CHIEF OF NAVAL OPERATIONS
SAFETY AND OCCUPATIONAL HEALTH BRANCH

REPORT TO THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION ON THE U.S. NAVY OCCUPATIONAL SAFETY AND HEALTH PROGRAM FOR FISCAL YEAR 1993

WASHINGTON, D.C. 20350-2000

Agency Annual Report
Occupational Safety and Health Program

FISCAL YEAR 1993

Name of Agency	Department of the Navy
Name of Component	U.S. Navy
Address	The Pentagon Washington, D. C. 20350-2000
Number of Employees covered by this report	266,512 (Civilian Average)
Number of Activities covered by this report	920 (Approximate)
Name of individual responsible for the occupational safety and health program of the agency or component covered by this report	VADM S. F. Loftus, USN
Telephone number of this individual	(703) 695-2154
Title of this individual	Deputy Chief of Naval Operations (Logistics) (N4)
Point of contact for this report	Clint Maish, N454C (703) 602-2579

Enclosure (1)

U.S. NAVY OCCUPATIONAL SAFETY AND HEALTH
PROGRAM REPORT FOR FISCAL YEAR 1993

TABLE OF CONTENTS

ATTACHMENTS

1. Major Command and Industrial Activity Performance in Meeting Occupational Injury and Illness Reduction Goals in Fiscal Year 1993

2. Naval Facilities Engineering Command FY93 Occupational Safety and Health Program Improvement Plan

3. OPNAVINST 5100.23C, Navy Occupational Safety and Health Program Manual

4. Protocol for Coordinating Serious Mishap Investigations with OSHA

5. Rationale and Design for a Mishap Cost-Reduction Model for the Navy's Occupational Safety and Health Program (Excerpts from Draft Report)

6. CNET NOTICE 5100 of 9 August 1993, Naval Safety School FY94 Course Schedule

7. CNO ltr 5100 Ser N454C/3U594462 of 24 September 1993, Guidance on Occupational Safety and Health Programs Under Downsizing and Base Closure

8. Navy Occupational Safety and Health Strategic Plan

9. Navy Occupational Safety and Health Program Evaluation Guide for Shore Activities

U.S. NAVY
OCCUPATIONAL SAFETY AND HEALTH PROGRAM REPORT
FOR FISCAL YEAR 1993

BACKGROUND

A. **REPORT COVERAGE**. The average number of United States civilian employees covered by this report is 266,512 for fiscal year 1993. This number includes approximately 1500 part-time employees. Approximately 920 "activities" are covered by the report which includes organizations with civilian employees and assigned a unit identification code.

B. **UNIQUE AGENCY CHARACTERISTICS**. The U.S. Navy has activities and offices located throughout the world employing U.S. civilians. All types and forms of operations, processes, work environments and occupations exist within the Navy. We are a major national industrial employer with over 53,000 civilian employees at naval shipyards, 20,000 at aviation repair activities, and 11,000 at public works/construction activities. Our blue collar/wage grade workforce exceeds 85,000.

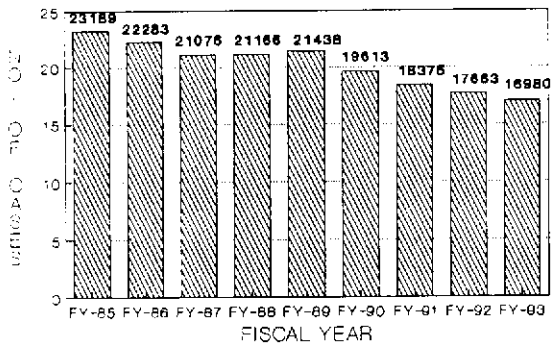
PROGRAM PERFORMANCE

A. **INJURY AND ILLNESS EXPERIENCE**.

1. INJURY/ILLNESS DATA.

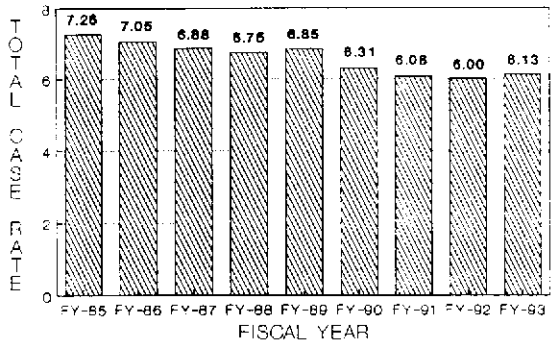
a. WORKERS' COMPENSATION INJURY/ILLNESS STATISTICS. Figure 1 (next page) provides a summary of our injury compensation claims experience since 1985 for both total cases filed and lost time cases. Attachment 1 contains a more detailed analysis of the claims for fiscal year (FY) 1993. This information is obtained from Office of Workers' Compensation Programs (OWCP) Federal Employees Compensation Act (FECA) Reports. As shown in Figure 1, **our total claims experience has declined 26.8 percent** since FY 1985, and **our lost time claims experience has declined 28 percent**. Figure 2 contains a summary of our compensation costs and continuation of pay costs for the last six years. While our compensation costs have risen, we have been able to reduce our continuation of pay costs by over 37 percent. In addition, as shown in Figure 3, **we estimate that at least $ 300 million in compensation costs have been avoided since 1985** due to our efforts and achievements in occupational injury/illness reduction. When medical cost inflation is considered, there has been a significant cost savings in constant (FY 1985) dollars. Figure 4 charts claims involving medical charges during the 1993 billing year by nature of injury. Figure 5 charts actual case experience and trends for each quarter since 1985.

TOTAL INJURY CASES
(FROM OWCP FECA TABLE #2 REPORTS)



26.8% REDUCTION FROM FY-85 TO FY-93

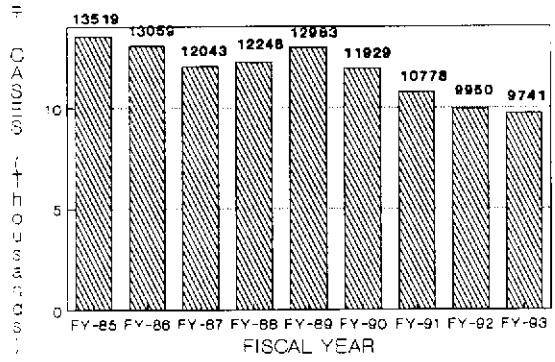
TOTAL CASE RATES
(CASES PER 200,000 HOURS WORKED)



15.6% REDUCTION FROM FY-85 TO FY-93

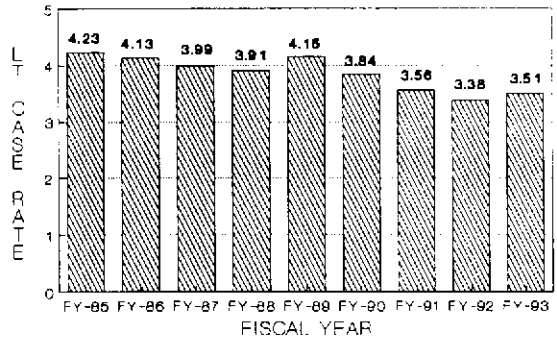
Average number of civilian employees by fiscal year: 1985-304958, 86-302075, 87-296485, 88-301419, 89-300595, 90-298998, 91-290622, 92-282751, 93-266512.

