51	FEMA
IS-235 Emergency Planning	2376	1	0	24	24	FEMA
IS-240 Leadership & Influence	2385	1	0	25	25	FEMA
IS-241 Decision Making and Problem Solving	2377	1	0	22	22	FEMA
IS-242 Effective Communication	2125	8	0	170	1360	FEMA
IS-244 Developing and Managing Volunteers	2378	1	0	3	3	FEMA
IS-271 Anticipating Hazardous Weather and Community Risk	2953	4	0	15	60	FEMA
IS-301 Radiological Emergency Response	2383	1	0	10	10	FEMA
IS-393.a Introduction to Hazard Mitigation	2952	4	0	166	664	FEMA
IS-546 Continuity of Operations (Awareness)	2026	1	0	41	41	FEMA
IS-547 Introduction to Continuity of Operations (COOP)	2029	1	0	40	40	FEMA
IS-22 Are You Ready? An In-depth Guide to Citizen Preparedness	2950	4	0	140	560	FEMA
IS-700 National Incident Management System (NIMS): An Introduction	1804	8	0	145	1160	FEMA
Telecommunicator I	2126	16	0	24	384	Classroom
IS-701 NIMS Multiagency Coordination Systems	2767	5	0	32	160	FEMA
IS-702 National Incident Management System (NIMS) Public Information Systems	2954	3	0	5	15	FEMA
IS-703 NIMS Resource Management	2955	3	0	22	66	FEMA
IS-775 EOC Management and Operations	2606	4	0	119	476	FEMA
IS-800.A National Response Plan (NRP): An Introduction	1805	8	0	420	3360	FEMA
IS-800.B National Response Framework (NRF), An Introduction	2350	3	0	710	2130	FEMA
Oil Hazardous Substance Spill Response Tabletop Exercise (OHS TTX)	2946	8	0	16	128	Navy Safety Center
SFTC - Emergency Management (EM)	2753	8	0	17	136	Classroom
SFTC - Emergency Operations Center Incident Management Team (EOC-IMT)	2752	32	0	66	2112	Surface Force Training Center
Telecommunicator II	2020	40	0	13	520	Classroom
CJIS Training	2614	8	0	7	56	Classroom
IS-55 Household Hazardous Materials - A Guide for Citizens	2384	3	0	43	129	FEMA
ICS Basic (IS-195)	1196	8	0	117	936	Classroom
Worst Case Discharge (WCD) Triennial Tabletop Exercise (TTX)	2968	8	36	1	8	Navy Safety Center
Emergency Medical Dispatch (EMD) (APCO)	2930	32	24	53	1696	Assoc of Public Safety Comms Official
Emergency Personnel Alert System	2615	8	0	87	696	Classroom
ESAMS Training - for EM Personnel	2945	8	0	11	88	Classroom
Fire Services Communications (APCO)	2610	80	0	5	400	Assoc of Public Safety Comms Official
Handling Communication Center Calls for Service from Hispanic Persons	2613	8	0	5	40	Classroom
IS-200.a ICS for Single Resources and Initial Action Incidents	2543	3	0	520	1560	FEMA
ICS 300 Incident Command System 300 Refresher	2947	1	0	4	4	Navy Safety Center

Course	Course ID	Course Length (Hrs)	Retrain Period (Mos)	Personnel Completed Training	Total Man Hours Trained	Availability
Emergency Medical Dispatch Concepts (APCO)	2611	32	24	1	32	Assoc of Public Safety Comms Official
ICS-200 (NFA Q463) Basic NIMS ICS for Operational First Responders	1198	8	0	181	1448	FEMA
ICS-300 (NFA H465) Intermediate All-Hazard NIMS ICS Review for Expanding Incidents	2031	1	0	141	141	FEMA
ICS-400 (NFPA H467) Advanced ICS for Command and General Staff	2075	14	0	147	2058	FEMA
ICS-800 National Response Plan (NRP), an Introduction	1830	8	0	348	2784	FEMA
IS-120.a An Introduction to Exercises	2948	5	0	23	115	FEMA
IS-200 ICS for Single Resources and Initial Action Incidents	2371	3	0	671	2013	FEMA
ICS 300 Incident Command System 300	1717	8	0	190	1520	Navy Safety Center
IS-00200 Incident Command System, Basic I-200 for Federal Disaster Workers	2391	3	0	8	24	FEMA
IS-139 Exercise Design	2375	1	0	23	23	FEMA
IS-1900 NDMS Federal Coordinating Center Operations Course	2769	3.5	0	3	10.5	FEMA
IS-100.SCa Introduction to Incident Command System for Schools	2373	1	0	11	11	FEMA
IS-100.LEa Introduction to Incident Command System for Law Enforcement	2043	1	0	93	93	FEMA
IS-100.HC Introduction to Incident Command System for Healthcare/Hospitals	2042	1	0	451	451	FEMA
IS-100.FWa Introduction to Incident Command System for Federal Workers	2388	1	0	16	16	FEMA
IS-100.a Introduction to Incident Command System	2542	1	0	798	798	FEMA
IS-100 Introduction to Incident Command System	1197	1	0	576	576	FEMA
IS-1 Emergency Manager: An Orientation to the Position	2390	10	0	9	90	FEMA
IS-15A Special Events Contingency Planning for Public Safety Agencies	2123	5	0	5	25	FEMA
SubTotal						
ESAMS² – Safety and Occupational Health (SOH)						
First Aid Training (1 Year Retrain)	2364	24	12	1052	25248	Classroom
Fitness Center Customer Service Counter	3289	1	12	12	12	Classroom
First Aid/CPR/AED Red Cross Instructor Training	390	16	24	134	2144	Classroom
First Aid Training (3 Year Retrain)	240	4	36	2127	8508	Classroom
First Aid and Survival Training	1107	0.5	12	487	243.5	Classroom
Fire Safety in The Workplace	1063	1	0	389	389	Classroom
Fire Protection and Life Safety	1065	32	0	225	7200	Navy Safety Center
Fire Prevention, Protection, Emergency Evacuation and Safety Procedures	1281	1	12	432	432	Classroom
Fire Prevention and Portable Fire Extinguisher Training and Education	1024	0.5	12	36775	18387.5	ESAMS WEB
Fire Extinguisher - Live Training	1067	1	0	653	653	Classroom
Fire Extinguisher Training - Flight Line	1064	1	12	58	58	Classroom
Fitness Complex Admin	3288	1	12	7	7	Classroom
Food Handler Training	1022	2	12	2353	4706	Classroom
Forklift Battery Charging Station	2929	1	0	8	8	Classroom
Forklift Driving Procedures	2489	1	0	3	3	Classroom
Forklift Training (OSHA Operators Safety Training Program)	247	1	12	46	46	Classroom
Formaldehyde Training (OJT by Supervisor)	1105	0.5	12	7	3.5	ESAMS OJT

Course	Course ID	Course Length (Hrs)	Retrain Period (Mos)	Personnel Completed Training	Total Man Hours Trained	Availability
General Industry Safety Standards [511]	68	40	0	65	2600	Navy Safety Center
General Maintenance	2802	1	12	2	2	Classroom
General Safety Training for COMNAVAIRFOR 4790.2	1178	4	12	7113	28452	ESAMS WEB
Ground Safety For Marines (GSM)	2588	80	0	7	560	Classroom
Fire Evacuation Drill Participation	1186	1	6	110	110	Classroom
Hazard Recognition and Risk Analysis for Supervisors	2906	4	0	217	868	Classroom
Ergonomic Awareness Training	1938	1	12	303	303	Classroom
Hazard Recognition Training	2650	0.5	1	4813	2406.5	ESAMS OJT
Hand Safety (OJT by Supervisor)	2014	1	0	241	241	ESAMS OJT
Ergonomic Awareness Training	371	1	0	53390	53390	ESAMS WEB
Isocyanate Training (OJT by Supervisor)	1106	0.5	12	1575	787.5	ESAMS OJT
Hazardous Material Overview (OJT by Supervisor)	2331	1	0	93	93	Classroom
Electrostatic Discharge (ESD) Safety Training	1030	4	12	3199	12796	ESAMS WEB
Electrostatic Discharge (ESD) Safety Training	1928	2	0	5	10	Classroom
Emergency Action Plan (EAP) Walk Through	2172	1	3	1773	1773	Classroom
Employee Reports of Unsafe/Unhealthful Working Conditions (OJT By Supervisor)	1726	1	0	1880	1880	ESAMS OJT
Engine Cylinder Head Cleaning and Containment Area	3248	1	0	3	3	Classroom
Engine Cylinder Head Overhaul	3247	1	0	4	4	Classroom
Engine Cylinder Head Overhaul (Colt)	3249	1	0	2	2	Classroom
Engine Exhaust Valve Overhaul	3251	1	0	3	3	Classroom
Ergonomics Awareness Training for Supervisors	372	1	0	12444	12444	ESAMS WEB
Equipment Specific Operator Training	2589	1	0	27	27	ESAMS OJT
Fall Protection Qualified Person	2469	40	0	3	120	Classroom
Ergonomic Baseline (conducted by the Supervisor)	373	1	0	23203	23203	ESAMS OJT
Excavation and Trenching Basics (Instruction may be provided by Supervisor)	235	1	12	1049	1049	ESAMS OJT
Excavation, Trenching and Soil Mechanics	250	32	0	14	448	Navy Safety Center
Facility Response Team [FRT] Five Day	1375	40	12	15	600	Navy Safety Center
Facility Response Team FRT Three Day	1374	24	12	42	1008	Navy Safety Center
Fall Protection	222	32	0	457	14624	Navy Safety Center
Fall Protection - Annual (OJT by Supervisor)	1073	1	12	12362	12362	ESAMS OJT
Fall Protection (Classroom)(SWRMC)	2763	2	0	73	146	Classroom
Fall Protection and Prevention Safety Awareness Training for Architects and Engineers	1900	4	0	461	1844	Classroom
Fall Protection for Workers (Authorized User)	1257	4	0	221	884	Classroom
Fall Protection for Workers (Authorized User)	3029	8	24	33	264	Classroom
Environmental Protection Specialist	3015	1	0	1	1	Classroom
Lead Awareness - Basic	1260	0.5	0	1052	526	Classroom
Job Hazard Analysis Training	326	0.5	0	4239	2119.5	ESAMS WEB
Kings Bay BC Custodian	2888	1	12	3	3	Classroom
Kings Bay Facilities Maintenance Branch	3007	1	12	5	5	Classroom
Kings Bay Facilities Maintenance Branch Ladders	3008	1	12	5	5	Classroom
Kitchen Operations & Food Preparation	2781	1	0	1	1	Classroom
Ladder Safety (OJT By Supervisor)	1730	1	0	3452	3452	ESAMS OJT

Course	Course ID	Course Length (Hrs)	Retrain Period (Mos)	Personnel Completed Training	Total Man Hours Trained	Availability
Ladders	2708	1	0	18	18	Classroom
Land Mobile Communications And Repair	2992	1	12	9	9	Classroom
Laser Safety Awareness (OJT by Supervisor)	1074	1	12	7089	7089	ESAMS OJT
Laser Safety Refresher Training	2293	1	12	132	132	ESAMS WEB
Introduction to NAVOSH Ashore	70	40	0	472	18880	Navy Safety Center
Laws and Regulations	2453	4	0	9	36	Classroom
Electrical Two Man Training	2903	1	12	8	8	Classroom
Lead Awareness - Non-Lead Workers (Possible Contact)	322	1	12	16789	16789	ESAMS WEB
Lead Awareness (OJT By Supervisor)	1731	1	0	1517	1517	ESAMS OJT
Lead Supervisor	85	32	12	77	2464	Classroom
Lead Worker	84	24	12	87	2088	Classroom
Lifeguard Training and First Aid	1193	4	36	146	584	Classroom
Lockout/Tagout Awareness	1213	1	0	1327	1327	Classroom
Lockout/Tagout for Affected Employees (OJT by Supervisor)	22	1	0	12219	12219	ESAMS OJT
Lockout/Tagout For Authorized Employees - Annually	1097	8	12	986	7888	Classroom
Lockout/Tagout For Authorized Employees (Annual)	3033	1	12	27	27	ESAMS WEB
Lockout/Tagout For Authorized Employees (CNRSW)	1603	1	0	737	737	ESAMS WEB
Lockout/Tagout For Authorized Employees (OJT by Supervisor) (CNRF)	62	8	12	1915	15320	ESAMS OJT
Laser System Safety Officer (ALSO Administrative)	1053	16	0	3	48	Navy Safety Center
Hot Weather Injuries	2157	1	0	43	43	Classroom
Hazardous Materials Control and Management Technician	315	40	0	281	11240	Classroom
Hazardous Materials Handling Cert. for DOT 49 CFR Trans. Reg.	195	4	0	70	280	Classroom
Hazards of Electromagnetic Radiation to Ordnance (HERO)	1369	1	0	431	431	Classroom
HAZCOM Annual Refresher	1387	0.5	12	86	43	Classroom
HAZCOM Training for Supervisors (Initial and Annual Refresher)	1058	1	12	8204	8204	ESAMS WEB
HAZCOM Training Job/Chemical Specific (OJT by Supervisor)	100	1	12	65365	65365	ESAMS OJT
HazMat/Environmental Rep Meeting	3338	1	0	7	7	Classroom
HAZWOPER / ERT - First Responder Operations Level	118	8	12	45	360	Classroom
HAZWOPER for Uncontrolled Hazardous Waste Site Workers	1253	40	12	3	120	Classroom
Hearing Conservation Training	110	1	12	58844	58844	ESAMS WEB
Heartsaver First Aid (American Heart Association - 2 year)	2409	3.5	24	382	1337	Classroom
CPR - Automated External Defibrillator (AED) - (Red Cross 1Yr)	1236	8	12	706	5648	Classroom
HGW Tech Support Test	2635	1	0	4	4	Classroom
Ionizing Radiation Program (Refresher Training)	2179	4	12	12	48	Classroom
Housekeeping (OJT By Supervisor)	1729	1	0	957	957	ESAMS OJT
Houskeeper	2803	1	12	27	27	Classroom
Hurricane Awareness	2102	4	0	250	1000	Classroom
Hurricane Response Pre-Deployment Safety Briefing	1794	1	0	75	75	ESAMS WEB
Indoor Air Quality Awareness	1072	1	0	5	5	ESAMS WEB
Industrial Equipment Mechanic	2853	1	0	1	1	Classroom
Industrial Hygiene Techniques/Occupational Exposure Monitor	1271	80	0	37	2960	Classroom
Industrial Noise	1056	1	0	11	11	Navy Safety

