

# DEPARTMENT OF THE NAVY

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

06 April 2004

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 Deputy Assistant Secretary of the Navy (Safety), it my privilege to provide the Department of the Navy's Fiscal Year 2003 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.

Please feel free to contact us with any comments or questions. I can be reached at (703) 614-5516. My Director of Safety and Occupational Health, Mr. Richard Wright, can be reached at 703-614-5530. Our Navy contact is Ms. Joy Erdman at (703) 602-2575 and our Marine Corps contact is Mr. Albert Lillibridge at (703) 614-1202.

Connie K. DeWitte

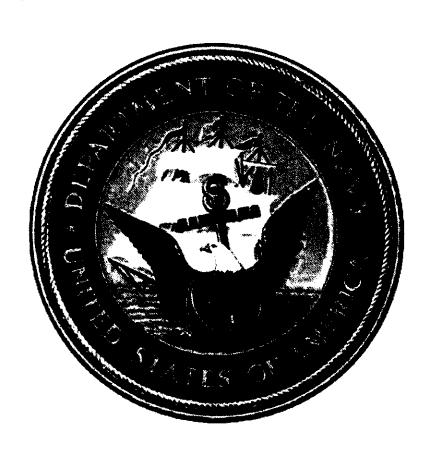
Deputy Assistant Secretary of the Navy (Safety)

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# DEPARTMENT OF NAVY

# OCCUPATIONAL SAFETY AND HEALTH PROGRAM

# FISCAL YEAR 2003 ANNUAL AGENCY REPORT



Fiscal Year:

2003

Name of Agency:

Department of Navy

Name of Components:

U.S. Navy and U.S. Marine Corps

**Address** 

1000 Navy Pentagon

Washington, DC 20350-1000

Number of employees covered by this

report:

181,140 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:

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Washington, DC 20350-1000

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(703) 693-4530

**Point of Contact:** 

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# **Department of Navy**

FY 2003 Annual Occupational Safety and Health Report

# **Summary**

The Department continued to enhance all aspects of safety and occupational health through a turbulent year that included combat operations and logistical support for Operation Enduring Freedom and Operation Iraqi Freedom; as well as increased homeland defense and anti-terrorism initiatives.

The Department continued an aggressive initiative to reduce mishaps and lost days due to injuries and illnesses in concert with the Department of Defense initiative to reduce mishaps and injuries by 50% within the next two years. This includes top-level Secretariat and senior command emphasis, a new 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. A prompt return to work enhances an 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 Department is fully engaged and leading Task Forces under the Defense Safety Oversight Council; chaired by Dr. David Chu; Undersecretary of Defense, and composed of Senior Flag / General Officers and Executives at the Undersecretary level. The Council and its Task Forces are focused on meeting aggressive Department of Defense safety and health reduction goals over the next two fiscal years.

During this fiscal year, the Department of Navy conceived the formation of the Navy and Marine Corps Safety Council. The Safety Council is composed of Navy Flag and Marine Corps General Officer leadership; and is broken into four working groups/domains; shore-based, afloat, aviation and ground tactical operations and missions. The Council is focused on improving the safety and health of our civilians and military members associated with activities that take place within these domains. We believe the Safety Council will have an extremely positive impact on safety and occupational health improvements Department-wide as it is stood-up this current fiscal year.

We also devoted much time and effort this fiscal year to the creation of a new Department of Navy Safety Civilian Community. We are focused on recruiting, developing and retaining qualified, competent safety and health professionals, by improving career progression and training opportunities. With the creation of the new Defense Personnel System, we hope to continue to pursue positive steps to ensure our safety and occupational health personnel increase professionalism into the future.

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. A three and four Star General Officer Executive Safety Board continues to tackle and promote safety and occupational

health initiatives. The Marines are taking the lead in their efforts to reduce motor vehicle accidents both on and off the job. Several new training initiatives and policy developments to enhance safety were established during the year.

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 OSH web page has become the premier electronic means to expedite and disseminate safety and occupational health information Navy and Marine Corps-wide; <a href="http://www.safetycenter.navy.mil/">http://www.safetycenter.navy.mil/</a>. Over the last year we focused on ergonomic-related injuries, and worked hard to ensure ergonomic hazards are "designed" out early in the acquisition process of major weapon system designs.

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 2003 data continued to indicate improvements in safety and occupational health. The Department recorded zero workplace fatalities in FY 03 (note that the Department does not track those fatalities reported by the Office of Workers' Compensation Program (OWCP) that occur after a long illness or that would primarily have been reported to close out a workers compensation claim). 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                                      | FY99   | FY00   | FY01   | FY02   | FY03   |
|---|--------|--------|--------|--------|--------|
| Total Cases less 1 <sup>st</sup> Aid<br>Cases | 8790   | 8690   | 8204   | 8009   | 7855   |
| Fatalities                                    | 4      | 8      | 1      | 2      | 0      |
| Lost Time Cases                               | 4822   | 4621   | 4108   | 3982   | 4155   |
| Avg. Number of<br>Employees                   | 204653 | 183581 | 180036 | 180418 | 181140 |

U.S. NAVY (USN)

| CATEGORY                                      | FY99   | FY00   | FY01   | FY02   | FY03   |
|---|--------|--------|--------|--------|--------|
| Total Cases less 1 <sup>st</sup> Aid<br>Cases | 7851   | 7576   | 7124   | 6989   | 6987   |
| Fatalities                                    | 4      | . 8    | 1      | 1      | 0      |
| Lost Time Cases                               | 4198   | 3874   | 3419   | 3331   | 3619   |
| Avg. Number of<br>Employees                   | 188543 | 169168 | 166031 | 166834 | 167865 |

# U.S. MARINE CORPS (USMC)

| CATEGORY                 | FY99  | FY00  | FY01  | FY02  | FY03  |
|--------------------------|-------|-------|-------|-------|-------|
| Total Cases less 1st Aid | 939   | 1114  | 1080  | 1020  | 868   |
| Cases                    |       |       |       |       |       |
| Fatalities               | 0     | 0     | 0     | 1     | 0     |
| Lost Time Cases          | 624   | 747   | 689   | 651   | 536   |
| Avg. Number of           | 14871 | 14413 | 14006 | 13583 | 13275 |
| Employees                |       |       |       |       |       |

# 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                    | FY99 | FY00 | FY01 | FY02 | FY03 |
|-----------------------------|------|------|------|------|------|
| OWCP Total Case Rate        | 4.30 | 4.73 | 4.56 | 4.44 | 4.34 |
| OWCP Lost Time Case<br>Rate | 2.36 | 2.52 | 2.28 | 2.21 | 2.29 |

# US NAVY (USN)

| CATEGORY                    | FY99 | FY00 | FY01 | FY02 | FY03 |
|-----------------------------|------|------|------|------|------|
| OWCP Total Case Rate        | 4.16 | 4.48 | 4.29 | 4.19 | 4.16 |
| OWCP Lost Time Case<br>Rate | 2.23 | 2.29 | 2.06 | 2.00 | 2.16 |

# U.S. MARINE CORPS (USMC)

| CATEGORY                    | FY99 | FY00 | FY01 | FY02 | FY03 |
|-----------------------------|------|------|------|------|------|
| OWCP Total Case Rate        | 6.31 | 7.73 | 7.71 | 7.51 | 6.54 |
| OWCP Lost Time Case<br>Rate | 4.20 | 5.18 | 4.92 | 4.79 | 4.04 |

# **TABLE 3: WORKERS' COMPENSATION DATA**

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

# DEPARTMENT OF THE NAVY (DON)

| CATEGORY                | CBY99 | CBY00 | CBY01 | CBY02 | CBY03 |
|-------------------------|-------|-------|-------|-------|-------|
| Chargeback Cases        | 27491 | 26601 | 25908 | 25793 | 21816 |
| Total Cost (\$ Million) | 240.5 | 241.6 | 246.9 | 248.2 | 246.5 |
| Cost per case (\$)      | 8748  | 9083  | 9529  | 9625  | 11299 |

# U.S. NAVY (USN)

| CATEGORY                | CBY99 | CBY00 | CBY01 | CBY02 | CBY03 |
|-------------------------|-------|-------|-------|-------|-------|
| Chargeback Cases        | 25256 | 24184 | 23526 | 23325 | 19535 |
| Total Cost (\$ Million) | 221.6 | 222.3 | 227.3 | 227.2 | 225.6 |
| Cost per case (\$)      | 8774  | 9192  | 9662  | 9740  | 11549 |

# U.S. MARINE CORPS (USMC)

| CATEGORY                | CBY99 | CBY00 | CBY01 | CBY02 | CBY03 |
|-------------------------|-------|-------|-------|-------|-------|
| Chargeback Cases        | 2235  | 2417  | 2382  | 2468  | 2281  |
| Total Cost (\$ Million) | 18.9  | 19.3  | 19.6  | 21.0  | 20.9  |
| Cost per case           | 8460  | 7985  | 8221  | 8533  | 9163  |

# **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               | FY99   | FY00   | FY01   | FY02   | FY03   |
|------------------------|--------|--------|--------|--------|--------|
| COP Cost (\$ Thousand) | 4683.3 | 4096.3 | 3910.4 | 3369.6 | 3964.1 |

# U.S. NAVY (USN)

| CATEGORY               | FY99   | FY00   | FY01   | FY02   | FY03   |
|------------------------|--------|--------|--------|--------|--------|
| COP Cost (\$ Thousand) | 4081.3 | 3739.6 | 3544.8 | 3007.5 | 3648.9 |

# U.S. MARINE CORPS (USMC)

| CATEGORY               | FY99  | FY00  | FY01  | FY02  | FY03  |
|------------------------|-------|-------|-------|-------|-------|
| COP Cost (\$ Thousand) | 602.1 | 356.7 | 365.6 | 362.1 | 315.2 |

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# **DEPARTMENT OF THE NAVY**

NAVAL SAFETY CENTER 375 A STREET NORFOLK, VIRGINIA 23511-4399

> 5100 Ser 90/0205 15 Mar 04

MEMORANDUM FOR DEPUTY ASSISTANT SECRETARY OF THE NAVY

Subj: U.S. NAVY FY 2003 ANNUAL REPORT TO OSHA

Ref: (a) OSHA Memo of 4 Dec 03 to Federal Agencies

Encl: (1) U.S. Navy Occupational Safety and Health Program Fiscal Year 2003 Annual Agency Report

- 1. In response to reference (a), the purpose of this memorandum is to forward the U.S. Navy portion of the Department of the Navy's FY 2003 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 2003 and are ready to meet new challenges to continue our focus on eliminating workplace fatalities, injuries, illnesses, and disabilities. The Navy has recently begun a major initiative to reduce mishaps by 50% in the next two years. We believe that our increasing emphasis on safety and health in the near term, as well as long term through acquisition, should profoundly improve future Navy workplaces.
- 3. Our points of contact for the U.S. Navy FY 2003 Annual Report to OSHA are Joy Erdman, COML (703) 602-2574, Gina Moore COML (703) 604-5434, and Alan Jacka COML (757) 444-3520 Ext 7168.

D. T. KERRICK Deputy Commander

# U.S. NAVY

# OCCUPATIONAL SAFETY AND HEALTH PROGRAM

# FISCAL YEAR 2003 ANNUAL AGENCY REPORT

# PREPARED BY:

CNO (09F)/COMMANDER, NAVAL SAFETY CENTER



| Fiscal Year:   | 2003  |
|--|---|
| Name of Agency:  | Department of the Navy  |
| Name of Component:   | U.S. Navy   |
| Address  | 2000 Navy Pentagon<br>Washington, DC 20350-2000   |
| Number of employees covered by this report:                                    | 167,865 Civilian Workforce  |
| Name of individual responsible for the Occupational Safety and Health Program: | RADM Richard E. Brooks, USN   |
| Title:   | Special Assistant to the Chief of Naval Operations for Safety Matters (CNO N09F)/Commander, Naval Safety Center   |
| Address:   | 2511 Jefferson Davis Highway<br>Arlington, VA 22202-3735  |
| Technical Points of Contact:   | Joy Erdman, MS, CIH, CSP Director, Safety and Occupational Health CNO 09FB2 (703) 602-2575  Alan Jacka Executive Assistant Occupational Safety and Health Directorate Naval Safety Center, Code 90A |
|  | (757) 444-3520, ext. 7168   |
| Prepared by:   | Gina Moore, BS<br>Management Analyst<br>CNO 09FB3<br>(703) 604-5434   |

# U.S. NAVY OCCUPATIONAL SAFETY AND HEALTH PROGRAM FISCAL YEAR 2003 ANNUAL AGENCY REPORT

## SCOPE OF REPORT

This report focuses on the U.S. Navy (USN). 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) 2003 annual report includes over 550,100 naval personnel comprised of active duty military, foreign nationals and civilians employed both in the United States and abroad. Of this number, 167,865 are appropriated-fund civilian employees at over 400 shore installations, including naval shipyards, aviation depots, and public works 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 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 U.S. Navy summary data for Fiscal Year (FY) 2003. 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 the U.S. 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. Although there were no U.S. Navy civilian fatalities at Navy workplaces in FY 2003, note that the Navy does not track 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 and Lost Time Mishaps

Information concerning Navy civilian occupational injuries and illnesses in FY 2003 are provided in four different analyses in **Attachment B**: Work Task Performed, Source of Mishap, Medical Diagnosis, and Body Part Injured. This information is derived from a review of 1,789 occupational injury or illness cases involving one or more lost workdays reported to the Naval Safety Center via the WEB Enabled Safety System (WESS) Injury/Occupational Illness Tracking System in use during FY 2003. Data provided in **Attachment B** summarizes the number of persons involved in lost time mishaps in a variety of categories. FY 2002 numbers are provided for comparison purposes. Overall lost time mishaps increased from 1,506 in FY 2002 to 1,789 in FY 2003. 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 one or more lost workdays reported in FY 2003 occurred due to slips, trips, falls, and overexertion. The Naval Safety Center is making major strides to improve data collection and analysis and is preparing for potential adoption of OSHA 1904 recordkeeping.