LOST TIME CASES
(FROM OWCP FECA TABLE #2 REPORTS)



28% REDUCTION FROM FY-85 TO FY-93

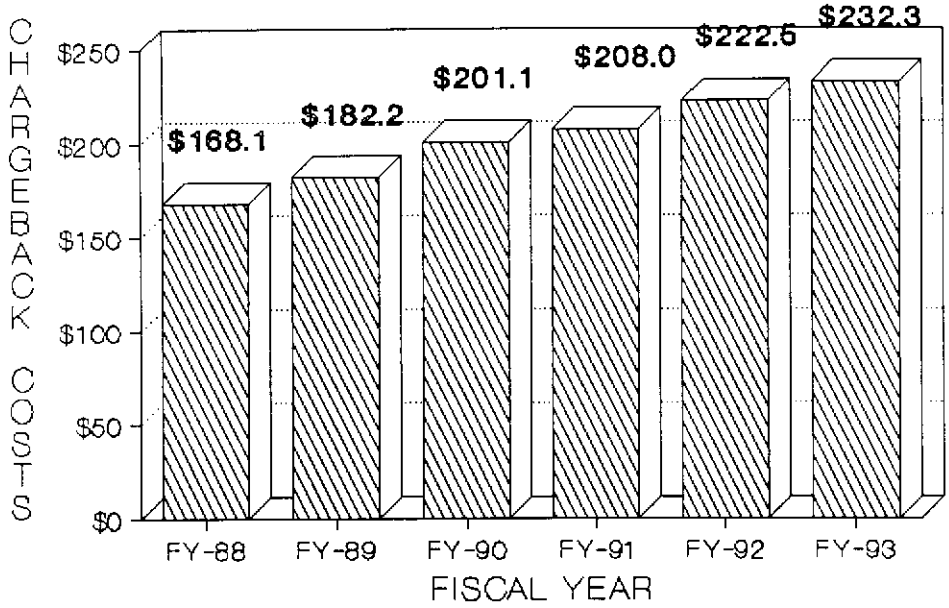
LOST TIME CASE RATES
(CASES PER 200,000 HOURS WORKED)



17% REDUCTION FROM FY-85 TO FY-93

FIGURE 1

CHARGEBACK COSTS
($ MILLIONS)



Source: OWCP Chargeback Reports

CONTINUATION OF PAY
($ MILLIONS)

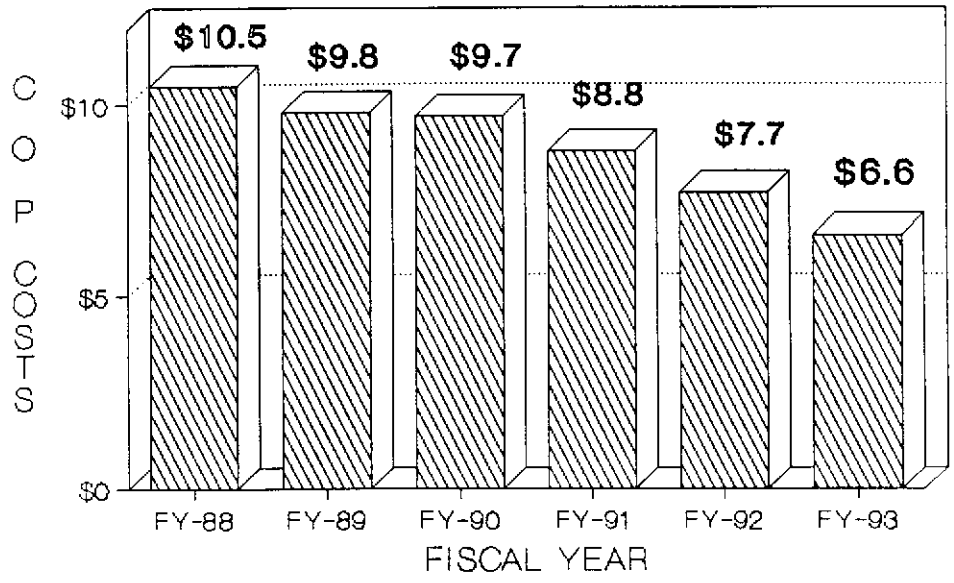


FIGURE 2

INJURY COMPENSATION COSTS
(CASES AND PAYMENTS UNDER FECA)

(1986 CASES • 23189)

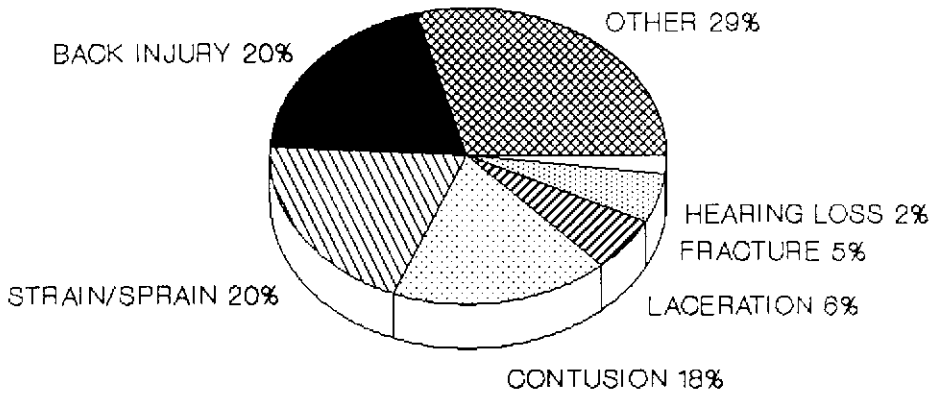
	1986	1987	1988	1989	1990	1991	1992	1993
# OF CASES	22283	21076	21166	21438	19613	18613	17663	16980
PAYMENTS ($MIL)	160	161	168	182	201	208	223	232
AVG. COST PER CASE (ACTUAL/ THEN YEAR)	7180	7639	7937	8489	10248	11320	12625	13663
EST. PAYMENTS W/O CASE REDUCTION ($MIL)	166.5	177.1	184.1	196.9	237.6	262.5	292.8	316.8
EST. COST AVOIDANCE ($MIL)	6.5	16.1	16.1	14.9	36.6	54.5	69.8	84.8

(TOTAL SAVINGS $299.3)