Course	Course ID	Course Length (Hrs)	Retrain Period (Mos)	Personnel Completed Training	Total Man Hours Trained	Availability
						Center
Intro to Industrial Hygiene for Safety Professionals	1054	32	0	95	3040	Navy Safety Center
Introduction to Hazardous Materials (Ashore)	1055	40	0	70	2800	Navy Safety Center
Hazardous Materials	2358	32	0	556	17792	Classroom
Heat Stress - Heat Illness (OJT by Supervisor)	58	1	12	10748	10748	ESAMS OJT
Beryllium Awareness Training (OJT by supervisor)	384	1	12	779	779	ESAMS OJT
Asbestos Supervisor Refresher	212	8	12	103	824	Navy Safety Center
Asbestos Worker Initial	2082	32	12	9	288	Classroom
Asbestos Worker Refresher	2083	8	12	37	296	Classroom
Aviation Confined Space Awareness	2191	1.5	12	378	567	Classroom
Aviation Gas Free Engineering Technician Training	1003	24	0	4	96	Classroom
Aviation Safety Specialist	1004	1	0	11	11	Navy Safety Center
Back Injury Prevention Training (OJT by Supervisor)(Annual)	2486	1	12	7803	7803	ESAMS OJT
Back Injury Prevention Training (One-Time Only)	40	1	0	29114	29114	ESAMS WEB
Base Indoctrination for Safety	2544	2	0	187	374	Classroom
Basic HAZCOM Training (One Time Only)	1169	3	0	18525	55575	ESAMS WEB
CBRNE RPPM Training	1702	4	0	50	200	Classroom
Battery Safety for COMNAVAIRFOR 4790.2 (Quarterly)	1103	0.5	3	10301	5150.5	ESAMS OJT
Asbestos Project Designer Refresher	229	8	12	60	480	Navy Safety Center
Big Ez Recreation Center Food/Bar Operations	2799	1	12	12	12	Classroom
Bloodborne Pathogen Instructor Training	400	0.5	0	13	6.5	Classroom
Bloodborne Pathogen Training	98	1	12	25704	25704	ESAMS WEB
Bloodborne Pathogens Exposure Control Plan (Site Explanation)	2395	1	12	8740	8740	ESAMS OJT
BLS for Healthcare Providers (CPR American Heart Association)	2059	8	24	1668	13344	Classroom
Bowling Center Operations	2890	1	12	24	24	Classroom
Building 9313 Fire Evacuation Plan	2909	1	12	57	57	Classroom
C-9B Pilot Electrical System Safety Training	1100	8	0	1	8	Classroom
Cadmium Awareness Training (OJT by Supervisor)	385	1	12	529	529	ESAMS OJT
Carbon Monoxide Awareness Training (OJT given by the Supervisor)	405	1	12	11951	11951	ESAMS OJT
CPR American Heart Association (Heart Saver- 2 Yr Requal)	227	4	24	3380	13520	Classroom
Battery Disposal	1135	1	0	1	1	Classroom
Anthrax Exposure and Awareness	1071	1	0	2841	2841	ESAMS WEB
40 Hour Contractor Safety/Hazard Identification	74	40	0	62	2480	Classroom
Administrative Work	2806	1	0	12	12	Classroom
Advanced Hazardous Waste Management Annual Certification Workshop	1009	8	0	1	8	Classroom
AED - Automated External Defibrillator (CPR)/(Am. Heart Assoc. Heart Saver- 2Yr)	1011	3	24	3583	10749	Classroom
Aerial Lift/Powered Work Platform Operational Certification	1290	0.5	36	173	86.5	Classroom
Aerial Lift/Powered Work Platform Operational Classroom Training	1288	2	0	122	244	Classroom
Aerial Lift/Powered Work Platform Operational Safety Practical	1289	1	0	101	101	Classroom

Course	Course ID	Course Length (Hrs)	Retrain Period (Mos)	Personnel Completed Training	Total Man Hours Trained	Availability
All Hands Annual Safety Training	1393	4	12	242	968	Classroom
Aloft Procedures at NAS JRB Ft. Worth	2745	1	0	10	10	Classroom
American EHS Health and Safety (CPR Instructor)	2198	1	48	14	14	Classroom
American Red Cross CPR- Adult, Child and Infant	3028	5	12	544	2720	Classroom
Asbestos Supervisor Initial (formerly Asb Sup/Worker)[303]	32	40	12	24	960	Navy Safety Center
Annual Safety Training (for Industrial Personnel)	206	4	12	55	220	Classroom
Asbestos Project Monitor Refresher	309	8	12	5	40	Navy Safety Center
Asbestos and Man-made Vitreous Fibers (MMVF) Hazard Awareness (CNRSW)	1238	1	12	678	678	ESAMS WEB
Asbestos Awareness	1725	1	0	2165	2165	ESAMS OJT
Asbestos Awareness - OSHA Class IV Asbestos Training	14	2	12	19137	38274	ESAMS WEB
Asbestos Awareness Required Reading (Specific to WPNSTACHAS)	2148	1	0	222	222	ESAMS WEB
Asbestos Inspector Initial [301]	33	24	12	22	528	Navy Safety Center
Asbestos Inspector Refresher	242	4	12	70	280	Navy Safety Center
Asbestos Maintenance-Construction - OSHA Class III Workers	1639	16	0	17	272	Classroom
Asbestos Management Planner [302]	34	16	12	1	16	Navy Safety Center
Asbestos Management Planner Refresher	1000	4	12	9	36	Navy Safety Center
Asbestos Project Designer [304]	35	40	12	1	40	Navy Safety Center
Chromate Awareness Training (OJT by Supervisor)	397	1	12	2637	2637	ESAMS OJT
American Red Cross CPR/AED for Lifeguards	2792	8	12	78	624	Classroom
Data Center Fire Evacuation Plan	2908	1	12	15	15	Classroom
CPR American Red Cross (Child and Infant)	210	4	12	2217	8868	Classroom
CPR and First Aid for Security Personnel (Initial and Refresher)	1788	16	24	834	13344	Classroom
CPR For the Professional Rescuer (American Red Cross)	1762	8	12	385	3080	Classroom
CPR Instructor Training (American Heart Association)	1098	4	24	158	632	Classroom
CPR Instructor Training (American Red Cross)	226	16	24	43	688	Classroom
CPR MTN Resuscitative Program Adult Child and Infant with AED	1175	4	24	400	1600	Classroom
CPR National Safety Council	2016	4	24	66	264	Classroom
Crane Rigger	2892	24	36	18	432	Classroom
Crane Rigger NCC-CR-03	3025	24	0	149	3576	Classroom
Crane Safety	93	32	0	74	2368	Navy Safety Center
CBRNE Respirator User Training	1243	1	12	7319	7319	ESAMS WEB
CSD: BTEL 2502 8-11	3254	1	0	16	16	Classroom
Machinery and Machine Guarding Standards	1041	32	0	30	960	Navy Safety Center
Delivering a High-Performance Safety Management System	2407	16	0	83	1328	Classroom
Depleted Uranium (DU) General Awareness Training	1796	1	0	34	34	Classroom
DoD Pesticide Applicator Certification and Training	1261	80	36	6	480	Classroom
DOD VPP CX - Hazard Analysis of Routine Activities	2357	1	0	1037	1037	ESAMS WEB

Course	Course ID	Course Length (Hrs)	Retrain Period (Mos)	Personnel Completed Training	Total Man Hours Trained	Availability
DoD VPP CX - Voluntary Protection Program Introduction	2281	1	0	2922	2922	ESAMS WEB
Electrical - High Voltage	13	8	0	44	352	Classroom
Electrical Safety - Low Voltage	1766	1	0	142	142	Classroom
Electrical Safety Standards	297	32	0	140	4480	Navy Safety Center
Electrical Safety Work Practices	1926	2	0	226	452	Classroom
Electrical Safety Work Practices for Workers (OJT by Supervisor)	67	1	12	5975	5975	ESAMS OJT
Electrical Switch Training	2904	1	12	8	8	Classroom
Critical Incident Stress Management	2118	1	0	12	12	Classroom
Confined Space Rescue and Emergency Training	59	4	12	2899	11596	Classroom
Cold Weather Injuries	2156	4	0	536	2144	Classroom
Collateral Duty Safety Officer (16 Hours) Training	1101	16	0	17	272	Classroom
Collateral Duty Safety Officer Meetings	2069	1	0	412	412	Classroom
Command Safety Introduction for New Check-ins	2620	1	0	43	43	Classroom
Competent Person/Scaffold Builder/Scaffold Inspector	1828	8	0	36	288	Classroom
Compressed Gas Cylinders (May receive instruction from Supervisor)	92	4	12	3852	15408	ESAMS OJT
Computer Workstation	2467	1	0	1	1	Classroom
Confined Space Shipyard, competent Person and Industrial	2010	1	12	24	24	Classroom
Confined Space / Entry Supervisor, Attendant, and Entrant	11	1	12	630	630	Classroom
Confined Space / Entry Supervisor, Attendant, and Entrant (one time only)	1651	2	0	51	102	Classroom
Confined Space Awareness Training	2570	1	0	312	312	ESAMS WEB
CPR American Red Cross (Adult)	103	4	12	2003	8012	Classroom
Confined Space Entry/Emergency and Rescue	114	8	12	25	200	Classroom
CPR American Heart Association (Child and Infant)	1059	4	24	182	728	Classroom
Confined Space Rescue Drill Practical Exercise	1205	2	12	3189	6378	ESAMS OJT
Confined Space Safety	66	10	0	814	8140	Navy Safety Center
Confined Space Training for Qualified Person Initial and Annual Refresher	57	8	12	666	5328	Classroom
Confined Space Worker Training (Entrant, Attendant, Supervisor)(OJT by Supervisor)	404	1	12	7643	7643	ESAMS OJT
Construction Quality Management - QA	375	8	0	3	24	Classroom
Construction Safety QA/Construction Safety - There is No Substitute	1297	4	0	608	2432	Classroom
Construction Safety Standards	230	80	0	172	13760	Navy Safety Center
Contract Safety Training (EM 385-1-1 On-line Course)	2305	1	0	4	4	ESAMS WEB
Contractor Safety/ U.S. Army COE/EM-385-1-1 [345]	76	8	0	789	6312	ESAMS WEB
Contractor Site Safety Orientation	1027	1	0	20	20	Classroom
Electrical Systems Training	2905	1	12	10	10	Classroom
Confined Space Awareness Training (OJT by Supervisor)	1273	1	12	4739	4739	ESAMS OJT
Servicing Multi-Piece and Single Rim Wheels [336]	12	1	0	7	7	Classroom
Safety Management II	2295	1	0	7	7	Classroom
Safety Orientation for Administrative Supervisors (this is a one time requirement, followed by an annual refresher)	2228	1	0	53	53	Classroom