# 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 SAFETY AND OCCUPATIONAL HEALTH (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 2003, 9,200 personnel were formally trained through 457 convenings of 50 courses at 75 locations worldwide. These courses were directed to SOH professionals and collateral-duty personnel. This training included interactive videos and other innovative instructional methods to train the maximum number of personnel at lowest overall cost.

# TRAINING FOR MANAGEMENT, SUPERVISION, EMPLOYEES, EMPLOYEE REPS

SOH training (separate from training offered by the NAVOSHENVTRACEN) is also integrated into trade/skill training and is provided to management, supervision, employees and union representatives in each workplace. During FY 2003, as in prior years, Navy civilian and military personnel received training tailored to their individual needs, from awareness training to education required to attain and maintain competency in their technical area(s) of expertise. Junior and senior military officers receive SOH management training that has been incorporated into all levels of the Navy's leadership training.

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

During FY 2003, the Navy participated in the DoD Policy Council, the Federal Safety Director's Roundtable, and other DoD committees. Of particular interest is the award winning Naval Air Engineering Station (NAES) in Lakehurst, NJ. This command has won the Federal Safety & Health Council's National Award five times, the most recent in FY 2003 and has also won the OSHA Superior Performance Award. One way NAES Lakehurst continues to be a leader in occupational safety and health is through membership with organizations such as: Federal Occupational Safety & Health Councils; OSHA Regional Office Partnership; Ocean County Traffic; Ocean County Partnership for Safety; NJ State Safety Council; NJ State Industrial Safety Council; and the Southern New Jersey Federal Safety and Health Council (SNJFSHC), one of the founding members of whom was the NAES Safety Manager. This Council has won the Category I, National Recognition Award during each of the past seven years, including FY 2003. In FY 2003 the Chair and Vice Chair positions on the SNJFSHC were held by the NAES Lakehurst Safety Manager and NAES Safety Officer, respectively. During FY 2003, the SNJFSHC provided an OSHA Construction Train-the Trainer Certification Course and the Ocean County Boat/Water Safety Course.

# **ACQUISITION SAFETY WEBPAGE**

The Acquisition Safety web pages were designed and developed in FY 2002 and FY 2003 for posting on the public domain portion of CNO's Safety and Occupational Health website, since moved to the Naval Safety Center website at <a href="http://www.safetycenter.navy.mil/acquisition/default.htm">http://www.safetycenter.navy.mil/acquisition/default.htm</a>. The goal of this 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 Navy will promote the message that building systems safer the first time means fewer retrofits, fewer 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 2003, the **Ergonomics/Human Systems Integration (HSI)** Acquisition Safety Challenge was completed and posted to the web pages. Two other Acquisition Safety Challenges, **Fall Protection** and **Industrial Ventilation**, were drafted in FY 2003 along with a section explaining **System Safety** in the Acquisition process. These will be added to the web pages in FY 2004. Further information is provided in **Attachment C**.

# **CENTER FOR NAVAL ANALYSES (CNA)**

In FY 2003, the U.S. Navy commissioned a Center for Naval Analyses (CNA) Study on workers' compensation programs to help make the business case for a greater investment in regional case management. The final report was issued in May 2003. CNA made three recommendations:

- Claims management centers for long term claims
- Greater attention to return to work
- More central oversight and meaningful metrics of program performance.

# WHITE HOUSE "FEDERAL WORKER 2000" INITIATIVE

In FY 2003, the Navy continued 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 Navy internal website. 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, the 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 2003, the U.S. Navy continued to monitor 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 2003 Goal | FY 2003 Actual | Met Goal/Status |
|-------------------------------------|------------------|--------------|----------------|-----------------|
| U.S. Navy                           | 4.98             | 4.41         | 4.16           | Met.            |
|                                     |                  |              |                | Down 16.5%      |
| Reporting Timeliness <sup>2</sup>   | FY 1998 Baseline | FY 2003 Goal | FY 2003 Actual | Met Goal/Status |
| Department of the Navy <sup>3</sup> | 36.2%            | 44%          | 53.8%          | Met             |
|                                     |                  |              |                | Improved by 49% |

<sup>1</sup>As reported By OSHA; <sup>2</sup>As reported by OWCP; <sup>3</sup>Data is not available for U.S. Navy, only available for Department of the Navy<sup>1</sup>

- a) Total Case Rate (TCR) Navy Action: The Navy continues to monitor the TCR. We met the TCR reduction goal for FY 2003 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 2003 and achieved a 17.6% improvement 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 LTCR for those work sites with the highest rates by 10%, per year for five 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 following the table.

| Lost Time Case Rate (LTCR) | FY 1996 Baseline | FY 2003 Goal | FY 2003 Actual | Met Goal/Status          |
|----------------------------|------------------|--------------|----------------|--------------------------|
| Norfolk NSY                | 5.54             | 3.63         | 4.58           | Did NOT Meet Goal        |
| Portsmouth, VA             |                  |              |                | Down 17.3% from baseline |
|                            |                  |              |                | Up 33.5% from FY 2002    |

| <b>Lost Time Case Rate (LTCR)</b> | FY 1996 Baseline | FY 2003 Goal | FY 2003 Actual | Met Goal/Status          |
|-----------------------------------|------------------|--------------|----------------|--------------------------|
| Puget Sound NSY                   | 5.50             | 3.61         | 3.12           | Met Goal                 |
| Bremerton, WA                     |                  |              |                | Down 43.3% from Baseline |
|                                   |                  |              |                | Down 28.8% from FY 2002  |
| PWC Norfolk                       | 6.33             | 4.15         | 4.89           | Did NOT Meet Goal        |
| Norfolk, VA                       |                  |              |                | Down 22.7% from Baseline |
|                                   |                  |              |                | Up 4.95 from FY 2002     |
| PWC Pensacola                     | 5.62             | 3.69         | 5.80           | Did NOT Meet Goal        |
| Pensacola, FL                     |                  |              |                | Up 3.2% from Baseline    |
|                                   |                  |              |                | Up 4.9% from FY 2002     |
| Naval Air Facility                | 6.57             | 4.31         | 3.09           | Met Goal                 |
| Key West, FL                      |                  |              |                | Down 53.0% from Baseline |
|                                   |                  |              |                | Down 14.6% from FY 2002  |
|                                   |                  |              |                | DEWSDP Pilot Site 1      |
| Naval Air Station                 | 6.04             | 3.96         | 4.10           | Did NOT Meet Goal        |
| Kingsville, TX                    |                  |              |                | Down 32.1% from Baseline |
|                                   |                  |              |                | Down 39.75 from FY 2002  |
|                                   |                  |              |                | DEWSDP Pilot Site 1      |
| NAVREG Mid-Atlantic               | 10.15            | 6.66         | 1.36           | Met Goal                 |
| Norfolk, VA                       |                  |              |                | Down 86.6% from Baseline |
|                                   |                  |              |                | Up 103.0% from FY 2002   |
| Atlantic Ordnance Command         | 7.38             | 4.84         | 8.27           | Did NOT Meet Goal        |
| Colts Neck, NJ                    |                  |              |                | Up 12.1 % from Baseline  |
|                                   |                  |              |                | Up 54.0% from FY 2002    |

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, Naval Air Station (NAS) Kingsville and Naval Air Facility (NAF) Key West, were pilot sites for demonstration projects under the Defense Employee Work Safety Demonstration Program (DEWSDP). Key West and Kingsville experienced respective reductions in their total number of injury cases and reductions in their individual total case rates (per 100 workers). Each site also experienced reductions in their total number of lost time cases. Congress has approved a one-year expansion of the Integrated Safety Model (ISM) model for seven additional Navy installations for FY 2004. Several of the targeted facilities have made significant strides toward improving their OSH performance, but others are clearly not meeting their goals. Three of the eight targeted Navy activities met their 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. Of the five activities that did not meet their goals, PWC Norfolk is improving but not enough to meet its goal; NAS 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 FY 2004 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<br>Baseline | FY 2003 Goal | FY 2003 Actual | Met Goal/Status     |
|------------------------------|---------------------|--------------|----------------|---------------------|
| Department of Navy           | 64.7                | 60.9         | 61.5           | Did NOT Meet Goal   |
|                              |                     |              |                | Down 0.6% from FY02 |

TLPD = Continuation of Pay (COP) hours provided by Defense Civilian Personnel Data System (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.

4) 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.

## NAVOSH STRATEGIC PLAN

Under the leadership of the NAVOSH Quality Council, implementation of the NAVOSH Strategic Plan continued during FY 2003. The Quality Council met once during FY 2003. Some of the teams' accomplishments are described below:

# The Ergonomics Team:

- Developed a computer workstation checklist and other policy improvements for OPNAVINST 5100.23
- Provided Navy ergonomics criteria for inclusion in the DoD occupational health computer system

## The Fall Protection Team:

- Completed the Navy Fall Protection Guide for Navy shore facilities
- Completed the second draft for fall protection policy ashore (OPNAVINST 5100.23)
- Developed criteria for selecting fall protection equipment conforming to the latest ANSI standard
- Finalized the ashore fall protection training requirements

### The OSH 2006 Team:

 Didn't meet in 2003; previous work on NAVOSH program competitive sourcing and contracting guidance continued to be a valuable tool within Navy and other Federal agencies that are considering outsourcing

# The Occupational Health Support Team:

- Promoted Occupational Medicine and Industrial Hygiene metrics, program assessment tools, and resource management systems
- Assisted in emergency response planning and operations for occupational health professionals

# **MAJOR MISHAP REVIEW**

We are pleased to report that there were no U.S. Navy civilian fatalities at Navy workplaces in FY 2003.

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

The Safety IPT was reactivated in mid-2003 after being in a holding status for one and a half years. Overall, the Safety IPT oversees the safety budget for Navy shore activities. The Safety IPT's efforts in FY 2003 focused on establishing Commander Naval Installations (CNI)-wide performance metrics and service levels. CNI was commissioned in FY 2003 as an Echelon II command reporting to the Chief of Naval Operations (CNO). CNI is the single responsible office and Navy point of contact for shore installations in the Navy with core responsibility to provide unified and consistent program management, policy, procedures, practices, and funding to oversee shore installation support to the fleet. The Safety IPT developed and approved an Objective Matrix detailing a concise set of performance metrics and their relative weights. Service Level descriptors were developed and approved by the Regional Commanders Conference (RCC) in FY 2003. The preliminary results of the FY 2003 performance data call for safety functions reported an overall service level 3, where service level 1 is the best and service level 4 is the worst.

# 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 and to address 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 1999 to FY 2009. **Attachment D** further details critical FY 2003 Hazard Abatement accomplishments.

TABLE: NAVOSH HAZARD ABATEMENT FUNDING

|              |               | AUTHORIZATION | OBLIGATED    |
|--------------|---------------|---------------|--------------|
| FUNDING YEAR | APPROPRIATION | (\$ Million)  | (\$ Million) |
| FY 1999      |               | 14.7          | 14.6         |
| FY 2000      |               | 14.7          | 12.3         |
| FY 2001      |               | 13.6          | 12.5         |
| FY 2002      |               | 14.1          | 12.0         |
| FY 2003      |               | 13.5          | 12.8         |
| FY 2004      |               | 14.0          |              |
| FY 2005      | 14.1          |               |              |
| FY 2006      | 14.1          |               |              |
| FY 2007      | 14.5          |               |              |
| FY 2008      | 14.8          |               |              |
| FY 2009      | 15.1          |               |              |

**Notes:** Appropriation costs begin tracking in FY 2005.

**Appropriations FY 2005 - FY 2009** are extracted from Navy Accounting System Programming & Budgeting Information System (PBIS) table entitled *2003/Program 2003/Budget - Working* (24 February 2004).

Authorizations FY 1999 - FY 2003 are summarized from previous Annual Reports to OSHA.

Authorization for FY 2004 is provided by PBIS table (see FY 2005 – FY 2009 explanation above).

Obligations FY 1999 - FY 2002 are summarized from previous Annual Reports to OSHA.

Obligation FY 2003 is provided by NAVFAC documentation.

