

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

**FISCAL YEAR 2002 ANNUAL
AGENCY REPORT**



Fiscal Year: 2002

Name of Agency: Department of Defense

Name of Component: Department of the Navy

Address 1000 Navy Pentagon
WASHINGTON, DC 20350-1000

Number of employees covered by this report: 180,037 Civilian Workforce

Name of individual responsible for the Occupational Safety and Health Program: The Honorable H. T. Johnson

Title: Assistant Secretary of the Navy
(Installations and Environment)

Address: 1000 Navy Pentagon
Washington, DC 20350-1000

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1000 Navy Pentagon
Washington, DC 20350-1000
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DEPARTMENT OF THE NAVY
OFFICE OF THE ASSISTANT SECRETARY
(INSTALLATIONS AND ENVIRONMENT)
1000 NAVY PENTAGON
WASHINGTON, D.C. 20350-1000

19 February 2003

Mr. John Henshaw
Assistant Secretary of Labor (OSHA)
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington DC 20210

Dear Secretary Henshaw:

As the recently selected and first Deputy Assistant Secretary of the Navy (Safety), it my privilege to provide the Department of the Navy's Fiscal Year 2002 Annual Report on Occupational Safety and Health. The Report includes a cover sheet with Department of the Navy summary information, and attachments containing the Navy's Report and the Marine Corps' Report.

When we submitted our report last year we offered some recommendations for your consideration. We believe that these recommendations, if implemented, would improve each Federal Agency's ability to monitor their performance and would improve the accuracy of injury, illness and fatality reporting. The recommendations were:

(1) Consolidate the web presence and reporting for both OSHA and OWCP data to consolidate the Federal Worker 2000 data, also known as the Federal Employee Safety and Injury Initiative (FESII) to provide timely and accurate data.

(2) Initiate a Federal Agency discussion to modify the current Federal Agency metrics that are based on OWCP FECA Table 2 Reports, i.e., case-create data, and to use instead the active case file data.

(3) Request OSHA and ESA/OWCP convene meetings with each Federal Agency to update the OSHA agency codes and suffixes to reflect current Agency organization changes.

I was extremely pleased to hear that your Office of Federal Agency Programs staff worked with Department of Navy staff to evaluate and discuss these recommendations over the last year.

I understand that OSHA is working on establishing a weblink between Federal Agency OSHA statistics and OWCP statistics to make it easier for Federal agencies to obtain Federal Worker 2000 performance data. I also understand OSHA is establishing an internal OSHA/OWCP policy to post Federal Worker 2000 performance data quarterly and within 90 days of the end of the reporting period. We applaud these actions and fully support these initiatives.

We do request that when reporting Department of Navy statistics, OSHA (and OWCP) break-out the U.S. Navy from the U.S. Marine Corps for clarity. We also request that under FED 2000 Goal 2, the Lost Time Case Rate be summarized and tracked for three different entities: the Department of Navy; U.S. Navy, and U.S. Marine Corps. Details on these issues are provided in Section 4 of the U.S. Navy report. We also recommend that the OSHA report submitted to the President, summarizing all Federal Agency annual reports, be made available to Federal Agencies, possibly being posted to a website.

We appreciate the increasing involvement of the OSHA Office of Federal Agency Programs (OFAP) with the Federal Safety Director's Roundtable; of which I am the current Chair. I also want to thank OFAP for assisting the Department of Navy by participating in the Secretary of the Navy Safety TaskForce over the last year.

Please feel free to contact us with any comments or questions. I can be reached at (703) 588-6680. My Director of Safety and Occupational Health, Mr. Richard Wright can be reached at 703-588-6684. Our Navy contact is Ms. Joy Erdman at (703) 602-2575 and our Marine Corps contact is Mr. Al Lillibridge at (703) 614-1202.



Connie K. DeWitte
Deputy Assistant Secretary
Of the Navy (Safety)

Copy to:
DUSD(I&E)SOH
CNO (N45)
CMC (Code SD)

Department of Navy

FY 2002 Annual Occupational Safety and Health Report

Summary

During FY 2002 The Department of Navy completed it's first year with a Deputy Assistant Secretary for Safety assigned, the only such position at this level dedicated entirely to Safety and Occupational Health within the Armed Services.

The Department continued to enhance all aspects of safety and occupational health through a turbulent year involving increased homeland defense and anti-terrorism initiatives, and a high operations tempo.

The Secretary of the Navy convened a high level Safety Task Force to evaluate current safety and health management structure, funding, and programs, and develop recommendations to enhance safety and health throughout the Department and services. The Task Force initiatives will assist in ensuring safety and health remains a top priority for the Secretary of the Navy, and senior staff of the U.S. Navy and U.S. Marine Corps.

The Department kicked-off an aggressive initiative to reduce lost days due to injuries and illness in concert with the Department of Defense. This includes top-level Secretariat and senior command emphasis, a web-based data management system, and team-based management of injuries involving safety, medical and workers compensation specialists, management and labor. This aids in getting injured workers back to productive work as soon as medically possible. This enhances employee's sense of worth and contribution to the organization as well as reduces costs, and places an emphasis on prevention of mishaps throughout the organization.

The United States Marine Corps has been aggressive at reducing mishap and injuries and senior Command emphasis on safety is at an all time high. New training initiatives and policy developments to enhance safety were established during the year. The Marines are taking the lead in their efforts to reduce motor vehicle accidents both on and of the job.

The United States Navy continues to be a leader in building safety into the acquisition process, "designing out" safety hazards before a mishap or injury can occur. A new acquisition safety web page was developed to assist in this process. The NAVOSH News continues to be a premier electronic newsletter that expedites and disseminates safety and occupational health information Navy-wide; <http://www.navosh.net/>

Congress authorized the Secretary of Defense to carry out a \$5 million defense employee work safety demonstration program to improve the work safety record for civilians at that site using best industry practices. A prime measure of success will address the Federal Worker 2000 safety goals, i.e. reduction in total workplace injuries, number of serious injuries and lost production days. In the shorter term, improvement in perception surveys and implementation of tools provided will measure success. Each of the armed services have selected two sites to participate in this program. The Navy has selected two volunteers, Naval Air Station Kingsville and Naval Air Facility Key West to participate in the demonstration program. The Marine Corps selected Marine Corps Base Pendleton, and Marine Corps Base LeJeune as the participants in the program. Contracts were awarded in late FY 2001, and implementation continued throughout FY 2002. Conclusion of the project will take place in 2003, and we hope to see significant results.

Details on the United States Navy and United States Marine Corps safety and occupational health programs and initiatives can be found in their separate attached reports.

Department of Navy FY 2002 data continued to indicate improvements in safety and occupational health. Data Summary tables are listed below:

TABLE 1: OWCP INJURY & ILLNESS DATA

Number of employees is obtained from the Office of Civilian Personnel Management (OCPM).

DEPARTMENT OF THE NAVY (DON)

CATEGORY	FY98	FY99	FY00	FY01	FY02
Total Cases less 1 st Aid Cases	9290	8790	8690	8204	8009
Fatalities	6	4	8	1*	2
Lost Time Cases	5142	4822	4621	4108	3982
Avg. Number of Employees	196719	204653	183581	180036	180418

U.S. NAVY (USN)

CATEGORY	FY98	FY99	FY00	FY01	FY02
Total Cases less 1 st Aid Cases	8191	7851	7576	7124	6989
Fatalities	6	4	8	1*	1
Lost Time Cases	4447	4198	3874	3419	3331
Avg. Number of Employees	181045	188543	169168	166031	166834

U.S. MARINE CORPS (USMC)

CATEGORY	FY98	FY99	FY00	FY01	FY02
Total Cases less 1 st Aid Cases	1099	939	1114	1080	1020
Fatalities	0	0	0	0	1
Lost Time Cases	695	624	747	689	651
Avg. Number of Employees	15674	14871	14413	14006	13583

*Note: Corrected number. See report paragraph 1. b. in Navy Report for explanation

TABLE 2: OWCP RATES OF INJURIES & ILLNESSES PER 100 EMPLOYEES

This data is obtained from the USDOL OWCP database. USN and USMC rates are based on cases without first aid.

DEPARTMENT OF THE NAVY (DON)

CATEGORY	FY98	FY99	FY00	FY01	FY02
OWCP Total Case Rate	4.54	4.30	4.73	4.56	4.44
OWCP Lost Time Case Rate	2.51	2.36	2.52	2.28	2.21

US NAVY (USN)

CATEGORY	FY98	FY99	FY00	FY01	FY02
OWCP Total Case Rate	4.35	4.16	4.48	4.29	4.19
OWCP Lost Time Case Rate	2.36	2.23	2.29	2.06	2.00

U.S. MARINE CORPS (USMC)

CATEGORY	FY98	FY99	FY00	FY01	FY02
OWCP Total Case Rate	6.74	6.31	7.73	7.71	7.51
OWCP Lost Time Case Rate	4.26	4.20	5.18	4.92	4.79

TABLE 3: WORKERS' COMPENSATION DATA

This data reflects the workers' compensation cost obtained from the USDOL OWCP database.

DEPARTMENT OF THE NAVY (DON)

CATEGORY	CBY98	CBY99	CBY00	CBY01	CBY02
Chargeback Cases	29655	27491	26601	25908	25793
Total Cost (\$ Million)	243.9	240.5	241.6	246.9	248.2
Cost per case (\$)	8225	8748	9083	9529	9625

U.S. NAVY (USN)

CATEGORY	CBY98	CBY99	CBY00	CBY01	CBY02
Chargeback Cases	27118	25256	24184	23526	23325
Total Cost (\$ Million)	225.7	221.6	222.3	227.3	227.2
Cost per case (\$)	8323	8774	9192	9662	9740

U.S. MARINE CORPS (USMC)

CATEGORY	CBY98	CBY99	CBY00	CBY01	CBY02
Chargeback Cases	2537	2235	2417	2382	2468
Total Cost (\$ Million)	18.2	18.9	19.3	19.6	21.0
Cost per case	7169	8460	7985	8221	8533

TABLE 4: CONTINUATION OF PAY (COP)

This data reflects the COP data obtained from the Defense Finance & Accounting System (DFAS) - Cleveland.

DEPARTMENT OF THE NAVY (DON)

CATEGORY	FY98	FY99	FY00	FY01	FY02
COP Cost (\$ Thousand)	4117.5	4683.3	4096.3	3910.4	3369.6

U.S. NAVY (USN)

CATEGORY	FY98	FY99	FY00	FY01	FY02
COP Cost (\$ Thousand)	3663.6	4081.3	3739.6	3544.8	3007.5

U.S. MARINE CORPS (USMC)

CATEGORY	FY98	FY99	FY00	FY01	FY02
COP Cost (\$ Thousand)	453.9	602.1	356.7	365.6	362.1

U. S. NAVY
OCCUPATIONAL SAFETY AND HEALTH
PROGRAM

FISCAL YEAR 2002 ANNUAL
AGENCY REPORT

PREPARED BY: CNO (N45)



Fiscal Year: 2002

Name of Agency: Department of the Navy

Name of Component: U.S. Navy

Address 2000 Navy Pentagon
Washington, DC 20350-2000

Number of employees covered by this report: 166,834 Civilian Workforce

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DEPARTMENT OF THE NAVY
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2000 NAVY PENTAGON
WASHINGTON, D.C. 20350-2000

IN REPLY REFER

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Ser N454/3U574524
31 JAN 03

MEMORANDUM FOR OFFICE OF THE DEPUTY ASSISTANT SECRETARY OF THE
NAVY (SAFETY) (Attn: Mr. Rich Wright)

Subj: U.S. NAVY FY 2002 ANNUAL REPORT TO OSHA

Ref (a) OSHA Memo to Federal Agencies of 24 Oct 02
(b) DASN (Safety) Memo to CNO (N45) of 30 Dec 02

Encl: (1) U.S. Navy FY 2002 Annual Report to OSHA

1. In response to references (a) and (b), the purpose of this memorandum is to forward the U.S. Navy portion of the Department of the Navy's FY 2002 Annual Occupational Safety and Health (OSH) Report.

2. Enclosure (1) is forwarded for inclusion in the Department of the Navy's official response. We are pleased with progress made in OSH in FY 2002 and are ready to meet new challenges to continue our focus on eliminating workplace fatalities, injuries, illnesses, and disabilities. We believe that our increasing emphasis on safety and health in acquisition has the potential to profoundly improve future Navy workplaces, particularly aboard ship. These improvements support three areas critical to the U.S. Navy: (1) Readiness (hurt people aren't ready); (2) Cost (mishaps cost unnecessary time, money and human suffering) and (3) Negative public image (which is unacceptable in an all-voluntary Navy).

3. In your forwarding letter, please consider highlighting our suggestions made in the recommendations section of the report.

4. My points of contact for the U.S. Navy FY 2002 Annual Report to OSHA are Joy Erdman at (703) 602-2575 and Gina Moore at (703) 604-5434.

JOY ERDMAN
Head, Safety and Occupational
Health Branch (CNO N454),
Environmental Readiness Division
(CNO N45)

NAVY OCCUPATIONAL SAFETY AND HEALTH (NAVOSH) PROGRAM

FISCAL YEAR 2002 ANNUAL AGENCY REPORT

SCOPE OF REPORT

This report focuses on the U.S. Navy. The U.S. Marine Corps reports separately. Together the U.S. Navy and U.S. Marine Corps comprise the Department of the Navy. The occupational safety and health program for the U.S. Navy is called the Navy Occupational Safety and Health (NAVOSH) Program. The NAVOSH program applies to Navy shore installations and afloat units worldwide and our military and civilian employees at those locations. Shipboard (afloat) programs, except for those staffed by civilian mariners (primarily in the Military Sealift Command), are only addressed minimally in this report because the Occupational Safety and Health (OSH) Act exempts uniformed military personnel.

The U.S. Navy Fiscal Year (FY) 2002 annual report includes over 500,000 Naval personnel comprised of active duty military, foreign nationals and civilians employed both in the United States and abroad. Of this number, 166,834 are appropriated-fund civilian employees at over 400 shore installations, including naval shipyards, aviation depots, and public work centers within the United States. Foreign national civilian employees overseas and civilians paid by non-appropriated funds at Navy shore installations worldwide are also included in the Naval Safety Center analysis and notable afloat initiatives are also mentioned as appropriate throughout this report.