Course	Course ID	Course Length (Hrs)	Retrain Period (Mos)	Personnel Completed Training	Total Man Hours Trained	Availability
Safety Orientation for Non-Supervisors	1093	4	0	13842	55368	ESAMS WEB
Safety Orientation for Supervisor (CJRM)	1647	4	0	664	2656	Classroom
Safety Orientation for Supervisors - Annual	1388	2.5	12	26	65	Classroom
Safety Orientation for Supervisors (Web or Classroom)	1077	4	0	11948	47792	ESAMS WEB
Safety Orientation for Top Managers	1361	2	0	68	136	Classroom
Safety Orientation Training for New Supervisors and Employee Representatives	1233	1.5	0	126	189	Classroom
Safety Stand Down	211	4	12	25015	100060	Classroom
Safety Training Seminar	2994	4	0	453	1812	Classroom
SCBA (Self Contained Breathing Apparatus) Training	121	1	12	5968	5968	Classroom
Quarterly Mail Safety, Security and Emergency Plan Brief (OJT by Supervisor)	2074	0.5	3	484	242	ESAMS OJT
Security Patrolman	3003	1	12	139	139	Classroom
Safety Certification Review	236	1	0	5	5	Navy Safety Center
Servicing Single and Multi-piece Rims (OJT By Supervisor)	1736	1	0	3	3	ESAMS OJT
Sight Conservation Training	111	1	0	23575	23575	ESAMS WEB
Site Safety Quality Management Board (QMB) Meeting	221	2	0	4	8	Classroom
Slips, Trips and Falls (OJT By Supervisor)	1738	1	0	2682	2682	ESAMS OJT
Spill Management Team	1184	15	0	19	285	Navy Safety Center
STAK ASR System User Guide and Safety Tips	3181	1	12	5	5	ESAMS WEB
steam distribution maint./repair of steam and condensate piping in steam pits and tunnels	3009	1	0	16	16	Classroom
SUBASE KB Auto Skills-Power Tools	2928	1	12	7	7	Classroom
SUBASE KB Ballfield Maintenance	3005	1	12	3	3	Classroom
SUBASE KB CDC	2960	1	12	79	79	Classroom
SUBASE KB CHAPEL	2961	1	12	4	4	Classroom
SUBASE KB Emergency Management	2917	1	12	7	7	Classroom
SCBA (Self Contained Breathing Apparatus) Training (Non-CBRNE Certified)	2797	1	12	2	2	Classroom
Reproductive Hazards Job Specific Training - Annual (OJT by Supervisor)	197	1	12	22971	22971	ESAMS OJT
Quarterly Self-Safety Inspection by Supervisors	1706	4	3	3610	14440	ESAMS OJT
Quarterly Verification of Personnel Training and Medical Surv Requirements	392	1	3	5	5	Classroom
Radiation Safety Conference	2404	24	0	23	552	Classroom
Radiation Safety for Emergency Response Personnel	1033	0.5	12	3294	1647	Classroom
Radiation Safety Health Training	1036	1	6	1	1	Classroom
Radiation Safety Officer Course	402	80	0	6	480	Classroom
Radiation Safety Training for Baggage Inspectors	1038	1.5	12	110	165	ESAMS WEB
Radiation Safety Training for Limited Radiation Workers	1039	1	12	132	132	ESAMS OJT
Radiation Safety Training for Organizational Personnel	1034	1	12	186	186	ESAMS OJT
Radiation Safety Training for X-Ray Radiographer (6-hr refresher).	1040	6	12	27	162	Classroom
Radiation Safety Training for XRF Operators	1035	2	12	68	136	ESAMS OJT
Radiofrequency Radiation Safety Training (OJT by Supervisor)	1037	1	12	6714	6714	ESAMS OJT

Course	Course ID	Course Length (Hrs)	Retrain Period (Mos)	Personnel Completed Training	Total Man Hours Trained	Availability
Safety Management I	2294	1	0	48	48	Classroom
Repetitive Lifting	2765	1	0	5	5	Classroom
Safety Committee Meeting	2070	1	0	1062	1062	Classroom
Respirator Fit Test Protection Instructor Training (Train the Trainer)	1272	8	0	58	464	Classroom
Machine Guarding Safety and Operation	1286	1	12	148	148	Classroom
Respirator User Training	112	1	12	15140	15140	Classroom
Lockout/Tagout For Authorized Employees (One Time Only)	1240	1	0	388	388	Classroom
Respiratory Protection Fit Testing	5	0.5	12	14909	7454.5	Classroom
Respiratory Protection Fit Testing Scheduling Only (Not for recording actual Fit Test)	2479	0.5	0	455	227.5	Classroom
Rigging and Weight Handling Equipment CMD Rigger Certification	1248	1	36	18	18	Classroom
Roll Call Training	1767	1	0	454	454	ESAMS OJT
Roofing (OJT By Supervisor)	1735	1	0	19	19	ESAMS OJT
Safety and Health Training for Indian Head Div., NSWCE Employees (Initial and Annual Refresher)	3243	1	12	1	1	ESAMS WEB
Safety Attitude for Supervisors	2471	1	0	18	18	ESAMS WEB
SUBASE KB Outdoor Recreation	2887	1	12	10	10	Classroom
RCRA / Hazardous Waste Personnel Training [335]	19	8	0	21	168	Classroom
Wildlife Technician	3021	1	0	4	4	Classroom
SUBASE KB Fitness Complex Admin	2967	1	12	16	16	Classroom
Tomahawk dunnage removal	2893	1	0	8	8	Classroom
Top Management Brief	1138	0.5	0	278	139	Classroom
Tower climber and rescue	3235	24	12	19	456	Classroom
Trainer Course in OSHA Standards for Construction	2105	32	48	5	160	Classroom
Trainer Course in OSHA Standards for General Industry	2106	24	48	1	24	Classroom
Truck Loading Safety and Procedures	1338	1	0	1	1	Classroom
Using Ladders	2800	1	0	5	5	Classroom
VLS Missile Blast Residue HAZCOM	2147	2	12	5	10	ESAMS WEB
Voluntary Protection Program (VPP)	1373	0.5	0	4751	2375.5	ESAMS WEB
Voluntary Protection Program (VPP) Passport Incentive Program	2286	1	0	1023	1023	ESAMS OJT
Voluntary Respirator Use Training	2049	1	12	623	623	Classroom
Thaw fuel leak check and fuel leak clean up	2644	1	0	8	8	Classroom
West Nile Virus Awareness Training	1234	1	0	1622	1622	ESAMS WEB
Thaw Forklift Operations	2881	1	0	8	8	Classroom
WRAIR-NMRC Accountability Officer Training	2521	1	0	29	29	Classroom
WRAIR-NMRC Biosafety	2500	1	12	1	1	Classroom
WRAIR-NMRC Bloodborne Pathogen Training	2476	1	12	552	552	ESAMS WEB
WRAIR-NMRC ECCHO Training	2517	1	12	2	2	Classroom
WRAIR-NMRC Hazardous Communication (HAZCOM) Training	2482	2	12	445	890	ESAMS WEB
WRAIR-NMRC Joint Safety, Health and Environmental	2468	1	0	388	388	ESAMS WEB
WRAIR-NMRC Laboratory Safety	2478	1	12	887	887	ESAMS WEB
WRAIR-NMRC Liquid Nitrogen (LN2) Handling Awareness	2473	1.5	0	39	58.5	ESAMS WEB
WRAIR-NMRC Lockout/Tagout For Authorized Employees	2524	1.5	12	7	10.5	Classroom
WRAIR-NMRC Quarterly Collateral Duty Safety Officer (CDSO) Training	2498	1	3	2	2	Classroom
WRAIR-NMRC Radiation Safety Training	2756	1.5	12	91	136.5	ESAMS WEB
WRAIR-NMRC Safety Orientation	2474	1.5	0	300	450	ESAMS WEB

Course	Course ID	Course Length (Hrs)	Retrain Period (Mos)	Personnel Completed Training	Total Man Hours Trained	Availability
VPP - My Personal Commitment to Safety Letter	2303	1	0	457	457	ESAMS OJT
Supervisor JHA/AJHA Annual Review/Update	1705	1	12	69	69	Classroom
Respirator Protection Manager Training (Assistant or RPPA)	1020	2	12	617	1234	ESAMS WEB
SUBASE KB Outdoor Recreation Grounds Maintenance	2885	1	12	11	11	Classroom
SUBASE KB Port Operations	2886	1	12	61	61	Classroom
SUBASE KB Swimming Pool	3004	1	12	3	3	Classroom
SUBASE KB Youth Center	3001	1	12	21	21	Classroom
SUBASE Kings Bay Fleet and Family Support Center	2973	1	12	6	6	Classroom
Subase Kings Bay Food and Beverage	2798	1	12	14	14	Classroom
Subase MWR Liberty	2884	1	0	14	14	Classroom
Subase QL31 Part 2	2966	1	12	104	104	Classroom
Subase QL31 Part 3	2975	1	12	10	10	Classroom
SUBASE Safety Office	2962	1	12	12	12	Classroom
SubaseKB QL31 Full JHA	2927	1	0	1	1	Classroom
Thawk Ordnance Testing	2882	1	0	8	8	Classroom
Supervisor Annual Training - Industrial (CNRSW)	1396	1.5	12	1926	2889	ESAMS WEB
SUBASE KB MWR Dispensing of Propane	2801	1	12	8	8	Classroom
Supervisor Safety Training Administration	3341	1	12	30	30	Classroom
Supervisor Safety Training for Industrial Supervisors (Includes HAZCOM Initial)	1365	4	12	87	348	Classroom
Supervisor Safety Training for Industrial Supervisors Refresher (Includes HAZCOM Refresher)	1366	2	12	88	176	Classroom
Supervisor Training - Non-Industrial (CNRSW)	1395	1	0	1521	1521	ESAMS WEB
Supplemental Training for New Collateral Duty Safety Personnel	2527	3	0	71	213	Classroom
Swimming - Class II Certification	1028	1	0	55	55	Classroom
Tag-Out Users Manual (TUMS) Training Afloat	2190	1	0	372	372	ESAMS WEB
Take 10 For ORM	2828	1	0	15296	15296	Classroom
Template Electric or Pneumatic Hand Tools Use	1722	1	0	4	4	Classroom
Thawk CAT III Bridge Crane Hoisting Operations	2770	1	0	8	8	Classroom
Thawk Decan Expended MK 10 Canister	2862	1	0	8	8	Classroom
Thawk Encan and Decan Ordnance Operations	2645	1	0	8	8	Classroom
SUBSAFE Awareness Training 2010	3233	1	0	240	240	ESAMS WEB
NAVOSH for New Employees	1202	1	0	1128	1128	Classroom
NAVFAC Fall Protection Systems Hands-On Training	3024	4	24	1779	7116	Classroom
NAVFAC Fire Safety (OJT By Supervisor)	2099	0.05	0	1169	58.45000087	ESAMS OJT
NAVFAC Mishap Investigation and Reporting (OJT By Supervisor)	2101	0.5	0	939	469.5	ESAMS OJT
NAVFAC Operational Risk Management (ORM) Training	1718	1	0	6833	6833	ESAMS WEB
NAVFAC Safety Orientation for Top Managers	1822	1	0	114	114	ESAMS WEB
NAVFAC Safety Orientation Training for Employees (Administrative/Professional)	1293	1	0	2449	2449	ESAMS WEB
Respiratory Protection / Program Management [508]	72	1	0	419	419	Navy Safety Center
NAVFAC Safety Orientation Training for Supervisors (Administrative/Professional)	1294	1	0	469	469	ESAMS WEB
Quarterly First aid training (4790.2J)	2354	0.5	3	1459	729.5	Classroom