• Data based on fiscal year cases filed/bill paid

FIGURE 3

NATURE OF INJURY
1993 CASES WITH MEDICAL CHARGES*



*Billings to OWCP

ALL CASES WITH MEDICAL CHARGES IN 1993

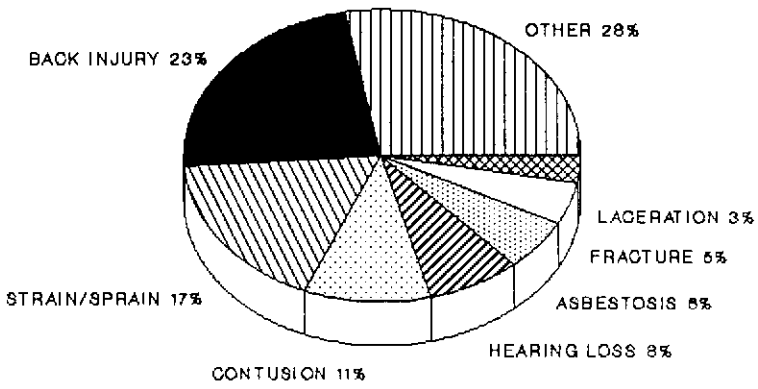
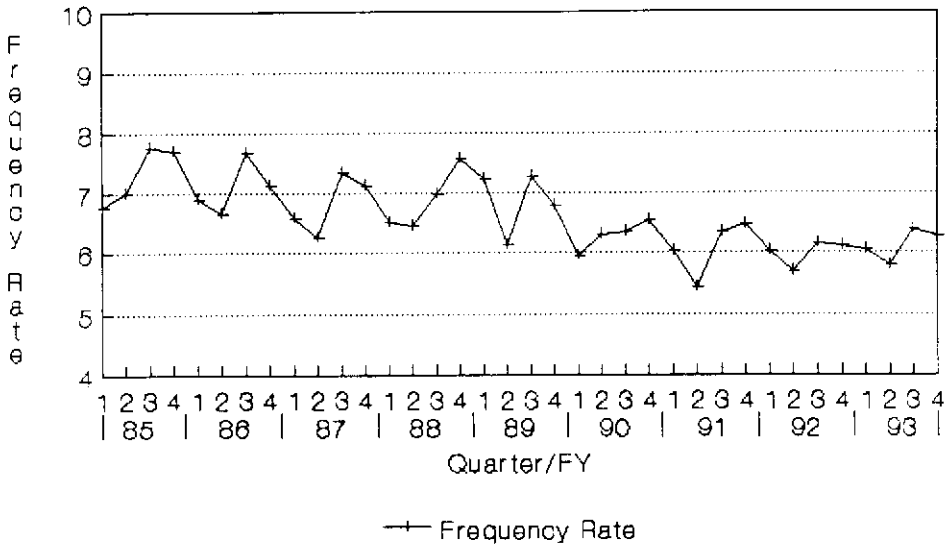


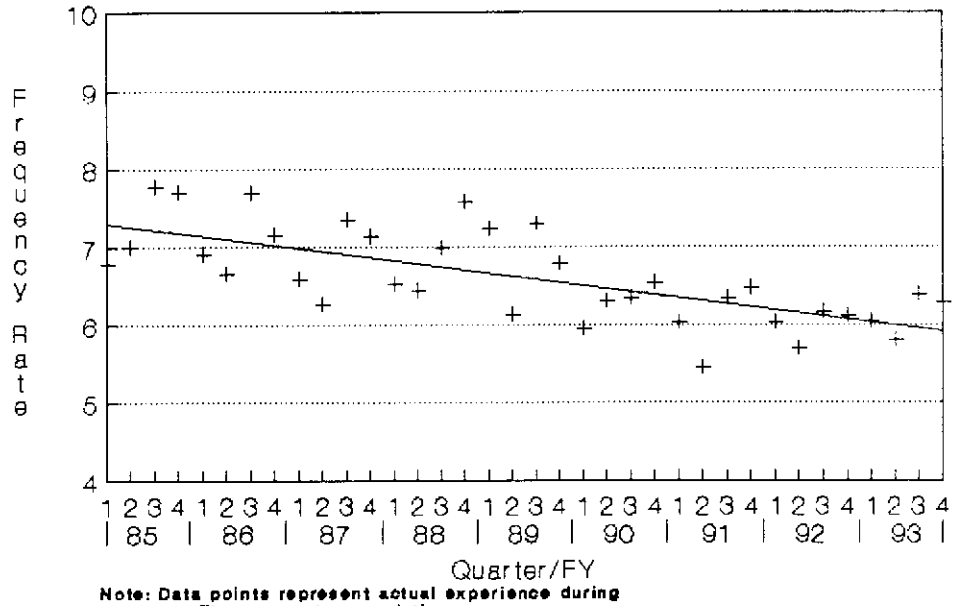
FIGURE 4

NAVY INJURY CASE RATE CHART



Source: FECA Table #2 Data

NAVY INJURY CASE RATE TREND CHART



Note: Data points represent actual experience during quarter. They are not cummulative.

FIGURE 5

b. MISHAP STATISTICS. Figure 6 on the next page contains case and trend data for occupational lost workday mishaps and occupational fatalities. **This information is based on reports submitted by activities to the Naval Safety Center using standard mishap reporting criteria. This data differs significantly from FECA reports since it is based only on valid occupational injuries/illnesses that occurred during the fiscal year (rather than all cases filed during the year).** In addition, for reporting and analysis purposes, we use the term lost workday case vice lost time case. A lost workday case is a case where more than 8 hours of work time is lost after the day of injury. We require mishap reports to be submitted to the Naval Safety Center for all cases involving five or more lost workdays. Our fatality data base also contains only valid occupational U.S. Navy civilian fatalities that actually occurred during the fiscal year. **The information that follows also comes from our Naval Safety Center mishap data base.**

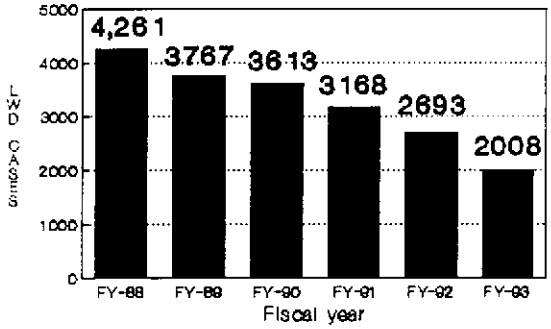
2. ANALYSIS OF OCCUPATIONAL MISHAP REPORTS FOR FY 1993.

a. The overall Navy civilian lost workday case rate has decreased significantly since FY 1988. Both the declines in the number of serious lost workday cases and the lost workday case frequency rate are consistent with our overall reductions in FECA cases and reflect our efforts, achievements and emphasis on mishap reduction through occupational safety and health (OSH) program improvement. Approximately 40 percent of our lost workday cases continue to occur at our naval shipyards, naval aviation depots, and public works centers. These activities employ over 31 percent of the Navy civilian workforce.

b. As shown in Figure 6, the Navy experienced only one occupational fatality to a U.S. Navy civilian in FY 1993. Additionally there were two civilian fatalities as a result of off-duty private motor vehicle accidents while the employees were on official travel; and two civilian fatalities due to a private plane crash while the employees were on official travel. The one occupational fatality reported involved a civilian mariner who drowned when he fell off a liberty boat during shore to ship transit. The two civilian motor vehicle accident fatalities occurred when the employees were crossing public highways after work hours while on travel. The other two fatalities occurred when a private airplane crashed. The civilians were in the plane while on official travel.