# <u>DEFENSE EMPLOYEE WORK SAFETY DEMONSTRATION PROGRAM (DEWSDP) NAVY PROJECTS AT NAS KINGSVILLE AND NAF KEY WEST</u>

In December 2003, NAS Kingsville and NAF Key West completed respective two-year employee work safety demonstration projects sponsored by Congress under the National Defense Authorization Act FY 2001. These projects were initially part of a \$5 million DoD-wide appropriation bill that sought to demonstrate a reduction in job-related civilian injuries and compensation costs by adopting private sector safety models for use on the Naval Air Stations that are representative of industry best practices. Key West adopted an Integrated Safety Model (ISM) and Kingsville adopted an OSHA Voluntary Protection Program (VPP) model. After two years of implementation, both models proved successful. Key West and Kingsville experienced respective reductions of 38% (down from 34 to 21 cases at Key West and down from 24 to 15 cases at Kingsville) in their total number of injury cases and at least a 31% (down from 8.69 to 5.93 at Key West and down from 12.37 to 8.57 at Kingsville) reduction in their individual total case rates (per 100 workers). Each site also experienced reductions of 45% or more (down from 18 to 10 at Key West and down from 14 to 5 at Kingsville) in their total number of lost time cases and reductions of 39% or more (down from 4.60 to 2.82 at Key West and down from 7.22 to 2.85 at Kingsville) in their lost time case rate (per 100 workers). These case and rate reductions were based on claims data reported by Federal Office of Workers' Compensation Program (OWCP) for chargeback year 2003 and referenced against baseline claims data reported for chargeback year 2001 (a chargeback year runs from 01 July through 30 June). Effects on direct and indirect compensation costs cannot be successfully determined until claims processing and claim adjudications are completed. Congress has approved a one-year expansion of the ISM model for seven additional Navy installations for FY 2004. Please Note: Performance data, provided by contractors to Kingsville and Key West, does not match performance data in the DOL OWCP database, which is shown on page 4 of this report. During FY 2004, additional analyses will be completed to resolve this discrepancy.

# **SUCCESS STORIES**

During FY 2003, 17 new Success Stories were developed and posted on the public domain side of the Safety Center's website website at <a href="http://www.safetycenter.navy.mil/success/default.htm">http://www.safetycenter.navy.mil/success/default.htm</a>. The stories communicate the Navy's commitment to the safety and quality-of-life of our Navy personnel. The purpose of the Safety 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 Safety 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 2003 focused on areas such as ergonomics, hand-arm vibration, hazardous materials control and management, and industrial ventilation. Additional information and summaries of the 17 Safety Success Stories posted in FY 2003 are provided in **Attachment E**.

# **OSHA CITATION WEBSITE**

In FY 2003, web pages were developed for the internal Navy Safety website allowing commands to review OSHA citations issued in 2002 and 2003. Tables are currently under development identifying citations for 2001 and will be posted on the website in the second quarter of FY 2004. The new web pages detail identified hazards by installation, inspection date, type of inspection, standard(s) cited, and abatement date. These tables assist all installations in identifying areas of potential illness and injury and support lessons learned from violations that have been cited previously for a substantially similar condition. The web pages are updated quarterly from data received from the DOL. An example of one citation is shown below:

| Installation                     | Inspection<br>Date | Inspection<br>Type | Violation<br>Type | Standard<br>Cited | Description              | NAVOSH Reference   | Abatement<br>Date |
|----------------------------------|--------------------|--------------------|-------------------|-------------------|--------------------------|--|-------------------|
| NCTAMS<br>LANT DET<br>Cutler, ME | 10/17/2002         | Complaint          | Serious           | 1910.146C(4)      | its employees will enter | 5100.23F Chapter 11<br>Basic Requirements;<br>Chapter 27 Confined<br>Space Entry Program | 12/6/2002         |

A comparison of data over the last three years demonstrates a significant decrease in the number of total citations, with serious violations being reduced by more that fifty percent each year. Further information on citations is provided in **Attachment A**.

| Fiscal Year | Willful | Repeat | Serious | Other | Total |
|-------------|---------|--------|---------|-------|-------|
| 2003        | 0       | 0      | 10      | 6     | 16    |
| 2002        | 0       | 3      | 32      | 9     | 44    |
| 2001        | 0       | 0      | 45      | 11    | 56    |

# ANTI-TERRORISM FORCE PROTECTION MISSION ACCOMPLISHMENTS

- Provided input from a safety and health perspective regarding on-going Chemical, Biological, Radiological, Nuclear and High-Yield Explosive (CBRNE) initiatives involving Navy Facilities Anti-Terrorism Force Protection (ATFP); Office of Homeland Security (OHS); and Navy Shore Installation Emergency Management Program.
- Determined functional roles and responsibilities of safety and industrial hygiene personnel at Navy shore installations regarding emergency planning and emergency response to man-made threats and natural disasters, including the nature of their respective involvement and integration with Federal and local counterparts from the regional safety and health community.

# NAVOSH POLICY AND GUIDANCE

- In January 2003, CNO issued a revised NAVOSH Reference Library on Compact Disk to Navy field activities and the OSHA Federal Agency Programs (OFAP) Office. This tool provides Navy-specific safety and health policy and nearly 250 references to the professionals in the field.
- In FY 2003, the Navy developed and distributed 30 issues of a weekly electronic newsletter to Echelon 2 commands Navy-wide. This newsletter expedites the dissemination of notices, bulletins, and other news pertinent to Navy work environments, including updates from regulatory agencies, schedules for inspections by Navy Inspector General (NAVINSGEN) and Board of Inspection and Survey (INSURV) teams, emerging issues resulting from legal proceedings and political actions, Success Stories, and web links to additional resources for more comprehensive information and useful tools needed by our field activities.

# 3. FY 2004 OSH PLANS, GOALS AND OBJECTIVES, AND SIGNIFICANT OSH INITIATIVES PLANNED AND PROGRAMMED FOR THE COMING YEAR(S).

The overall goals of the U.S. Navy's OSH program are to prevent fatalities, injuries and occupational illness; reduce the severity of mishaps; and improve operational readiness. Key FY 2004 initiatives focus on completing organizational alignment of the safety function, participating in the SECNAV Community Planning Board, developing a budget line for safety, improving data quality for mishap reporting, and coordinating Navy efforts to implement a Plan of Action & Milestones (POA&M) to reduce mishaps by 50% over the next two years. The following highlight our major initiatives for FY 2004:

# NAVAL SAFETY STRATEGIC PLAN

During FY 2004, the Navy Occupational Safety and Health Strategic Plan will be folded into a new Naval Safety Strategic Plan, which will include all safety areas (e.g., aviation safety, afloat safety, traffic safety, recreation and off duty safety) and the Marine Corps. This plan will provide a framework to respond to the Secretary of Defense's challenge to reduce mishaps by 50%. A Mishap Reduction and Plan of Actions and Milestones (POA&M) was developed for approval by SECNAV. There are four teams under the Navy and Marine Corps Safety Council: Ashore, Afloat, Aviation, and Ground Tactical (Operational). Many of the current efforts will continue under the Navy and Marine Corps Safety Council Shore Safety Committee. Some of these Shore Safety Committee tasks include:

# The Ergonomics Working Group will:

- Improve the ergonomic survey tool in NAVOSH shore policy and create additional ergonomic tools
- Review FY 2003 mishap data related to ergonomics to improve proactive approaches
- Increase ergonomics program visibility and evaluate program compliance and effectiveness
- Review FY 2003 ergonomics-related mishaps to improve proactive approaches

# The Fall Protection Working Group will:

- Assist in finalizing shore fall protection policy (OPNAVINST 5100.23)
- Draft afloat fall protection policy (OPNAVINST 5100.19)
- Test fall protection harnesses on ships and finalize the selection criteria to improve the harnesses
- Assist the Naval Safety School to finalize training for fall protection competent person/program mgrs
- Develop fall protection training for Navy architects to design buildings that include fall protection

### The *Process Review and Measurement Working Group* will:

- Finalize the self assessment guide and scoring methodology begun in FY 2003
- Assist with training needs related to implementing improvements

# The Occupational Health Support Working Group will:

- Assist as technical experts to update occupational health related chapters in OPNAVINST 5100.23F
- Update industrial hygiene and occupational medicine staffing guidelines and assist in development of the "DoD Resourcing Model"

# WEB ENABLED SAFETY SYSTEM (WESS) VERSION 2

The Navy's Mishap Reporting System, called the Web Enabled Safety System (WESS) will undergo significant improvements in FY 2004 as part of Version 2. WESS is a web-based, multi-tiered, automated mishap reporting and data retrieval system. WESS uses Turbo Tax® logic (customers will only be prompted for information that appears to be relevant to the event based on information previously entered).

An extensive reports/data retrieval function will also be available for a wide range of reports, including an Ad-Hoc report functionality.

# <u>CNO N46 OTHER BASE OPERATING SUPPORT (OBOS) SAFETY INTEGRATED PROCESS</u> TEAM (SAFETY IPT)

In FY 2004, CNI, through the Safety IPT process, is planning to provide consistent, effective, and efficient shore installation safety services and support to sustain and improve current and future fleet readiness and mission execution. CNI will evaluate and adopt a standardized web-based application for safety and occupational health (SOH) data requirements including mishap reports, training, direct and indirect costs, medical surveillance, hazard analysis, etc. to meet the Secretary of Defense's goal of reducing preventable mishaps by 50%. In addition, Safety IPT efforts will focus on identifying common components, identifying units of measure, refining service levels, and developing required operational capabilities.

# **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 costs. FY 2004 acquisition safety goals are:

- Continue building the acquisition safety website with a goal of adding four more hazard areas.
- Increase Safety and Occupational Health (SOH) membership and participation in acquisition Integrated Process Teams (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 acquisition requirements and capabilities documents that describe the fundamental capabilities and performance criteria for new equipment, systems, and support equipment and facilities.
- 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 & destroyer).
- Participate in review of Programmatic Environmental Safety and Health Evaluation (PESHE) documentation at all Acquisition Category (ACAT) levels beginning with major (ACAT I) (\$355 Million R&D and/or \$2.1 Billion procurement, in 1996\$) acquisition programs. Special emphasis is being placed on safety and health improvements for the new littoral combat ship (LCS) and the next Navy aircraft carrier, with informal partnership with Grumman Newport News Shipyard (an OSHA Voluntary Protection Program site), which will be doing the design and construction. This cooperation is resulting in redesign of certain shipboard confined spaces for more efficient and safer access for the next aircraft carrier.
- Continue education and outreach efforts within the Navy OSH community to increase understanding of the acquisition process and support effective involvement.
- Continue involvement in developing and updating DoD and Navy acquisition policy and guidance

# **OSHA ISSUES**

- Continue to monitor OSHA citations Navy-wide to help Navy activities to learn 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

• FY 2004 goals continue FY 2003 efforts and issue Navy policy on emergency management planning, which will include occupational safety and health

## CENTER FOR NAVAL ANALYSES (CNA) STUDY

During FY 2004, the Navy will coordinate with CNA to complete a study on hearing loss among Navy personnel, investigating factors that contribute to hearing loss and helping to focus efforts to mitigate risk and reduce the increasing incidence of military hearing loss, which currently exceeds \$70M a year to Navy veterans with hearing loss. CNA will determine, by building a data set and performing a statistical analysis, the extent to which individual demographic factors and history of workplace exposure explain hearing loss. The study is expected to be completed in November of 2004.

# **NAVOSH POLICY & GUIDANCE**

During FY 2004, safety policy in OPNAVINST 5100.23, will be updated to reflect safety organization/alignment improvements, finalize new fall protection policy, and make general improvements. In addition, Navy guidance provided online is being consolidated into the Naval Safety Center website.

- 4. PROVIDE COMMENTS, REQUESTS & RECOMMENDATIONS FOR CONSIDERATION BY OSHA'S OFFICE OF FEDERAL AGENCY PROGRAMS (OFAP) IN GOVERNMENT-WIDE OSH PROGRAMS OR REPORT ANY ITEMS OF SPECIAL INTEREST CONCERNING OSH ACTIVITIES OR PROGRAMS. (OPTIONAL)
  - a. Comment about data improvements between DoN and DoL: The Naval Safety Center established a web link on its Web Enabled Safety System (WESS) web site to allow Navy and Marine Corps activities to view monthly FECA statistics including detailed raw case file information for creating customized reports. This web link is an Excel-based program that is designed to assist commands with the DoD/DON goal to reduce total numbers of mishap and lost time cases by 50% in two years. The program allows commands to electronically manipulate monthly new case create data provided by Federal Office of Workers' Compensation Program (OWCP). This data is now provided by OWCP and posted to WESS on a monthly basis. Agency users at the activity level can access this data online (in real time) to track compensation cases, calculate chargeback costs, project Federal Worker 2000 performance statistics and chargeback costs, ensure accuracy of entered OWCP coding, and verify assignment of cases under the correct agency-assigned unit identification code (UIC).
  - b. Request to separate Navy and Marine Corps data: Navy continues to request, that when reporting DON statistics, 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: 1) Department of the Navy, 2) U.S. Navy, and 3) U.S. Marine Corps. This applies to FED 2000 data as well as the new Safety, Health and Return to Employment (SHARE) initiative
  - c. Request to make OSHA Federal annual reports available: 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 by formal correspondence.