Course	Course ID	Course Length (Hrs)	Retrain Period (Mos)	Personnel Completed Training	Total Man Hours Trained	Availability
NAVFAC Scaffold Safety (OJT By Supervisor)	2100	0.5	0	874	437	ESAMS OJT
NAVO Shiprider Safety	3026	1	12	306	306	ESAMS WEB
NCC General Crane Safety Refresher	1305	8	24	1	8	Classroom
NAVOSH Assessment Tools and Strategies	321	32	0	397	12704	Navy Safety Center
NAVFAC Contract Hazard Awareness Training Course (5 days)	329	40	0	572	22880	Classroom
NAVOSH Orientation	1356	1	0	5517	5517	ESAMS WEB
Navy Ergonomics Program Course	248	40	0	160	6400	Navy Safety Center
Navy Fall Protection (Slips, Trips and Falls) Awareness (One Time Only)	1259	1	0	7347	7347	ESAMS WEB
Navy Fall Protection Awareness Training for End Users Working at Heights and Supervisors of End Users	2018	1	0	5121	5121	ESAMS WEB
NCC Category 2 and Cab Operated Cat. 3 Crane Safety	1304	16	0	186	2976	Classroom
NCC Category 3 Non Cab Operated Crane Safety	1012	12	36	3105	37260	Classroom
NCC Category 4 Crane Safety	1303	24	0	64	1536	Classroom
NCC Crane Electrical Inspector	1308	8	0	1	8	Classroom
NCC Crane Electrician	1300	32	0	2	64	Classroom
NCC Crane Mechanic	1301	28	0	2	56	Classroom
NCC Crane Rigging and Cat. 3 Crane Safety	1314	40	0	2	80	Classroom
NCC General Crane Safety	1302	40	24	14	560	Classroom
NAVOSH for Safety Advisors	2011	8	0	196	1568	ESAMS WEB
Mishap Reporting (NMSC)	2970	0.5	12	473	236.5	Classroom
Mako Compressor Training	2116	1	0	33	33	Classroom
Management Principles for Safety Professionals	302	40	0	5	200	Classroom
Management Safety Training	1368	1.5	0	306	459	Classroom
Manager / Supervisor Safety Training	2270	1	0	195	195	Classroom
Man-Made Vitreous Fibers (MMVF)	1043	16	12	6	96	Classroom
Man-Made Vitreous Fibers (OJT by Supervisor)	398	1	12	4852	4852	ESAMS OJT
MCBCL Supervisor Safety Training (SST) - (Initial and Refresher)	2540	4	12	2	8	Classroom
Mercury Awareness Training (OJT by Supervisor)	383	0.5	12	217	108.5	ESAMS OJT
Methylene Chloride Awareness Training (OJT by Supervisor)	399	0.5	12	3022	1511	ESAMS OJT
Military Safety Indoc	1201	1	0	1626	1626	Classroom
Mishap Investigation (Ashore)	1047	32	0	232	7424	Navy Safety Center
MISHAP Investigation, Rreporting, Recordkeeping for CLASS C & D	2153	1	0	12	12	Classroom
NAVFAC Equipment Safety (OJT By Supervisor)	2098	0.05	0	8	0.400000006	ESAMS OJT
Mishap Reduction Required Reading (One-time Only)	1146	1	0	3958	3958	ESAMS WEB
NAVFAC Contract Safety and Health Correspondence Course Part 2	1299	4	0	749	2996	Classroom
Monthly Safety Talks - Given	291	1	1	123577	123577	ESAMS OJT
Monthly Safety Talks - Received	292	1	0	697044	697044	Classroom
Monthly Self-Safety Inspection by Supervisors	2285	1	1	2840	2840	ESAMS OJT
Motor Vehicle Operator Driving Initial and Refresher (5 Yr)	243	1	60	162	162	Classroom
MWR Seal Beach Moving Office Equipment	2631	1	0	10	10	Classroom
NAMRU/SA Safety Orientation	3285	1	0	27	27	ESAMS WEB
NAMRU/SA Supervisor Safety Training	3286	1	0	15	15	ESAMS WEB
Naval Aviation Maintenance Program	2592	3	0	1146	3438	Classroom

Course	Course ID	Course Length (Hrs)	Retrain Period (Mos)	Personnel Completed Training	Total Man Hours Trained	Availability
(NAMP) Indoc						
Naval Aviation Maintenance Program (NAMP) Semi Annual Follow-On	2747	1	6	1228	1228	Classroom
Naval Aviation Maintenance Program (NAMP) Yearly Follow-On Training	2746	1	12	405	405	Classroom
NAVFAC Bloodborne Pathogens (OJT By Supervisor)	2097	0.05	0	937	46.8500007	ESAMS OJT
NAVFAC Safety Orientation Training for Supervisors (Industrial)	1295	2	0	310	620	ESAMS WEB
Mishap Recordkeeping Seminar	1046	8	0	21	168	Navy Safety Center
Powered Industrial Lift Trucks (332)	271	1	60	78	78	Classroom
OSHA 10 Hour General Industry Course	3032	10	0	135	1350	Classroom
OSHA Compliance and Workplace Safety	2609	6	0	64	384	Classroom
OSHA VPP Challenge	1384	1	0	864	864	ESAMS WEB
Paint Booth (Small, 3 sided with ventilation)	3250	1	0	3	3	Classroom
Pandemic Influenza Awareness Training	2964	1	0	86	86	ESAMS OJT
Pediatric CPR and First Aid for Children, Infants, and Adults Version (Medic First-2 yr requal)	2398	6	24	273	1638	Classroom
Pediatric CPR and First Aid Instructor - NSC	2034	8	12	14	112	Classroom
Perform search on person/ vehicle/ building on NWSSB	2933	1	0	3	3	Classroom
Permit Required Confined Space Entry	2760	1	0	4	4	Classroom
Polychlorinated Biphenyls (PCBs) (OJT By Supervisor)	1734	1	0	2	2	ESAMS OJT
Portable Hand Tool Safety (OJT by Supervisor)	82	1	0	4379	4379	ESAMS OJT
OSH Policy Council Meeting	1274	1	0	68	68	Classroom
Powder Actuated Tools [331]	38	1	0	24	24	Classroom
Powered Industrial Trucks (Forklift) Familiarization (For Explosive Handlers)	1131	1	36	40	40	Classroom
Powered Industrial Trucks (Forklift) Class Room Training	2015	8	36	12	96	Classroom
Powered Industrial Trucks (Forklift) Familiarization	1110	4	0	870	3480	Classroom
NCC Mechanical Crane Inspector	1312	16	0	1	16	Classroom
Powered Industrial Trucks (Forklift) Formal Instruction - 29 CFR 1910 178(l)(2)(ii)	1109	2	0	2520	5040	ESAMS WEB
NAVFAC Safety Orientation Training for Employees (Industrial)	1237	2	0	2115	4230	ESAMS WEB
Powered Industrial Trucks (Forklift) Practical Working Exam	1111	4	36	935	3740	Classroom
Powered Industrial Trucks (Forklift) Practical Working Exam (For Explosive Handlers)	1132	1	36	135	135	Classroom
PPE Job Specific Usage - Conducted by your supervisor (OJT by Supervisor)	239	1	12	58096	58096	ESAMS OJT
PPE Training (General - One Time Only)	1398	1	0	9679	9679	ESAMS WEB
Preventing Slips, Trips and Falls	81	1	0	124	124	Classroom
Principles of Scaffolding	1017	32	0	46	1472	Navy Safety Center
Process Review and Measurement System (PRMS)	1397	1	0	948	948	ESAMS WEB
Portable Power Tool Safety (OJT by Supervisor)	83	1	0	3845	3845	ESAMS OJT
New Employee Indoctrination Training CNRSE	1377	1.5	0	1174	1761	Classroom
Powered Industrial Trucks (Forklift) Formal Instruction (For Explosive Handlers)	1130	4	36	32	128	Classroom
ORM Aviation Fundamentals Course	2980	8	12	5972	47776	Classroom

Course	Course ID	Course Length (Hrs)	Retrain Period (Mos)	Personnel Completed Training	Total Man Hours Trained	Availability
NCC Mobile Crane Mechanic	1311	12	0	4	48	Classroom
NCC Rigging Gear Inspection	1315	8	0	10	80	Classroom
New Employee Indoctrination Training CNRMA	1370	1	50	306	306	Classroom
New Employee NAVOSH Orientation	1933	2	0	27	54	Classroom
New Employee Safety Orientation Training for Region Hawaii	1341	2	0	1598	3196	Classroom
NFPA 70E and Arc Flash Training	2304	1	0	13	13	Classroom
NWS SB IG Gen Office Safety	2796	1	0	1	1	Classroom
NWSSB MWR General Office	2457	1	0	1	1	Classroom
NWSSB Operating MWR Government Owned Vehicles	2772	1	0	1	1	Classroom
Occupational Reproductive Hazard Awareness	1242	1	0	2744	2744	ESAMS WEB
Office Ergonomics	3030	1	0	25	25	ESAMS WEB
ORM All Navy Fundamentals	228	1	0	38765	38765	ESAMS WEB
ORM Aviation Executive Overview Course	2981	8	12	462	3696	Classroom
NCHB Maritime Cargo Handling	3283	1	0	1	1	Classroom
Office Safety (OJT By Supervisor)	1732	1	0	2059	2059	ESAMS OJT
ORM Aviation Applications and Integration Course	3311	1	0	1313	1313	Classroom
ORM Aviation Essentials for Leaders Course	3312	1	0	4034	4034	Classroom
ORM All Navy Executive Overview Course	2094	1	0	1050	1050	Classroom
ORM All Navy Essentials for Leaders Course (Annual)	2193	1	12	16	16	Classroom
Operational Risk Management ORM (OJT By Supervisor)	1733	1	0	1163	1163	ESAMS OJT
ORM All Navy Application and Integration	2215	1	0	1597	1597	Classroom
Orientation For Safety Coordinators (Classroom by Safety Office)	2022	8	0	42	336	Classroom
Operations Class BLD 3280 RMB108	2794	1	0	1	1	Classroom
Office Safety: Mail pickup and distribution - IT Dept.	2463	1	0	1	1	Classroom
ORM All Navy Essentials for Leaders Course	2093	1	0	7111	7111	Classroom
Office/Supply	1129	1	0	2	2	Classroom
SubTotal						
Enterprise Safety Applications Management System (ESAMS)² - Traffic Safety						
Pre-Trip Safety Checklist (OJT by Supervisor)	1162	0.5	0	1230	615	ESAMS OJT
National Safety Council Defensive Driving Course	2827	8	0	110	880	Classroom
Motorcycle Simulator Training (Honda Smart Trainer)	2791	2	0	358	716	Classroom
Motorcycle Safety Foundation (MSF) Extended BRC/Formal Remedial Training	3232	4	0	7	28	Classroom
Motorcycle Safety Foundation (MSF) Military Sportbike Rider Course (MSRC)	2359	8	36	3856	30848	Classroom
Motorcycle Safety Foundation (MSF) Military Sportbike Rider Coach Trainer	2382	24	0	6	144	Classroom
Save a Life Tour	2355	4	0	5	20	Classroom
Motorcycle Safety Foundation (MSF) Experienced Rider Courses (ERC)	1254	8	36	5147	41176	Classroom
Motorcycle Safety Stand Down	2290	2	0	328	656	Classroom
Traffic Safety (OJT By Supervisor)	1739	1	0	768	768	ESAMS OJT
Traffic Safety Briefs Prior to Holidays, Liberty, or Extended Weekends	1176	6	3	28783	172698	ESAMS OJT
Traffic Safety Committee	2150	2	0	15	30	Classroom
Traffic Safety Entry Point Training (Military under 26 years of age)	216	4	0	79	316	Classroom

Course	Course ID	Course Length (Hrs)	Retrain Period (Mos)	Personnel Completed Training	Total Man Hours Trained	Availability
Traffic Safety, Train the Trainer (OJT By Supervisor)	1163	1	0	4	4	ESAMS OJT
WRAIR Local Hazards (Army) Training	2925	1	0	748	748	ESAMS WEB
WRAIR Local Hazards (Navy) Training	2926	1	0	35	35	ESAMS WEB
Motorcycle Safety Foundation (MSF) Dirt Bike School (DBS)	1255	16	0	170	2720	Classroom
AAA Driving Improvement Program (DIP) Instructor Trainer (MASTER)	2299	1	0	2	2	Classroom
Traffic Safety Training Indoc	1742	1	0	2171	2171	Classroom
Emergency Vehicle Instructor (EVOC) (Initial and Recert)	178	40	36	256	10240	Classroom
WRAIR Supervisor Traffic Safety Training	2655	2	0	68	136	Classroom
AAA 15-Passenger Van Safety Training	251	4	0	1	4	Classroom
AAA Driving Improvement Program (DIP)	209	8	12	7854	62832	Classroom
AAA Driving Improvement Program (DIP) for Instructors	312	40	36	89	3560	Classroom
Advance Motorcycle Rider Track Day	3255	1	0	144	144	Classroom
ATV Safety Institute (ATV) Training (For Instructors)	1376	40	24	2	80	Classroom
AVOC Airfield Vehicle Operator Init/Recert	1164	4	12	347	1388	Classroom
ATV (All Terrain Vehicle Safety Training)	1092	4	0	429	1716	Classroom
Driving for Life	1154	5	12	24043	120215	ESAMS WEB
Motorcycle Safety Foundation (MSF) Basic Rider Course Rider Coach Trainer Prep	1112	4	24	62	248	Classroom
Emergency Vehicle Master Instructor (EVOC) (Initial and Recert)	2300	1	0	10	10	Classroom
Emergency Vehicle Operators Course (EVOC) Basic Initial/Refresher	113	40	36	4982	199280	Classroom
ESAMS Training - Motorcycle Coordinators	3179	3	0	2898	8694	ESAMS WEB
Honda Smart Trainier Basic	2987	2	0	109	218	Classroom
Honda Smart Trainier Refresher	2988	2	0	1	2	Classroom
Low Speed Vehicle Training	2302	1	0	1151	1151	ESAMS WEB
Motorcycle Safety Foundation (MSF) Basic Rider Course (BRC)	244	16	36	8990	143840	Classroom
Driver Awareness Safety Training (DAST)	2037	4	12	682	2728	Classroom
Pre-Trip Safety Checklist (OJT by Supervisor)	1162	0.5	0	1230	615	ESAMS OJT
National Safety Council Defensive Driving Course	2827	8	0	110	880	Classroom
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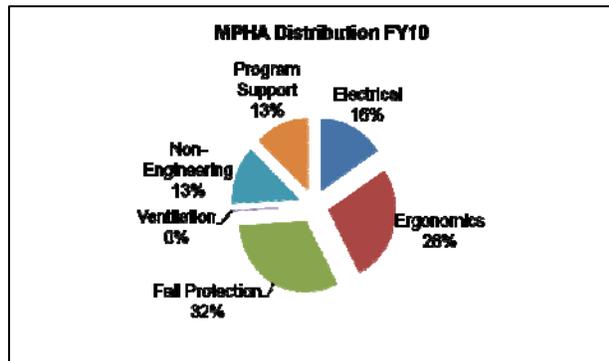
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^esams.navy.mil						