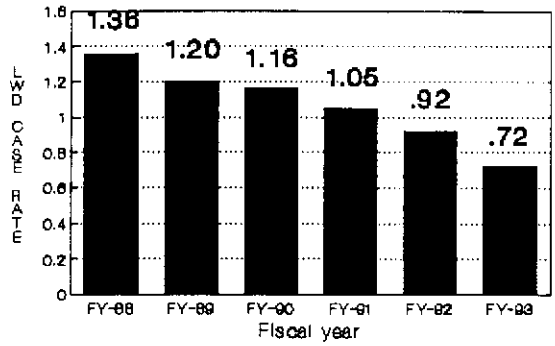
c. Figures 7 through 9 provide charts based on the analysis of data of our serious lost workday mishaps. There are no significant trends or changes from past years. The majority of lost work day mishaps continue to result in strains and sprains (58.7 percent), overexertion continues to be the most frequent source of injury (36.8 percent), and backs continue to be the most frequent body part injured (39.4 percent). As in past years, the most frequent type of work being performed when injury occurs is overhaul work or material handling, accounting

LOST WORKDAY CASES
5 OR MORE LOST WORK DAYS



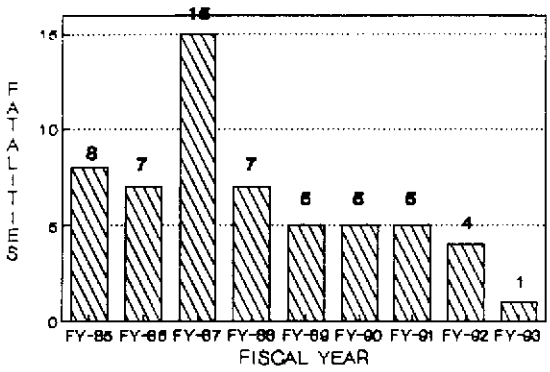
*FY-93 DATA NOT COMPLETE

LOST WORKDAY CASE RATES*
Per 200,000 Hours Worked



*CASES WITH FIVE OR MORE LOST WORK DAYS

FATALITIES



Source: Naval Safety Center Mishap Data

FATALITY RATES
(PER 200,000 HOURS WORKED)

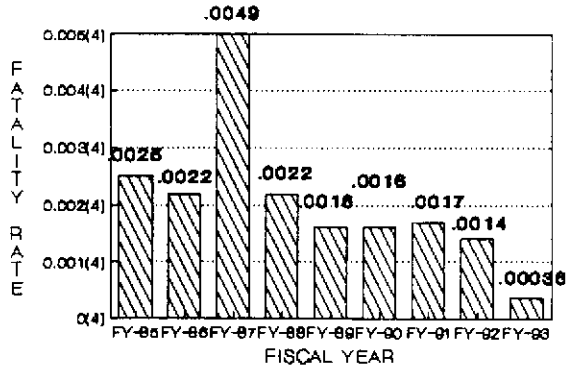
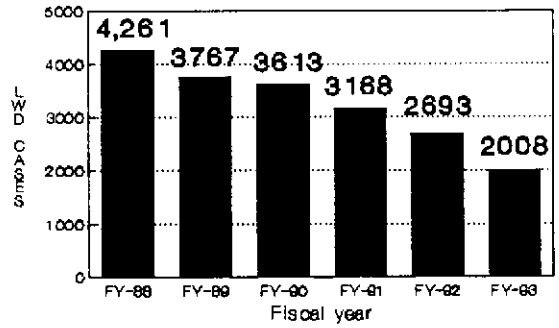


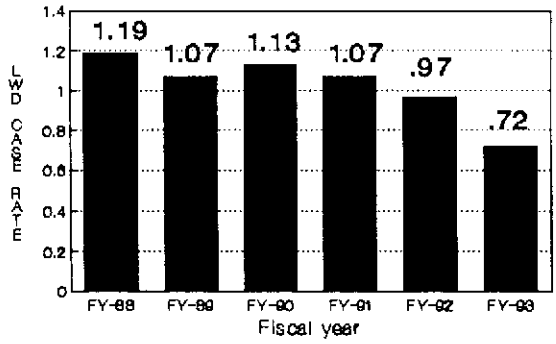
FIGURE 6

LOST WORKDAY CASES
5 OR MORE LOST WORK DAYS



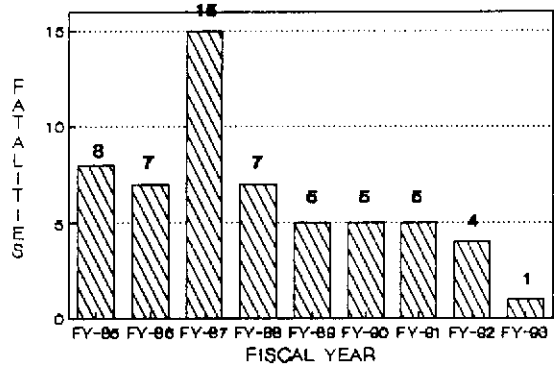
*FY-93 DATA NOT COMPLETE

LOST WORKDAY CASE RATES*
Per 200,000 Hours Worked



*CASES WITH FIVE OR MORE LOST WORK DAYS

FATALITIES



Source: Naval Safety Center Mishap Data

FATALITY RATES
(PER 200,000 HOURS WORKED)