## **ATTACHMENTS**

Attachment A - USN Consolidated Injury/Illness Data Summary

Attachment B - Mishap Profiles and Workers' Compensation Trends

Attachment C - Acquisition Safety

Attachment D - Hazard Abatement

Attachment E – Safety Success Stories, Cost/Time Savings Table, and Executive Summaries

# 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).

# U.S. NAVY (USN)

| CATEGORY                         | FY 98   | FY 99   | FY 00   | FY 01   | FY 02   | FY 03   |
|----------------------------------|---------|---------|---------|---------|---------|---------|
| Total Cases less 1 <sup>st</sup> | 8,191   | 7,851   | 7,576   | 7,124   | 6,989   | 6,987   |
| Aid Cases                        |         |         |         |         |         |         |
| Fatalities                       | 6       | 4       | 8       | 1       | 1       | 0       |
| Lost Time Cases                  | 4,447   | 4,198   | 3,874   | 3,419   | 3,331   | 3,619   |
| Avg. Number of<br>Employees      | 181,045 | 188,543 | 169,168 | 166,031 | 166,834 | 167,865 |

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

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

# U.S. NAVY (USN)

| CATEGORY                    | FY 98 | FY 99 | FY 00 | FY 01 | FY 02 | FY 03 |
|-----------------------------|-------|-------|-------|-------|-------|-------|
| OWCP Total Case Rate        | 4.35  | 4.16  | 4.48  | 4.29  | 4.19  | 4.16  |
| OWCP Lost Time Case<br>Rate | 2.36  | 2.23  | 2.29  | 2.06  | 2.00  | 2.16  |

# TABLE 3: WORKERS' COMPENSATION DATA – Average Cost Per Employee

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

# U.S. NAVY (USN)

| CATEGORY                | CBY 98 | CBY 99 | CBY 00 | CBY 01 | CBY 02 | CBY 03 |
|-------------------------|--------|--------|--------|--------|--------|--------|
| Chargeback Cases        | 27,118 | 25,256 | 24,184 | 23,526 | 23,325 | 19,535 |
| Total Cost (\$ Million) | 225.7  | 221.6  | 222.3  | 227.3  | 227.2  | 225.6  |
| Total # Employees       | 181.0K | 188.5K | 169.2K | 166.0K | 166.8K | 167.9K |
| Avg. Cost per Case (\$) | 8,323  | 8,774  | 9,192  | 9,662  | 9,740  | 11,549 |
| Avg. Cost per           |        |        |        |        |        |        |
| Employee (\$)           | 1,246  | 1,176  | 1,314  | 1,369  | 1,362  | 1,344  |

# **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               | FY 98  | FY 99  | FY 00  | FY 01  | FY 02  | FY 03  |
|------------------------|--------|--------|--------|--------|--------|--------|
| COP Cost (\$ Thousand) | 3663.6 | 4081.3 | 3739.6 | 3544.8 | 3007.5 | 3648.9 |

TABLE 5: OSHA CITATION SUMMARY – BY TYPE

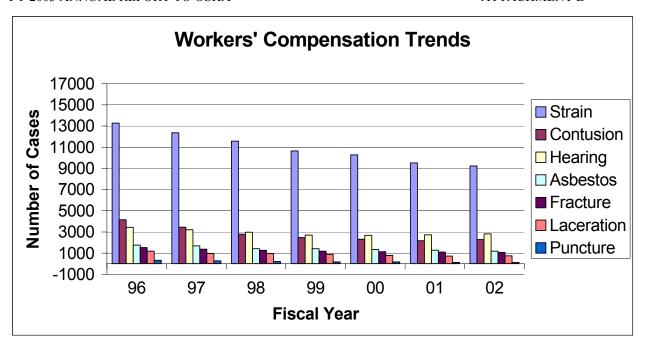
| CATEGORY                 | FY 99 | FY 00 | FY 01 | FY 02 | FY 03 |
|--------------------------|-------|-------|-------|-------|-------|
| Number of<br>Inspections | 35    | 36    | 25    | 23    | 18    |
| Willful                  | 4     | 0     | 0     | 0     | 0     |
| Serious                  | 37    | 50    | 45    | 32    | 10    |
| Repeat                   | 2     | 1     | 0     | 3     | 0     |
| Other                    | 3     | 13    | 11    | 9     | 6     |
| Total<br>Citations       | 46    | 64    | 56    | 44    | 16    |

**NOTE:** The top four OSHA citations (Number of Citations in FY 2003): Electrical (4) Toxic Substances (3) Confined Space (3) Asbestos (2)

# ATTACHMENT B – FY 2003 MISHAP PROFILES (ONE OR MORE REPORTED LOST WORK DAYS) AND WORKERS' COMPENSATION TRENDS

| 3 FY02            | 419               | 215   | 129                                 | 111                          | 166                        | 157   | 125                     | 93                           | 6                        | 34  | 35                             |                 |
|-------------------|-------------------|---|-------------------------------------|------------------------------|----------------------------|---|-------------------------|------------------------------|--------------------------|---|--------------------------------|-----------------|
| FY 03             | 426               | 305   | 211                                 | 188                          | 148                        | 147   | 139                     | 88                           | 42                       | 42  | 38                             |                 |
| BODY PART         | BACK              | FEET/ANKLES/LEGS/TOES                                 | WRISTS/HANDS/FINGERS                | MULTIPLE BODY PARTS          | KNEES                      | TRUNK/CHEST                                   | HEAD/FACE/EARS          | ARM                          | BODY SYSTEMS             | NECK                                      | PELVIC REGION                  |                 |
| FY 02             | 222               | 31  | 22                                  | 178                          | 96                         | 110   | 15                      | 135                          | 21                       | 6   | 10                             | ı               |
| FY 03             | 693               | 191   | 171                                 | 149                          | 126                        | 104   | 39                      | 31                           | 6                        | 9   | 3                              | 7               |
| MEDICAL DIAGNOSIS | SPRAINS, STRAINS  | INJURIES TO<br>MUSCLES, TENDONS,<br>LIGAMENTS, JOINTS | TRAUMATIC INJURIES<br>AND DISORDERS | BRUISES AND<br>CONTUSIONS    | FRACTURES                  | CUTS/ ABRASIONS/<br>SCRATCHES/<br>LACERATIONS | BURNS                   | BACK PAIN/HURT BACK          | ERGONOMIC INJURIES       | EFFECTS OF<br>ENVIRONMENTAL<br>CONDITIONS | RESPIRATORY SYSTEM<br>DISEASES | 001             |
| FY 02             | 318               | 288   | 208                                 | 153                          | 51                         | 143   | 49                      | 45                           | 14                       | 22  | 38                             | ι               |
| FY 03             | 402               | 321   | 263                                 | 215                          | 137                        | 92  | 87                      | 63                           | 48                       | 45  | 17                             | ,               |
| SOURCE OF MISHAPS | SLIPS/TRIPS/FALLS | OVER-EXERTION   | BODILY CONDITIONS                   | STRUCK BY/ STRUCK<br>AGAINST | EXPOSURE TO                | BENDING/ CLIMBING/<br>REACHING/ TWISTING      | CONTACT WITH<br>OBJECTS | CAUGHT IN/ UNDER/<br>BETWEEN | MOTOR VEHICLE<br>RELATED | REPETITIVE MOTION                         | RUBBER OR ABRADED              | FIRE/EXPLOSION- |
| FY 02             | 528               | 193   | 317                                 | 176                          | 54                         | 75  | 23                      | 22                           | 26                       | 45  | 22                             | Ç               |
| FY 03             | 646               | 373   | 331                                 | 132                          | 62                         | 42  | 31                      | 28                           | 30                       | 24  | 19                             |                 |
| WORK TASK         |                   |   | MISCELLANEOUS                       |                              | PROFESSIONAL/<br>TECHNICAL | CONSTRUCTION                                  |                         |                              | _                        | RECREATION                                | RESEARCH &<br>DEVELOPMENT      |                 |

| WORK TASK | FY 03 | FY 02     | FY 03 FY 02 SOURCE OF MISHAPS                 | FY 03 | FY 02     | APS FY 03 FY 02 MEDICAL DIAGNOSIS FY 03 FY 02 | FY 03     | FY 02 | BODY PART | FY 03 FY02 | FY02 |
|-----------|-------|-----------|---|-------|-----------|---|-----------|-------|-----------|------------|------|
|           |       |           | COLLISION BETWEEN<br>VEHICLES OR<br>EQUIPMENT | 6     | 14        |   |           |       |           |            |      |
| OTHER     | 36    |           | 13 OTHER                                      | 80    | 158       | OTHER   | 266       | 317   | 317 OTHER | 15         | 13   |
|           |       |           |   |       |           |   | _         |       |           |            |      |
| TOTAL     | 1789  | 1789 1506 |   | 1789  | 1789 1506 |   | 1789 1506 | 1506  |           | 1789 1506  | 1506 |



**Source: Naval Sea Systems Command** 

Note: FY 2003 trends are being compiled and will be available later in Fiscal Year 2004.

# **ATTACHMENT C - ACQUISITION SAFETY**

In FY 2003, the **Ergonomics/Human Systems Integration (HSI)** Acquisition Safety Challenge was completed and posted to the Naval Safety Center's Acquisition Safety web pages at <a href="http://www.safetycenter.navy.mil/acquisition/default.htm">http://www.safetycenter.navy.mil/acquisition/default.htm</a>. Two additional Acquisition Safety Challenges, **Falls** and **Industrial Ventilation (Control of Chemical Hazards)** and a section on the Navy's **Systems Safety Program** were drafted for the web pages. These sections will be finalized and posted in FY 2004. Background information and further details on acquisition safety and FY 2003 accomplishments are provided below.



The Acquisition Safety pages were designed and developed in FY 2002. The goal of this component of the website is to promote incorporation of safety and occupational health factors into all stages of the Defense Acquisition Process through discussing the challenges, communicating information on Best Practices, and sharing successful Navy acquisition safety and health initiatives.

Through these Acquisition Safety web pages, we strive 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 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

# ACQUISITION SAFETY IS A SMART INVESTMENT





Without Acquisition Safety

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.

The **Ergonomics/Human Systems Integration (HSI)** Safety Challenge, completed and posted to the Acquisition Safety web pages in FY 2003, provides an overview of HSI and ergonomics as they relate to

successful acquisition programs. The section describes the potential consequences of deficiencies in design [The Problem]; the challenges of engineering improved products [The Challenge]; and provides information for potential answers to these challenges [The Solution]. Most of this information addresses ships and ship systems, but it is relevant to virtually every procurement and The section stresses that acquisition program. planning, development, and production of new equipment and systems and the facilities needed for their support must take into account how the operator and maintainer fit into the design and that the work must be fitted to the worker, instead of requiring the worker to adapt to existing working conditions. Points emphasized are that omitting the human factor from designs has created costly obstacles to safe and efficient production, operation, and maintenance of equipment and facilities, both in the military and civilian sectors. Controls and displays that are difficult to



Ordnance loading is a key area for consideration of HSI/ergonomics during acquisition planning

interpret during emergency situations may be linked to catastrophic events such as aircraft crashes, ship collisions, and power plant failures. Designs that disregard the basics of material handling, assembly, and repair can be associated with injury to users and inefficient and excessively costly maintenance and preservation. This can and has jeopardized program performance, schedule and costs. On the other hand, effective designs maximize productivity and operational effectiveness while protecting operators and maintainers.

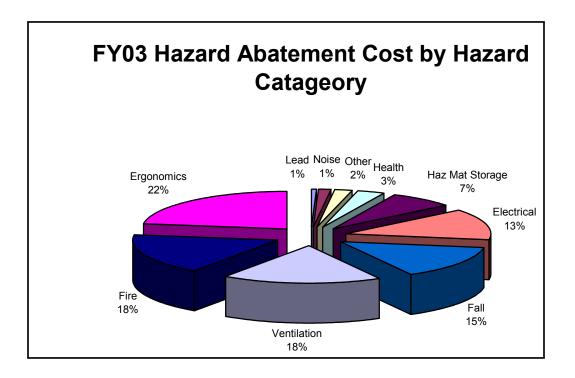
# ATTACHMENT D - HAZARD ABATEMENT

The Navy's Hazard Abatement Program (HAP) is available to fund abatement of hazards for which local activities do no have sufficient funds and to address hazards at multiple activities that can be corrected with common designs. The NAVOSH Program 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 2003 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 former NAVOSH Strategic Plan.

In FY 2003, the Navy made great progress in 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. Examples of FY 2003 Mishap Prevention projects are:

- Acquisition Safety Website The website was launched in FY 2002 to get out the 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 Ergonomics section of the website was completed during FY 2003. The Industrial Ventilation, System Safety, and Fall Protection sections were drafted in FY 2003 and are being finalized. 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 C).
- <u>Navy Ergonomics Program</u>: In FY 2003, ergonomists with the Navy HA Program conducted the
  Ergonomics Applied Methods course through the Naval Occupational, Safety, and Health and
  Environmental Training Center (NAVOSHENVTRACEN) and provided technical assistance to
  Navy activities experiencing problems with work related musculoskeletal disorders to improve
  production while reducing lost time injures and workers' compensation costs.