ATTACHMENT E MISHAP PREVENTION/HAZARD ABATEMENT

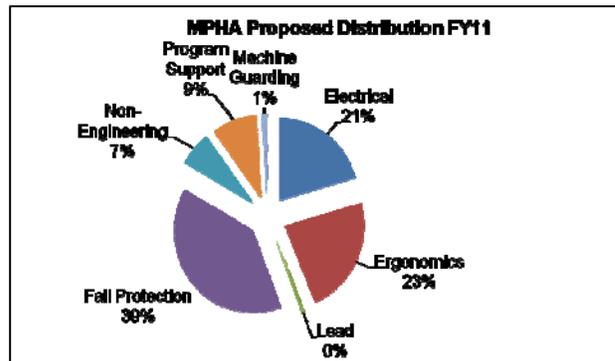
The Navy's Mishap Prevention and Hazard Abatement Program (MPHA) is available to fund mishap prevention initiatives and abatement of hazards for which local activities do not have sufficient funds and to address hazards at multiple activities that can be corrected with common designs. The Navy Safety 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 FY10 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.

In FY10, approximately \$8.9 million was obligated to fund FY10 MPHA projects. Approximately 48 hazard abatement projects were approved for award during FY10. The majority of these Hazard Abatement projects fit into the categories of fall protection, ergonomics, fire protection, and electrical safety. Examples of successful Hazard Abatement projects are listed at the end of this attachment.

Pie Chart 1 illustrates the cost percentages by hazard category for the breakdown of FY10 MPHA Program funds. Pie Chart 2 illustrates the cost percentages breakdown of the FY11 proposed projects for the MPHA Program by hazard category.



Pie Chart 1



Pie Chart 2

Navy MPHA Program Highlights for FY10

Navy Electrical Program – During FY10, NAVFAC electrical specialists continued their investigations into and resolutions of electrical safety hazards at shore facilities across the U.S. In FY10, NAVFAC specialists completed grounding/bonding resolutions on 150 Marine Aviation Logistics Squadrons (MALS) Mobile Facilities (MFs) at Marine Corps Base Hawaii (MCBH) Kaneohe Bay, HI; 16 MFs at Marine Corps Air Station (MCAS) Iwakuni, Japan; and 38 MFs at MCAS Futenma, Okinawa. Scheduled for FY11, as funding permits, are completion of the remaining MFs at MCAS Miramar and MCAS Yuma, AZ. The MPHA Team also conducted initial surveys which identified safety deficiencies in hangars and flight line electrical systems at Naval Air Station (NAS) Norfolk and NAS Oceana, VA and Naval Air Facility Atsugi, Japan. Other projects completed were grounding/bonding and lightning protection hazards at NAS Joint Reserve Base New Orleans, LA.

Navy Fall Protection Program - The Navy Fall Protection Subject Matter Expert (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 development of fall protection standards as part of the National Fall Protection Code and serves as the Vice Chair for the main Z359 Committee. In FY10, the SME continued to provide fall protection expertise and to deliver fall protection training Navy-wide and to other DoD agencies. The SME also served as the Chair for the Navy Fall Protection Working Group (FP WG) which is under the auspices of the Navy Executive Safety Board. The FP WG 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 underway include fall protection for multiple overhead cranes at Submarine Base Kings Bay, GA, and NAS Key West, FL loading docks.

Navy Ergonomics Program - NAVFAC manages the Navy Ergonomics Program, 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 WG and is the ergonomics technical representative to the Defense Safety Oversight Council, Installation and Industrial Operations Task Force. In FY10 the Ergonomics SME continued to provide ergonomics expertise, and to address ergonomics initiatives by providing parameters, tools, and intervention strategies to reduce Workplace Musculoskeletal Disorders (WMSDs). The SME also served as the Chair for the Navy Ergonomics Working Group (Ergo WG), which is under the auspices of the Navy Executive Safety Board. The Ergonomics SME and Ergo WG will continue to support Navy commands in identifying and reducing WMSDs in the workplace.

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 for 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 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 of this course, students have a firm understanding of ergonomics principles affecting their work environment. Students assess ergonomic risks in the workplace using the Ergonomics Survey Tools from the Navy Safety and Occupational Health Program Manual (OPNAVINST 5100.23), Chapter 23. The course also covers WMSDs, workstation and task design, establishing an ergonomics program as well as computer and industrial workstation set-up and evaluation. Participants conduct an ergonomics assessment in the field at a Navy/Marine Corps activity, analyze the data, generate recommendations and present their findings. Certified industrial hygienists, certified safety professionals and occupational health nurses can earn certification maintenance points for successfully completing the course.

Navy Ergonomics Risk Assessment/Resolution Program - In addition to ergonomics training courses, the NAVFAC Certified Professional Ergonomists conducted initial risk assessments or resolved 17 individual ergonomic hazards in 2009 for sites from Virginia to California, from Florida to Washington State. Many were “first look” site visits for hazards reported in the HA database which resulted in Ergonomics Risk Assessments and Site Analyses containing recommendations for best value resolutions. Eleven projects were successfully completed in FY10 and another six are on track to be completed in CY2010.

Examples of Mishap Prevention and Hazard Abatement Projects:**Lightning Protection at Naval Air Station Joint Reserve Base (NAS JRB) New Orleans, LA**

According to the National Occupational Research Agenda, losses due to lightning are estimated at \$4-5 billion each year. Between 1979 and 2008, lightning killed an average of 58 people each year and injured about 300. In December 2008, a NAVFAC Hazard Abatement Implementation Team of electrical and power quality specialists conducted an inspection of various site locations around NAS JRB New Orleans. The objective was to determine compliance with lightning protection requirements as outlined in MIL-HDBK-1004/6 (Military Handbook on Lightning Protection) and UFGS-26 41 00.00 20 (Unified Facilities Guide Specifications for Lightning Protection System). This inspection was conducted in order to verify and document safety hazards and discrepancies previously brought to light, enable the Team to prepare a detailed Statement of Work (SOW), and to determine the funding required for corrective actions needed to bring the lightning protection systems into compliance with current commercial and military electrical safety codes.

The inspection validated hazards dealing with inadequate lightning protection, poor grounding measures, and deteriorating protection systems, all of which could put both personnel and sensitive electronic equipment at risk.

Discrepancies and hazards noted included:

- Improper lightning protection on Building 33, FRC.
- Improper lightning protection on Building 9/10, Ground Electronics.
- Deteriorating lightning protection on Magazines in the Weapons Area.

Lightning Protection System installations must be accomplished by a contractor specially licensed for this particular type of work. A qualified contractor local to the New Orleans area provided individual estimates for the facilities that needed to be addressed. After performing a cost analysis of their submitted bids and comparing them to work previously performed at other base locations, it was determined that their proposals were fair and competitive, and they were subsequently tasked to perform the work.

All work was coordinated with the appropriate building/area Points of Contact in order to insure that there would be no disruption of ongoing exercises/workloads. Since the repairs would involve even a small amount of digging, excavation permits had to be submitted and approved through Public Works prior to the start of work. This process took time prior to the start of actual work, because all departments involved had to check the markings and sign off as an indication that the proposed dig areas would not disrupt any existing utilities or underground systems.

The lightning protection system installation and repair at all three locations was completed in just a little over three weeks. All base requirements and procedures were followed throughout the effort. The repairs made will provide better protection to base personnel and insure compliance with current military regulations.



New Air Terminal and Down Conductor



New rooftop LP Air Terminals and Connections to Down Conductor

Marine Aviation Logistics Squadrons (MALS)

The MALS project was initiated in 2008 and continued throughout 2009 providing materials for eight MALS units and personnel training for seven of the U.S. units to assist in implementing 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. Although the original SEB contained very specific procedures for correcting G/N separation issues, it did not allow for other, often hidden, circuit anomalies that might prevent proper separation. These anomalies include: 60Hz and 400Hz neutral circuits sharing a common neutral bus; the use of white wires for ground circuits (normally used for neutral circuits and green for ground); and white wire used for the Environmental Control Unit (ECU) ground circuit, which was inadvertently hooked up to the neutral bus.

During FY10, the NAVFAC MPHA Electrical Safety Specialists conducted site visits to MCBH Kaneohe, HI; MCAS Futenma, Okinawa; and MCAS Iwakuni, Japan to complete the SEB implementation. Although initial training had been accomplished at MCBH Kaneohe, numerous personnel transfers and higher priority missions prevented the remaining MFs from being completed. A three member NAVFAC Team, assisted by MALS Shop 990 personnel, completed the required modifications to 150 MFs in just 10 days. During subsequent five-day site visits to MCAS Iwakuni and MCAS Futenma, the Team completed 16 and 38 MFs respectively. For FY11, the project will continue at MCAS Miramar, CA (over 700 MFs) and MCAS Yuma, AZ (over 350 MFs) as well as other sites as funding permits.

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 four dry docks on 112 acres. The shipyard's primary mission is to provide regional maintenance to keep surface ships and submarines "Fit to Fight."

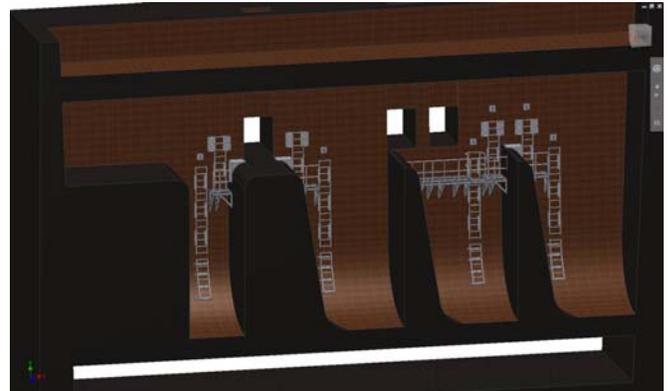
Dry-dock Pumpwell and Engineering Section personnel conduct regular inspection and maintenance to ensure that the dry docks are in operational condition. At Dry Dock #1, this includes Sluice Gates SG-13, 14, & 15 and Main Pumps 1, 2, 3, & 4. The sluice gates are 22-1/2 feet below street level, and the 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.

The design for protective rails and walk platforms was completed last year. This year a contract was awarded to fabricate and install work platforms and ladders to allow safe access to the Dry Dock #1 spaces.



Before view: Looking down access ladder



After schematic diagram displays ladder and walk platforms currently being installed.

Hangar 54, Center for Security Forces (CSR)

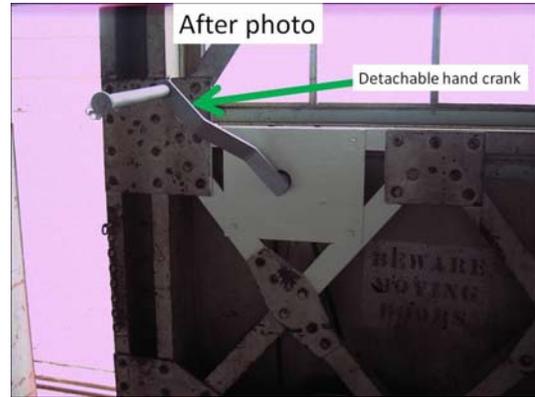
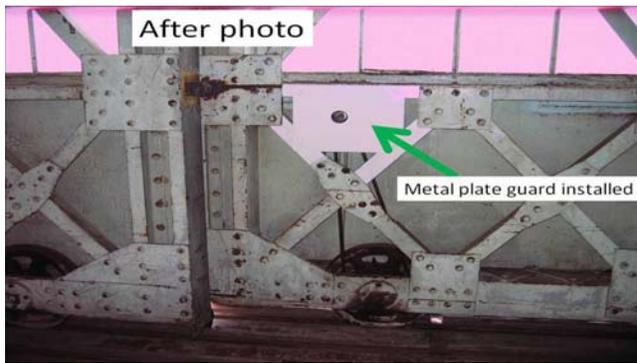
Ford Island was bought by the United States Army during World War I, and it was transferred to the Navy in 1923. Many of the structures on Ford Island are very old. Hangar 54 is one such structure built in 1935. It is currently used as a training facility by the Center for Security Forces (CSR). CSR provides training and human performance solutions to Navy Expeditionary, Security, and Antiterrorism professionals to meet the needs of the Fleet.