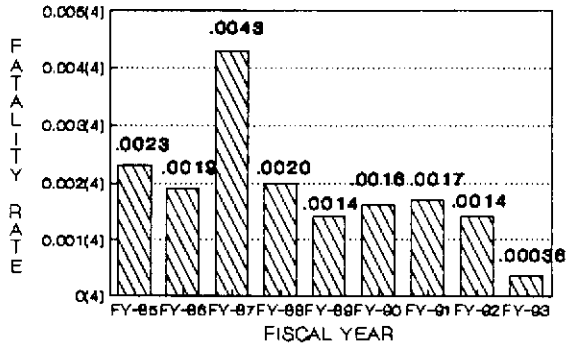


FIGURE 6

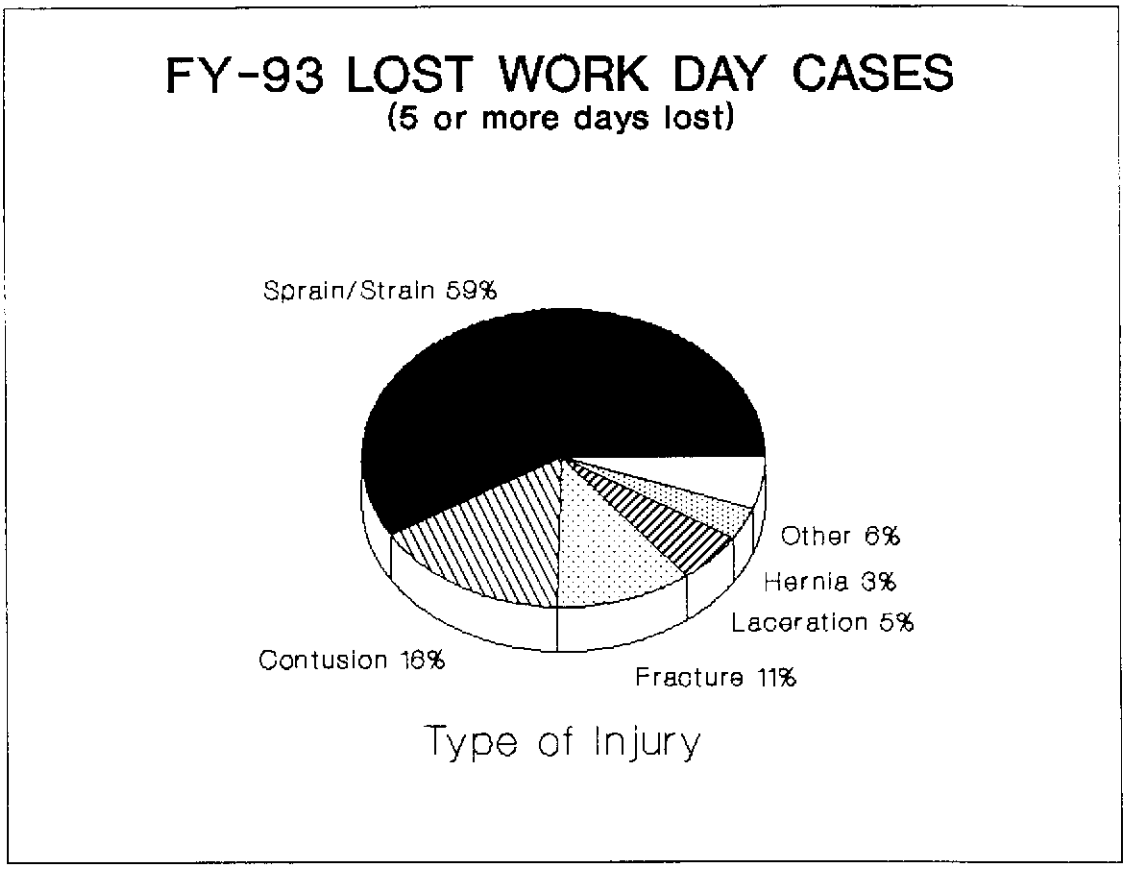
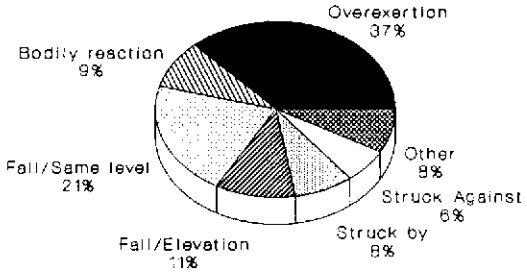


FIGURE 7

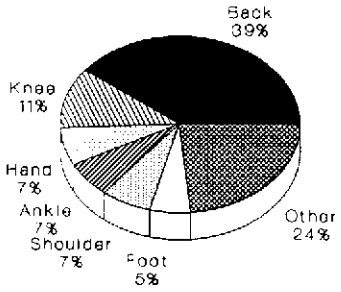
for approximately 30 percent of lost workday cases. 23 percent of the lost workday mishaps involved lifting, carrying or moving objects, and 19 percent of the cases occurred while walking or stepping.

d. We believe our overall achievements in mishap reduction, continuation of pay reduction, and FECA cost avoidance can be attributed to our long term emphasis on mishap reduction through OSH program improvement as discussed in the next section of this report. Key efforts include improving injury compensation case management, emphasizing back injury prevention and ergonomics, our strong emphasis on training improvement, and our oversight inspection/evaluation efforts.

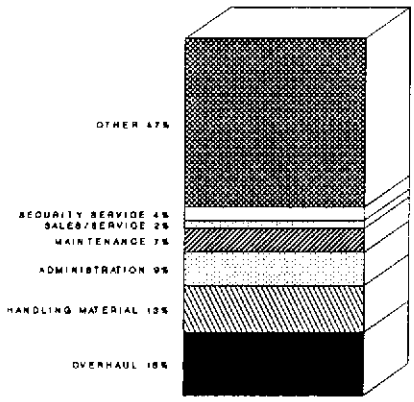
FY-93 LOST WORK DAY CASES
(5 OR MORE DAYS LOST)