1. INJURY/ILLNESS DATA

The U.S. Navy is a significant industrial employer with a broad spectrum of operations, processes, work environments, and occupations. This section provides summary data for U.S. Navy for Fiscal Year (FY) 2002. The statistical aspects of this report apply to civilian employees covered by the Federal Employees' Compensation Act (FECA). In a few instances where data was not available for US Navy, data for the entire Department of the Navy is provided.

a. Annual Statistics for Fatalities and Lost Time Disabilities

The data provided in **Attachment A** reflects civilian total injury/illness and lost time cases obtained from the United States Department of Labor (USDOL), Office of Workers' Compensation Program (OWCP) database, and reviewed by the Naval Safety Center. This report addresses only the portion of that data that is USN data. Fatality data is obtained from the Naval Safety Center database and represents traumatic fatalities and those that occurred within six months of the date of initial injury. Not included are those fatalities reported by OWCP that occur after a long illness or that would primarily have been reported to close out a workers' compensation claim.

b. Discussion of Major Trends, Causes or Sources of Fatalities and Lost Time Mishaps

Information concerning Navy civilian occupational injuries and illnesses in FY 2002 are provided in four different analyses in **Attachment B**: By Work Task Performed, By Source of Mishap, By Medical Diagnosis, and By Body Part Injured. This information is derived from a review of 691 occupational injuries or illnesses cases involving five or more lost workdays reported to the Naval Safety Center using the Injury/Occupational Illness Tracking System (INJTRAK) that has been in use since FY 2000. Data provided in **Attachment B** summarizes the number (#) of persons involved in the top 10 categories. An injured person may be counted in more than one category. Review of individual reports of mishaps submitted to the Naval Safety Center reveals that over 40% of civilian mishaps involving five or more lost workdays reported in FY 2002 occurred due to slip, trips, falls and overexertion. Our NAVOSH Strategic Plan has one team addressing ergonomics (for overexertion and repetitive motion hazards) and another team addressing fall hazards. The Naval Safety Center is making major strides to improve data collection and analysis and is preparing for potential adoption of OSHA 1904 recordkeeping.

c. Mishap Trends based on Workers' Compensation Data

The chart in **Attachment B** shows a decreasing trend over the past seven years for injuries and illnesses due to Strains, Contusions, Hearing Loss, Asbestos Illness, Fractures, Lacerations, and Punctures.

2. SAFETY AND OCCUPATIONAL HEALTH PROGRAM ACCOMPLISHMENTS

a. Accomplishments for ensuring workers, supervisors, and committee members receive appropriate job health and safety awareness and hazard recognition information and training.

TRAINING FOR SOH PROFESSIONALS

The Naval Occupational Safety, Health, and Environmental Training Center (NAVOSHENVTRACEN) trains Sailors, Marines, and civilian employees assigned to surface ships, submarines, aviation squadrons, and shore activities on safety and occupational health (SOH). During FY 2002, over 6,819 personnel were trained in 367 sessions of 41 SOH or SOH-related courses at 40 locations, primarily to SOH professionals and those collateral-duty personnel with SOH duties. This training included interactive video training and other innovative instructional methods to train the maximum number of personnel at lowest overall cost.

TRAINING FOR MANAGEMENT, SUPERVISION, EMPLOYEES, EMPLOYEE REPRESENTATIVES

Separate from the NAVOSHENVTRACEN, SOH training is also integrated into trade/skill training and is provided to management, supervision, employees and union representatives in each workplace. During FY 2002, 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 of expertise. Although no official Navy-wide data system exists to track training for management, supervision, or employees, limited local capability is provided on a case-by-case basis and informal data gathering methods are used to provide feedback to the NAVOSH Training & Education Quality Management Board.

Shore activity personnel were also provided additional educational opportunities to assist them in initiating and managing their own SOH programs with new courses on NAVOSH Program Management and Self-Assessment. Feedback from the initial course convenings has been positive; these courses address strongly-voiced field activity needs.

DOD/FEDERAL COUNCILS AND COMMITTEES

Navy participated in the DoD Policy Council, the Federal Safety Director's Roundtable, and other DoD committees. Committees, in which the Navy adopted a particularly strong role, include: Ergonomics, Hearing Conservation, Laser Safety, and Industrial Hygiene. Additionally, field activity personnel actively participated in local Federal Safety & Health Councils, and maintained activity-level SOH Committees, Quality Management Boards, and Process Action Teams.

ACQUISITION SAFETY WEBPAGE

The *Acquisition Safety* web pages <http://www.navosh.net/acquisition/> were designed and developed in FY 2002 for posting on the public domain portion of CNO's Safety and Occupational Health Branch website. The goal of this new component of the website is to promote the incorporation of safety and occupational health factors into all stages of the Defense Acquisition Process by discussing the challenges, communicating information on Best Practices, and sharing successful Navy acquisition safety and health initiatives. Through these Acquisition Safety web pages, the CNO Safety and Occupational Health Branch will promote the message that building systems safer the first time means fewer retrofits, no injuries, enhanced productivity, and reduced cost. Nine Acquisition Safety *Challenges* will be featured on the site: Noise, Vibration, Ergonomics/Human Systems Integration, Confined Space Entry, Heat Stress, Falls, Electrical Shock and Other Hazardous Energy Sources, Non-Ionizing Radiation, and Industrial Ventilation.

In FY 2002, two of the Acquisition Safety Challenges, **Noise** and **Vibration**, were completed and posted to the Acquisition Safety web pages. A third Acquisition Safety Challenge, **Ergonomics/Human Systems Integration (HSI)**, was also drafted in FY 2002 and will be posted early in FY 2003. Further information is provided in **Attachment C**.

b. Accomplishments in assessing effectiveness of safety and occupational health programs.

CENTER FOR NAVAL ANALYSES (CNA)

In FY 2002, U.S. Navy commissioned a Center for Naval Analyses (CNA) study that makes recommendations for improving safety data collection and information dissemination practices. CNA was asked to look again at workers' compensation programs and help make the business case for a greater investment in regional case management.

WHITE HOUSE "FEDERAL WORKER 2000" INITIATIVE

The Navy established policy and guidance to implement the President's "Federal Worker 2000" (FED 2000) initiative. We monitor Navy performance against the program criteria and goals via FED 2000 graphs posted quarterly on the NAVOSH website at <http://www.navosh.net>. Recently, OWCP has changed the title to Federal Employee Safety and Injury Initiative (FESII), but to avoid confusion, U.S. Navy continues to use FED 2000. The FED 2000 goals require actions from the Navy's SOH community as well as from the Navy's Human Resource workforce to address workers' compensation claims management to support the FED 2000 initiative. Since 1990, U.S. Navy has tracked the Total Case Rate (TCR) and Lost Time Case Rate (LTCR) for the entire civilian workforce under the Federal Worker 1990 (FED 1990) initiative, by major command, and major industrial activity, including the naval shipyards, aviation depots, and public works centers. In FY 2002, the US Navy also monitored performance against the FED 2000 goals. A key difference between the FED 1990 and FED 2000 initiatives is that we have expanded our internal key activity list to add targeted activities in FED 2000 that were not individually monitored at the headquarters level under FED 1990, and added new FED 2000 reduction goals for timeliness in reporting and Lost Production Days.

1) *FED 2000 Program Goal 1A*: Reduce the overall occurrence of injuries by 3% per year using a FY 1997 baseline, while improving agencies' timeliness in reporting injuries and illnesses to the Department of Labor by 5%, each year using a FY 1998 baseline.

Total Case Rate (TCR) ¹	FY 1997 Baseline	FY 2002 Goal	FY 2002 Actual	Met Goal/Status
U.S. Navy	4.98	4.55	4.18	Met. <i>Down 16%</i>
Reporting Timeliness ²	FY 1998 Baseline	FY 2002 Goal	FY 2002 Actual	Met Goal/Status
Department of the Navy ³	36.2%	41.9%	41.4 %	Met. <i>Improved by 14.4%</i>

¹ As reported By OSHA ² As Reported by OWCP ³ Data is not available for US Navy, only available for Department of the Navy

a) *Total Case Rate (TCR) Navy Action*: The Navy continues to monitor the TCR for U.S. Navy, and the U.S. Navy met the TCR reduction goal for FY 2002 and achieved a reduction over the baseline. The Navy continues its aggressive NAVOSH management program with FED 2000 goals firmly in mind, and relying on the reports generated by the Occupational Safety and Health Administration (OSHA) using Office of Personnel Management (OPM) employment figures to track progress of this goal.

b) *Reporting Timeliness Navy Action*: The Navy met the goal for increasing timeliness of submission of CA-1s and CA-2s in FY 2002 and achieved a 5.2% reduction over the baseline. The Navy relies on the reports generated by the Office of Workers' Compensation Programs (OWCP) to track progress of this goal. Additionally, the report format does not separate U.S. Navy from U.S. Marine Corps data.

2) *FED 2000 Program Goal 2*: Reduce the lost time case rate (LTCR) for those work sites with the highest rates by 10%, per year for 5 years. Targets were selected if they exceeded two times the Federal average of 2.67

(i.e., 5.34) in FY 1996. Performance is shown in the table below with additional comments provided following the table.

Lost Time Case Rate (LTCR)	FY 1996 Baseline	FY 2002 Goal	FY2002 Actual	Met Goal/Status
Norfolk NSY Portsmouth, VA	5.54	4.08	3.43	Met 5-Year Goal. <i>Down 38.1% from baseline. Up 6.8% from FY01</i>
Puget Sound NSY Bremerton, WA	5.50	4.01	4.38	Did NOT Meet Goal. <i>Down 20.4% from baseline. Down 6.8% from FY01.</i>
PWC Norfolk Norfolk, VA	6.33	4.61	4.66	Did NOT Meet Goal. <i>Down 26.4% from baseline. Up 3.6% from FY01.</i>
PWC Pensacola Pensacola, FL	5.62	4.10	8.18	Did NOT Meet Goal. <i>Up 45.6% from baseline. Down 27.8% from FY01. <u>Note: Major Out-sourcing at this site.¹</u></i>
Naval Air Facility Key West, FL	6.57	4.79	3.62	Met Goal. <i>Down 44.9% from baseline. <u>DEWSDP Pilot Site¹</u></i>
Naval Air Station Kingsville, TX	6.04	4.40	6.80	Did NOT Meet Goal. <i>Up 12.6% from baseline. Down 12.8% from FY01. <u>DEWSDP Pilot Site¹</u></i>
NAVREG Mid-Atlantic Norfolk, VA	10.15	7.40	0.67	Met 5-Year Goal <i>Down 93.4% from baseline. Down 4.3% from FY01. <u>Note Change in Scope</u></i>
Atlantic Ordnance Command Colts Neck, NJ	7.38	5.38	5.37	Met 5-year Goal <i>Down 27.2% from baseline. Up 97.4% from FY01. <u>Note Change in Scope</u></i>

¹ Defense Employee Work Safety Demonstration Program (DEWSDP), Navy Project Site

Navy Action: Navy tracks the LTCR average performance for the U.S. Navy as well as LTCR at the targeted facilities. All Navy facilities perform an annual self-assessment and develop improvement plans designed to correct highest risk program or process deficiencies. Two sites, NAS Kingsville and NAF Key West are pilot sites for demonstration projects under the Defense Employee Work Safety Demonstration Program (DEWSDP). Several of the targeted facilities have made significant strides toward improving their OSH performance, but others are clearly not meeting their goals. Four of the eight targeted Navy activities met their goals, three of which (Norfolk Naval Shipyard, Naval Region Mid-Atlantic and Atlantic Ordnance Command) have already met their five-year goals. Two activities (Atlantic Ordnance Command and Naval Region Mid-Atlantic) have had significant changes in scope due to reorganization. This change makes it a challenge to establish a viable baseline. Both met their goals. Of the three activities that did not meet their goal, Puget Sound NSY is improving but not enough to meet its goal; Naval Air Station Kingsville is receiving assistance; and, PWC Pensacola is facing major regionalization and outsourcing challenges that may be adversely impacting their true performance. These three activities will be singled out during FY2003 for closer scrutiny.

3) *FED 2000 Program Goal:* Reduce the rate of Lost Production Days – that is, the number of days employees spend away from work due to injury– by 2% per year. As noted by OWCP, FY 2000 performance establishes the baseline.

Lost Production Days (LPD) ¹	FY 2000 Baseline	FY 2002 Goal	FY2002 Actual	Met Goal/Status
Department of Navy	64.7	62.1	64.7	Did NOT Meet Goal <i>Down 3.3% from FY01.</i>

¹ LPD = Continuation of Pay (COP) hours provided by DCPDS divided by 8 to convert to days + Non-Quality Care Management (Non-QCM) in calendar days provided by OWCP + Quality Case Management (QCM) in calendar days provided by OWCP. As explained by OWCP, QCM days represent short-term cases with active case management where payment is often on a case-by-case basis, while Non-QCM days represent longer-term cases where payment is often automatic every 28 days. This is then converted to a rate as lost production days per 100 workers.

Navy Action: This goal has two components. (1) Prevent or reduce the severity of injuries and illnesses, and, (2) Ensure timely return to work. Efforts continue at the individual activity level to return workers to work as soon as practicable. DoN has maintained the same rate of lost production days without significant improvement. Navy human resources officers are encouraged to improve workers' compensation case management.

c. Accomplishments in the identification, assessment and resolution of safety and health problems, including methods to recognize outstanding achievers and to establish accountability and performance standards for managers, supervisors, and employees.

NAVOSH STRATEGIC PLAN

Under the leadership of the NAVOSH Quality Council, chaired by CNO (N454), a Strategic Plan is being implemented to eliminate workplace fatalities, disabilities, injuries and illnesses. The Quality Council meets semiannually and owes much of its success to a clear vision, high quality multidisciplinary teams, and contract support to facilitate teams, track meeting decisions and actions, and post information on a secure website. A six-sigma approach was used to develop the Strategic Plan, focusing on most important problems. Each of the six teams and their FY 2002 accomplishments are described below:

The ergonomics team:

- Enhanced the Navy ergonomics policy to more effectively define roles and responsibilities and increase the ergonomic focus in the US Navy
- Initiated development of a section on the acquisition safety website to empower the Navy acquisition community to integrate ergonomics into design and construction of new ships, aircraft, weapon systems, facilities and associated equipment.
- Facilitated NAVOSH ergonomic success stories in cooperation with the Naval Facilities Engineering Command Ergonomics Center of Excellence in San Diego, CA.