Approximately \$12.8 million was authorized by the U.S. Navy and implemented by the Naval Facilities Engineering Command to fund FY 2003 Hazard Abatement and Mishap Prevention Projects. Seventy hazard abatement projects were approved for completion in FY 2003. The majority of these Hazard Abatement projects fit into the categories of falls, ergonomics, industrial ventilation, fire/egress, electrical, and hazardous material control and management. The pie chart below illustrates cost percentages of FY 2003 Hazard Abatement projects by hazard category.



# **Examples of FY 2003 Hazard Abatement Projects**

A number of Hazard Abatement projects completed in FY 2003 were notable for their correction of highrisk hazard areas, innovative techniques, numbers of protected personnel, and cost-effective use of available funds.

# **Ergonomics:**

• Firefighters at Pearl Harbor Naval Air Station were at risk of injury from lifting 84-pound smoke ejector fans from the top of fire trucks as well as lifting 110-pound extension ladders from a height above the shoulders. The lifting stress was greatly reduced by relocating the smoke ejector fans to a neutral height on the truck bumper. A new mounting bracket installed on the trucks mechanically lowers the ladders to reduce heavy lifting.



Before: Lifting smoke ejector fan



After: Mechanical ladder loader

Workers in the dental clinic at Naval Dental Center Northwest in Bremerton, Washington
performed repetitive work in constrained postures with risk for back, neck and shoulder pain and
with contact stress on wrists and forearms from tools and work surfaces. Adjustable workstations
with task lighting, proper ventilation and fixtures to hold paperwork reduced contact stress and
encouraged employees to work in neutral postures.



Before: Working in awkward postures



After: New workstations promote neutral postures

• Employees at Assault Craft Unit-4 in Little Creek, Virginia maintain and repair hovercraft propellers. Employees performed the maintenance tasks in awkward, sustained postures bending over the propellers or reaching overhead, typically for extended periods combined with repetitive motion. This put workers at risk for work-related musculoskeletal disorders (WMSDs). Height and angle adjustable fixtures were designed for the facility in order to promote neutral postures and reduce material handling.



Before: Workers sustained awkward postures while performing maintenance



After: Height and angle adjustable fixtures promote neutral postures

 At Naval Medical Center San Diego personnel working at pharmacy intake windows were exposed to work-related musculoskeletal disorders (WMSDs) due to prolonged standing. Hazard Abatement funds were allocated for stools that could be height adjusted for an individual's comfort while working at computer stations and to allow rest from prolonged standing.



Before: Standing for long periods



After: Stools adjust to each individual's height

Laboratory technicians at Naval Hospital Great Lakes and Naval Medical Center San Diego
worked for long hours in awkward postures in order to study specimens under conventional hood
microscopes. Awkward postures put employees at risk for back, neck, shoulder and wrist pain.
Hazard Abatement funds were allocated for new microscope workstations that include arm rests
and adjustable angle microscopes.



Before: Worker is hunched over (representative photo)



After: New workstations include armrests and height adjustable microscopes

At various Naval Hospitals, including Naval Medical Center San Diego and Naval Hospital
Beaufort, lateral transfer of patients between beds and gurneys or between gurneys and exam
tables was a routine work task with a high risk for occupational back injury. Hazard Abatement
funds were allocated to purchase hover mats, which use a cushion of air to transfer patients on a
perforated mat.



Manually lifting patients can mean risk of back injury (representative photo)



Hover mats ease lifting strain during patient transfer

# Fall Protection:

• Naval Facilities Engineering Command Southwest (NAVFAC SW) designed and installed rigid guardrails to replace an outdated fall protection system at the top of a Portsmouth Naval Shipyard (PNS) Kittery, ME dry dock. The CNO's Hazard Abatement Program funded the guardrail replacement project to minimize the fall hazard associated with working near dry docks. The guardrails were installed at a substantial cost and time savings, and considerably decrease the cost of maintaining a fall prevention guardrail system.



Post and chain system was replaced by guardrails to improve fall protection.

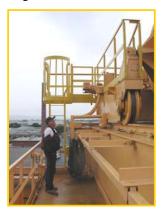


Guardrails around the perimeter of PNS dry-dock

• Naval Inventory Control Point (NAVICP) Mechanicsburg was approved by the CNO's Hazard Abatement Program for funding to abate fall hazards on its 60-foot high bridge crane. Guard rails, catwalks, and laddercages now supplement the use of fall arrest gear to protect maintenance personnel, crane operators, and inspectors from the risk of falling from heights.



One anchor point for fall arrest gear resulted in very limited working area



Safety guardrails installed on bridge crane prevent falls

A study by the Naval Air Station (NAS) Meridian, MS Safety Department identified occupational
safety hazards associated with six below-ground sewage pumping (lift) stations. NAS Meridian
applied for and received Navy Hazard Abatement Program funding to pay for the study and
resolution of these occupational safety and health hazards. New guardrails, access ladders, and
adequate anchor points for personnel rescue systems have been installed.



Original lift station



New lift station rescue system anchor

# ATTACHMENT E – SAFETY SUCCESS STORIES

The Safety Success Stories web pages were developed and posted on the public domain portion of the Naval Safety Center website, <a href="www.safetycenter.navy.mil">www.safetycenter.navy.mil</a> to communicate the Navy's commitment to the safety and quality-of-life of our personnel. The purpose of the Success Stories is to inform Sailors, their families, Navy civilians, and the general public about what the Navy is doing to protect the military and civilian work force from workplace fatalities, life-threatening injuries, and 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 Safety Success Stories also demonstrate the value added by safety and best business practices, and how such initiatives result in productivity gains and cost savings. An additional feature of the Success Stories web pages is the <u>Safety Stories Cost/Time Savings Chart</u> (see chart on page E-2), 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.

In FY 2003, 17 new stories were posted to the *Safety Success Stories* web pages. The stories focused on numerous OSH areas of concern, such as ergonomics, hand-arm vibration, hazardous materials management, and industrial ventilation. Summaries of two stories are provided as examples:

Naval Air Station North Island (NASNI) Door Three Shop mechanics repair the number three doors on FA-18 aircraft. In addition to using vibrating tools to remove and replace rivets, Door Three Shop mechanics worked in awkward positions in order to reach all areas of the aircraft door. Vibration from the tools and maintaining awkward postures for long periods of time added stress to the mechanics' hands, wrists, backs, shoulders, and lower extremities. Ergonomic improvements were required to make aircraft doors more easily accessible and to reduce vibration exposure from powered hand tools.

The Naval Facilities Engineering Command, which oversees the Navy's Hazard Abatement Program, reviewed and approved a design for an adjustable door fixture originally conceived by a NASNI mechanic. The door fixture eliminates awkward postures by holding each aircraft door firmly in place while its support structure allows the mechanic to rotate the door for maximum access and adjusts to each mechanic's height. In addition, existing hand tools at Door Three Shop were replaced with *reduced-vibration* powered hand tools. Door three mechanics can use the *reduced-vibration* hand tools for up to eight hours a day without risking overexposure to excessive vibration. The combination of the low-vibration tooling and the adjustable door fixture saves three to five days of labor per door repair. The improvements described in this Safety Success Story paid for themselves within seven months.

| INITIAL RETURN ON INVESTMENT FINDINGS<br>FA-18 DOOR #3 FIXTURE AND VIBRATION REDUCED TOOLING |            |  |  |  |  |  |
|--|------------|--|--|--|--|--|
| Pre Intervention Annual Cost (15 days/door x 8 hr/day x \$30/hr x 20 door/year)              | \$72,000   |  |  |  |  |  |
| Post Intervention Annual Cost (11 days)  | \$52,800   |  |  |  |  |  |
| Annual Cost Difference (savings) \$72,000 - 52,800   | \$19,200   |  |  |  |  |  |
| Expected Service Life  | Ten years  |  |  |  |  |  |
| Total Improvement cost over ten years/worker (tools, fixture, maintenance) \$10,700.         |            |  |  |  |  |  |
| Return on Investment (Ten Years)   |            |  |  |  |  |  |
| Cost Savings (Ten years)   | \$181,300. |  |  |  |  |  |
| Break Even point   | 203 Days   |  |  |  |  |  |

Another outstanding FY 2003 Safety Success Story featured Aircraft Intermediate Maintenance Department (AIMD) Work Center 900, which maintains various types of ground support equipment for Naval Air Station Joint Reserve Base (NAS JRB) Willow Grove, PA. Military and contract employees spend 20 to 30 hours a week spray-painting ground support equipment in a specially designed paint spray booth. Workers wear full body protective clothing and supplied breathing air to protect them from contaminants in the air. The paint booth also has a ventilation system designed to remove potentially health-hazardous air contaminants from inside the booth.

AIMD Work Center 900 painters noticed increased vibration and noise in the paint booth. The booth's air filters also began to clog up quickly, but substituting new air filters did not help. The noise and vibration distracted workers and made working uncomfortable. An inefficient ventilation system can also mean lack of proper airflow and a potential increase in booth contamination.

A Certified Industrial Hygienist (CIH) investigated the paint booth problem and found that layers of dried



Over 25 pounds of paint residue were removed from fan blades and ductwork

paint on the fan blades and in the paint booth's ductwork burdened the exhaust system excessively, so that it was no longer capable of efficiently removing exhaust air from the booth. AIMD workers subsequently removed

over 25 pounds of dried paint from the system. After AIMD cleaned the fan blades and ductwork and changed the air filters, the airflow inside the paint booth increased to a satisfactory level, and the vibration and noise

from the ventilation system disappeared. AIMD is now developing a formal Preventive Maintenance Plan to ensure periodic inspection and maintenance of the paint booth ventilation system.



Fan blades after cleaning

The *Safety Success Stories* web pages fulfilled our FY 2003 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. Following the table are executive summaries of the 17 Safety Success Stories posted in FY 2003.

# SAFETY SUCCESS STORIES COST/TIME SAVINGS FY 2003

|                                       |   |   |  | TIME/LABOR   |
|---------------------------------------|---|---|--|--|
| ACTIVITY                              | CHALLENGE                                     | IMPROVEMENT   | COST SAVINGS   | SAVINGS  |
| Naval<br>Hospital, NAS<br>Rota, Spain | Streamline cataloging of hazardous materials. | Industrial hygienists<br>use cross-referenced<br>databases to assess<br>health risks<br>associated with HM. | Avoidance of future<br>HM exposure and<br>injury with resulting<br>workers'<br>compensation costs. | Industrial hygienists complete HM risk assessments more rapidly and are available to |
|                                       |   |   |  | spend time on other services.  |

| ACTIVITY                                       | CHALLENGE   | IMPROVEMENT  | COST SAVINGS  | TIME/LABOR<br>SAVINGS  |
|--|---|--|---|--|
| SIMA<br>Coronado, CA                           | Grinding with heavy, awkward, strongly vibrating conventional grinder   | Substitution of pneumatic grinder.   | Decreased risk of irreversible HAVS and carpal tunnel syndrome with resulting workers' compensation costs.                      | Time to complete repair projects reduced by 25%.                                     |
| NAS JRB,<br>Willow Grove,<br>PA                | Deteriorated local exhaust ventilation in spray paint booth.            | Removal of paint residues from fans and ductwork. Establishment of formal preventive maintenance plan. | Extended life of paint-spray booth's local exhaust ventilation system. Reduced time ground support equipment out of service.    | Decreased time required to remove corrosion and to repaint ground support equipment. |
| PWC San<br>Diego, CA                           | Accessing roll-offs and redistributing HW.                              | Remote control hazardous waste rake attached to forklift.  | \$5,200.00 to<br>\$8,800.00 annually<br>per facility.   | Reduction in time from 15 to 20 minutes to 2 to 3 minutes per HW redistribution.     |
| NASNI, San<br>Diego, CA                        | Repairing number 3 doors on FA-18 aircraft using hand held power tools. | Fixture to hold door in place and allow partial rotation and reduced-vibration powered hand tools.     | \$181,300 over ten years  | Reduced time to repair door from 15 to 11 days.                                      |
| Public Works<br>Center,<br>Philadelphia,<br>PA | Paint spray booth needed updated ventilation system.                    | New exhaust<br>system, improved<br>lighting, installation<br>of pressure gauge.                        | Avoidance of exposure to airborne mists, vapors, and fumes from paints and solvents with resulting workers' compensation costs. | Time to complete spray painting tasks cut in half.                                   |

| ACTIVITY              | CHALLENGE  | IMPROVEMENT   | COST SAVINGS  | TIME/LABOR<br>SAVINGS   |
|-----------------------|--|---|---|---|
| SIMA San<br>Diego, CA | Manual transporting of heavy, awkward portable welding equipment | Developed fixture that increases maneuverability and distributes the load between two people. | Reduced risk of injuries and WMSDs of the back, arms, and shoulders with resulting workers' compensation costs. | Decreased time getting to and from jobsites. Decreased time needed to recover from fatigue before starting welding tasks. Increased welding efficiency. |

#### **EXECUTIVE SUMMARY FOR FY 2003 SAFETY SUCCESS STORIES**

**Electrical Safety Program Protects USS Kitty Hawk** - America's oldest active warship has an exceptional Electrical Safety Program to protect a crew of more than 5,500 from high, medium, and low voltage electrical hazards.