There are 36 hangar doors in Hangar 54. Each hangar door measures approximately 28' high by 18'6"



wide. The doors are mounted on metal roller wheels and were designed to be opened and closed by the use of a hand crank. Since the hand cranks were lost, the hanger doors were opened and closed by having multiple persons pushing and pulling on the door. The chain and sprocket drive in the doors were exposed and presented a pinch point hazard to personnel pushing and pulling on the doors.

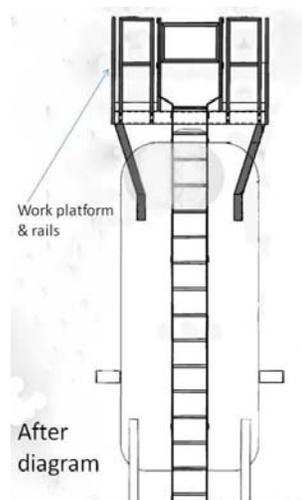
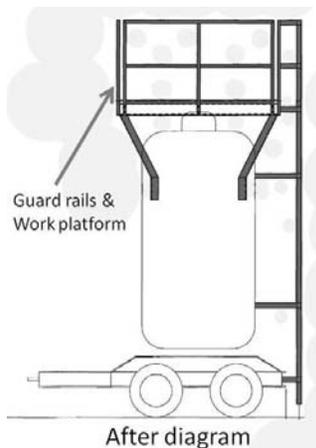
A contract to make the hangar doors safer was awarded. This was accomplished by repairing the chain and sprocket drive by salvaging usable parts from unused doors, fabricating hand cranks, and installing metal plates over the exposed pinch point on the upper side of the chain and sprocket drive. The hangar doors can now be safely opened and closed by one person.



Fall Hazard on Dust Collectors, Blast Pots, and Accumulators at Pearl Harbor Naval Shipyard (PHNSY) & Intermediate Maintenance Facility (IMF)

Most of the operations conducted at PHNSY & IMF require the use of dust collectors, blast pots, and accumulators. These pieces of equipment are mobile and have lifting jigs and hose attachments at the top of the units. The heights of the units vary from 12 to 15 feet. The equipment did not have work platforms or safe access and presented a fall hazard to workers needing to access the tops of the units.

A contract to fabricate and install work platforms with safety rails and toe boards around the tops of the collectors, pots, and accumulators was awarded to provide fall protection for workers to safely hook up rigging and other attachments to the equipment.



Electrical Grounding/Bonding at Naval Air Station Joint Reserve Base (NAS JRB) New Orleans, LA (NOLA)

In February of 2009, as a follow-up to a survey of various locations within NAS JRB NOLA conducted in 2008, NAVFAC Southwest Hazard Abatement Implementation Team electrical and power quality specialists conducted an inspection of the various work centers located within the FRC, the Weapons Magazine Area, and Ground Electronics (Bldg 9/10). This inspection was conducted to verify and document safety hazards and discrepancies previously brought to light, enable the Team to prepare a detailed SOW, and determine the funding required for corrective actions needed to bring the electrical systems into compliance with current commercial and military electrical safety codes.

The inspection revalidated the hazards previously outlined dealing with improper wiring methods, poor grounding measures and poor labeling/circuit identification, all of which could put both personnel and sensitive electronic equipment at risk.

These deficiencies not only presented clear personnel safety hazards but were also violations of SPAWARINST 5100.9D (Navy Shore Electronics Safety Precautions) and NAVAIR 01-1A-512 (Design Guide For Avionics Shop Power Distribution). Discrepancies and hazards included:

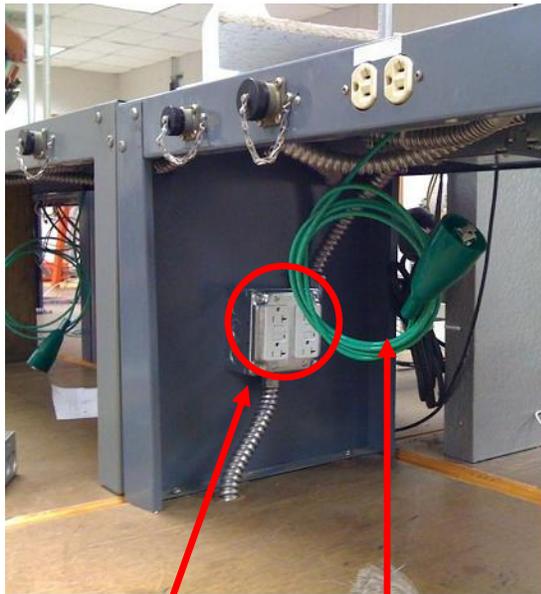
- Internal bench wiring not properly color-coded
- Ground loops allowing current flow through equipment housings in approximately 59 workbench sections
- Power Supplies improperly wired
- 60 Hz ground fault circuit interrupter (GFCI) protection missing from all electronic workbenches
- Improperly sized circuit breaker protection
- Missing safety straps on workbenches
- Loose ground fittings
- Deteriorated wiring, conduits, and electrical boxes on light poles
- Lack of an appropriate lightning arrestor on the main service entrance

On August 16, 2010, a contract was awarded to a local electrical contractor to provide the qualified personnel and materials to correct the identified electrical safety hazards. A pre-implementation meeting was held on September 9, 2010 with representatives from NAVFAC, the implementation contractor, FRC, Public Works Department, base Safety and the weapons area to work out security, safety, and access requirements prior to the start of the work.

All work was coordinated with the appropriate building/area POCs in order to insure that there would be no disruption of ongoing exercises/workloads. On September 13, 2010, under the oversight of the NAVFAC Electrical Team, work began, and the entire repair process was completed in four weeks, successfully removing all hazards initially addressed and increasing the safety environment of both personnel and equipment. A large part of the repair work centered on rewiring the 60 workbenches to conform to National Electrical Code, Space and Warfare Command and Naval Air Systems Command requirements. Throughout the course of the repairs Base Safety and all departments were actively involved. The work performed will not only help

to increase the safety of base personnel, but it will also significantly increase the reliability of the repair and maintenance activities by improving the quality and stability of the supplied electrical power.

From a message received following completion: "... the immediate result of the NAVFAC team and their work is lower stress and higher confidence in our day-to-day work ... The research, inspection, and maintenance performed in returning our facility to proper electrical code and specifications could not have come at a better time. We now perform training, maintenance, and customer services with confidence ... Their efforts sharpened our focus onto what *we do* instead of what our facility and benches *aren't doing*. The value of this confidence and focus cannot be understated. On behalf of 600 Division, FRCMA NOLA, thanks NAVFAC."



NEC compliant GFCI protection and ground straps were installed to provide shock protection.



Before



After

The correct wire size and color, per NAVAIR instructions, was installed in the PSI-A power supplies and benches and neutral circuits were isolated from the ground circuits in work centers 610, 620 & 670

Ergonomic Improvements to the Pump Maintenance and Repair Process at the Trident Refit Facility, Kings Bay, Georgia

Naval Submarine Base Kings Bay is located adjacent to the town of St. Marys in Camden County, in southeastern Georgia, and not far from Jacksonville, FL. Kings Bay’s Trident Refit Facility (TRIREFFAC) is the largest tenant command at the submarine base and has quietly and efficiently kept a significant portion of the United States Fleet Ballistic Missile submarines at sea since 1985. TRIREFFAC provides quality industrial-level and logistics support for the incremental overhaul, modernization, and repair of Trident submarines. It also furnishes global submarine supplies and spare parts support. In addition, TRIREFFAC provides maintenance and support services to other submarines, regional maintenance customers, and other activities as requested. TRIREFFAC building 4026 houses the industrial shops and is the location of large pump test stands.

TRIREFFAC machinists were at risk for potential injuries due to ergonomic hazards while operationally testing and repairing pumps that circulate water on the Trident submarines. These pumps support diving and surfacing operations. While being inspected and/or repaired, the pumps are placed on the test stand by a crane. The workers are required to access the entire pump (top, bottom, and sides) and were required to stand on



Pump shown in test fixture with the temporary staging surrounding it.



Side view of test stand.

awkward postures the machinists assumed while performing maintenance and repair tasks resulted in a higher potential for an ergonomic injury.

temporary staging that was not conducive to performing work in optimal ergonomic postures. Machinists reached and extended their bodies at times as much as four feet, to access bolt threads, wiring, seals, and other components of the pumps. They also were required to twist and bend their bodies into awkward postures for extended periods of time to perform repairs and tests. Pump maintenance and repair tasks are performed by three to five machinists at a time, and the same employees work the tasks until the entire pump

repair is complete. The task duration is normally 3 days and performed 30 to 40 times per year. The

The shapes of the pumps are similar to a tower and pot belly that require the necessity for a versatile staging configuration. Workers had been observed standing on rails of the temporary staging as well as piping to access components of pumps as they disassembled/reassembled them. This not only was an ergonomics issue, but a fall protection issue as well.

An MPHA project was developed to provide an ergonomics solution to the staging issue. The project was submitted through NAVFAC for ergonomics funding in the amount of \$31,000 to design and purchase customized staging for permanent access to the pumps. Permanent access would eliminate the stressors created by overexertion on the workers.



Workers who helped install staging: Dan Menard, J.D. Noyes, and Adam Pepper



New staging

The Navy’s MPHA Program Team assessed the pump test stand, and the potential solution to the ergonomic issues was identified. TRIREFFAC developed a proposed design for permanent staging for the pump stand area. The design was reviewed and approved by the TRIREFFAC Building 4026 Safety Committee and Facilities Representative. Meetings were held with the potential vendor of the permanent staging, and the Navy MPHA Team reviewed the final design of the staging. The newly acquired staging was installed by TRIREFFAC personnel.

The completed project allows machinists to work in ergonomic neutral postures while providing access to the entire pump, provides access to pumps in a manner that reduces the potential for injury, and eliminates the need to stand on rails, reducing the potential for a life threatening fall.

Ergonomic Improvements to the Chain Fall Storage Locker at Naval Submarine Base, Kings Bay, Georgia

Identifying the Problem

“Necessity is the Mother of Invention” is an old saying that is attributed to, among others, Plato. It describes the idea that until something is needed it won’t be invented. Ergonomists and safety and health professionals are always on the lookout for new and improved ways of making work less physically stressful and safer. Numerous products exist that have been designed and manufactured to do just that. In many cases custom



Original Chain Fall Storage Locker

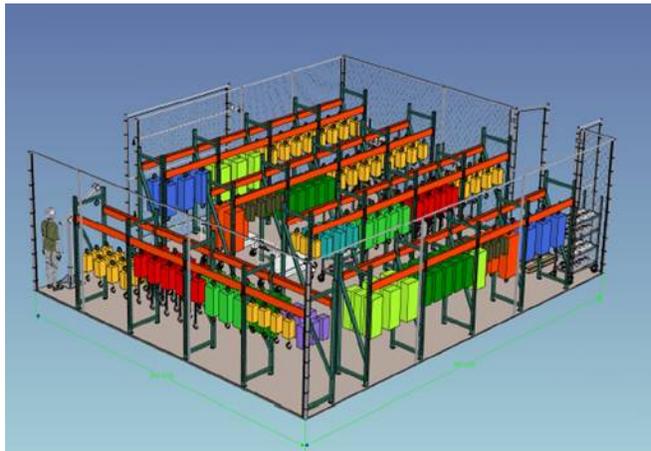
solutions are required. However, these solutions do not always need to be complicated to be successful in reducing the physical stresses of work. One example is a Navy MPHA Program project that was requested by the Trident Refit Facility at Naval Submarine Base Kings Bay. The problem was a large number of chain fall hoists and other rigging equipment that was being stored by the facility. There were several hundred chain falls being stored in a small storage locker, and workers were exposed to ergonomic stressors when they removed and replaced the chain falls. Solutions were solicited from various vendors, and all came back with very complicated indexing units that cost well into the hundreds of thousands of dollars. These solutions also did not appear to satisfy the needs of the facility, and there would be a great amount of additional cost associated with maintaining the systems.



Jungle of Chain Falls

Lower Cost Solution

Engineers and ergonomists working on the project found a better solution using heavy duty racks that will store the chain falls neatly at a height above the floor where they can be safely slid onto a hydraulic lift table and rolled out of the storage area. This solution will be implemented in the fall of 2010. The cost of the simple solution selected is one quarter of the cost of the proposed indexing machines and will have less maintenance and utility costs in the long run.