The fall protection team:

- Requested and received approval to develop policy to establish fall protection programs that will enable Navy activities to reduce fall mishaps and improve work sites.

The training and education team:

- Focused on realignment of Navy safety training to fit in with TASK Force Excel and Navy realignment efforts.

The process review and measurement system (PRMS) team:

- Completed a PRMS training video for prospective commanding officers so that OSH is integrated across the organization and not just considered a function of the OSH office.

The occupational health support team:

- Completed implementation of occupational health support services measurement system designed to gauge the effectiveness of the support services provided
- Proposed the addition of two industrial hygiene metrics into the Industrial Hygiene Effectiveness Evaluation Procedure.

- Expanded the QMB's NAVOSH Strategic Plan goals and objectives to include: Better use of emerging technologies; Integrating occupational health into contingency response plans, Developing tools to embed quality and performance measures into existing databases; and Developing an occupational medicine/industrial hygiene business model template to improve resourcing, beginning with the FY 2006 budget

The **OSH 2003 (future safety office) team:**

- Initiated pilot study on NAVOSH Performance metrics as Navy-wide indicators. The NAVOSH Quality Council will evaluate the pilot study results and determine the feasibility of Navy-wide implementation.

The **Data team:**

- Worked with the SECNAV Safety Task Force Data Team to outline a strategy for mishap data improvement across the Navy and Marine Corps.
- Encouraged a new web-based system for all injury prevention statistics (ashore, afloat, aviation, off-duty and motor vehicle mishaps).
- Identified strategy options for Quality Council approval to improve use of all Navy data sources (medical, veterans, research, etc.) to increase safety and health research capabilities and data based decision making.

In addition, the NAVOSH Quality Council oversaw and assisted with special Navy initiatives, including the following:

- Developed a **Navy safety budget** effort that, for the first time, provides an accounting line for safety services in the Navy shore community (Further details in next paragraph on Safety IPT).
- Provided **3 focus groups** at the annual Navy safety conference to solve important problems. In April 2002, focus groups were conducted to address improving the **safety culture afloat**, identifying the **safety role in disaster preparedness** (homeland security/antiterrorism and force protection), and improving **data capabilities**.
- Facilitated **acquisition safety** efforts to leverage limited safety resources where they can have the greatest effect.
- Recommended the National Safety Council brief senior Navy leadership on the **National Safety Council study** of DoD Safety.
- Reviewed FY **2003 hazard abatement and mishap prevention projects**.
- Updated **NAVOSH policy**, including major rewrite of **confined space policy** to clarify maritime and general industry requirements, improved policy on **hazardous materials** and **ergonomics (Attachment D)**.
- In partnership with Marine Corps, collected safety leadership quotations from senior leaders to increase the focus on safety (**Attachment E**).

MAJOR MISHAP REVIEW

The CNO major Mishap Review Board met in FY 2002 to conduct a review of past mishaps to determine the progress of recommendations that had resulted from completed Safety Investigations. This process helps to insure that Safety Investigation recommendations are integrated into Naval operations worldwide to prevent similar mishaps in the workplace. The Navy continues to conduct vigorous safety investigations into all workplace mishaps that occur and posts summaries to the NAVOSH Report Card on the NAVOSH website behind password at <http://www.navosh.net>. The web site listing provides key information to assist others in managing risk and reducing mishaps Navy-wide.

To facilitate mishap recurrence prevention, the Naval Safety Center provides extensively distributed lessons-learned messages, which are also posted on their secure web site at <https://www.safetycenter.navy.mil>. Major mishap summaries are provided to the chain of command, and hazard corrections or other actions required as a result of the mishaps are tracked. Navy recommendations to prevent reoccurrence of the FY 2001 civilian fatality are provided below:

- Fatal burn at NSY Puget (01 Jan 01): Twenty-six recommendations to prevent fatal burns were put forward by the Safety Investigation Board Report as a result of this investigation. These recommendations included

revised supervisor and employee training, changes in required PPE, supervisor requirement to visit worksites more often, procedures for performance of work, fire watch requirements and shift turnover for supervisor procedures.

There were two fatalities identified in the FY 2001 report that were reported in error. Explanations are provided below, and in Attachment A, Tables one and five were updated appropriately.

- Ergonomics Fatality at NADP North Island (14 Mar 01): This fatality was listed in error in the FY 2001 Report to OSHA. It was determined that this individual died of natural causes. He had been ill earlier in the year and was told he could not return to work with out a doctor's medical clearance. He returned to work with a forged medical clearance that he had acquired and was allowed to return to work. He became ill at work several weeks later and then entered the hospital where he died of a congenital heart problem.
- PMV/GMV PWC San Diego (28 Sep 01): This fatality had two errors in the FY 2001 Annual Report. It listed the wrong location in the FY 2001 Annual report to OSHA. It should read as Navy Recruiting District, Dallas, Texas instead of PWC San Diego. In addition, the fatality was a Navy enlisted person (IT1), not a civilian, who lost control of a Government Owned Vehicle (GOV) and struck a civilian auto on a public highway.

CNO N46 OTHER BASE OPERATING SUPPORT (OBOS) SAFETY INTEGRATED PROCESS TEAM (SAFETY IPT)

- The Safety IPT was successful in developing cost macro metrics for 3 of 4 business areas in POM-04: NAVOSH, Traffic, and Recreational and Off-duty Safety (RODS). The Safety IPT deliberately did not generate a macro metric for Explosive Safety, as it is very complex and very dependent on specific events or processes. The Safety IPT also spent extensive time/effort developing a consensus definition of what represents mission function versus BOS safety function. Not all safety spending in the Navy is in the OBOS budget, but rather will include mission related funds spread across numerous other appropriations. The Safety IPT supported Installation Management Accounting Project (IMAP) 2002 which has proven successful efforts as a BOS cost collection tool. In addition, Safety IPT successfully updated Cost Accounting Code definitions for safety in STARS/FL (installation accounting system), which are used to standardize cost collection at Navy installations across all BOS functions. OBOS Safety budget in POM-04 is \$35M, which covers 65% of the full requirement.

HAZARD ABATEMENT PROGRAM

The Navy's Hazard Abatement Program (HAP) is available to fund abatement of hazards for which local activities do not have sufficient funds as well as addressing hazards at multiple activities that can be corrected with common designs. The Hazard Abatement (HA) Program objective of identifying, evaluating, and correcting hazards continues to improve Navy workplaces. Emphasis remains on prioritizing and correcting identified hazardous conditions with the highest degree of risk to ensure cost-effective use of available funds. The table below provides further details for HA funding from FY 1997 to FY 2007. (**Attachment F**)

TABLE: NAVOSH HAZARD ABATEMENT FUNDING

Authorizations FY 1998 - FY 2002 are summarized from previous Annual Reports to OSHA
 Obligations FY 1998 - FY 2001 summarized from previous Annual Reports to OSHA
 Obligations FY 2002 are provided by NAVFAC documentation
 Authorizations for FY 2003 - FY 2009 are provided by Navy Headquarters documentation

FUNDING YEAR	AUTHORIZATION (\$ Million)	OBLIGATED (\$ Million)
FY1998	11.6	10.7
FY1999	14.7	14.6
FY2000	14.7	12.3
FY2001	13.6	12.5
FY2002	14.1	12.0

FUNDING YEAR	AUTHORIZATION (\$ Million)	OBLIGATED (\$ Million)
FY 2003	13.5	
FY2004	14.3	
FY2005	14.1	
FY2006	14.1	
FY2007	14.4	
FY2008	14.8	
FY2009	15.1	

**DEFENSE EMPLOYEE WORK SAFETY DEMONSTRATION PROGRAM (DEWSDP) NAVY
PROJECTS AT NAS KINGSVILLE AND NAF KEY WEST**

Under the National Defense Authorization Act FY2001, Congress authorized the Secretary of the Department of Defense (DoD) to carry out a \$5 million DoD-wide employee work safety demonstration program. Program goals for the 2-year pilot were to demonstrate a reduction in job related injuries and associated direct and indirect costs by the end of December 2003. At least 2 installations per service were selected from the Federal 2000 Initiative and Occupational Safety and Health Administration (OSHA) “worst first” list to participate by adopting private sector safety models for use in the workplace that are representative of industry best practices. An Integrated Safety Model (ISM) adopted with modifications from the Department of Energy was selected for use at Naval Air Facility Key West and an OSHA Voluntary Protection Program (VPP) model was selected for Naval Air Station Kingsville. The purpose was to determine whether the use of private sector safety models would improve the work safety record of DoD civilian employees.

d. Unique or significant accomplishments that your agency made last year to enhance employee participation, involvement and consultation in the safety and occupational health program.

NAVOSH NEWS

The Navy distributes the *NAVOSH News*, its weekly electronic newsletter, to Echelon 2 commands for distribution Navy-wide. In FY 2002, the Navy developed and distributed 40 NAVOSH newsletters. This newsletter, also maintained at <http://www.navosh.net>, expedites the dissemination of notices, bulletins, and other news pertinent to Navy work environments, including updates from regulatory agencies, schedules for NAVOSH inspections by Navy Inspector General (NAVINSGEN) and Board of Inspection and Survey (INSURV) teams, emerging issues resulting from legal proceedings and political actions, NAVOSH Success Stories, and weblinks to additional resources for more comprehensive information and useful tools needed by our field activities. Newsletters are developed in two formats, (1) For public viewing only, and (2) More detailed revision behind password for the NAVOSH community. The latter version allows for communication of key Navy problems that need attention. Our website currently receives over 35,000 visits per month, making it a powerful tool for Navy leadership to better communicate and effect positive change in managing occupational safety and health issues Navy-wide.

NAVOSH SUCCESS STORIES

During FY 2002, 16 NAVOSH Success Stories were developed and posted on the public domain side of CNO’s NAVOSH website, <http://www.navosh.net> to communicate the Navy’s commitment to the safety and quality-of-life of our Navy personnel. The purpose of the NAVOSH Success Stories is to keep sailors, their families, Navy civilians, and the general public informed about what the Navy is doing to protect the military and civilian workforce from workplace fatalities, life-threatening injuries, and crippling disabilities. The Success Stories widely disseminate valuable lessons-learned and successful initiatives. In addition, they demonstrate the value added by safety and best business practices resulting in productivity gains and cost savings. Success stories in FY 2002 focused on high hazard areas, such as ergonomics, fall protection, and noise-induced hearing loss. In FY 2002, the NAVOSH Success Stories site was recognized as a runner-up for the *Government Technology Leadership Awards*. Additional information and summaries of the 16 Success Stories posted in FY 2002 are provided in **Attachment G**.

3. FY 2003 OSH PLANS, GOALS AND OBJECTIVES, AND SIGNIFICANT OSH INITIATIVES PLANNED AND PROGRAMMED FOR THE COMING YEAR (S).

The overall goals of the NAVOSH program are to prevent fatalities, injuries and occupational illness; reduce the severity of mishaps; and improve operational readiness. Key FY 2003 initiatives focus on completing organizational alignment of the safety function, developing a budget line for safety, improving data quality for mishap reporting, and monitoring OSHA citations. The NAVOSH program is comprised of a number of elements that target key areas such as compliance, training and hazard control and elimination. The following elements are the tools by which the Navy intends to accomplish its overall NAVOSH goals in the next few years.

NAVOSH STRATEGIC PLAN

- Actively continue progress on existing initiatives in NAVOSH training and education, Occupational Health Services, and Regionalized Safety Services (called “OSH 2003”).
- Continue implementation of three initiatives begun in FY 2001:
 - Eliminate fall hazards and reduce workplace falls
 - Reduce workplace ergonomics hazards
 - Improve access and quality of safety and health data for use by decision makers
- Review the broad spectrum of NAVOSH support to identify opportunities to enhance the provision of safety and health support to Navy operational forces.
- Participate in disaster preparedness efforts to classify safety and occupational roles and responsibilities.

CNO N46 OTHER BASE OPERATING SUPPORT (OBOS) SAFETY INTEGRATED PROCESS TEAM (SAFETY IPT)

Next year tasking includes completing Program Review 2005 (PR-05) Baseline Assessment Memorandum (BAM) data call instructions; conducting and validating the PR-05 data call; and developing and defending PR-05 BAM. Possible future milestones for Program Objectives Memorandum 2006 (POM-06) include validating and refining the cost macro-metrics; identifying best business practices and showing value added by benchmarking; refining service level descriptors; reviewing and developing readiness links; and developing objective metrics for all sub-functions.

ACQUISITION SAFETY

Acquisition safety is a growing priority for the U.S. Navy because integrating safety and health into the acquisition process will result in fewer retrofits, fewer injuries, enhanced productivity and reduced cost. FY 2003 acquisition safety goals are:

- Continue building the acquisition safety website with a goal of adding four more hazard areas in FY 2003.
- Increase SOH membership and participation in acquisition IPTs and working groups.
- Insert SOH criteria by identifying key areas, (i.e., ergonomics, noise, fall protection and chemical management), and describing minimum acceptable criteria for program reviews to be incorporated into Operational Requirements Documents (ORDs) and Mission Needs Statements (MNS).
- Improve support and guidance to acquisition program managers and system safety support personnel to ensure insertion of safety and health criteria into major acquisition programs (e.g., carrier and destroyer).
- Participate in review of Programmatic Environmental Safety and Health Evaluation (PESHE) documentation at all Acquisition Category (ACAT) levels beginning with major (ACAT I) acquisition programs. Special emphasis is being placed on safety and health improvements of the next Navy aircraft carrier, with informal partnership with Grumman Newport News Shipyard (an OSHA VPP site), which will be doing the design and construction.
- Continue education and outreach efforts within the Navy OSH community to increase understanding of the acquisition process and support effective involvement.

OSHA ISSUES

- Develop and implement a system to monitor OSHA citations Navy-wide to facilitate activities learning from citations at other Navy sites, thus preventing OSHA “repeat” or “willful” citations.

- Promote Navy shore activity certification from OSHA Voluntary Protection Program (VPP).

HOMELAND SECURITY MISSION CHALLENGES

- Assist in anti-terrorism force protection (ATFP), Homeland Security, and Biological, Nuclear, Radiological, and High-Yield Explosive (CBRNE) initiatives from a safety and health perspective.
- Determine functions and roles for safety and occupational health communities in this multi-disciplinary effort, including requirements and resources needed for training for defined roles and use of appropriate detection methods and equipment.