http://www.safetycenter.navy.mil/success/stories/0105.pdf

Navy's Mobile Preventive Medicine Team Protects Sailors and Marines During Operation Iraqi Freedom - The Navy's Preventive Medicine Mobile Medical Augmentation Readiness Team 5 in central Iraq is the first line of defense in protecting the health of Marines and their Navy support staff during Operation Iraqi Freedom. This vital unit prevents communicable diseases, occupational illnesses, and other health hazards that might otherwise harm Sailors and Marines deployed there. http://www.safetycenter.navy.mil/success/stories/0104.pdf

NAS Sigonella's Customs Office Reduces Risk of Injuries & Musculoskeletal Disorders - NAS Sigonella's Customs Office moved into an office that was cramped and inefficiently laid out. It also had substandard electrical outlets and was inadequately lighted and ventilated. Sigonella's Safety Department implemented PR&MS requirements to perform a safety survey and an ergonomic assessment of the new facility. Based on Safety's recommendations, Sigonella's Material, Customs, and Transportation Office located a supplier that provided ergonomically designed workstations and maximized available space use. http://www.safetycenter.navy.mil/success/stories/0103.pdf

NAS Sigonella and NSA Naples Presented Safety Excellence Award by Italian Association of Safety, Health and Environmental Professionals (AIAS) - Following successful integration of the US Navy's PR&MS requirements with the requirements of Italian safety laws, NAS Sigonella and NSA Naples were recognized for their safety excellence by the Italian certifying body and regional authority for all safety issues. The prestigious Safety Excellence Award was the first such award presented to the U.S. Navy by a foreign professional safety association.

http://www.safetycenter.navy.mil/success/stories/0102.pdf

Computerized Data Accelerates Industrial Hygiene Chemical Exposure Risk Assessments at NAS Rota's Industrial Hygiene Department cross-referenced their MSDS and AUL databases to streamline the cataloging of hazardous materials. Industrial hygienists use the combined databases to assess the health risks associated with hazardous materials. These risk assessments have helped Industrial Hygiene reduce occupational exposures to hazardous substances at NAS Rota, especially to potential carcinogens and reproductive hazards.

http://www.safetycenter.navy.mil/success/stories/0101.pdf

SIMA San Diego Welders Reduce Risk of Injuries with Welding Power-Con Carrying Fixture - Welders in the SIMA San Diego Welding Shop manually carried heavy welding equipment to, from

and aboard Navy ships in dry dock. The CNO's Hazard Abatement Program funded in-house design and development of a fixture that allows two workers to share the load of carrying portable welding equipment. <a href="http://www.safetycenter.navy.mil/success/stories/0100.pdf">http://www.safetycenter.navy.mil/success/stories/0100.pdf</a>

Renovated Paint Spray Booth Improves Worker Health & Safety at PWC Philadelphia – renovated paint spray booth by upgrading local exhaust ventilation and electrical systems. Fluorescent lighting and an air filter pressure gauge also positively affect worker health and safety and increase productivity. http://www.safetycenter.navy.mil/success/stories/0099.pdf

**Ergonomic Door Fixture and Reduced Vibration Tooling Prevent Worker Injuries at NASNI** - Door *Three Shop* sheet metal mechanics are proud of their part in the design of a fixture that holds and rotates FA-18 doors. The door fixture and new reduced vibration tooling make it possible for mechanics to repair aircraft doors without risk of HAVS or WMSDs The Return on Investment due to these ergonomic, time saving improvements is very impressive.

http://www.safetycenter.navy.mil/success/stories/0055.pdf

**Improved Local Exhaust Ventilation Protects Welders at PWC, Philadelphia** - Industrial hygienists from National Naval Medical Center played a pivotal role in PWC Philadelphia's welding shop acquiring an improved local exhaust ventilation system to replace its canopy hood. The new local exhaust system substantially reduces the risks associated with overexposures of workers to welding smoke and fumes. <a href="http://www.safetycenter.navy.mil/success/stories/0098.pdf">http://www.safetycenter.navy.mil/success/stories/0098.pdf</a>

SIMA San Diego Uses Anti-Vibration Sanders to Prevent Hand Arm Vibration Syndrome - Antenna Shop repair technicians reported numbness and tingling in their hands and fingers after using conventional jitterbug sanders. Industrial hygienists from Naval Medical Center San Diego researched and recommended anti-vibration jitterbug sanders, which eliminated the risk of hand arm vibration syndrome. <a href="http://www.safetycenter.navy.mil/success/stories/0097.pdf">http://www.safetycenter.navy.mil/success/stories/0097.pdf</a>

Navy Environmental Health Center's Web-Based Industrial Hygiene Field Operations Manual - NEHC developed an Industrial Hygiene Field Operations Manual and has posted the manual on its website. NEHC keeps the manual current on the latest technical and regulatory industrial hygiene changes to assist Navy industrial hygienists in planning field surveys, evaluating findings, and drafting reports. <a href="http://www.safetycenter.navy.mil/success/stories/0096.pdf">http://www.safetycenter.navy.mil/success/stories/0096.pdf</a>

**Hazardous Waste Rake Prevents Exposures and Injuries at Public Works Center, San Diego** - Various safety hazards were associated with the manual redistribution of hazardous waste deposited in roll-off bins at PWC San Diego. The problem was solved when a supervisor in PWC's Environmental Department came up with the idea for a *Hazardous Waste Rake* that could be attached to a forklift. PWC's hazardous waste is now redistributed by remote access.

http://www.safetycenter.navy.mil/success/stories/0095.pdf

Navy Develops HAZWOPER Checklist to Protect Hazardous Waste Site Workers - NEHC's Environmental Programs Directorate has developed and posted to the NEHC website a Site-Specific Health and Safety Plan Review Checklist to assist in writing and reviewing hazard and safety plans (HASPs) and to improve HASP quality. This easily accessible tool assists with drafting HASPs that meet regulatory agency requirements.

http://www.safetycenter.navy.mil/success/stories/0094.pdf

**Pearl Harbor's SMART Center Returns the Fleet to Readiness** - Since the Branch Medical Clinic Pearl Harbor opened its Sports Medicine and Rehabilitation Therapy (SMART) Center, it has successfully returned 78% of its patients to duty status within 30 days. The SMART approach emphasizes diagnosis, treatment, reconditioning of musculoskeletal injuries, and the expeditious return to duty. http://www.safetycenter.navy.mil/success/stories/0056.pdf

Industrial Hygienist Resolves Paint Booth Ventilation Problem at NAS JRB Willow Grove - Aircraft Intermediate Maintenance Department workers noticed increased noise and vibration in the ventilation system of the shop's paint spray booth. A National Naval Medical Center Industrial Hygienist determined that the booth's dirty exhaust fan and ductwork were causing the problems as well as impeding the flow of exhaust air out of the booth. Thorough cleaning of the fan and surrounding ductwork solved the problem. <a href="http://www.safetycenter.navy.mil/success/stories/0093.pdf">http://www.safetycenter.navy.mil/success/stories/0093.pdf</a>

Fitting Chairs to Workers Prevents Back Pain at Naval Surface Warfare Center Crane Division - Administrative employees at NSWC Crane Division had complained of back pain due to chairs that were incompatible with personal computer use. The Crane Division OSH Office instituted a chair loan program that allows workers to try out multiple models of desk chairs before committing to order a specific model. Personal computer users are now free of back pain. http://www.safetycenter.navy.mil/success/stories/0054.pdf

Pneumatic Grinder Prevents Workplace Injuries in SIMA Naval Amphibious Base Coronado's Small Boat Repair Department - Repair technicians in the SIMA Amphibious Base Coronado Small Boat Repair Shop used to experience vibration-induced hand and arm discomfort due to use of a hand-held grinder. Investigation into the risk of vibration exposure led SIMA's industrial hygienist to locate a suitable ergonomic grinder. This pneumatic grinder greatly reduces the risk of vibration exposure. http://www.safetycenter.navy.mil/success/stories/0092.pdf



# DEPARTMENT OF THE NAVY HEADQUARTERS UNITED STATES MARINE CORPS 2 NAVY ANNEX WASHINGTON, DC 20380-1775

IN REPLY REFER TO:

5103 SDO-1 12 Mar 04

MEMORANDUM FOR THE DEPUTY ASSISTANT SECRETARY OF THE NAVY (SAFETY)

Subj: ANNUAL AGENCY OCCUPATIONAL SAFETY AND HEALTH REPORT

Ref: (a) OSHA memo of 4 Dec 03

Encl: (1) Annual Occupational Safety and Health Report of the U.S. Marine Corps for Fiscal Year 2003

1. Per the reference, the enclosure is submitted as the Marine Corps input to the subject report.

2. Point of contact on this report is Albert Lillibridge, SDO, at (703) 614-1202/1077.

H. C. DEWEY III

Colonel, U. S. Marine Corps Director, Safety Division

# ANNUAL OCCUPATIONAL SAFETY AND HEALTH REPORT

OF THE

U. S. MARINE CORPS

Reporting Period: Fiscal Year 2003

Director, Marine Corps Safet Division

TITLE

Colonel Henry C. Dewey III, USMC SAFETY AND HEALTH OFFICIAL

# ANNUAL OCCUPATIONAL SAFETY AND HEALTH REPORT

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#### ATTACHMENTS

- A. Commandant of the Marine Corps Safety Policy Statement
- B. MARADMIN 225/03
- C. Manage Safety Programs Description
- D. ALMAR 010/03

#### I. EXECUTIVE SUMMARY.

- A. The Occupational Safety and Health (OSH) program applies to US Marine Corps installations and units worldwide and our military and civilian employees at those locations. The population covered in the US Marine Corps Fiscal Year (FY) 2003 annual report is comprised of active duty military and civilians employed both in the United States and abroad. This includes 177,779 Marines and 13,275 appropriated-fund civilian employees at several installations, including offices, air stations, and logistic bases within the United States, and deployed at field locations across the world. Missions are widely diverse, ranging from offices, schools, hands-on training in high-risk occupations, deployments in foreign countries in support of military personnel performing peacekeeping or humanitarian missions, and general industrial operations.
- B. The injury/illness rates, workers' compensation cost and continuation of pay (COP) cost have all declined since last FY. The OWCP total case rate for injuries/illnesses was reduced by 13%. The lost time case rate was reduced by 16%. The workers' compensation cost exhibited a small decrease and the COP dropped 13%.
- C. Based on reports submitted to the Naval Safety Center, the top five causes of civilian worker injuries and illnesses are: Sprains/strain; fractures; contusion; cuts/laceration; and irritation.
- D. The Marine Corps had many accomplishments during FY 2003 as shown in section III of this report. They included safety policies, leadership involvement, new and improved processes and equipment, management support, and training. One of the key accomplishments for FY 2003 was the revision to the curriculum of the Ground Safety for Marines course and letting a new contract. This is a two-week course that is attended by full time or additional duty safety personnel.
- E. The overall goals of the Marine Corps OSH program are to prevent fatalities, injuries, and occupational illness; reduce the severity of mishaps; and improve operational readiness. Key FY 2004 initiatives will focus on implementing our safety strategic and campaign plans; implementing Installation Core Safety Services; working with leadership to improve the safety culture; and creating strategies for data quality improvement. The Marine Corps Safety Program is comprised of a number of elements that target key areas such as compliance, training, and hazard control and elimination.

#### II. SAFETY AND HEALTH PROGRAM PERFORMANCE

A. INJURY AND ILLNESS RATES AND COSTS. Injury and illness data are provided in Tables 1-4.

TABLE 1: OFFICE OF WORKERS' COMPENSATION PROGRAM (OWCP) INJURY AND ILLNESS CASES

| Category                          | FY 99  | FY 99 FY 00 |        | FY 02  | FY 03  |
|-----------------------------------|--------|-------------|--------|--------|--------|
| Total Cases for<br>Injury/Illness | 939    | 1114        | 1080   | 1020   | 868    |
| Fatalities                        | 0      | 0           | 0      | 1      | 0      |
| Lost Time Cases                   | 624    | 747         | 689    | 651    | 536    |
| Number of<br>Employees            | 14,871 | 14,413      | 14,006 | 13,583 | 13,275 |

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

| Category                    | FY 99 | FY 00 | FY 01 | FY 02 | FY 03 |
|-----------------------------|-------|-------|-------|-------|-------|
| OWCP Total Case<br>Rate     | 6.31  | 7.73  | 7.71  | 7.51  | 6.54  |
| OWCP Lost Time<br>Case Rate | 4.20  | 5.18  | 4.92  | 4.79  | 4.04  |

TABLE 3: WORKERS' COMPENSATION CHARGEBACK DATA

| Category                             | CBY 99 | CBY 00 | CBY 01 | CBY 02 | CBY 03 |  |
|--------------------------------------|--------|--------|--------|--------|--------|--|
| a. Cases Having<br>Chargeback Costs  | 2235   | 2417   | 2382   | 2468   | 2281   |  |
| b. Total Cost<br>(Million)           | 18.9   | 19.3   | 19.6   | 21.1   | 20.9   |  |
| c. Cost Per Case<br>(b divided by a) | 8,460  | 7,985  | 8,221  | 8,533  | 9,163  |  |

TABLE 4: CONTINUATION OF PAY (COP)

| Category               | FY 99 | FY 00 | FY 01 | FY 02 | FY 03 |
|------------------------|-------|-------|-------|-------|-------|
| COP Cost<br>(Thousand) | 602.1 | 356.7 | 365.6 | 362.1 | 315.2 |

#### B. FEDERAL WORKER 2000 INITIATIVE

- 1. The Marine Corps established policy and guidance to implement the Federal Worker 2000 by ACMC letter of 8 Aug 2001. The Federal Worker 2000 goals require actions from the Marine Corps Occupational Safety and Health (OSH) community as well as from the Marine Corps' Human Resource workforce to address workers' compensation claims management.
- 2. All Marine Corps facilities have developed an accident reduction plan designed to target areas for improvement and perform an annual self-assessment. Marine Corps Base (MCB) Camp Lejeune, MCB Camp Pendleton, and Marine Corps Logistics Base Barstow are our three targeted activities. Refer to table 5 for performance metrics.