Proposed New Chain Fall Storage Area



Aerial View of the Proposed New Storage Locker

Ergonomic Improvements to the H-60 Repair Process at Fleet Readiness Center Southwest, Naval Air Station North Island, San Diego, CA

Fleet Readiness Center Southwest (FRCSW) is located at Naval Air Station North Island. The command provides comprehensive support to our nation’s aviation warfighters through the overhaul, repair, and modification of Navy and Marine Corps front line tactical, logistical, and rotary-wing aircraft.

FRCSW repairs and maintains Navy and Marine Corps aircraft, including the F/A-18 Hornet, AV-8B Harrier, H-60 Seahawk, H-53 Super Stallion, E-2C Hawkeye, and C-2A Greyhound.

One group of FRCSW personnel is charged solely with the maintenance and repair of the H-60 Seahawk variants; Bravo (B), Foxtrot (F), Hotel (H), Romeo (R), and Sierra (Sierra).



As seen above, the overall RandR task is difficult to perform because the technicians are either squatting or sitting in chairs and looking upward when in the cab with their hands above their heads. A technician installing the in-cab absorber would military-press it into place, a second team member then securing it. The placement is not simply a lift and set, nor is the absorber light.



There is extremely limited space for hands and tools surrounding the absorber when installed.

Two personnel are involved in the removal and replacement (RandR) process of the vibration absorbers.



A vibration absorber is located beneath the nose of the helicopter. Above a technician installs the nose absorber which can weigh up to 120lbs. The task is complicated by awkward postures and high forces required to support the absorber and the manner in which it is inserted into the receiver.

Most of the H-60 variants have three vibration absorbers, one under the nose, and two in the cabin. The R and S variants may only have two absorbers depending on the mission and type of cargo.

The cabin absorbers were previously lifted into place by one technician, military-press style, while a second technician secured it. The placement is not simply a lift and set, nor is the absorber light. The 80 to 100 lb. absorbers were lifted overhead in constrained postures (i.e. kneeling, squatting, and sitting) which always compromises a person’s strength. As seen in the photographs above, the tasks are complicated by a difficult handhold and low hand clearance.

The vibration absorbers located beneath the nose of the helicopter required the technician to basically bench-press

it into place while lying on a creeper. These absorbers tend to be heavier, up to 120 lbs. Maintenance personnel identified that the RandR task was difficult; they tested a few commercial off-the-shelf (COTS) products to lift/hold the absorber. The products did not quite fulfill the need due in part to the manner in which the absorber is inserted into the receiver, see picture above. Although no injuries were reported, and the frequency of the exposure is low, the risk of injury was apparent.



Transmission jack eliminates most risk during removal and replacement by supporting the weight of the absorber

FRCSW safety department contacted NAVFAC after discussing the COTS equipment and process with the RandR team.

The NAVFAC MPHA Team assessed the H-60 operation, discussed potential resolutions with FRCSW personnel,



A modified transmission jack eliminates most of the risk during removal and replacement by supporting the weight of the absorber in the forward and aft positions.

and generated a detailed report. An MPHA project was subsequently developed, submitted and funded. The funding was used to modify COTS equipment to lift and lower the vibration absorbers in the various positions on the H-60s. The modified COTS equipment has an articulating mounting head and a variety of bolt patterns to fit the absorbers which differ by H-60 variant and position. The jacks are used to support the absorbers on removal, and lift them on replacement. The jacks reduce the ergonomics risk factors of force, duration, and awkward posture.

The RandR task still requires lifting the jack and absorbers into the cabin. This task is performed by two personnel within their power zone (i.e., knees to shoulders) and is within safe lifting limits. Successful completion of this project has saved a considerable amount of manual effort, increased safety, and reduced the ergonomics stressors.

Ergonomics Improvements to the Accommodation Ladder Repair and Maintenance Process at Southwest Regional Maintenance Center, San Diego, CA

Southwest Regional Maintenance Center (SWRMC) is the Navy’s largest Shore Intermediate Maintenance Activity and the second largest ship repair facility in the Southwestern United States. SWRMC employs some 2,200 military and civilian personnel across 70 industrial work centers.



Fully assembled accommodation (ACCOM) ladder after repair.



Watertight fitting

One group of SWRMC personnel is charged solely with the maintenance and repair of accommodation (ACCOM) ladders (also known as anchored ladders) and watertight fixtures (i.e. doors, scuttles, hatches) for ships home-ported in San Diego. Ladders and fixtures are serviced when a ship returns to port; the time between services varies based on the mission.

Repair technicians have the potential to be exposed to a number of hazards when repairing and maintaining the ACCOM ladders, including the intense light created by arc welding and very hot materials. Until recently, they were exposed to high forces when lifting accommodation ladder components and turning the ladders and worked in awkward postures during repair and maintenance tasks.

The ladder assembly as a whole was difficult to work on. It had to be manually turned to allow personnel to work on its underside. Workers exerted unacceptably high forces when performing this heavy lifting task. Personnel were required to bend, stoop, twist, and kneel during the preventive maintenance (PM) process to access all sides of the ACCOM ladder. Short, infrequent exposures to awkward postures are typically tolerated by the workforce; where long exposures can cause injury.

The combination of heavy lifting and sustained awkward postures placed those working on ACCOM ladders at an increased risk of developing Work-related Musculoskeletal Disorders (WMSDs)



Rotating ladder fixture orients easily into the position that best suites the worker and the task whether it be welding or bolt removal; thus continually fitting the task to the person.

of the spine or shoulder.

These disorders can

be caused by exerting high forces which can contract muscles to their maximum capability; leading to fatigue and possible damage to the muscles and other soft tissues. Lifting outside of one's power zone (i.e., from knees to shoulders) increases stress on the spine. SWRMC personnel noted these postures when turning the heavy ACCOM ladders.

Personnel previously placed the ACCOM ladders on sawhorses to perform maintenance work and repairs. SWRMC personnel identified this arrangement as unsuitable and unstable with the potential to fall over. SWRMCs safety department contacted NAVFAC after a safety inspection revealed their potential ergonomic hazards.



Awkward working postures were quite common during welding tasks on the ACCOM ladders



Rotating ladder fixture allows one worker to safely turn the ladder which saves time and effort, and reduces the risk of injury.

The NAVFAC MPHA Team assessed the ACCOM operation, discussed potential resolutions with SWRMC personnel, and generated a detailed report. An MPHA project was subsequently developed, submitted and funded. The funding was used to design and fabricate a rotating ladder fixture, which eliminated the need to manhandle the ACCOM ladders, and greatly reduced the requirement for sustained awkward postures. SWRMC personnel practiced participatory ergonomics by designing the ladder turning fixture. The worker-based design was used as a foundation for the final holding device.

Although heavy lifting and somewhat awkward postures are inherent to ACCOM ladder repair, the use of the ladder fixture has greatly reduced the severity and frequency of the exposure to these ergonomics stressors.

The ladder fixture was provided to the shop along with additional tooling to assist personnel with the removal of seized parts on the ACCOM ladders and watertight fixtures. Designing the tooling was no small task due to the numerous positions and sizes of these parts which included a variety of bolts, bushings, and pins, many of which were one-of-a-kind.

Successful completion of this project has saved a considerable amount of time and effort during the PM of ACCOM ladders and watertight fixtures and contributed to the safety of workers.



Previously seized bolts/ bushings/ pins were removed with an impact hammer or by manually hammering them out. Blunt impact, both first aid and lost work day, injuries had occurred from the manual method.



The stanchion removal tool effortlessly pushes the bolts free and eliminates the manual method.



Replaced brass bushing (left) and hinge (right) on a watertight door.

Ergonomics Improvements to Machine Shop Metal Forming Tasks at Norfolk Naval Shipyard, Portsmouth, VA

The Norfolk Naval Shipyard (NNSY) in Portsmouth, Virginia, is one of the largest shipyards in the world specializing in repairing, overhauling, and modernizing ships and submarines. It's the oldest and largest industrial facility that belongs to the U.S. Navy, and it's also the most multifaceted. While NNSY can dry-dock, overhaul, and repair any ship in the U.S. fleet, it can also perform any technical, fabrication, manufacturing, and engineering work an organization might need accomplished.

The NNSY machine shop is a very large facility that forms metal using both state-of-the-art techniques, as well as more classical metal forming means like forges, lathes, and mills. In fact, a time traveling machinist from 1900 might not notice a striking difference in the way some items are fabricated today.

The work pieces can weigh anywhere from ten pounds to hundreds of tons. Workers are potentially exposed to very stressful ergonomics conditions because of the nature of the metal forming that is performed. Safety and health professionals at NNSY identified four tasks performed in the machine shop that required ergonomics interventions. These were:

- Turnbuckle, Cable Eye, and Shackle Repair
- Zinc Corrosion Block Forming
- Chain Link Repair
- Press Brake Metal Forming

The following discusses the hazards and the solutions that were provided:

Turnbuckle, Cable Eye, and Shackle Repair

The Turnbuckle, Cable Eye, and Shackle Repair area repairs and refurbishes heavy sections of cable connectors, large turnbuckles, and other cable and chain parts. Some of these items can weigh up to several hundred pounds. These items must be moved around inside the shop area, up to and from work benches, and positioned on racks. The ergonomics hazard involves heavy lifting in awkward postures. The solutions that were provided to NNSY to reduce the potential for injury in this area were walk-behind fork lifts to move the items from one area to another, and to load them onto the racks and hydraulic lift tables.



Walk-behind fork lift

Zinc Corrosion Block Forming



Hydraulic lift table

Brackets on 50 pound zinc blocks are drilled and counter sunk to prepare them for mounting in ship ballast tanks. The operation requires the workers to pick up the block from below waist level, place it in the machines, and lower it back down to below waste level. This is a very frequent lifting task that requires potentially awkward postures. This area was provided with hydraulic lift tables so that the blocks can be positioned at the same level as the punch press. This eliminated the need for the workers to bend over to pick up the block. Instead, they can adjust the heights of the tables so that the block is at the appropriate height for the worker.

Chain Link Repair

Heavy anchor chain detachable links that can weigh up to 200 pounds were being placed on an 18-inch high stake table for repair and refurbishment. The workers had to bend over at the waist or kneel by the link to perform work. Also, the links had to be rotated on the table in the dismantling and assembly operations. The postures the workers had to assume were very awkward and ergonomically stressful. The only logical ergonomic solution for this task was an adjustable height, hydraulic turntable. The workers can now adjust the height of the work table to the optimum height for each individual, and the anchor chain link can be rotated into the optimum position on the work table. Therefore, the majority of the awkward postures were eliminated.



Adjustable height hydraulic turntable

Press Brake Metal Forming

One to two workers were manually positioning heavy sheet metal into the press brake so that it could be formed into various shapes. The sheet metal can be up to five feet or more in length and width, and can weigh up to several hundred pounds. There were two machines used for this task, a 60-ton press and a 100-ton press brake. The ergonomics hazard was manually handling very heavy loads in awkward postures. An adjustable height, hydraulic lift table with rollers was provided so that the material could be fed into the machine at the correct height. This table reduced the potential for serious injury from maneuvering the heavy pieces of metal.



Adjustable height hydraulic lift table with rollers

The NNSY Machine Shop is now benefitting from the ergonomics improvements. Though many of the operations are performed similarly to how they were in 1900, the 21st Century ergonomics solutions provide a much safer and healthier work environment.

ATTACHMENT F - 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 154 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*, 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 FY10 stories is shown on page 4 below.

In FY10, four new stories were posted to the *Safety Success Stories* web pages. An additional nine stories, completed in FY10, were approved and posted to the website in October and November 2011. The stories focused on OSH areas of concern such as ergonomics, the Navy installations that have achieved *Star* status in OSHA's Voluntary Protection Programs, and the Navy installations that received Secretary of the Navy 2010 Safety Excellence Awards. Summaries of two stories are provided as examples:

Protecting Our People from Bad Vibrations

Some potentially serious occupational hazards in Navy workplaces, like noise and heat stress, are well known, heavily reported, and well documented. However, certain other workplace hazards, some of which can produce serious, irreversible, and unsuspected diseases are not as widely recognized. One such hazard is hand arm vibration, which can cause hand arm vibration syndrome, or HAVS.

HAVS, previously known as Reynaud's syndrome, is a medical condition that can lead to permanent disability. HAVS is caused by people's hands being exposed to chronic vibration, which damages the nerves, blood vessels, muscles and joints. Exposure to cold temperatures also increases the probability of acquiring HAVS and the likelihood of exhibiting symptoms. [An estimated 2.5 million



A seaman uses a pneumatic sander to prepare metal framing for painting.

U.S. workers are exposed daily to some level of hand-arm vibration from the power tools they use on their jobs. Navy civilian and military personnel involved in defense-support operations may be exposed to such hazards. See *Vibration* at: http://www.public.navy.mil/navsafecen/Pages/acquisition/vibration_acquisition.aspx]

Most occurrences of HAVS affecting Navy personnel involve workers who use gasoline, pneumatic, hydraulic, or electric vibratory tools, such as grinders used for surface preparation or rivet guns and bucking bars for airframes maintenance. These tools are common in Navy shipyards, aircraft-maintenance shops, and other environments such as construction sites and foundries.