CENTER FOR NAVAL ANALYSES (CNA) STUDIES

- Coordinate with CNA on completion of a study on workers' compensation.
- Address CNA recommendations for improving safety data collection and dissemination practices.
- Initiate a new study addressing approaches to bring down injury rates.

NAVOSH POLICY & GUIDANCE

- Update and improve NAVOSH shore policy and guidance for fall protection.
- Issue a revised NAVOSH Reference Library on Compact Disk. This tool provides Navy-specific safety and health policy and nearly 250 references to the professionals in the field.

4. PROVIDE COMMENTS, REQUESTS AND RECOMMENDATIONS FOR CONSIDERATION BY OSHA'S OFFICE OF FEDERAL AGENCY PROGRAMS (OFAP) IN GOVERNMENT-WIDE OCCUPATIONAL SAFETY AND HEALTH PROGRAMS OR REPORT ANY ITEMS OF SPECIAL INTEREST CONCERNING OCCUPATIONAL SAFETY AND HEALTH ACTIVITIES OR PROGRAMS. (OPTIONAL)

a. Feedback on Last Year's request: Navy greatly appreciates the special meeting held with OSHA Federal Agency Program to address 5 Navy issues. We believe that OSHA's planned expansion of 1904 recordkeeping to the Federal sector will resolve the majority of our concerns. We look forward to OSHA completing the actions they volunteered to address that are currently in progress:

- Establish a weblink between OSHA Federal agency statistics and OWCP statistics to make it easier for Federal agencies to obtain Federal Worker 2000 Performance statistics
- Establish an internal OSHA and OWCP policy to post Federal Worker 2000 performance data quarterly and within 90 days of the end of the reporting period.

b. Navy continues to request that, when reporting Department of Navy statistics that OSHA and OWCP break out the U.S. Navy from the U.S. Marine Corps under the Department of the Navy. Additionally, request that under the FED 2000 initiative Goal 2, that the Lost Time Case Rate (LTCR) be summarized and tracked for three distinct entities: Department of the Navy, U.S. Navy and U.S. Marine Corps. See **Attachment H** for proposed format. Finally, request that FED 2000 Navy performance data for Goals 1B and 3 be separated into U.S. Navy and U.S. Marine Corps as well as current data on the combined Department of the Navy data.

c. We appreciate the increasing involvement by OSHA Federal Agency Programs office with the Federal Safety Directors' Roundtable. U.S. Navy also appreciates the OSHA Federal Agency Program leadership provided to the SECNAV Safety Task Force and the data team. This effort is greatly enhancing Navy's efforts to improve data tools that will empower all levels of the Navy to more effectively prevent workplace fatalities, disabilities, injuries and illnesses.

d. We recommend that the OSHA report submitted to the President, summarizing all of the OSHA Federal annual reports, be made available to Federal agencies. This could be accomplished by posting on the OSHA website, through e-mail, or formal correspondence.

ATTACHMENTS:

Attachment A - USN Consolidated Injury/Illness Data Summary

Attachment B - Mishap Profiles and Worker's Compensation Trends

Attachment C - Acquisition Safety

Attachment D - OPNAVINST 5100.23F (Summary)

Attachment E - Safety in Speeches

Attachment F - Hazard Abatement

Attachment G - NAVOSH Success Stories, NAVOSH Cost/Time Savings Table and Executive Summaries

Attachment H - Proposed OFAP Format

Attachment A - USN Consolidated Injury/Illness Data Summary

TABLE 1: OWCP INJURY & ILLNESS DATA

Number of employees is obtained from the Office of Civilian Personnel Management (OCPM). Fatalities are traumatic fatalities only, obtained from the Naval Safety Center database. See Table 5.

U.S. NAVY (USN)

CATEGORY	FY98	FY99	FY00	FY01	FY02
Total Cases less 1 st Aid Cases	8191	7851	7576	7124	6989
Fatalities	6	4	8	1*	1
Lost Time Cases	4447	4198	3874	3419	3331
Avg. Number of Employees	181045	188543	169168	166031	166834

*Note: Corrected number. See report paragraph 1. b. for explanation

TABLE 2: OWCP RATES OF INJURIES & ILLNESSES PER 100 EMPLOYEES

This data is obtained from the USDOL OWCP database. USN and USMC rates are based on cases without first aid.

U.S. NAVY (USN)

CATEGORY	FY98	FY99	FY00	FY01	FY02
OWCP Total Case Rate	4.35	4.16	4.48	4.29	4.19
OWCP Lost Time Case Rate	2.36	2.23	2.29	2.06	2.00

TABLE 3: WORKERS' COMPENSATION DATA

This data reflects the workers' compensation cost obtained from the USDOL OWCP database.

U.S. NAVY (USN)

CATEGORY	CBY98	CBY99	CBY00	CBY01	CBY02
Chargeback Cases	27118	25256	24184	23526	23325
Total Cost (\$ Million)	225.7	221.6	222.3	227.3	227.2
Cost per case (\$)	8323	8774	9192	9662	9740

TABLE 4: CONTINUATION OF PAY (COP)

This data reflects the COP data obtained from the Defense Finance & Accounting System (DFAS) - Cleveland.

U.S. NAVY (USN)

CATEGORY	FY98	FY99	FY00	FY01	FY02
COP Cost (\$ Thousand)	3663.6	4081.3	3739.6	3544.8	3007.5

TABLE 5: NAVY FATALITY SUMMARY**Based on data from the Naval Safety Center on Traumatic Fatalities**

DATE	CATEGORY	UIC DESCRIPTION	BRIEF NARRATIVE
10/29/96	Fatal Fall/Aerial Lift	Naval Aviation Depot Jacksonville, FL	Found on floor next to aerial lift basket
09/15/97	Fatal Impact/Boat Davit	Naval Shipyard Puget Sound, WA	Struck by hand crank shaft of boat davit winch
09/15/97	Fatal Fall/Stairway	Naval Base Seattle, WA	Fell to first deck when second deck railing gave way
FY97	Motor Vehicle Fatality		
FY97	Motor Vehicle Fatality		
04/27/98	Fatal Impact/Straddle	Naval Shipyard Puget Sound, WA	Struck from behind by straddle truck while walking on the pier
FY98	Motor Vehicle Fatality		
FY98	Motor Vehicle Fatality		
FY98	Motor Vehicle Fatality		
FY98	Motor Vehicle Fatality		
FY98	Motor Vehicle Fatality		
03/13/99	Fatal Burn/Steam Pipe	Naval Shipyard Portsmouth, NH	Contact with residual steam condensate while opening steam valve
FY99	Motor Vehicle Fatality		
FY99	Motor Vehicle Fatality		
FY99	Motor Vehicle Fatality		
02/04/00	Fatal Fall/Drowning	USNS Big Horn	Merchant seaman fell into water from liberty boat
05/20/00	Fatal Impact/Man lift	Naval Shipyard & Immediate Maintenance Facility Pearl Harbor, HI	Man lift overturned, fatal head injuries
08/09/00	Fatal Crash Aircraft	Naval Air Warfare Center, Lakehurst, NJ	Passengers in mid-air collision
08/09/00	Fatal Crash Aircraft	Naval Air Warfare Center, Lakehurst, NJ	Passengers in mid-air collision
08/09/00	Fatal Crash Aircraft	Naval Air Warfare Center, Lakehurst, NJ	Passengers in mid-air collision
08/09/00	Fatal Crash Aircraft	Naval Air Warfare Center, Lakehurst, NJ	Passengers in mid-air collision
08/09/00	Fatal Crash Aircraft	Naval Air Warfare Center, Lakehurst, NJ	Passengers in mid-air collision

DATE	CATEGORY	UIC DESCRIPTION	BRIEF NARRATIVE
08/09/00	Fatal Crash Aircraft	Naval Air Warfare Center, Lakehurst, NJ	Passengers in mid-air collision
01/02/01	Fatal Burn	Naval Shipyard Puget Sound, WA	Fatal Heart Attack while being treated for burns.
08/19/02	Motor Vehicle Fatality	Naval Shipyard, Puget Sound, WA	Civilian lost control of private motor vehicle on-duty in San Diego, CA

TABLE 6: OSHA CITATION SUMMARY – BY TYPE

Based on data from the OSHA

	FY1999	FY2000	FY2001	FY2002
Number of Inspections	35	36	25	23
Willful	4	0	0	0
Serious	37	50	45	32
Repeat	2	1	0	3
Other	3	13	11	9
Total Citations	46	64	56	44

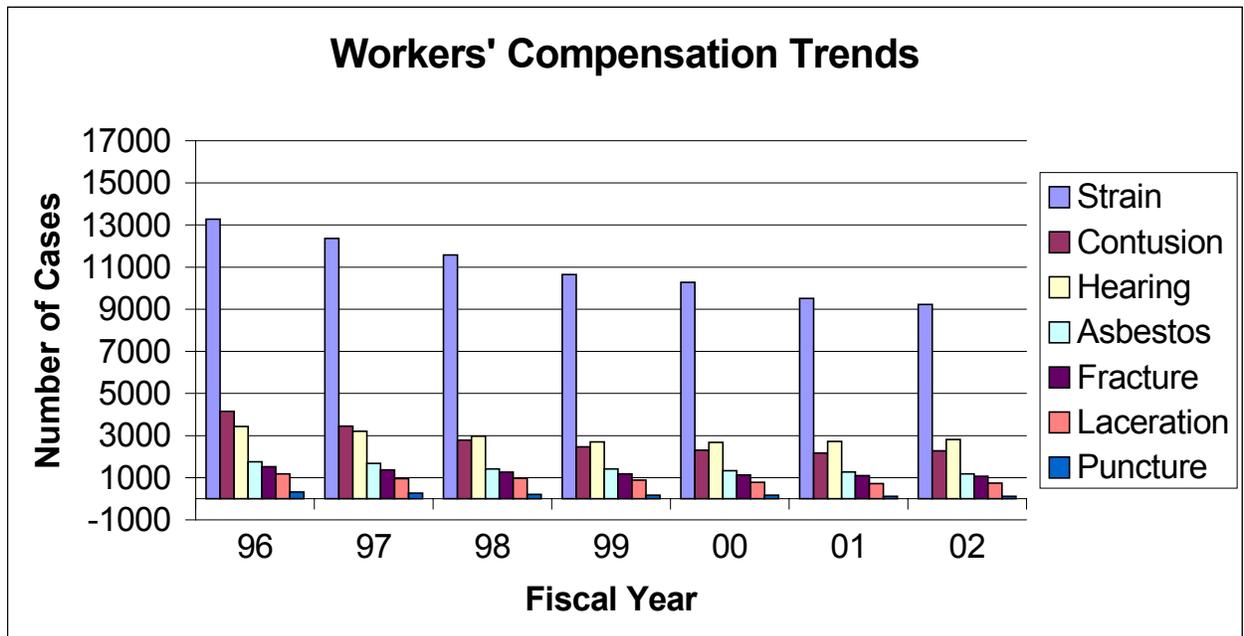
NOTE: THE TOP 6 OSHA CITATIONS (Number of Citations in FY2002)

Toxic Substances (27) * Personal Protective Equipment (5) * Material Handling (3) * General Environmental Controls (2) * Electrical (2) * Administrative (2)

Attachment B - Mishap Profiles and Worker's Compensation Trends

FY 2002 Mishap Profiles							
WORK TASK	#	SOURCE OF MISHAP	#	MEDICAL DIAGNOSIS	#	BODY PART	#
Miscellaneous	133	Slips, Trips and Falls	152	Sprains, Strains	231	Back	161
Industrial	203	Over-Exertion	126	Bruises, Contusions	58	Foot/Ankle/Leg	78
Services	58	Struck By/Struck Against	63	Fractures	56	Knee	73
Clerical	65	Bending/Climbing	51	Back Pain, Hurt Back	44	Hand/Finger/Wrist	55
Construction	29	Bodily Reaction	41	Cuts/ Abrasions/ Scratches	22	Arm/Elbow	33
Research	16	Caught In/Under/Between	21	Lacerations	19	Shoulder	22
Professional	15	Repetitive Motion	13	Injury to Muscles, Tendons, Ligaments, Joints, etc.	17	Neck	15
Travel	8	Contact with Objects	12	Hernia	14	Groin	14
Weapons	7	Exposure to caustic, noxious or allergenic substances	8	Ergonomic Injuries/Illnesses	10	Face	10
Training	4	Compressed or Pinched By	4	Stress	5	Ear	3
TOTAL	538	TOTAL	491	TOTAL	476	TOTAL	464

Source: Naval Safety Center



Source: Naval Sea Systems Command

ATTACHMENT C - ACQUISITION SAFETY

The *Acquisition Safety* web pages <http://www.navosh.net/acquisition/> were designed and developed in FY 2002 for



posting on the public domain portion of CNO’s Safety and Occupational Health Branch website. The goal of this new component of the website is to promote the incorporation of safety and occupational health factors into all stages of the Defense Acquisition Process by discussing the challenges, communicating information on Best Practices, and sharing successful Navy acquisition safety and health initiatives. Through these Acquisition Safety web pages, we hope to get out the message that building ship systems safer the first time means fewer retrofits, no injuries, enhanced productivity, and reduced cost.

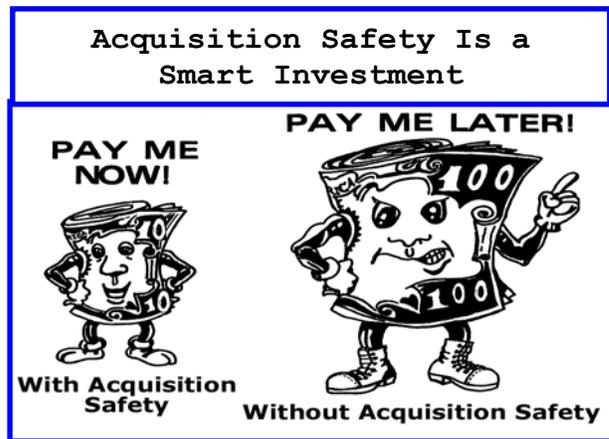
A National Safety Council Study of the Department of Defense Safety Program estimated safety losses to the Navy, Air Force, Army, Marine Corps and Defense agencies to be \$10 to \$20 billion per year. The Acquisition Safety web pages are a work in

progress for addressing the nine most significant safety challenges facing the Defense Acquisition and Navy Occupational Safety and Health communities during planning of ship, weapons, and aircraft systems:

1. **Noise**
2. **Vibration**
3. **Ergonomics/Human Systems Integration (HSI)**
4. **Confined Space Entry**
5. **Heat Stress**
6. **Falls**
7. **Industrial Ventilation (Control of Chemical Hazards)**
8. **Non-Ionizing Radiation**
9. **Electrical Shock and Other Hazardous Energy Sources**

Each of the nine Safety Challenges to be featured in the web pages is approached from three perspectives: The Challenge, Best Practices, and Acquisition Safety Successes.