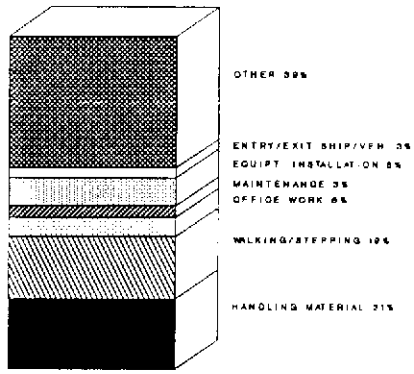
Source of Injury



Body Part Injured



TYPE OF WORK PERFORMED



SPECIFIC ACTIVITY AT TIME OF INJURY

FIGURE 8

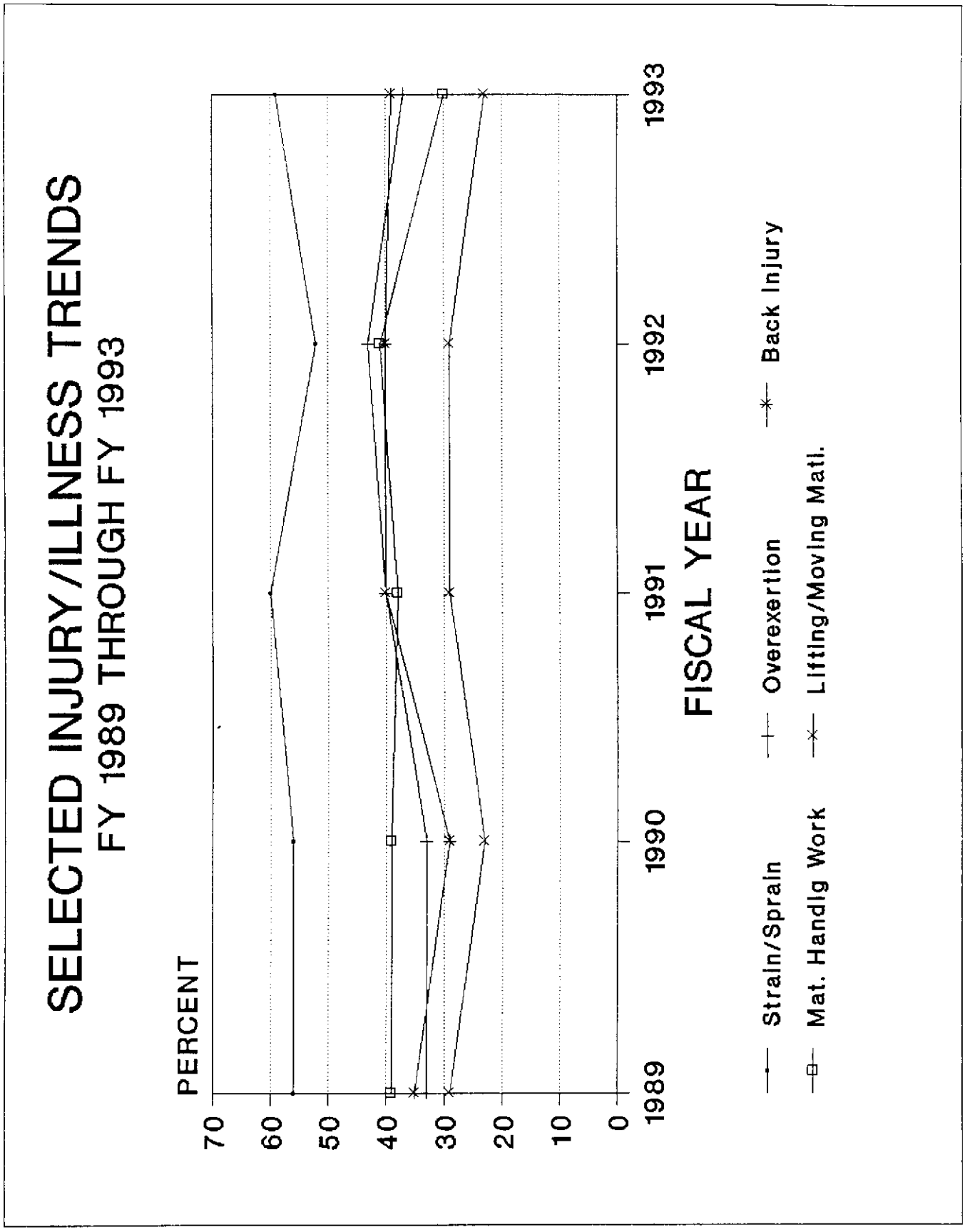

SELECTED INJURY/ILLNESS TRENDS
FY 1989 THROUGH FY 1993
PERCENT
70
60
50
40
30
20
10
0
1989
1990
1991
1992
1993
FISCAL YEAR
Strain/Sprain
Overexertion
Back Injury
Mat. Handlg Work
Lifting/Moving Matl.

FIGURE 9

B. **SIGNIFICANT OSH ACCOMPLISHMENTS AND INITIATIVES**. Our programs and initiatives have been directed to reducing our claims and mishap experience and improving the overall working environment for our employees. Our interest is in both reducing costs and improving employee well-being. We have used detailed analyses of our mishap, claims and inspection experience to target program initiatives. The following discussion outlines major programs and initiatives last year.

1. **WORKPLACE HAZARDS**.

a. MISHAP REDUCTION INITIATIVES. We continued to incorporate quality management concepts into our efforts to attain overall OSH program improvement. Our main initiative is to get all major commands to develop improvement plans tied to mishap reduction. Under our concept, called OSHPIP (Occupational Safety and Health Program Improvement Plans), each command identifies its program deficiencies and mishap trends, and develops strategies and actions to improve the programs and processes. Last year's report explained this program in more detail. In FY 1993, we completed our fourth year of this program and have attained significant improvements at our major industrial activities. Attachment 2 provides an example of a command OSHPIP. Through OSH quality management boards and process action teams, our industrial commands have made significant achievements in mishap rate reduction and hazard control (see Attachment 1). The following summarizes many of our initiatives aimed at reducing mishap/claims experience and associated costs:

- Our initiative to transfer automation of OWCP FECA injury data to the Naval Safety Center was completed. We are now working to generate reports by activity unit identification code and provide listings of cases with frequency rates for total cases and lost time cases, with nature of injury summaries.

- We continued to develop and provide quarterly performance reports tied to our two percent reduction goals with guidance for goal attainment. Attachment 1 is an example of the analysis data we provide commands each quarter in monitoring their performance in reducing cases. In FY 1989, we established baseline claims rates for commands for using the total claims rate, and we have monitored performance since that year.

- We significantly improved guidance and requirements for mishap investigation as discussed in section b. below. We believe our requirements for major commands to establish investigation teams for fatalities and serious mishaps, and conduct coordinated objective evaluations targeted to causal factors and preventive measures, has significantly improved the quality of investigations as well as identifying long term preventive actions and process improvements.

o We continued to provide sophisticated analytical training for mishap investigators. This training covers the investigation process and various analysis techniques including Management Oversight and Risk Tree Analysis (MORT). In addition, we continued distributing standard analytical software for data analysis, specifically for statistical process control (SPC), and training in SPC from a safety standpoint.

b. MISHAP INVESTIGATION AND REPORTING. We completed our first year under our totally revised occupational mishap investigation, recording and reporting program as described in Chapter 14 of Attachment 3. Our new program provides a new investigative report which emphasizes quality investigation and identification of causal factors. We have greatly enhanced our initiative of team investigation of our most serious mishaps and have been providing our safety professionals specialized training in investigation techniques. Three levels of specialized training are provided; a one day mishap recordkeeping and recording workshop given by the Naval Safety Center; a basic mishap investigation course for safety specialists and supervisors/managers; and an advanced course for team investigations of fatalities that emphasizes MORT techniques. Various handouts and publications on mishap investigation and reporting were developed and distributed. In addition, a protocol was developed and distributed concerning coordinating investigations of serious mishaps with OSHA personnel (see attachment 4). Finally, we continued our special project to develop a model for mishap cost- reduction. This project made significant strides during the year as summarized in Attachment 5.

c. INSTRUCTIONS. NAVY OCCUPATIONAL SAFETY AND HEALTH (NAVOSH) PROGRAM MANUAL, OPNAVINST 5100.23C. Our revised NAVOSH Manual was distributed during the year. A copy is provided in Attachment 3. Our report last year summarized the manual. This year we completed a major draft change to the manual. New NAVOSH standards were developed on bloodborne pathogens, reproductive hazards and indoor air quality. In addition, significant changes were made to our standards on training, hazardous materials and confined space entry. Specific actions relative to these program elements are discussed elsewhere in this report.

d. HAZARDOUS MATERIAL CONTROL AND MANAGEMENT (HMC&M)

o We continued implementation of our Hazardous Material Control and Management (HMC&M) Program during the year. The HMC&M program is designed to establish life cycle control of hazardous material in compliance with OSHA Hazard Communication and EPA environmental regulations. Our intent is to limit the number and quantities of hazardous material used, reduce levels of hazard, and thus significantly reduce hazardous waste generation and costs.

o The HMC&M section of the NAVOSH Manual, Chapter 7, was substantially revised in 1993 to add a sample Hazard Communication Plan, add detailed training outlines, more clearly define responsibilities, and to specify training courses. These revisions will be incorporatd into change 1 to the Manual. Our training courses in hazardous material control both ashore and afloat were also revised and enhanced by the Naval Safety School.

o Improvement and expansion efforts were made for the Hazardous Material Inventory Control System (HICS). This automated system is designed for management and control of hazardous material at the activiity level. HICs remains under review for Navywide application, however, an increasing number of activities and ships are using the system.

o A significant new initiative started in 1993 with Navywide expansion expected. As part of our HMC&M program, hazardous material reuse stores are being established on a regional basis. The stores will facilitate minimization of storage at activities, significant reduction in disposal, and significant reduction in material waste.