TABLE 5: FEDERAL WORKER 2000 PERFORMANCE METRICS

| Performance<br>Measure   |                               | Baseline       |        | FY-01   | FY-02   | FY-03                 | Goal/Status                       |
|--|-------------------------------|----------------|--------|---------|---------|-----------------------|-----------------------------------|
| Total<br>Injury/Illness  |                               | 8.12<br>FY 97  | Goal   | 7.64*   | 7.41*   | 7.19*                 | Met Goal,<br>Down 17.5%           |
| Case I   | Case Rate                     |                | Actual | 7.71**  | 7.51**  | 6.70                  |                                   |
|  | MCB<br>Camp<br>Lejeune<br>(2) | 10.81<br>FY 96 | Goal   | 8.65*   | 7.57*   | 6.49*                 | Did NOT<br>Meet Goal,<br>Down 22% |
| Lost-Time Injury/illness Case Rate for the three Work Sites with highest rates of injuries (1) |                               |                | Actual | 11.01** | 10.48** | 8.46                  |                                   |
|  | MCB<br>Camp                   | 6.91           | Goal   | 5.53*   | 4.84*   | 4.15*                 | Did NOT<br>Meet Goal,             |
|  | Pendleton (2)                 | FY 96          | Actual | 9.65**  | 8.55**  | 8.94                  | Up 23%                            |
|  | MCLB 7.54<br>Barstow FY 96    | Goal           | 6.03*  | 5.28*   | 4.53*   | Did NOT<br>Meet Goal, |                                   |
|  |                               | FY 96          | Actual | 6.6**   | 7.56**  | 6.69                  | Down 11%                          |

<sup>(1)</sup> Three of 17 installations are targeted for high rates of serious injuries.

<sup>(2)</sup> Defense Employee Work Safety Demonstration Program (DEWSDP), USMC Pilot Sites.

<sup>\*</sup> Projected based on Federal Worker 2000 baseline data.

<sup>\*\*</sup> Actual data.

#### C. WRITTEN SAFETY AND HEALTH PROGRAM

- 1. The Marine Corps has an active program to recognize, evaluate, and control workplace safety and health hazards. We require this through MCO P5100.8F and MCO 3500.27A. These requirements are implemented through comprehensive safety inspections, industrial hygiene surveys, employee reports, self-audits, safety councils, and reports to supervisors.
- 2. MCO P5100.8F provides policy, assigns responsibility, and establishes instructions for the administration of the Marine Corps OSH Program. This Order adopts the most current editions of national consensus standards, including OSHA.
- 3. MCO 3500.27A establishes Operational Risk Management as an integral part of military operations, training and planning at all levels. Marines are trained on the process of hazard identification, assessment of hazards, decision-making, implementation of controls, and supervision.

#### D. SAFETY AND HEALTH TRAINING

- 1. All Marine Corps commands are required to provide general safety and occupational health training to all managers, supervisors, employees and employee representatives. More specialized safety and occupational health training is provided locally based on job hazard analysis, safety inspections, and industrial hygiene surveys or as needed.
- 2. Headquarters Safety Division sponsors and centrally funds the Ground Safety for Marines, Mishap Investigation, and various special OSH Courses for the Marine Corps.
- a. Trained 429 personnel in the Ground Safety for Marines Course conducted under the Naval Occupational Safety and Health and Environmental Training Center (NAVOSHENVTRACEN), Norfolk, VA. Thirteen of the two-week long courses were presented at various geographical locations. The course is designed for new safety officers, and provides them fundamentals they need to conduct safety inspections and investigations, and manage a safety program for their field unit. Collateral-duty safety courses were also conducted by some of the major commands for Marine Corps personnel within their local area.
- b. Trained 153 personnel in the Mishap Investigation Course conducted under the NAVOSHENVTRACEN. Seven of these one-week long courses were presented at various geographical locations. The course is designed for safety specialists and members of formal mishap investigation boards.
- c. Specialty OSH training courses in the following areas were also provided during FY 03: Electrical Standards,

Respiratory Protection, and Crane Safety, Introduction to Industrial Hygiene, Excavation, Trenching and Soil Mechanics.

#### III. ACCOMPLISHMENTS

- A. EXECUTIVE SAFETY BOARD MEETINGS. The Commandant of the Marine Corps (CMC) convened two Executive Safety Board (ESB) meetings during FY03, chaired by the Assistant Commandant of the Marine Corps (ACMC). The ESB meets biannually and consists of commanding generals from our operational commands, major bases and supporting organizations. The ESB provides safety policies and reduction strategies for both on and off duty mishaps to enhance both unit and individual readiness to ensure our Corps remains ready to answer our Nation's call.
- B. CMC SAFETY POLICY STATEMENT. The CMC issued a safety policy statement on a poster for dissemination across the Marine Corps. The policy statement is provided at Attachment A.
- INSTALLATION CORE SAFETY SERVICES. The Installation Core Safety Services will standardize the professional safety support available to the operational commanders from the installation safety offices. The installation safety offices support military tactical operations and field training both on and off the installation by providing services including: trained specialists assigned by request to units involved in tactical training exercises and operations, oversight of explosives and range safety programs, operational risk management, safety training, consultations, work center inspections, and mishap investigations. This process will enable operational commanders to reduce their personnel and material losses due to mishaps. During FY03 the Marine Corps established 14 additional civilian positions for the installations to support the Core Safety Services. Funds were programmed for another 34 safety positions in FY05.
- D. AUTOMATED HEAT STRESS SYSTEM (AHSS). The AHSS is a web-accessible computerized system that shows real time weather measurements and eliminates human error in calculating Wet Bulb Globe Temperature readings. Seven units were purchased and installed at MCB Camp Lejeune and one unit at MCAS Cherry Point as a test protocol. These measurements are used to determine flag conditions that are used to set limitations for operations and physical conditioning during hot weather and reduce heat casualties. The AHSS has a server from which personnel can view the flag condition for the surrounding area on a computer.
- E. BOOT CAMP TRAINING. Operational Risk Management (ORM) is included in the Common Skills Handbook and the Recruit Training Plan of Instruction (POI) as of January 2003. The POI has two hours of ORM instruction that is given adjacent to the time the recruit is provided Leadership Instruction. The Drill Instructor

school added ORM to their curriculum. Eight hours of driver improvement training was also added to the Recruit Training curriculum in 2003.

- F. MCO 5100.19E. The Marine Corps Traffic Safety Program (DRIVESAFE) was revised to contain guidance and requirements for the safe operation of cellular phones while driving and the use of headlights during precipitation. Additional direction was provided to clarify requirements concerning the wearing of reflective clothing. Lastly, these changes established standardized minimum penalties for failure to wear seatbelts on Marine Corps installations. Six strategically located safety specialists have been identified to participate in a Motorcycle Safety Foundation/USMC-sponsored hybrid train-the-trainer program. In addition to motorcycle and traffic safety, plans include incorporating additional high-risk power-sports (e.g., ATV, Dirt Bike) into a comprehensive training system. The message on this change is provided at Attachment B.
- G. ELECTROMAGNETIC RADIATION SAFETY SURVEYS. The Naval Ordnance Center conducted Hazards of Electromagnetic Radiation to Ordnance (HERO) surveys at four Marine Corps installations during FY03. These surveys are completed to ensure conflicts between ordnance safety and use of the electromagnetic spectrum can be effectively managed in the conduct of military operations. This initiative will help ensure the safety of Marines and their families, bases and stations, and the environment.
- H. USMC BUSINESS PLAN. The USMC Business Plan was issued in February 2003 to implement the Commandant's direction to manage the Business Enterprise of the Marine Corps through application of better business practices. The Business Plan defines strategies, identifies high-level milestones, assigns accountability, and relies on the chain of command to take specific actions to improve business processes and support provided to the operating forces. Installation processes were developed under this plan to include 37 specific functions grouped in seven standard business management categories. One category is Security and Safety with three functions that include: Manage Safety Programs, Provide Security, and Provide Fire Protection and Emergency Services. A description for the Manage Safety Programs is provided at Attachment C.
- I. SAFETY PERFORMANCE MEASURES. Performance measures were developed for the Manage Safety Programs function of the USMC business plan. These measures include:
- 1. Number of mishaps (Number of Class A and B mishaps for on-duty & off-duty, number of total injuries for civilian personnel).

- 2. Percent of workplaces inspected (Number of workplaces inspected x 100/number of required inspections).
- 3. Percent of supervisors trained (Number of supervisors received annual safety training x 100/Number of supervisors).
- 4. Abatement Efficiency Index (AEI) (Age of deficiency/target age).
- 5. Safety Staff Index (Number of Safety & Occupational Health (SOH) personnel onboard/number of SOH personnel required).
- J. FACILITIES MANAGEMENT ASSISTANT. The Facilities Management Assistant (FMA) is a risk based automation system that steps users through the process of documenting and responding to issues using a triage methodology of risk, cost, and exposure. FMA is designed to support any inspection, audit, or conditions assessment criteria and was initially tried at MCB Hawaii in 1999 for the recognition, evaluation, and control of facility based occupational safety and health deficiencies. Due to the positive results the FMA was installed at MCB Camp Lejeune and MCB Camp Pendleton in FY 2002. During FY 2003 the FMA was installed at four more installations.
- K. DEFENSE EMPLOYEE WORKER SAFETY DEMONSTRATION PROJECT (DEWSDP). The DEWSDP was funded by the Department of Defense to determine if implementation of private sector best safety practices can reduce injury rates and the associated costs. MCB Camp Pendleton and MCB Camp Lejeune were selected as Marine Corps pilot sites. The safety practices chosen include a management software system and methodology used to identify, evaluate, and control a wide range of risks, personnel commitment, and training. As a result of this study and through the efforts of the Executive Safety Board, additional personnel were added to both safety offices. These combined results indicate civilian lost-time case rate reductions of 30% at Camp Pendleton and 33% at Camp Lejeune (FY00 to FY03).

#### L. SAFETY AND HEALTH PROGRAM EVALUATIONS

- 1. We evaluate the success or failure of our accident, injury and occupational illness prevention programs by inspections, surveys, and mishap trends. Our inspection programs are designed to measure compliance with Federal and Marine Corps standards and evaluate the overall effectiveness of the safety and health programs. The inspections are implemented at three levels of command.
- a. All Marine Corps commands are required to conduct formal safety and occupational health inspections at least annually. More frequent inspections are required for high hazard

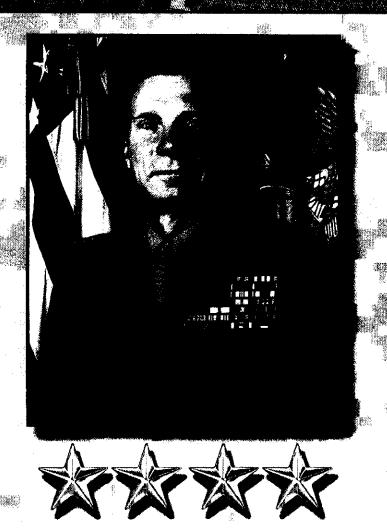
areas based on an assessment of the potential for injuries, occupational illness or property damage. Managers, supervisors and employee representatives can participate in the inspections conducted by local safety and occupational health specialists.

- b. The major commands conduct oversight inspections of their subordinate units using checklists that are developed and updated by the Safety Division.
- c. The Inspector General of the Marine Corps (IGMC), through the command inspection program, conducts oversight inspections of the major subordinate commands. The Headquarters Safety Division participated in six (6) IGMC inspections during FY 03.
- 2. The Naval Safety Center provides safety surveys and mishap investigations to field commands upon request. Navy industrial hygiene personnel conduct periodic surveys of all workplaces. Safety and health problems identified by inspections or surveys that cannot be resolved at the local level are referred to Headquarters Safety Division.
- M. REPORTS AND APPEALS OF UNSAFE OR UNHEALTHFUL WORKING CONDITIONS
- 1. MCO P5100.8F provides guidelines and procedures to report unsafe or unhealthful working conditions to management for correction, establish a process for management response to these identified conditions, and establish an appeal process for individuals who disagree with initial assessment.
- 2. Any military or civilian personnel, or employee representative, observing unsafe or unhealthful work practices, conditions or violations of established OSH standards, shall advise workplace supervisor of the condition noted, either orally or in writing. Initial oral reports are required for imminent danger situations. Reprisals against personnel for submitting hazard reports are prohibited.
- 3. We implemented an additional process this year for personnel to submit reports named ANYMOUSE. A copy of the message that issued the ANYMOUSE process is provided at Attachment D.