The **Challenge** sections define and discuss each safety risk and its consequences in terms of human, time, and material costs as well as military readiness. The **Best Practices** sections provide links to general information on each safety challenge topic, as well as resources on research studies, technology, Navy and DoD instructions, industry standards, and other acquisition websites containing information relevant to the specific safety challenge. The **Acquisition Safety Successes** will contain true success stories demonstrating how various Navy commands are meeting each acquisition safety challenge. We are relying on the Navy acquisition community to share its successes with us in order to protect our people and to help the acquisition community to reduce risks at minimal cost and on time.



In FY 2002, two of the Acquisition Safety Challenges, **Noise** and **Vibration**, were completed and posted to the Acquisition Safety web pages. A third Acquisition Safety Challenge, **Ergonomics/Human Systems Integration (HSI)**, was also drafted in FY 2002 and will be posted early in FY 2003. For further information go to <http://www.navosh.net/acquisition/>

Attachment D - OPNAVINST 5100.23F (Summary)



Keeping Our Sailors Singing through the Highlighted Summary of the Navy Occupational Safety and Health Program Manual, OPNAVINST 5100.23F

Chapter 1: Introduction

Reference 1-4	Changed OPNAVINST 5100.19 to the current version and date (OPNAVINST 5100.19D of 30 Aug 01)
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Chapter 2: Responsibilities

0207i	Revised section requires activities to develop a hazard abatement program as required by Chapter 12. Deletes language that requires Commanding Officer to be aware of the hazard abatement program.
Reference 2-13	Updates the reference to the latest version of the Navy Systems Training Plan (8603D).
Appendix 2-A	Updated version of the DoD Occupational Safety and Health Program poster.

Chapter 3: Organization and Staffing

0304c	A new paragraph has been added that strongly recommends that regional safety managers attain board certification through either the American Board of Industrial Hygiene or the Board of Certified Safety Professionals. Also encourages all OSH professionals to seek professional certification per section 0606.
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Chapter 4: Councils and Committees

0402e(1)	Deletes the requirement for activity council meetings to be held quarterly. If the activity OSH manager attends routinely scheduled department head (staff) meetings or personally briefs the commanding officer (CO)/executive officer (XO) on a recurring basis, where safety Items can be discussed in a timely manner, only one formal annual meeting is required. Otherwise, the council shall meet annually or more frequently as needed.
0404.b	Revises language to include NAVRESFOR as a member of the NAVOSH Quality Council.
0404d	Revised language to indicate that the Quality Council will meet semi-annually.

Chapter 5: Prevention and Control of Workplace Hazards

	No changes
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Chapter 6: Training

0602	Revised paragraph to include a reference to the NAVOSHENVTRACEN course listing found at www.norva.navy.mil/navosh .
0602b(3)	Adds requirement that supervisory training for newly appointed supervisors be given as soon as possible but no later than 180 days. Deletes the requirement that this training be as specified in reference 6-1. Adds as statement that electronic training methods are acceptable.
0602d(3)	Deletes paragraph that requires activities to ensure that all new OSH personnel with limited NAVOSH policy background complete <i>Introduction to NAVOSH (Ashore), A-493-0050</i> .
0602d(3)	New paragraph 0602d(3) revised to require person(s) conducting formal OSH training courses to complete a formal instructor training course offered by CNET or equivalent training/experience as approved by the NAVOSH manager.
0602f(2)	Adds "Security Personnel" to the list of job positions or individuals required to administer first aid and/or CPR.
0606	Revises last sentence of paragraph to include availability of CIH, CSP and CHMM computer study programs for the certification examinations.
0607a	Revises duties and responsibilities of the Deputy Chief of Naval Operations (DCNO) (Logistics) (N4) to include establishing policy and resourcing of NAVOSH and HMC&M training programs.
0607c(1), (2) and (3)	Revises duties and responsibilities of the Chief of Naval Education and Training. Also provides the proper title for the Navy systems Training Plan.
Reference 6-3	Corrects the instruction revision and date of issue.
Reference 6-4	Corrects the title and revision number of the NAVOSH and HMC&M Navy Systems Training Plan.
Append. 6-C	Deleted appendix. Activities encouraged to visit NAVOSHENVTRACEN web site for current course listings.

Chapter 7: Hazardous Material Control and Management (Full Chapter Revision, Major changes listed below. Recommend Reading Entire Chapter Before Submitting Comments)

0701d	Paragraph has been deleted in its entirety.
0702a(1)	The "Note" section has been added that describes the Naval Health Research Center's ability to conduct toxicological profiles (TP) and health hazard assessments (HHAs), which help the center set the allowable exposure limits for HM in operational settings.

0702a(2)	Revises language to include the HCM&M requirement to perform HHAs associated with the management of the facility level Authorized Use List (AUL).
0702b(1)	Includes language for COMNAVSUPSYSCOM to develop and recommend to CNO policies and procedures to enhance personnel and facilities safety as well as reducing/minimizing HM into the supply system.
0702b(3)	Adds requirement for NAVSUP to provide guidance to, and coordinate efforts on Navy-wide HM substitution.
0702b(4)	Adds language to ensure that assistance and computer equipment is provided for pollution prevention programs, CHRIMP, HSMS & HICS.
0702d	Adds language to ensure that Commanders of Headquarters and major claimants coordinate with BUMED, program managers, field activities and Navy regions regarding sponsored activities in those regions. It also adds language to ensure that major claimants provide OSH support and funding to develop and implement HM elimination and substitution processes. It goes on to say that OSH professionals shall assist in managing the facility AUL to ensure the use of non-hazardous or least hazardous, technically acceptable materials.
0702e	Adds a new section with responsibilities for Navy regional commanders including coordinate with HQs, program managers and field activities to which they provide support to implement, manage and maintain HMC&M programs.
0702g(1)	Requires commanding officers, commanders to assign and define HMC&M responsibilities and ensure compliance with Reference 7-1 and 7-7 through 7-10.
0702g(2)	Adds language to ensure the AUL includes all HM and any materials that “meet or have potential to meet” the definition of HW per 40 CFR 261 during any phase of its existence. Also adds a "NOTE" that clarifies the CFR 1910.1200 exemptions.
0702g(3)	Adds a new paragraph that requires OSH professionals perform a safety and health review of HM proposed for the addition to the activity AUL prior to the purchase of the HM.
0702g(6)	Revises language that an MSDS should be maintained for all HM issued, received or allowed to be brought onto the facility. Also allows for electronic MSDS and use of online MSDS services.
0702g(7)	Adds language that allows for use of HSMS or an equivalent system that meets the intent of HSMS including MSDS identification, industrial type or other process and EPA waste stream for each manufacturer-specific hazardous material.
0702g(9)(b)	Adds language that says HM with no apparent authorized use should be returned to the HAZMIN Center for proper disposal.
702(g)(9)(c)	Reference to 0702h(6) should be changed to 0702g(7) due to paragraph sequencing error.
0702g(10)(d)	Adds language that says to report deficiencies in the DoD HMIS to NAVENVIRHLTHCEN at the address listed in appendix 7-A.
0702g(10)(j)	Adds language to ensure that the activity Pollution Prevention Plan addressed OSH concerns regarding the facility AUL, HM purchases, and other HM management methods.
0703a	Adds language to ensure that headquarters commands and major claimants assess environment safety and occupational health effects of chemicals and materials of high potential hazard.
0703b	Adds language to ensure headquarters commands and major claimants coordinate with program managers to address OSH aspects as an integral part of ESOH. Paragraph goes on to discuss human factors engineering and HM management principles and practices consistent with Reference 7-12.
Reference 7-6 Correction	Replace reference 7-6 with latest edition, BUMEDINST 6207.8A of 2 Jan 02, Procedures for Obtaining Health Hazard Assessments. Reference update to be added in upcoming revision of the NAVOSH Occupational Safety and Health Manual.

Reference 7-8	Delete Reference BUMEDINST 4110.1 of 30 Aug 93
Appendix 7-A	Additional language indicating that DoD Hazardous Materials Management Information Resource System (HMIRS) is scheduled to replace HMIS in April 2002.

Chapter 8: Occupational Health

Appendix 8-B Correction	Revise the table of contents to include Appendix 8-B, Periodic Industrial Hygiene Evaluation Frequency Categories.
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Chapter 9: NAVOSH Inspection Program

0902.b(3) Correction	Delete. Safety Appraisal, course number A-493-0061 no longer exists.
0903j Correction	First sentence, “Activities shall conduct follow-up workplace inspections to verify that completed corrections have been made or that actions addressing specific problem areas are taken.” deleted due to clerical error not policy change. Text correction to be added in upcoming revision of “Navy Occupational Safety and Health Program Manual”.
0903j Error	Deletes the requirement that activities conduct follow-up workplace inspections to verify that completed corrections have been made or that actions addressing specific problem areas are taken.
0904a(4)	Deletes the requirement for command evaluations to evaluate the results of Federal Employee Compensation Act (FECA) cost reduction efforts..
0904b	Revises paragraph to refer to "Occupational Safety Health Management Inspection" evaluations.
0904c	Adds a paragraph that states that the Naval Oversight Inspection Unit inspections may be used to meet this requirement for command inspections.

Chapter 10: Employee Reports of Unsafe/Unhealthful Working Conditions

	No Changes
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Chapter 11: Inspections and Investigations of Workplaces by Federal and State OSH Officials

1104c	This paragraph deletes the requirement for activity commanders to provide the name, address and phone number of each activity coordinator by letter to the appropriate OSHA Regional Office.
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Chapter 12: Hazard Abatement Program (Full Chapter Revision, Major changes listed below. Recommend Reading Entire Chapter Before Submitting Comments)

1202c NOTE	Revises language to delete \$500 labor and materials threshold required for cost recording of each identified hazard.
1202c(8)	Adds a statement allowing a computerized file vice the hard copy, as long as it contains all of the required close-out information.
1204b	This paragraph has been modified to require activities to submit projects to their major claimant in coordination with their facilities manager and/or regional engineer utilizing the web-based Hazard Abatement Program as well as to NAVFACENGC.COM.
1204b(1)(a)1	Adds a new subparagraph <u>1</u> . that funds for centrally-managed hazard abatement must be for non-Navy Working Capital Fund (non-NWCF) activities only.

1204b(1)(a) 2.a.	Revises the range for minor construction to \$100,000 to \$1,000,000.
1204b(1)(a)1.b.	Revises the range for the cost of a repair to \$100,000 to \$1,000,000.
1204b(1)(a)2(c)	Adds new paragraph that creates a threshold of equal to or greater than \$10,000 for ergonomics projects.
1204b(1)(e)	Revises paragraph to delete exit sign example and edit guardrail example.
1204b(2)(a)	Inserts a minor change to indicate what is prohibited are projects that are a result of a lack of maintenance rather than those that are maintenance related.
1204b(2)(b)	Added a new paragraph on non-authorized projects that addresses projects involving facilities owned (on plant property accounts) by NWCF activities.
1204b(2)(g)	Adds purchase of ergonomic furniture to list of unauthorized projects that do not normally qualify for central HA funding
1204b(3)(a)	Revises paragraph to indicate that HA project submissions are to be done electronically.
1204b(3)(d)	Paragraph deleted. On-line database to be used for HA project submittals.
1205b	Revised text to indicate that Abatement Priority Number (APN) will be used to determine abatement priorities.
Appendix 12-B	Revised form title: Hazard Abatement Project Request Worksheet
Appendix 12-B-2	Revised Hazard Abatement Request Worksheet instructions.
Appendix 12-C Correction	Revise Table of Contents to delete reference to Appendix 12-C, Instructions for Preparation of the Hazard Abatement Project Request Worksheet. Text correction to be added in upcoming revision of the NAVOSH Occupational Safety and Health Manual.

Chapter 13: Navy Occupational Safety and Health Cost Data (Shore Only)

	No Changes
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Chapter 14: Mishap Investigation, Reporting, and Recordkeeping

	No Changes (<i>All comments submitted for this chapter have been forwarded to the OPNAVINST 5102 committee for consideration.</i>)
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Chapter 15: Respiratory Protection (Full Chapter Revision, Major changes listed below. Recommend Reading Entire Chapter Before Submitting Comments)

1503c	Revised section to delete "escape-only" respirator exception to medical qualification requirements.
1504b	This section is changed to provide situations when the supply-air respirator may be used in place of a chemical cartridge respirator.
1505a(1)	Revised paragraph to include adding a cartridge change schedule to written SOPs.