2. **SAFETY AWARENESS AND HAZARD RECOGNITION. THE NAVOSH TRAINING PROGRAM.** The following is a summary of training accomplishments and initiatives in FY 1993:

a. During the year both a zero based review and a baseline assessment of all NAVOSH training was conducted. The purpose of the zero based review was to define necessary core training in occupational safety and health, and the baseline assessment was conducted to identify training needs and funding requirements. Based on these actions, significant reorganization in training occurred at the Naval Safety School. As identified in Attachment 6, much training was consolidated at the Naval Safety School, and many new or significantly revised courses were provided. As already mentioned, new or revised courses were given in mishap investigation, and a new course was provided in conducting safety inspections. We significantly revised our training course for collateral duty safety personnel, and enhanced and expanded our ergonomics and hazardous material courses.

b. We continue to manage the training process through the NAVOSH Training Steering Committee which acts as the quality management board (QMB) for safety and occupational health training. It is established through the Naval Training Plan (NTP) as a means of providing broad command input into the training process. The Steering Committee is supported by four working groups (acting as process action teams (PATs)) representing the four communities in the Navy (air, ships, submarines and shore). Through these groups, requirements are identified, defined and incorporated into the NTP for development

and implementation. Numerous changes were made to the NTP action plan during the year based on reviews and recommendations made by the working groups.

c. A Strategic Plan was completed for the Naval Safety School as part of our efforts to incorporate TQM concepts into our NAVOSH program and improve the quality of our efforts. In addition, training was made a major strategy in our NAVOSH Strategic Plan as discussed later in this report.

d. In our efforts to improve the coordination and quality of training, the U.S. Navy assumed chairmanship of the Department of Defense Sub-Committee on Safety, Occupational Health and Fire Protection Training. The initial major efforts of this subcommittee are to develop a catalog of all standard OSH courses in DOD, identify professional development needs and requirements, and to define specific training needs from the OSHA Training Institute.

e. An automated quota control system, which documents the personnel data, through-put, and demand for every formal course offered by the Naval Safety School was installed. This system allows us to provide demographic data on the training audience to assess and target resources. The school handled nearly 2,000 quota requests manually in 1993, and is expected to handle 15,000 through the automated system in FY 1994.

f. We continued our emphasis on significantly improving training, especially afloat, with continued course review, and development of standard videotapes for distribution to both fleet and shore commands. Standard videotapes were distributed throughout the U.S. Navy on hazardous material control and management, and ergonomics. As part of the revision of the NAVOSH manual, all training regulations were reviewed and updated. Specific courses will be mandated by subject matter or program element when Change 1 to the manual is issued. For example, we will define training requirements for inspectors, mishap investigation, and safety specialists.

g. Agreements were finalized with the National Institute for Occupational Safety and Health (NIOSH) to provide the Navy specialized training courses. Through these agreements, three NIOSH courses were given in 1993, and negotiations continue with NIOSH to provide more courses through the Education Resource Centers.

h. We developed and provided a refresher course for our respiratory protection program managers. The purpose of the course is to maintain a high level of competency for the managers.

i. Finally, we developed and conducted a needs assessment to determine professional development needs for our

safety and occupational health professionals. This needs assessment will be compared to safety task analyses to determine future training.

3. PROGRAM EFFECTIVENESS. In addition to our programs and initiatives on inspections and the NAVOSH Strategic Plan as discussed later in this report, we continued our major effort to develop a mishap cost-reduction model for the NAVOSH program. The purpose of this project is to develop a model to measure the effectiveness of our programs and mishap reduction efforts. Attachment 5 provides excerpts from the latest draft report on this project. Among other objectives, we are developing a model for long term mishap/case cost projection as well as model for incident rate analysis and comparison.

4. SAFETY AND HEALTH PROBLEMS.

a. DOWNSIZING. The impact of downsizing and base closure on occupational safety and health programs and occupational mishap claims continues to be a major concern. Effects on the maintenance of professional OSH staffs are already being felt, and we may now be seeing increases in claims at bases facing base closure. Due to our concern about the maintenance of strong occupational safety and health programs during a period of downsizing, we issued clear guidance to our commands in 1992 on the importance of OSH programs. Last year, we issued additional guidance, Attachment 7, emphasizing methods to maintain quality OSH staff at bases facing closure. We will continue to monitor with concern staffing and mishap rates at these activities.

b. CONSULTATIVE ASSISTANCE TEAMS (CAT). We continued to use CAT support for occupational health problems as discussed in last year's report. Twenty CAT visits were completed in FY 1993. One fourth of the support was in the area of indoor air quality. In this regard, we have drafted a policy and standard on indoor air quality designed to resolve complaints, improve ventilation maintenance and improve new construction.

c. MEDICAL CASE MANAGEMENT. Efforts to improve the management of medical aspects of Federal employee injury compensation continued. Our goal to make occupational health nurses the backbone of the case management process made significant strides with the approval of our new standard position descriptions for occupational health nurses as discussed in section 6.d. below. Updating of the Occupational Medicine Field Operations Manual as part of this process will continue through FY 1994. As part of our annual NAVOSH Professional Development Conference, we made this subject the topic of a special session.

5. ENHANCEMENTS. We are using and stressing total quality management (TQM) concepts in our management of the NAVOSH program. This is our primary overall method to increase employee participation and involvement in the program. As part of this process, changes were made in the NAVOSH Manual addressing the use of TQM processes in lieu of committees, and changes were made in our committee instructions (see Chapter 4 of Attachment 3). In addition, as discussed later in this report, we have established a NAVOSH Quality Council, a NAVOSH Strategic Plan, and a variety of Quality Management Boards and Process Action Teams. TQM concepts have been especially valuable to implementation of ergonomics programs and increasing employee involvement in ergonomics. In addition, we continue to pursue behavior based worker safety projects which are based on employee leadership and involvement. Finally, employee (customer) surveys were developed and distributed as part of several program improvement initiatives including training, facility safety, indoor air quality, and reproductive hazards.