Mindful of the need for further study, the Defense Safety Oversight Council (DSOC) initiated a project in 2007 to address the root causes of HAVS: http://www.public.navy.mil/navsafecen/Documents/acquisition/Vibration_Talk_DOD_IH_Forum_2008-finalJun08.pdf.

The Council collaborated with the General Services Administration (GSA) and the National Institute for Occupational Health and Safety (NIOSH) to provide guidelines for low-vibration and other ergonomics characteristics in procurement criteria for new power hand tools. A concurrent effort worked to identify and incorporate International Organization for Standardization (ISO) 10819 and *American National Standards Institute* (ANSI) S2.73 certified anti-vibration gloves into the federal procurement process.

A working group with Department of Defense (DoD)/GSA/NIOSH and U.S. Coast Guard members was formed. The Navy was recognized as a leader within DoD in identification of HAVS having a focused effort within several fleet concentration areas. PSNS & IMF, Naval Base San Diego, and the Navy Fleet Readiness Center, East (Cherry Point, NC) provided leadership and technical support in their areas of expertise for this project. Procurement criteria for anti-vibration gloves, low-vibration tools, and third-party certification guidelines were developed.



Builder from Naval Mobile Construction Battalion Four Zero breaks apart the asphalt with a jackhammer on a road repair project.

As a result of the DSOC project in September 2009, three low-vibration hand tools were introduced into the federal supply system:

- Pneumatic riveting hammer, described as HAMMER, PNEUMATIC, PORTABLE 5130-01-5716908. Its vibration (<2.5 m/s²) is less than half the level created by many legacy tools.
- Pneumatic reciprocating saw, listed as SAW, RECIPROCATING, PNEUMATIC 5130-01-572-5529. Its vibration (<4 m/s²) is less than half the level created by many legacy tools.
- Needle scaler (needle gun), listed as SCALER, PNEUMATIC, PORTABLE 5130-01-317-2453. To date, GSA has been unable to specify a maximum vibration level for this tool. However, one vendor's product, which served as a guide for the item specification, reportedly had vibration levels in the range of 3.5 meters per second, also considerably lower than many legacy products.

With input from Navy subject matter experts, GSA is continuing to incorporate low-vibration and other ergonomics characteristics into procurement criteria for new and updated power hand tools.



Operations Specialist wears certified anti-vibration gloves while using a needle gun to chip paint off a bulkhead.

Collaboration with the Navy Clothing and Textile Research Facility in Natick, MA; the Defense Logistics Agency; and support from the office of the Secretary of Defense for Manpower, Personnel and Readiness ([See OSD MPR Memo of 15 Dec 09: Prevention of Vibration-Induced Hand and Arm Injury](#)) resulted in the introduction of certified anti-vibration gloves into the federal supply system. These gloves are labeled “meets ANSI S2.73/ISO 10819.”

A guide for users of anti-vibration gloves has been posted on the DoD Ergonomics Working Group website at:

<http://www.ergoworkinggroup.org/ewgweb/SubPages/ProgramTools/Publications/2005Pubs/98DODEWGNews.pdf>

The Navy, in conjunction with the U.S. Army Center for Health Promotion and Preventive Medicine, has also developed guidelines for workers and supervisors on the use of low vibration tools and anti-vibration gloves to protect Navy workers from hand-arm vibration exposures as shown below:

Guidelines to Protect Navy Workers from Hand-arm Vibration Exposures:

- Workers and their supervisors should ensure use of appropriate work practices and protective equipment. These include:
 - Use of certified ANSI S2.73/-ISO 10819 (third party tested) anti-vibration gloves (many models are now available within the federal supply system)
 - Use power tools with reduced-vibration characteristics
 - Keep fingers, hands, and the body warm
 - Do not smoke (Nicotine in tobacco constricts the blood vessels and can reduce circulation in the fingers).
 - Let the tool do the work, grasping it as lightly as possible, consistent with safe work practices
 - Keep tools well-maintained
 - For pneumatic tools, keep the cold exhaust air away from fingers and hands
 - Take breaks from tool use for at least 10 minutes per hour to allow circulation to recover
 - Wear hearing protective equipment as appropriate (Most operations producing significant hand-arm vibration are also noisy)
 - Have your vibration exposure evaluated by a professional if you feel you are exposed to high levels of vibration
 - If signs and symptoms of HAVS appear, seek medical help.

Guidelines to Protect Navy Workers from Hand-arm Vibration Exposures (continued):

- Work with your supply points of contact and process managers (engineers, shop supervisors, and technical authorities) to specify and order suitable low-vibration tools and certified anti-vibration gloves. *The continued and expanded availability of these products will depend on user demand.*
- Report concerns and worker complaints to the appropriate industrial hygiene and occupational health professionals through your safety office. Specialized assistance, such as that provided by the Navy and Marine Corps Public Health Center may be beneficial.
- Review your process specification and technical manuals. If you feel that low-vibration tools and/or anti-vibration gloves might be considered for the relevant processes, use the comment sheet, typically on the last page of nearly every DoD/Navy technical manual, to describe potential issues and concerns. ***Remember that informed user feedback is the basis of progress and protects users and sustains the warfighter and support personnel while enhancing the Navy's mission.***

The Navy faces the continual challenge of finding better and improved vibration-reducing materials and technologies that meet ANSI/ISO guidelines and standards and can be incorporated into ships and shore facility designs during the acquisition process. Because Navy leadership is concerned about the safety and health of its military and civilian workers, they are working hard to address HAVS as an under-recognized occupational health problem through acquisition of safe, cost-effective, and performance-improving designs and equipment.

Naval Weapons Station Charleston Awarded OSHA VPP Star Status

In late 2005, OSHA conducted a Voluntary Protection Programs (VPP) assessment of Naval Weapons Station (NWS) Charleston, which resulted in the base being recognized as a VPP Merit Site. NWS Charleston had demonstrated the potential and commitment to provide excellent safety and health protection, and while receiving Merit recognition was commendable, their goal was to achieve Star. Therefore, management and employees renewed their commitment and continued to strive for OSHA's top tier recognition as a VPP Star site.

A designated *Star* site must have had all of its occupational safety and health program elements operating effectively for at least one year, and its three-year injury and illness rates compared to a like industry class in the private sector must be below the national average published annually by the Bureau of Labor Statistics (BLS) for that industry. Injury and illness history for a site is evaluated using a three-year total case incident rate (TCIR) and a three-year day away, restricted, and/or transfer case (DART) incident rate.

NWS Charleston's mishap statistics for the period of 2006-2008 were:

- 3-year TCIR is 1.7, which is 73% below the 2007 BLS industry average for ***North American Industry Classification System*** (NAICS) 561200.

- 3-year DART case incidence rate is 1.1, which is 58% below the 2007 BLS industry average for NAICS 561200.

Year	Hours	Total # of Cases	TCIR	No. Cases Days Away from Work, Restricted Activity or Job Transfer	DART Rate
2006	706,360	5	1.4	4	1.1
2007	865,260	8	1.9	6	1.4
2008	900,000	8	1.8	4	0.9
Total	2,471,620	21		14	
Three-Year Rate (2006-2008)			1.7		1.1
— 2005 BLS Rates for NAICS —					
— 2006 BLS Rates for NAICS —					
—x_ 2007 BLS Rates for NAICS _561200_—			6.2		2.6

The site experienced an increase in recordables from 2006 to 2007. This is thought to be the result of improved employee hazard recognition and better reporting of injuries and illnesses. Hazard analysis indicated that the most common recordable injuries and illnesses involved sprains/strains, cuts, and abrasions. The most common body parts injured were hands and backs.

The following examples illustrate the types of actions taken by Naval Weapons Station Charleston toward attaining VPP Star recognition:

- Command leaders kept the press on to ensure Merit goals set by OSHA for NWS Charleston were completed in a timely fashion and that management and employees remained focused and dedicated.
- NWS Charleston employees participated in safety and health programs through worker safety and health committees, prompt reporting of unsafe/unhealthful work practices, safety participation and training, supervisor and employee safety self-inspections, as well as ensuring compliance with applicable standards.
- Focus was placed on wellness training and work conditioning for employees in Fire Department and Morale, Wellness, and Recreation Department where the majority of recordables were experienced.
- Continued to focus on having employees develop and review Job Hazard Analyses to improve hazard awareness and help reduce occurrences.

In 2008, the DoD VPP Center of Excellence was invited to NWS Charleston to conduct an evaluation of random safety and health programs, documentation, employee interviews, and on-site inspections. Based on their sampling, it appeared that NWS Charleston was ready for OSHA’s re-inspection.

In January 2009, OSHA returned to NWS Charleston for a re-inspection. Upon completing the inspection, NWS Charleston was recommended for VPP Star. OSHA noted improvements in documentation, a greater focus on hazard recognition and increased management/ employee inspections. In addition, OSHA inspectors complemented the Command staff for their heavy involvement and for maintaining such high visibility in the workplace during 2008 and during their assessment.

Achieving the VPP Star illustrates NWS Charleston's excellence in Safety and Health programs and demonstrates the commitment and involvement of the station's employees and management. While it was an overall team effort, the importance of management involvement was paramount.

EXECUTIVE SUMMARIES FOR FY 2010 SAFETY SUCCESS STORIES

[Note: If reading an electronic file of this report, click on title to view the entire story]

Protecting Our People from Bad Vibrations - Hand arm vibration, which can cause hand arm vibration syndrome, or HAVS, is caused by people's hands being exposed to chronic vibration, which damages the nerves, blood vessels, and bones. Navy civilian and military personnel involved in defense support operations may be exposed to such hazards. The Defense Safety Oversight Council initiated a project in 2007 to address the root causes of HAVS. PSNS & IMF, Naval Base San Diego, and the Navy Fleet Readiness Center, East provided leadership and technical support in their areas of expertise for this project. As a result of the DSOC project, in September 2009, three low-vibration hand tools were introduced into the federal supply system.

Ergonomics Stressors Resolved for Maintenance of EA-6B Prowler Tactical Jamming System - Fleet Readiness Center Northwest (FRC NW) is the primary repair and maintenance facility for the EA-6B Prowler's electronic countermeasure apparatus. The repair work required sustained awkward postures of the back, neck, and shoulders as well as the potential for high spinal forces associated with lifting and carrying transportation fixtures and pushing handling rotating units (HRUs). A Certified Professional Ergonomist from the Navy's Mishap Prevention and Hazard Abatement Program evaluated the maintenance and repair process for ergonomics risk factors and helped execute the solution that would ultimately benefit the FRC NW personnel - re-design of the HRU and retro-fitting transportation fixtures with wheeled dollies.

Star Voluntary Protection Programs Status Awarded to Naval Station Mayport - On 14 December 2009, OSHA awarded Naval Station (NS) Mayport Star Voluntary Protection Programs (VPP) Site designation. OSHA recognized NS Mayport for initiatives implemented toward safer work practices and environments of the workforce. OSHA noted that all elements of the site's safety and health management system meet the quality expected of VPP participants. Naval Station management, union leadership, safety staff, and employees teamed up to establish and maintain their excellent safety and health record through knowledge of Job Hazard Analysis (JHA) and universal knowledge of the VPP Program.

Naval Weapons Station Charleston Awarded OSHA VPP Star Status - In late 2005, OSHA recognized Naval Weapons Station (NWS) Charleston as a VPP Merit Site. NWS Charleston had demonstrated the potential and commitment to provide excellent safety and health protection, and their goal was to achieve Star. Therefore, management and employees renewed their commitment and continued to strive for OSHA's top tier recognition as a VPP Star site. In January 2009, OSHA returned to NWS Charleston for a re-inspection, and NWS Charleston was recommended for VPP Star. OSHA noted improvements in documentation, a greater focus on hazard recognition and increased management/employee inspections. OSHA inspectors complemented the Command staff for their heavy involvement.

**ATTACHMENT G
CERTIFIED SAFETY PROFESSIONALS (CSPs)
IN FEDERAL AGENCIES**

Agency	Number CSPs
Department of Energy	182
Department of Labor (OSHA)	160
Navy (less Marine Corps)	65
Department of the Army	57
National Aeronautics & Space Administration	30
United States Air Force	26
Health & Human Services/Centers for Disease Control/National Institute for Occupational Safety & Health	20
Department of Defense	14
Federal Aviation Administration	13
U.S. Department of Veterans Affairs	13
United States Coast Guard	10
United States Marine Corps	8

Reference: Board of Certified Safety Professionals (BCSP) database, July 2010

Note: Limitations on this information – the reported employer may not be accurate in some instances where persons have left government employment for the private sector and do not update employer information with BCSP, or current employer information is not otherwise reported to BCSP.