1505a(3)	Adds a new limitation to respirator canister use that chemical cartridge/canister air-purifying respirators may be used (up to their maximum use concentration) for protection against substances without good warning properties, including isocyanates, if a cartridge change out schedule is developed and implemented.
1505a(4) Correction	Modifies old paragraph 1505a(3) to state that although ANSI Z88.7-2001 establishes a system for marking respirator filtering elements for identification by color coding; respirator cartridges, canisters, and filters shall be identified by the information provided on the approval labels. Also, NOTE added to suggest additional training and supplemental labeling requirements where local situation may have the potential for EU or local National Standards that differ from ANSI. Text correction to be added in upcoming revision of the NAVOSH Occupational Safety and Health Manual.
1505a(4) Error	Modifies old paragraph 1505a(3) to state that although ANSI Z88.2-1992 establishes a system for marking respirator filtering elements for identification by color coding; respirator cartridges, canisters, and filters shall be identified by the information provided on the approval labels. Also, NOTE added to suggest additional training and supplemental labeling requirements where local situation may have the potential for EU or local National Standards that differ from ANSI.
1507c(8)	Adds cartridge service life to efficiency as a factor that the RPPM must consider.
1509a	Adds Reference 15-10 to the required references for fit testing.
1509b	The Reference to references 15-10 and 15-11 in this paragraph has been deleted.
1511j	A new training aspect is added requiring that users know when to change chemical cartridges/canisters according to the established change out schedule.
1512b(4)(m)	A new requirement for RPPM training topics has been added: cartridge change out schedules.
1512e	A new requirement has been added to this paragraph that personnel assigned by the RPPM to conduct respirator fit testing shall be trained and evaluated per clause 5 and annex A1 of Reference 15-10.
1513a(2)	A minor change to the paragraph was made to indicate that activities shall <u>also</u> develop SOPs in the general area.
1513a(8)	Revised paragraph to indicate that annual IH review of respirator program does not meet annual review requirement buy may provide data used in the evaluation.
1513a(11)	A new provision for respiratory protection programs has been added that commands establish and implement cartridge change out schedules and describe the objective information or data on which they are based in the written respirator program.
1513c(5)	Adds a new employee responsibility that they change respirator cartridges/canisters according to established change out schedules.
Reference. 15-1	Updates Reference OPNAVINST 5100.19D of 30 Aug 01
Reference 15-5	Changes the effective date of the Reference from 1989 to 1997.
Reference 15-6 Correction	Delete reference. ANSI Z88.2-1992. Replace with American National Standards (ANSI), Z88.7-2001, American National Standard for Color Coding of Air-Purifying Respirator Canisters, Cartridges and Filters (NOTAL). Reference update to be added in upcoming revision of the NAVOSH Occupational Safety and Health Manual.
Reference 15-10	Deletes Reference to 29 CFR 1910.125, Lead standard

Reference 15-11	Deletes Reference to 29 CFR 1910.1001, Asbestos standard
Reference 15-10	Adds Reference Z88.10-2001, American National Standard for Respirator Fit Testing Methods
Appendix 15-A	Revised title of form: "Respirator Use Questionnaire."

[Chapter 16: Occupational Safety and Health Standards](#)

	No Changes
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[Chapter 17: Asbestos Control](#)

	No Changes
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[Chapter 18: Hearing Conservation and Noise Abatement](#)

1805	Modified first paragraph to allow for use of stencil (paint) or engrave words to identify equipment and/or power tools that produce hazardous noise. Also allows for use stencil on flight line tools in lieu of approved decals to prevent foreign object damage.
1809a	Revised Reference to the Defense Occupational Environment and Health Readiness System-Hearing Conservation (DOEHRHS-HC)
Reference 18-1	Updates Reference to OPNAVINST 5100.19D of 30 Aug 01
Reference 18-8	Revises Reference to read MIL-STD-1472F Human Engineering Design Criteria for Military Systems, Equipment and Facilities.

[Chapter 19: Sight Conservation](#)

1902a.	Revised section to prohibit the use of personal eyewash units.
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[Chapter 20: Personal Protective Equipment](#)

	No Changes
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[Chapter 21: Lead](#)

2104c(4)	Revised section to require personnel exposed to airborne concentrations above the PEL to shower before entering the clean room. Also requires clean change rooms to be located adjacent to shower rooms or clean change rooms incorporating showers within.
Reference 21-5	Updates Reference. American Conference of Government Industrial Hygienists Pub. No. 2092, Industrial Ventilation: A Manual of Recommended Practice, 24 th Edition (NOTAL)
Reference 21-10	Updates Reference. UFGS-13282N of Sept 99, Removal and Disposal of Material Containing Lead (NOTAL)
Reference 21-11	Updates Reference. UFGS 13283N of Sept 00, Removal and Disposal of Lead-Containing Paint (NOTAL)

Chapter 22: Non-ionizing Radiation (Full Chapter Revision, Major changes listed below. Recommend Reading Entire Chapter Before Submitting Comments)

2205	Changes the administrative lead agent for laser safety from NAVAIRSYSCOM to BUMED.
2208	Changes the command providing approval for disposal military exempt lasers from COMNAVAIRSYSCOM to BUMED.
2209	A minor change to this paragraph states that Reference 22-6 provides "general guidance for materials necessary and procedures followed by the LSRB review" rather than "procedures for obtaining an LSRB review."
2212	Changes the command that can approve equivalent LSSO training from NAVAIRSYSCOM to BUMED.
2212a	Adds language that describes the four categories of LSSO; certification and maintenance requirements; and qualifications of each type of LSSO as defined in the CNO/CMC laser instruction.
2216a	This paragraph has been changed to indicate that Reference 22-11 will be amended to reflect the current RF PELs listed in Reference 22-12 rather than indicating that it "contains RF PELs adopted from Reference 22-12."
2225c	The responsibilities formerly assigned to COMNAVAIRSYSCOM have been assigned to BUMED and combined with 2225d.
2225c(2)	Revised language to require BUMED to maintain a list of DoD laser systems that have been exempted from CFR Title 21 regulations and their status
2225c(3)	Revised language to require BUMED to provide the Secretariat to LSRB with laser safety design standards, safety documentation and training and laser protective devices developed for military laser systems.
2225c(4)	Additional bullet requiring BUMED to ensure laser safety design standards, safety documentation, and laser eye protection are developed for military laser systems.
2225e(3)	Revised language that allows laser operation at installations and ranges that have been certified and approved by an appropriate LSSO as safe for each specific laser and tactic to be used.
Reference 22-3	Update Reference. ANSI Standard ANSI Z136.1-2000
Reference 22-12	ANSI has been removed from the standard. Notation has been added that this standard incorporates IEEE/ANSI Std C95.1-1999 and IEEE Std C95.1A-1998).
Reference 22-12 Correction	Revise reference to reflect latest edition, IEEE Std. C95.1.2003 . Reference update to be added in upcoming revision of the NAVOSH Occupational Safety and Health Manual.
Appendix 22-C	Under technical assistance, paragraph c., the code and telephone numbers for Naval Warfare Systems Activity have been changed. The email address has been added.

Chapter 23: Ergonomics Program (Full Chapter Revision, Major changes listed below. Recommend Reading Entire Chapter Before Submitting Comments)

2301	This section has been changed to better define the term "ergonomics." Work related musculoskeletal disorders (WMSDs) are better defined as are the ergonomic and personal risk factors.
2302	This section has been revised. It states up-front that the ergonomics program cannot be successful without involvement of the commanding officer or the officer in charge. It states that aggressive management action in ergonomics will improve command readiness.
2303	This is a new section on employee involvement. It requires command ergonomics programs include employee involvement in ergonomic hazard identification. It also requires that if the command has a safety and health committee, that committee review and analyze ergonomic problem areas and recommend

	corrective actions. Also provides for worker-based teams to identify ergonomic problems, analyze risk factors and develop solutions
2304	This is a new section that requires commands to perform an annual self-assessment of its ergonomic program using the Process Review and Measurement System. It provides detailed guidance on performing trend analysis.
2305	This section provides detailed guidance on performing job task analysis. Also specifies that industrial hygienist, safety professionals or graduates of the Navy Ergonomics Program course may perform Job Requirements and Physical Demands Survey.
2305 Correction	Repagination of Enclosure (1), Appendix 23-A, due to insertion of missing page on Hand-Arm Vibration (new page 23-A-11).
2306	This new section provides guidance for safety managers and OSH professionals on where to get assistance should they require it.
2307	This section on hazard prevention and control is old section 2305, with several major modifications. A subsection regarding illumination has been added. Also, new subparagraph that indicates that qualifying commands may use centrally-managed NAVOSH funds to correct ergonomic hazards
2308	This section on ergonomic training is old section 2306. It now requires indoctrination training of personnel as well as refresher training. Topics have been moved to an appendix (23-D).
2309	This section on medical program is old section 2307. Section has been revised.

Chapter 24: Energy Control Program (Lockout/Tagout)

	No Changes
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Chapter 25: Polychlorinated Biphenyls (PCBs)

	No Changes
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Chapter 26: Man-made Vitreous Fibers

	No Changes
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Chapter 27: Confined Space Entry (CSE) Program (Non-maritime) (Full Chapter Revision, Major changes listed below. Recommend Reading Entire Chapter Before Submitting Comments)

2701	This section has been completely rewritten. The definition of a combined space is provided. Navy policy (i.e., to consider all confined spaces to contain the most unfavorable and unsafe conditions; entry into, or work in or on, confined spaces prohibited until qualified personnel have performed the tests, evaluations and prescribed procedures of the chapter to ensure that safe conditions exist and are maintained; and each installation develop a written, program that explains the processes, means and methods used for recognizing, evaluating and controlling potential confined space hazards, and for communicating information concerning those hazards to employees) is provided in this section.
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2702	This section states that this chapter is applicable to all shore non-maritime activities. This section states that Naval maritime facilities will comply with reference 27-1. The section also specifies that Navy shore non-maritime commands performing facilities-related confined space ashore within a facility defined in this section shall comply with this chapter except that a NFPA Marine Chemist or Board Certified Navy GFE shall be used per reference 27-1. This section also specifies that Navy shore non-maritime commands performing ship repair operations shall comply with reference 27-1 except that the Confined Space Program Manager may provide management of requirements listed in reference 27-1 and perform or designate other personnel to perform duties limited to those of a Navy Competent Person.
2703	This section now emphasizes that commanding officers are ultimately responsible for all safety and health issues at their installations. In cooperation with other members of their management team, they shall provide continuing support, both motivational and financial; to ensure that an installation's confined space entry program remains effective. This section now states that the CSPM is the only person authorized to amend an installation's confined space program. Provides the training requirements for the CSPM. Discusses appointment and responsibilities of the ACSPM and qualified persons (QPs). It addresses how tenant commands may use the regional CSPM for its program.
2704	The section on basic program elements has been replaced with one that lists the responsibilities of the CSPM, supervisors, and individual employees.
2705	This is a new section that provides three entry options. These are: reclassifying a permit-space as a non-permit space by eliminating all entry-related hazards, implementing alternative entry procedures that require continuous forced mechanical ventilation and continuous air monitoring in situations where the only hazard posed is an atmospheric hazard which can be controlled by ventilation, and establishing a permit-entry procedure.
2706	This is a new section that provides three administrative policies for the confined space entry program.
2707	This is a new section that addresses the program content. This content includes the processes, means, and methods by which the installation manages its entries into confined spaces.
2708	This is a new section that addresses confined space identification. It requires a written program that describes the process the installation will employ to identify on-site confined spaces and poorly ventilated enclosed spaces. Written programs applies to both permit and non-permit spaces.
2709	This new section on hazard analysis and risk communication requires that the written program advises employees of the existence and location of confined spaces, the nature of the potential hazards posed by confined spaces, and the prohibition against entering confined spaces unless special precautions are taken and an entry permit completed.
2710	This new section has the requirement that the written program must identify site-specific processes, means, and methods used to prohibit unauthorized entrants from entering confined spaces.
2711	This new section on pre-entry precautions has the requirement that the written program must identify the site-specific process used to identify any precautions, work practices, or controls that need to be implemented before entry.
2712	This is a new section on job-hazard analysis. It requires that the written program describe the process for conducting a job specific hazard analysis used to identify all of the hazards at a work site, and a requirement that any hazards, including those that have been controlled or eliminated, be identified on the permit.
2713	This is a new section on limiting unauthorized access. It requires that the written program describe the means and methods used to limit unauthorized access.
2714	This new section on controlling hazardous entry requires the written program to identify how hazardous energy will be controlled in a confined space.
2715	This new section on providing effective isolation defines isolation and requires the written program to describe the process used to achieve isolation.

2716	This is a new section on draining, cleaning and flushing. It requires the written program to describe the process used to identify hazards such as corrosive, toxic, or flammable materials and explain how they may be eliminated or controlled prior to entry. It also requires that the written program incorporate a provision that the installation's cognizant environmental representative must be notified to evaluate any space to be drained, flushed, or rinsed.
2717	This new section requires the written program to explain the installation's process for identifying hazards that may require testing and monitoring, and describe the means and methods by which this testing and monitoring is to be conducted.
2718	This new section on control of atmosphere hazards requires that the written confined space program to stipulate that atmospheric hazards be controlled to the extent feasible through forced, mechanical ventilation. If the CSPM or other designated qualified person determines that ventilation is not effective for controlling atmosphere hazards, they shall require respiratory protection. This new section also defines the minimum standard when evaluating for atmospheric hazards.
2719	This new section requires the written program to describe the process used to manage entrants' exposure to physical hazards.
2720	This new section requires the written program to describe the process used to assess the need for personal protective equipment for a confined space.
2721	This new section requires the written program to explain the process for developing an emergency response plan that addresses the unique nature of each entry.
2722	This is a new section. It requires the written program to describe the process for identifying what conditions are deemed to be acceptable for a confined space entry.
2723	This new section requires the written program for any installation that decides to reclassify a permit space to describe the process used for reclassification. It also provides the minimum requirements for reclassification.
2724	This is a new section. It requires that the written program for any installation that decides to enter permit spaces under the alternate entry procedure to describe the process for implementing that procedure. It also provides the minimum requirements for an alternate entry procedure.
2725	This new section provides the program elements for permit-required confined space. It requires a written, site-specific, entry permit procedure for space entry if a permit-space cannot be reclassified or cannot be entered under the alternate entry procedures. It describes the minimum requirements for this procedure.
2726	This new section addresses the provisions for issuing, canceling, reviewing and archiving entry permits. Also limits duration of entry permit to one shift or the time required to complete assigned task or job identified on the permit, whichever is less.
2727	This new section is on designation of employees. It requires the written program to describe the process used to designate confined space entrants, attendants, and entry supervisors.
2728	This section is a rewrite of old section 2707. It provides detailed guidance regarding what needs to be included in the written, site-specific plan.
2729	This is a new section on entry into atmosphere that are immediately dangerous to life and health. It provides the provisions that the written procedure must address.
2730	This section is a rewrite of old section 2706a. It defines hot work and the provisions for hot work that must be included in the site-specific procedure.
2731	This new section requires that activities that perform special processes such as spray application of flammable or combustible materials, abrasive blasting, and pressure-washing must perform special, specific job-hazard analysis.
2732	This is a new section on employee training. It requires the written program to explain the process the installation uses to ensure employees are trained and have demonstrated proficiency in confined space entry.