#### IV. GOALS AND OBJECTIVES

- A. Revise or update Marine Corps Orders on the following:
  - 1. Marine Corps Safety Program.
  - 2. Marine Corps Occupational Safety and Health Program.

- 3. Operational Risk Management.
- 4. Ground Mishap Investigation and Reporting.
- B. Develop a web-based system for all Marine Corps installations and units to report mishaps and safety investigations by using the Internet.
- C. Support the newly established Defense Safety Oversight Committee and appointed committees, task forces, and work groups.



# SAFETY POLICY STATEMENT OF THE COMMANDANT OF THE MARINE CORPS

Safety is integral to force protection and the operational readiness of the Marine Corps. Safety programs and operational risk management are key for keeping our military and civilian personnel, whether on-dustrated of the family members, safe and healthy. I, along with the Assistant Commandant, am committed to preventing deaths, injuries and accupational illnesses in our Corps. I expect leaders at every level to implement Marine Corps safety and occupational health programs and promote safe practices during all operations and training.

m.w. 4-6-

## **MARADMIN 225/03**

**{**{{**/**|{/------}}}}}

Date signed: 05/09/2003 MARADMIN Number: 225/03

R 091430Z MAY 03 FM CMC WASHINGTON DC(uc) TO AL MARADMIN(uc) MARADMIN BT

UNCLASSIFIED

MARADMIN 225/03

MSGID/GENADMIN/CMC WASHINGTON DC/SD//
SUBJ/MC ORDER 5100.19E OF 29 DEC 00. CH 2. MARINE CORPS TRAFFIC
/SAFETY PROGRAM//

REF/A/DOC/MCO 5100.19E/-//

POC/M. D. SUMNER/MAJOR/GROUND SAFETY BR HEAD/-/TEL:DSN 224-1202/EMAIL:SUMNERMD@HQMC.USMC.MIL//

GENTEXT/REMARKS/1. PURPOSE. THIS MARADMIN DIRECTS PEN CHANGES TO THE BASIC ORDER. THIS CHANGE IS APPLICABLE TO ALL MARINE CORPS ACTIVITIES (PCN 1020726801 DISTRIBUTION).

- 2. BACKGROUND.
- A. MARINE CORPS ORDER 5100.19E REQUIRES CHANGES TO ADDRESS THE FOLLOWING ISSUES THAT PERTAIN TO MARINE CORPS TRAFFIC SAFETY.
- (1) CELLULAR PHONE USE WHILE DRIVING
- (2) USE OF HEADLIGHTS WHEN THERE IS PRECIPITATION
- (3) GUIDANCE ON THE WEARING OF REFLECTIVE CLOTHING
- (4) STANDARDIZED SEATBELT ENFORCEMENT ON USMC INSTALLATIONS3. ACTION. THE FOLLOWING CHANGES SHALL BE MADE TO THE BASIC ORDER:
- A. TO ENCLOSURE (2), PARA 5, ADD NEW PARA AS FOLLOWS: "5C. OPERATORS OF PRIVATELY OWNED VEHICLES ON MARINE CORPS INSTALLATIONS SHALL NOT USE CELLULAR PHONES WHILE THE VEHICLE IS IN OPERATION, UNLESS THEY ARE USING A HANDS-FREE DEVICE. A HANDS-FREE DEVICE IS A FEATURE THAT IS INCLUDED OR AVAILABLE WITH MOST OF TODAY'S CELLULAR TELEPHONES THAT PERMITS A DRIVER TO USE THE TELEPHONE WITHOUT LIFTING OR HOLDING THE HANDSET TO THE DRIVER'S EAR."
- B. TO ENCLOSURE (2), PARA 5 ADD NEW PARA AS FOLLOWS: "5D. ON ALL INSTALLATIONS, VEHICLES WILL BE OPERATED WITH HEADLIGHTS TURNED ON DURING PERIODS OF PRECIPITATION AND OTHER REDUCED VISIBILITY CONDITIONS, WHETHER OR NOT IT IS REQUIRED BY STATE OR NATIONAL LAW. EXAMPLES ARE, BUT NOT LIMITED TO, DURING PERIODS OF LIGHT OR HEAVY RAIN, OR DURING PERIODS OF OBSCURATION DUE TO FOG OR SMOKE."

  C. TO ENCLOSURE (2), PARA 10C, ADD AFTER "DURING PERIODS OF REDUCED VISIBILITY" THE FOLLOWING: "AND BEFORE MORNING COLORS AND AFTER
- EVENING COLORS," AND ADD AT THE END OF THE SAME SENTENCE "WHEN CONDUCTING PHYSICAL TRAINING OR EXERCISING ON OR NEAR ROADWAYS."

  D. TO ENCLOSURE (2), PARA 14, ADD NEW PARA L: "MINIMUM PENALTIES FOR FAILURE TO WEAR SEATBELTS ON A MARINE CORPS INSTALLATION WILL
- BE: (1) FOR FIRST VIOLATION, A ONE WEEK SUSPENSION OF DRIVING PRIVILEGES PLUS ATTENDANCE AT A SATURDAY FOUR-HOUR REMEDIAL DRIVING CLASS FOCUSED ON SAFETY BELTS. (2) FOR SECOND VIOLATION, ONE MONTH SUSPENSION OF DRIVING PRIVILEGES. (3) FOR THIRD VIOLATION, 6-MONTH
- SUSPENSION OF DRIVING PRIVILEGES." CHANGE ORIGINAL PARA L TO PARA M. 4. SUMMARY OF CHANGES. THE ABOVE CHANGES CONTAIN GUIDANCE AND REQUIREMENTS FOR THE SAFE OPERATION OF CELLULAR PHONES WHILE DRIVING AND THE USE OF HEADLIGHTS DURING PRECIPITATION. ADDITIONAL DIRECTION IS PROVIDED TO CLARIFY REQUIREMENTS CONCERNING THE WEARING OF REFLECTIVE CLOTHING. LASTLY, THESE CHANGES ESTABLISH

STANDARDIZED MINIMUM PENALTIES FOR FAILURE TO WEAR SEATBELTS ON MARINE CORPS INSTALLATIONS.

- 5. FILING INSTRUCTIONS. FILE THIS CHANGE TRANSMITTAL IMMEDIATELY FOLLOWING THE SIGNATURE PAGE OF THE BASIC BULLETIN.
- 6. MCO 1500.19E W/CH 1 IS UNDER REVISION. CHANGES TO THE ORDER, INCLUDING THE AFOREMENTIONED CHANGES, WILL BE REVIEWED IN LIGHT OF RECENT SUGGESTIONS AND CIRCUMSTANCES. THE REVISION WILL BE STAFFED CORPS-WIDE WITHIN THE THIRD QUARTER. THE RELEASE OF THE REVISED ORDER IS ESTIMATED NLT 1 OCT 03.

11

## 15. Manage Safety Programs

#### **Definition:**

All activities that manage workplace and living quarters health and safety, to include installation wide safety and occupational health programs, support for military operations and training (on and off of the installation,) and all applicable Installation Core Safety Services.

Applicable Marine Corps Orders (MCOs)

MCO 3500.27A Operational Risk Management (ORM)

MCO 3750.1A Aviation Safety and Standardization Programs

MCO 5100.29 Marine Corps Safety Program

MCO 5104.1A Navy Laser Hazards Control Program

MCO 5104.3 Marine Corps Radiation Safety Program

MCO P5100.8F Marine Corps Occupational Safety and Health Program Manual

MCO 3500.33 Marine Aviation Operational Risk Management

MCO 5100.19E Marine Corps Traffic Safety Program (Drivesafe)

MCO 5100.30A Marine Corps Off Duty and Recreation Safety Program

MCO 5104.2 Marine Corps Radiofrequency Electromagnetic Field Personnel Protection Program

MCO 6260.1E Marine Corps Hearing Conservation Program

MCO 8020.11 Department of the Navy Explosives Safety Program

MCO P5102.1A Marine Corps Ground Mishap Investigation and Reporting Manual

#### **Typical High-Level Processes and Activities**

Provide Safety Support to Military Operations and Training
Conduct Traffic Safety Activities
Distribute Safety Promotional Material
Manage Installation-Wide Safety and Occupational Health Program
Conduct Safety Inspections
Conduct Mishap Investigations
Manage Personal Protective Equipment Program
Provide Safety Training
Provide Safety Consulting Services
Coordinate Occupational Health Services

#### **Products and Services**

Safety Inspections Mishap Investigations Safety Training Safety Consultation

# **ALMAR 010/03**

Date signed: 01/30/2003 ALMAR Number: 010/03

R 300945Z JAN 03

FM CMC WASHINGTON DC(n)

TO ML ALMAR(n)

ALMAR

BT

UNCLAS

ALMAR 010/03

MSGID/GENADMIN/CMC WASHINGTON DC SD//

SUBJ/IMPLEMENTATION OF THE GROUND ANONYMOUS SAFETY REPORTING PROGRAM "ANYMOUSE"//

POC/M. D. SUMNER/MAJ/TEL: 703-614-2423/TEL: DSN 224-2423//

RMKS/1. DURING THE JUNE 2002 EXECUTIVE SAFETY BOARD (ESB), CHAIRED BY THE ACMC, THE ESTABLISHMENT OF AN ANONYMOUS SAFETY REPORTING PROGRAM WAS DIRECTED. THIS PROGRAM WILL ALLOW AN INDIVIDUAL MARINE TO VOICE VALID SAFETY CONCERNS WITHOUT FEAR OF RETRIBUTION.

- 2. THE ANYMOUSE PROGRAM HAS EXISTED IN MARINE CORPS AND NAVY AVIATION SINCE THE EARLY 1950'S. SINCE ITS INCEPTION, MARINES AND SAILORS OF ALL RANKS ATTACHED TO AVIATION UNITS HAVE USED THE "ANYMOUSE" PROGRAM TO BRING SAFETY CONCERNS TO THE COMMAND'S ATTENTION. "ANYMOUSE" IS INTENDED TO ENCOURAGE PERSONNEL TO MAKE VOLUNTARY REPORTS OF SAFETY CONCERNS THAT THEY ARE NOT COMFORTABLE REPORTING THROUGH THE ESTABLISHED CHAIN OF COMMAN OR REPORTING CHANNELS.
- 3. THE "ANYMOUSE" PROGRAM REQUIRES "ANYMOUSE" FORMS AND A RECEPTACLE THAT ARE PLACED IN A DISCREET AREA ALLOWING EASY ACCESS FOR ALL PERSONNEL SUCH AS A MAINTENANCE AREA. THE SAFETY OFFICER IS RESPONSIBLE FOR CHECKING THE BOX AND SHALL ADDRESS ALL SAFETY CONCERNS WITH THE COMMANDING OFFICER MONTHLY. INSTRUCTIONS, FORMS AND PICTURES ARE AVAILABLE VIA THE SAFETY

DIVISION HOMEPAGE,

WWW.HQMC.USMC.MIL/SAFETY.NSF <a href="http://www.HQMC.USMC.MIL/SAFETY.NSF">http://www.HQMC.USMC.MIL/SAFETY.NSF</a>.

- 4. THE VAST MAJORITY OF "ANYMOUSE" REPORTS WILL BE RESOLVED AT THE LOCAL LEVEL. HOWEVER, IN THE EVENT A MARINE HAS A SAFETY CONCERN WHICH HE/SHE I NOT ABLE TO VOICE WITHIN THE COMMAND, HE/SHE SHOULD UTILIZE HIGHER HEADQUARTERS "ANYMOUSE" BOXES OR FORWARD THE COMPLETED FORM VIA MAIL OR FA (703) 695-3231 OR DSN 225-3231 TO CMC(SD) FOR RESOLUTION. YOUR ANONYMITY WILL BE PRESERVED. ADDITIONALLY, COMPLETED "ANYMOUSE" FORMS THAT HIGHLIGH CONDITIONS SUCH AS DESIGN OR MANUFACTURING FLAWS AND HAVE LESSONS LEARNED VALUE TO OTHER UNITS SHOULD BE RELEASED AS A HAZARD REPORT BY THE UNIT SAFETY OFFICER IN ACCORDANCE WITH MCO P5102.1A.
- 5. COMMANDERS SHALL ENSURE THAT ALL MARINES HAVE READ THIS ALMAR AND THAT EVERY MARINE IS BRIEFED ON THE "ANYMOUSE" SAFETY REPORTING PROGRAM. ALL UNITS WILL HAVE AN ANONYMOUS SAFETY REPORTING PROGRAM INSTITUTED BY 31 OCT 2003.
- 6. SEMPER FIDELIS, M. W. HAGEE, GENERAL, U.S. MARINE CORPS, COMMANDANT OF THE MARINE CORPS.//