2733	This section is a rewrite of old section 2708. It requires the written program to describe the process for managing work contractors perform in the installation’s confined spaces. It describes the provisions for contractor work that the written program must address. It also requires the written program to include, a provision that describes the installation’s process for determining if the contractor’s written program addresses the minimum program elements.
2734	This new section addresses precautions for special activities such as construction activities including underground construction and trenching; telecommunications work; aircraft fuel cells, work involving the generation, distribution and transmission of electricity and confined space operations conducted on a Naval Maritime Facility or ship repair operations at any location.
2735	This new section is a rewrite of old section 2705f. It requires the site-specific written program to describe the process used for conducting and reviewing the installation’s confined space program.
Ref 27-1	Adds new reference, “Gas Free Engineering Manual, NAVSEA S6470-AA-SAF-010 REV01, 1 Sept 99

[Chapter 28: Bloodborne Pathogens](#)

	No Changes
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[Chapter 29: Occupational Reproductive Hazards](#)

	No Changes
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[Chapter 30: Indoor Air Quality Management](#)

	No Changes
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[Chapter 31: Weight Handling Safety](#)

	No Changes
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[Chapter 32: Safety and Occupational Health Awards Program Ashore \(Full Chapter Revision, Major changes listed below. Recommend Reading Entire Chapter Before Submitting Comments\)](#)

3205	Paragraph added that encourages Echelon 2 and 3 headquarters commands to establish “in-house” safety awards of their own in line with the CNO award criteria to recognize respective activities and individuals within each claimancy.
Reference 32-1	Addition of Reference. SECNAVINST 5100.15A, Secretary of the Navy Awards for Achievement in Safety Ashore.
Appendix 32-A	Changes headquarters command category to include Echelon 3 commands assigned primary support responsibility for subordinate commands. Changes the top level for medium commands from 2000 to 3000 employees. Changes the lower band for large commands accordingly. Adds a new individual award category, the CNO Individual Award for Safety and Occupational Health. The nine winners in this category will compete for the Jerry Shultz Memorial Safety Award. Process Review and Management System use is a part of the evaluation criteria for Headquarters commands and activities. Documented efforts in achieving Voluntary Protection Program (VPP) status through the Occupational Safety and Health Administration (OSHA) will be considered in the evaluation criteria for Headquarters commands and activities. Specifically excludes regions from receiving awards. Changes the submission and review process for awards. Added a paragraph on the Presentation of Awards. Added a section on SECNAV Awards.

NOTE

All general comments and specific chapter comments not captured in OPNAVINST 5100.23F will be evaluated during the OPNAVINST 5100.23G review process. Please direct any questions or comments to <http://www.navosh.net/feedback/index.html>.

ATTACHMENT E - SAFETY LEADERSHIP QUOTATIONS

Click to view **Safety in Speeches** and **Views on Safety**

[\[http://www.navosh.net/library/otherdocs.cfm\]](http://www.navosh.net/library/otherdocs.cfm)

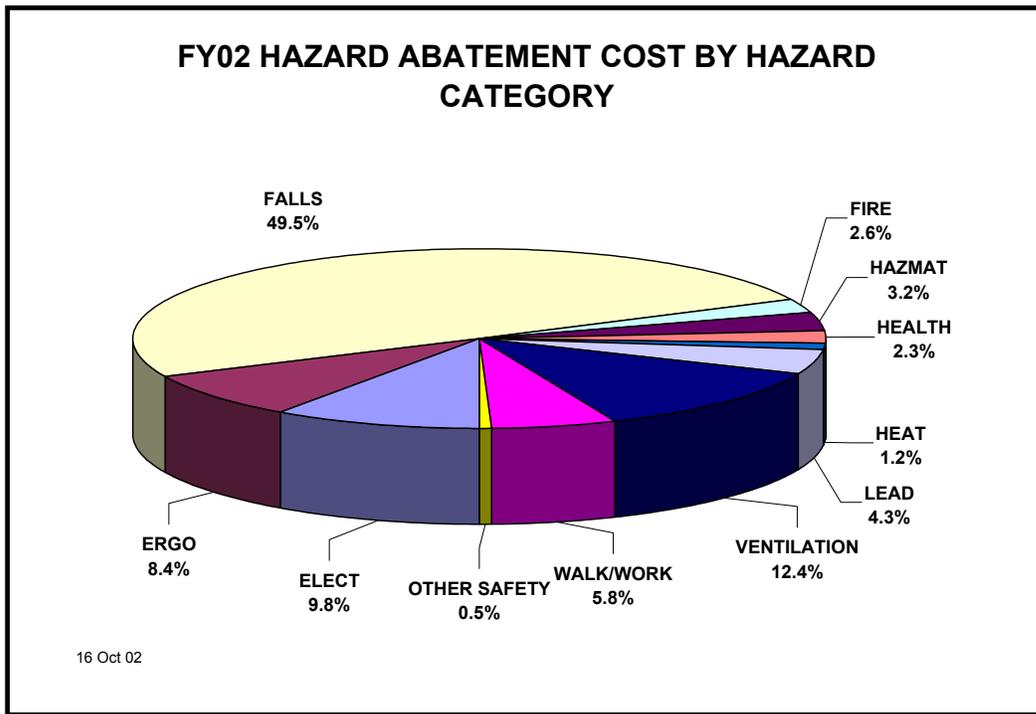
ATTACHMENT F - HAZARD ABATEMENT

The Navy's Hazard Abatement Program (HAP) is available to fund abatement of hazards for which local activities do not have sufficient funds as well as addressing hazards at multiple activities that can be corrected with common designs. The NAVOSH Program, administered by the CNO Safety and Occupational Health Branch, requires commands to identify workplace hazards during self-assessment, 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 FY 2002 with funding secured through the Navy's Hazard Abatement Fund, administered by the Naval Facilities Engineering Command (NAVFAC). Priority for funding was given to areas connected with the highest degree of risk such as falls and ergonomics. These priorities also correlate to areas of risk focus in the NAVOSH Strategic Plan.

In FY 2002, the CNO's Safety and Occupational Health Branch also began the process of expanding the traditional scope of Hazard Abatement to address Mishap Prevention. In this way, exposures to occupational hazards can be prevented rather than treated as problems to be fixed after the fact. Four examples of FY 2002 Mishap Prevention projects are:

- **CNA Study** - The Center for Naval Analysis completed a data safety study that focused on the top two categories of workplace mishaps resulting in fatalities, injuries, illnesses and disabilities - fall hazards and ergonomic hazards. The study's purpose was to assist Navy leadership to make optimal investment decisions to reduce hazards in these mishap areas.
- **Acquisition Safety Website** - The website was launched in FY 2002 to get out a message that building ship systems safer the first time is in effect a means of Mishap Prevention, which results in enhanced productivity and reduced cost. The Noise and Vibration sections of the website were completed during FY 2002. The Acquisition Safety website provides a valuable tool to Navy and other acquisition program managers, systems engineers, and OSH professionals. The website will help demonstrate how investing in acquisition safety provides greater return on investment by avoiding costly retrofits (see Attachment D).
- **Center for Ergonomic Excellence** - Another Mishap Prevention project supports the Center for Ergonomic Excellence. This office, located in San Diego, CA provides support to Navy activities worldwide. The Center responds to inquiries about solutions for solving ergonomic problems and promulgates best ergonomic business practices Navy-wide. Information and products from this Center will not only improve safety but will also increase productivity.
- **Center for NAVOSH Engineering Excellence** - A fourth FY 2002 Mishap Prevention project supports the Center for NAVOSH Engineering Excellence, which focuses on engineering solutions to hazards related to Industrial Ventilation and Indoor Environmental Quality. The Center provides solutions for preventing future health and safety hazards, abating current hazards, and improving productivity.

Approximately \$14 million were authorized by the U.S. Congress and implemented by the Naval Facilities Engineering Command to fund FY 2002 Hazard Abatement and Mishap Prevention projects. Seventy hazard abatement projects were approved for completion in FY 2002. The majority of these Hazard Abatement projects fit into the categories of falls, ergonomics, industrial ventilation, vibration, electrical, and hazardous material control and management. The pie chart below illustrates cost percentages of FY 2002 Hazard Abatement projects by hazard category.



Examples of FY 2002 Hazard Abatement Projects

A number of Hazard Abatement projects funded in FY 2002 were notable for their correction of high risk hazard areas, innovative techniques, numbers of protected personnel, and cost-effective use of available funds.

Fall Protection:

- At Naval Air Station Whidbey Island, 160 personnel working on aircraft in four separate buildings at heights of ten to twenty feet above a concrete floor were exposed to a high risk fall hazard. Hazard Abatement funds were allocated to design and install fall arrest systems.
- Maintenance and inspection crews in Yokosuka, Japan were subjected to fall hazards when working on the cooling towers atop high rises. Hazard Abatement funds were allocated to fabricate and install stainless steel platforms with handrails.



Ergonomics:

- Thirty-one workers in the Naval Shipyard and Intermediate Maintenance Facility, Pearl Harbor were at high risk for back, shoulder, arm and wrist strains. Workers manually moved pumps weighing 50-100 pounds from pallets to their workbenches. They lifted stainless steel balls weighing approximately 100 pounds each to polish the surfaces of the balls on a buffing machine. Hazard Abatement funds were appropriated to purchase material handlers or motorized scissors lifting devices that can lift and



transport parts from the staging area to the work area. Funds were also provided for an Engineering Study or modification of existing equipment to hold stainless steel balls during the buffing operation.

- At various Naval Hospitals, including National Naval Medical Center (NNMC) in Bethesda, MD, lifting and transferring some patients into and out of their beds was a routine work task with a high risk for occupational back injury and the risk, to both patient and caregiver of falling. Although some portable lifting equipment was available to the nursing staff, it was old and inadequate. NAVFAC asked the NNMC nursing staff to evaluate two varieties of portable floor lift devices and one permanently installed ceiling lift. Based on the results of the study, fully upgraded Portable Floor Lifts were procured for the Inpatient Medicine, Inpatient Surgery, and Physical Therapy areas of the hospital. In addition, Inpatient Medicine received a permanently installed Ceiling Lift as a suitable alternative to manually lifting patients. Since introduction of the portable and mechanical ceiling lifts at NNMC, there have been no reported severe disabilities or fall injuries among employees at risk of injury during patient transfer.



Industrial Ventilation:

- Eighty firefighters were at high risk for exposure to diesel exhaust from fire trucks in truck bays at Naval Air Station Whidbey Island. Hazard Abatement funds were allocated to design, procure & install mechanical ventilation systems with quick disconnects to the fire trucks that capture and remove the diesel exhaust to a safe discharge point outside of the building.



Vibration:

- One hundred and fifty workers at Intermediate Maintenance Facility (IMF) Bangor were exposed to segmental hand arm vibration exceeding 10 m/sec² while using hand power tools such as needle guns, chipping guns, and right angle grinders. Hazard Abatement funds were allocated to replace old power tools with new technology that reduces vibration levels below the Threshold Limit Value (TLV) recommended by the American Conference of Government Industrial Hygienists (ACGIH). This intervention not only eliminated the risk of hand arm disabilities at IMF Bangor, but led to increased focus on eliminating this hazard Navy-wide.
- At Pearl Harbor Naval Shipyard, 300 workers operate pneumatic tools such as portable grinders, sanders, and scalers to remove corrosion and prepare metal surfaces on board ship and in the main structural shop. The operation places the workers at risk for vibration related injuries. FY 2002 Hazard Abatement funds were made available to provide ergonomically designed tooling, which reduces vibration exposures.



Electrical:

- At Naval Station Norfolk, Virginia, Pier 11 had been supplied with electricity through under-pier vaults that were entered via a manhole in the pier deck. The under-pier vaults were exposed to leakage of seawater, condensation and temperature variations resulting in corrosion, which created an electrical shock, fire, and explosion hazard for high voltage transformers, switchgear, circuit breakers, and cables in the vault. Navy Hazard Abatement Program Funds were used to



relocate electrical equipment from the vaults beneath the pier to the top of the pier. This is an ongoing effort that began in the 1990's, following a deadly mishap, to ensure that no further electrical shock fatalities occur.

- At Control Wing Pacific Detachment San Diego, 75 workers were exposed to an electrocution hazard from inadequate or missing grounding connections for power panels and/or workbenches. Hazard Abatement funds were allocated to assess the adequacy of grounding systems for workbench and workspace safety and to prioritize corrective action. Corrective action for the grounding system could include the repair or replacement of grounding rods and ground connections, by CAD welding or other approved techniques, installing ground busses in power panels, grounding wiring to work benches, as well as installing new conduit and cable at the main power runs where necessary in accordance with NAVOSH requirements.



Before



After

Hazardous Material Control and Management

- Liquid oxygen is used to service strike (attack) aircraft at Naval Air Stations. Liquid oxygen (LOX) is a hazardous material of concern in Navy aircraft repair, particularly when located around any other organic chemicals, such as fuel. Safety is critical to ensure liquid oxygen doesn't become a fire (oxidation) or reaction source. The best available technology was studied to protect eighty maintenance personnel working on aircraft. Hazard Abatement funds were used to procure and install two liquid oxygen storage carts.



ATTACHMENT G - NAVOSH SUCCESS STORIES

The *1,001 NAVOSH Success Stories* web pages were developed and posted on the public domain portion of CNO's Safety and Occupational Health Branch website, <http://www.navosh.net/>, to communicate the Navy's commitment to the safety and quality-of-life of our Navy personnel. The purpose of the NAVOSH Success Stories is to keep Sailors, their families, Navy civilians, and the general public informed about what the Navy is doing to protect the military and civilian work force from workplace fatalities, life-threatening injuries, and crippling disabilities. By providing real examples at Navy field activities, the stories widely disseminate valuable lessons-learned, innovative technologies, and successful programs and initiatives.

The examples of OSH successes reported in the NAVOSH 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 addition to the Success Story web pages in FY 2002 was the [*NAVOSH Cost/Time Savings Chart*](#) (see chart further in attachment), which highlights in table form the challenges, improvements, and cost, time and labor savings of selected stories. This Navy chart helps 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.

During FY 2002, the *1,001 NAVOSH Success Stories* web pages were recognized as a runner-up in the Government Technology Leadership Awards sponsored by the publication, *Government Executive*. These awards seek to encourage innovation and honor pioneering programs that have made a difference. "Judges look for programs that: get the right information to the right people at the right time; are sensitive to privacy and security concerns; address important organizational goals; are innovative in their application of technology; have benefits that clearly justify its cost; and have potential applicability in other organizations."

Sixteen new stories were posted to the *1001 NAVOSH Success Stories* web pages in FY 2002. The stories focused on numerous OSH areas of concern, such as ergonomics, fall protection, respiratory protection, electric shock, and workers' compensation.

Summaries of two stories are provided for example: Workers' Compensation Case Management and a Crane-rigging Ergonomic Rope Lubrication System. Navy Region Southwest's (NRSW) successful consolidated Workers' Compensation Program, which provides workers' compensation services to an employee population of approximately 35,000 current and former Navy employees and manages a combined workers' compensation caseload totaling \$30 million annually in workers' compensation costs.



Electrician's Mate wearing appropriate personal protective equipment measures resistance of a fan coil unit motor.

The Center for Naval Analyses (CNA), a research and development center that assists the Navy and Marine Corps in increasing their effectiveness and efficiency, recently reviewed workers' compensation programs Navy-wide. In its March 2001 report, CNA stated that NRSW did a better job at managing workers' compensation expenses than any other Navy Region. The report also stated that NRSW should be a model for the rest of the Navy. The CNA's cost analysis indicated that the Southwest Region is expected to spend approximately 30 percent less than the rest of the Department of the Navy on each new workers' compensation claim because of its consolidated, regional approach to ensuring that injured workers receive prompt, appropriate care.

As the Navy advances toward its goal of zero workplace injuries, NRSW stands out as an example of how a few good people can make a big difference. They have successfully streamlined management of the workers' compensation program while benefiting the workers and the Navy. They have revised the phrase – "better, faster, cheaper" to *better, faster, cheaper and safer*.

Another outstanding FY 2002 Success Story featured Public Works Center (PWC) San Diego's solution for preventing WMSDs, increasing productivity, and reducing costs in their crane rigging operations. PWC San Diego sought an ergonomic solution that would minimize the risk of WMSDs to crane riggers who routinely cleaned and lubricated wire ropes. PWC purchased an *automated wire rope lubrication system*. Crane riggers now perform wire rope cleaning and lubricating tasks without the need to assume awkward postures, stand for long periods of time, or use repetitive motions. Since installation of the new system, PWC crane riggers have not reported any lost time mishaps or WMSDs related to wire rope cleaning and lubrication. Cleaning and lubricating crane wire ropes using

Manual cleaning and lubrication is both time consuming and causes repetitive motion injuries.

Automating this process reduces time and injuries.

Combined savings in labor and lost time is \$286,000 annually.

the old manual method took approximately five eight-hour workdays per crane. With the automated system, crane wire rope can now be cleaned and lubricated in one eight-hour day. The automated lubrication system has reduced PWC San Diego's annual cost of cleaning cables from about \$320K a year to approximately \$34K, a yearly savings of approximately \$286K.

The *1,001 NAVOSH Success Stories* web pages fulfilled our FY 2002 goals to advertise our successes and to further the occupational safety and health initiative by sharing the ideas, skills, technology, and programs that continually improve the work environment of Navy personnel. The additional focus on improving productivity and providing cost savings was also clearly demonstrated, as shown in the table below, which was added to the website in FY 2002. Following the table you will find executive summaries of the 16 success stories posted in FY 2002.

NAVOSH COST/TIME SAVINGS

ACTIVITY	CHALLENGE	IMPROVEMENT	COST SAVINGS	TIME/LABOR SAVINGS
NNSY, Norfolk, VA	Manually pulling electrical cable weighing 7 lbs/linear ft 	Mechanically assisted cable pulling process	Decreased risk of injuries. Cost reduction up to 50%; combined savings over \$118,000.00.	Labor reduction from 30 - 70 workers to 7 - 12 workers per cable pull

<p>PWC, San Diego, CA</p>	<p>Manually pulling heavy tarps over dump truck beds</p> 	<p>Automatic system for covering truck beds</p>	<p>Decreased injuries and cumulative trauma disorders. Direct savings of \$74,970.00 annually</p>	<p>Increased productivity from 25 minutes/truck to 10 minutes/truck</p>
<p><i>Various</i></p>	<p>Mobile cranes collapse when load limit exceeded</p> 	<p>Load Moment Indicators or Load Indicating Devices installed on 132 mobile cranes at 28 locations</p>	<p>Avoidance of serious injuries and destruction of millions of dollars worth of equipment and materials</p>	<p>Decreased downtime by reducing the number of crane-related mishaps and personnel injuries</p>
<p>PWC, San Diego, CA</p>	<p>Manual cable cleaning and lubrication</p> 	<p>Automated cable lubrication system</p>	<p>Reduced annual cable cleaning costs by 89%, from about \$320,000.00 to about \$34,000.00</p>	<p>Increased efficiency and decreased downtime by reducing incidence of hand injuries among cable cleaners</p>
<p>NUWC, Newport, RI</p>	<p>Manually transferring towed array test cable reels weighing up to 7,000 lbs.</p> 	<p>Mechanical cable reel handler</p>	<p>Avoided approximately \$67,500.00 annually on about 225 reels/year</p>	<p>Labor reduction from of 4 - 6 workers to 1 worker to transfer a cable reel, increasing efficiency and reducing risk of injuries</p>

<p>NADEP, North Island, CA</p>	<p>Vibration from rivet guns exposed workers to serious risk of hand-arm vibration syndrome</p> 	<p>Remote control device reduces transmission of rivet gun vibration to user's hands, arms, and upper body</p>	<p>Reduced annual costs of F/A-18 maintenance by about \$29,669.00</p>	<p>Eliminated risk of work-related vibration injuries and reduced turn around time on F/A-18 aircraft by 20 hours/unit</p>
<p>SIMA, Norfolk, VA</p>	<p>Off-site training of new forklift operators and periodically re-qualifying experienced operators</p> 	<p>Developed in-house forklift operator training classes</p>	<p>Estimated annual direct cost avoidance of \$50,600.00</p>	<p>Decreased downtime by eliminating need to send forklift operators off-site for periodic forklift training</p>
<p>NFESC, Port Hueneme, CA</p>	<p>OSHA ventilation requirements for spray-paint operations costly and impractical for corrosion control and paint hangars</p> 	<p>Obtained revised OSHA local exhaust ventilation requirements for corrosion control and paint hangars</p>	<p>Initial cost savings of about \$250,000.00 per new hangar and life cycle cost avoidance of another \$250,000.00/hangar</p>	<p>Improved protection of aircraft maintenance workers from fire and explosions and from inhalation hazards during aircraft maintenance operations</p>
<p>IH Dept., NH, Rota, Spain</p>	<p>Numerous respiratory illnesses and allergic reactions reported by workers in an office building. Indoor air quality investigation revealed fungus contamination in building's air handling system</p> 	<p>Navy microbiologist identified fungal contaminants and recommended method for decontaminating building's air handling system and for preventing recontamination</p>	<p>Navy experts resolved indoor air quality incident, avoiding about \$9,000.00 in cost to bring consultants from U. S. to identify air contaminants and resolve this incident</p>	<p>Downtime and medical evaluation due to respiratory illnesses and allergic reactions. Building returned to normal levels after decontaminated</p>

EXECUTIVE SUMMARY FOR FY 2002 NAVOSH SUCCESS STORIES

PWC San Diego Prevents WMSDs, Increases Productivity, and Reduces Costs With Automated Cleaning and Lubrication System - Crane riggers in PWC San Diego's Crane and Rigging Department were at risk for WMSDs while manually cleaning and lubricating wire rope from floating and land crane winches. The purchase of an automated wire rope lubrication system has minimized the risk of WMSDs, increased productivity, and reduced costs. <http://www.navosh.net/strategic/success/stories/pdfs/WireRopeFinal.PDF>

Patient Lifts Prevent Injuries and Workplace Musculoskeletal Disorders at National Naval Medical Center, Bethesda, MD - In the past, half of all occupational back injuries at NNMC, Bethesda were related to lifting and transferring patients. Since the purchase of three portable patient lifts and a mechanical ceiling lift no serious back injuries have been reported on the wards where the lifts are being used. <http://www.navosh.net/strategic/success/stories/pdfs/BethesdaergoFinal.PDF>

Rollertop Hydraulic Lift Table Reduces Injuries and WMSDs at Naval Intermediate Maintenance Facility, Bangor - Shipwrights risked WMSDs due to cutting 300-pound keel blocks. An ergonomic assessment and input from workers and Safety led to an ergonomic solution. <http://www.navosh.net/strategic/success/stories/pdfs/Bangorfinal.PDF>

NASSIG Ergonomic Interventions Deliver Fleet Mail Center from Work-Related Disabilities - Developed ergonomic solutions to protect mail handlers from WMSDs. Equipment, work station design, and structural modifications have all benefited NASSIG Mail Center employees as they move five million pounds of mail a year between the U. S. and locally assigned military and civilians and the Fleet. http://www.navosh.net/strategic/success/stories/pdfs/nassig_fleet_mail.pdf

Naval Safety Center's Website Links Safety Surfers With Safety Information

Safety Surfers are finding a veritable host of information to meet their safety awareness and injury-prevention needs at the Naval Safety Center's website. Visitors can find online versions of periodicals, safety posters, safety checklists, links to other safety websites, and more.

<http://www.navosh.net/strategic/success/stories/pdfs/NSCWebsiteFinal.PDF>

Navy's Southwest Region Excels at Managing Workers' Compensation Program – NRSW has increased efficiency and effectiveness in managing its workers' compensation cases. NRSW was the first Navy region to consolidate Workers' Compensation into a central office. <http://www.navosh.net/strategic/success/stories/pdfs/CNRSW.PDF>

MED Mall at NAS Sigonella, Italy Ergonomically Designed for Employees and Customers - The Mediterranean Mall, or Med Mall, office supply store at Naval Air Station, Sigonella, Italy has been ergonomically redesigned. <http://www.navosh.net/strategic/success/stories/pdfs/mall.PDF>

Naval Safety Center Marks 50 Years as "One-Stop Safety Shop" Service to Navy and Marine Corps – 50 years of enhancing naval readiness culminating in a "one-stop safety shop" for Navy sailors and marines around the world. http://www.navosh.net/strategic/success/stories/pdfs/NSC_50-year%20final.PDF

Naval Facility Engineering Command Builds in Fall Protection – Architects and engineers who may not previously have considered the safety of building occupants in designing and building structures, can now find suitable training through NAVFAC's "Fall Protection and Prevention Training" module. http://www.navosh.net/strategic/success/stories/pdfs/engg_command.PDF

Ergonomic Microscopes Reduce the Risk of Musculoskeletal Disorders at Naval Health Research Center's Respiratory Disease Laboratory – Technicians were at risk of WMSDs from using traditional binocular microscopes. The lab acquired microscopes with many ergonomically sound features, which reduce worker discomfort. <http://www.navosh.net/strategic/success/stories/pdfs/microscope.PDF>

NAS Sigonella's Ergo Tips Reduce Risk of WMSDs - NASSIG's Ergonomics Program Manager used photos taken during ergonomic assessments to develop a unique series of fliers called Ergo Tips. The colorful leaflets point out risk factors for WMSDs and provide information for avoiding those risks. The pictures help workers make the connection between their work situations and the information in the Ergo Tips.

<http://www.navosh.net/strategic/success/stories/pdfs/mar1.PDF>

Lockout Prevents Electric Shock Injuries at NNOC - Naval Network Operations Command found a solution to their electrical Lockout/Tagout needs. They are using a new breaker lockout device that is used to lock any circuit breaker. Electricians and electrical maintenance technicians now work more safely on transmitters, receivers, and other electronic communications systems. <http://www.navosh.net/strategic/success/stories/pdfs/lockout.pdf>

Industrial Hygienists Clear the Air after Pentagon Terrorist Attack – The September 11th terrorist attack released health-hazardous residues in the Pentagon crash zone and trailed contamination into adjacent areas. National Naval Medical Center's industrial hygienists helped to expedite the recovery and restoration of the Pentagon and dispelled lingering concerns of attack-related health hazards. <http://www.navosh.net/strategic/success/stories/pdfs/attackstory.PDF>

Expertise of Industrial Hygienists Keeps Navy Firefighters Safe - A National Naval Medical Center North industrial hygienist discovered leaking facepieces when examining SCBAs at Naval Surface Warfare Command Philadelphia's fire department. His quick action to have the SCBAs removed from service saved firefighters from a potentially deadly situation. Additional Industrial Hygiene assistance resulted in newer model SCBAs for the NSWC fire department. The new SCBAs are a big improvement for the firefighters. <http://www.navosh.net/strategic/success/stories/pdfs/firefighterstory.pdf>

Naval Air Station, Sigonella, Italy Promotes Motor Vehicle Safety - NASSIG promotes motor vehicle safety by requiring privately-owned cars to pass a safety inspection before they can be driven anywhere in Italy or parked on base. Only owners of vehicles that pass inspection may buy gasoline on base, and cars that fail the inspection must be repaired or junked. <http://www.navosh.net/strategic/success/stories/pdfs/Traffic Safety NASSIG final.pdf>.

Ergonomic Carts Improve Management of Hydraulics Parts at NADEP JAX Aircraft Examiners and Evaluators were working in cramped, overcrowded conditions while evaluating and directing thousands of aircraft parts for repair. NADEP's Ergo Team evaluated the situation and recommended mobile, easily stored staging and transfer carts. http://www.navosh.net/strategic/success/stories/pdfs/foldaway_carts.PDF

ATTACHMENT H - PROPOSED OFAP FORMAT

		FY1998	FY1999	FY2000	FY2001
Number of Employees*	Federal Government	2782762	1908398	2009380	
	Department of Navy	199921	192371	186351	182557
	U.S. Navy				
	U.S. Marine Corps				
Total Injury/ Illness Cases	Federal Government	152053	74591	79321	
	Department of Navy	9555	8549	8374	
	U.S. Navy				
	U.S. Marine Corps				
Lost Time Injury/ Illness Cases	Federal Government	66806	35924	36227	
	Department of Navy	5143	4554	4465	
	U.S. Navy				
	U.S. Marine Corps				
Fatalities**	Federal Government	146	95	85	
	Department of Navy	18	13	12	
	U.S. Navy				
	U.S. Marine Corps				

*OFAP Statistics, FY1998-FY2000; OPM Statistics, FY2001, as of May 2001

**OFAP Statistics include Traumatic Fatalities and Fatalities after Long-Term Illness

Total Case Rate (TCR)	Federal Government	5.46	3.91	3.95	
	Department of Navy	4.78	4.44	4.49	
	U.S. Navy				
	U.S. Marine Corps				
Lost Time Case Rate (LTCR)	Federal Government	2.40	1.88	1.80	
	Department of Navy	2.57	2.37	2.40	
	U.S. Navy				
	U.S. Marine Corps				