6. RESOURCES.

a. WORKPLACE HAZARD ABATEMENT. THE NAVOSH DEFICIENCY ABATEMENT PROGRAM. An integral part of our mishap prevention program is the correction of workplace hazards identified during inspections, investigations, evaluations, oversight inspections, and as a result of employee hazard reports. Our program to correct hazards and improve the workplace is explained in the NAVOSH Program Manual (OPNAVINST 5100.23C) and the NAVOSH Deficiency Abatement Program directive (NAVFACINST 5100.14A). The Naval Facilities Engineering Command (NAVFAC) has lead responsibility for administering our centrally funded and managed program to abate major deficiencies.

o Expenditures in FY 1993 under the centrally funded NAVOSH Deficiency Abatement Program were $18.2 million for approximately 193 projects, including individual facilities projects, and several program improvement studies or projects. From 1979 to 1993, over $265 million has been expended under our centrally managed program to correct serious workplace deficiencies, and over 1376 major facility projects have been completed. Projects funded include asbestos removal, industrial ventilation improvements, noise abatement, electrical safety hazard removal, and hazardous material control and storage.

o Outyear target projections for the NAVOSH Deficiency Abatement Program are as follows:

FY 94	$18.4 million
FY 95	$15.9 million
FY 96	$9.4 million
FY 97	$11.8 million
FY 98	$14.4 million

Program focus in FY 1994 will be to continue to improve service to shore activities in executing local deficiency abatement projects. As part of this effort, we are reorganizing the overall program and creating a new full-time central management position. In addition, during the year, we will conduct a program workshop for our command managers, and continue to offer our course to train local asbestos program coordinators in asbestos management practices.

b. RESEARCH AND DEVELOPMENT. Our main OSH project in this area is the mishap cost reduction model mentioned previously in this report, and our behavior modification projects. However, various activities have conducted a variety of research studies on ergonomics, facility design, and hazardous material.

c. DATA SYSTEMS. A major strategy in the NAVOSH Strategic Plan discussed later in this report is communications and information systems. We are commencing a multi-year study to determine our needs, identify systems, and provide a comprehensive and coordinated NAVOSH information system. In addition, we continue to sponsor the Navy Occupational Health Management Information System (NOHIMS) at Naval Shipyards. This system will be maintained until a DOD-wide system is developed under the DOD Corporate Information Management (CIM) program. A CIM committee for occupational health was formed in 1992 and tri-service meetings have been on-going. Finally, we have continue our NAVOSHNET, a computer communications network for our safety and occupational health managers and professionals. Approximately 250 employees actively use the network. The network provides a mechanism for our OSH personnel to share ideas, information, and actions. It is also used for various announcements, and as a mechanism to ask and receive timely responses to technical questions on safety and occupational health.

d. STAFFING. Our only significant staffing related issue in 1993 concerns the ongoing staffing, productivity, and effectiveness study for occupational health as reported in past years. Revised staffing standards for industrial hygienists, technicians, laboratories, physicians and occupational health nurses were completed in 1992. The study also provided program recommendations to improve occupational health and industrial hygiene effectiveness. The study, proposed staffing standard and recommendations were reviewed in FY 1993, and are presently under evaluation for incorporation into the NAVOSH Manual. A second staffing related initiative was completed last year; our standard position descriptions for occupational health nurses. This effort was started to increase the roles of our occupational health nurses and include medical case management as part of their responsibilities. Standard position descriptions establishing a journeyman level of GS-12 were approved by Office of Civilian Personnel Management this year.

e. TRAINING. As discussed in section B. 2. above, we conducted a zero based review and baseline assessment of NAVOSH training. As a result of this effort, $600,000 in additional funds was programmed for NAVOSH training in FY 1994. We have requested additional funding as part of the baseline assessment. A total of $1.7 million was provided under the NAVOSH program for the Naval Safety School in FY 1994.

PROGRAM PLANNING

A. **GOALS AND OBJECTIVES.**

1. CURRENT GOALS AND OBJECTIVES. THE NAVOSH STRATEGIC PLAN. During 1993 we undertook a major initiative to develop a strategic plan for the NAVOSH program. Attachment 8 provides a copy of the plan we developed. As part of the process, the NAVOSH Quality Council was established with membership representing safety and occupational health professionals throughout the U.S. Navy. The plan contains our long term mission, vision and guiding principles for NAVOSH. In addition, four major strategies are provided on communication and information systems, process review and measurement, planning and engineering, and training and education. For each strategy, specific goals have been developed and a timetable for goal accomplishment established. In addition, quality management boards and process action teams have been established to facilitate development and implementation of the strategies and goals. This plan provides our program goals and objectives for the next five years.

2. LAST YEARS GOALS AND OBJECTIVES. The following lists our goals and objectives for 1993. The bracketed and shaded section at the end of each item provides the status of action on each goal or objective.

a. Draft Change 1 to the NAVOSH Manual. [Draft change completed and distributed for review.]

b. Continue and refine automation projects for injury claims and cases, with an attempt to incorporate cost data. [Cases data automation completed. Cost reduction model development continuing.]

c. Improve the fatality investigation team program by continuing to provide specialized training. Complete development on basic training on the new investigation process and forms. [Action complete. Three courses developed and delivery is ongoing.]

d. Continue the management evaluation program of major command headquarters. [On-going action.]

e. Establish a PAT team to review and evaluate the NAVOSH oversight inspection process from the standpoint of quality improvement. Continue to conduct at least 100 oversight inspections annually. [Action complete.]

f. Continue OSHPIP emphasis and performance monitoring including development of a specific plan for occupational health. Continue training in SPC and emphasis on data analysis. [Action complete.]

g. Develop technical reports, to include respiratory protection needs in the Navy. [Documents issued on ventilation, asbestos, industrial hygiene, carcinogens, respiratory protection.]

h. Continue the staffing study for occupational health to incorporate total quality management principles. [Study completed and submitted for review.]

i. Continue occupational health automation efforts, both through Navy efforts at shipyards and Navy committees (medical matrix, industrial hygiene, audiology, and laboratory), as well as participate in the DOD CIM effort. [Now under the control and review of DOD CIM. Shipyard programs in place and undergoing continuing improvement.]

j. Improve medical case management through approved position descriptions for occupational health nurses, and guidance in the Occupational Medicine Field Operations Manual. [Standard position descriptions completed and approved. Manual not completed and now scheduled for 1994.]

k. Continue to expand the NAVOSH computer network focusing on adding all key managers, technical experts and adding afloat professionals. [Action ongoing.]

l. Improve the asbestos program by establishing an asbestos disease registry and completing the occupational medicine trend report on asbestos. [Action on-going.]

m. Continue to provide occupational health support to the environmental hazardous waste program. [Action ongoing.]

n. Continue to improve the four consolidated industrial hygiene labs by reducing turn around time on specific chemicals and increasing laboratory automation. [Action on-going. Automation approved for two labs.]

o. Improve occupational health training through incorporation and review of all such training by the NAVOSH Training Group and increased coordination with the Naval Safety School. Establish a NIOSH resource center through the school. [Action ongoing. Agreement completed with NIOSH.]

p. Complete Navy lead action in updating the DOD Medical Surveillance Manual. [Draft completed.]

q. Begin development on a specific long term strategic plan for NAVOSH following total quality management concepts and utilizing broad based input from technical experts. Structure the NAVOSH Long Range Planning Group as a QMB for strategic plan development. [Action completed. Plan implementation on-going.]

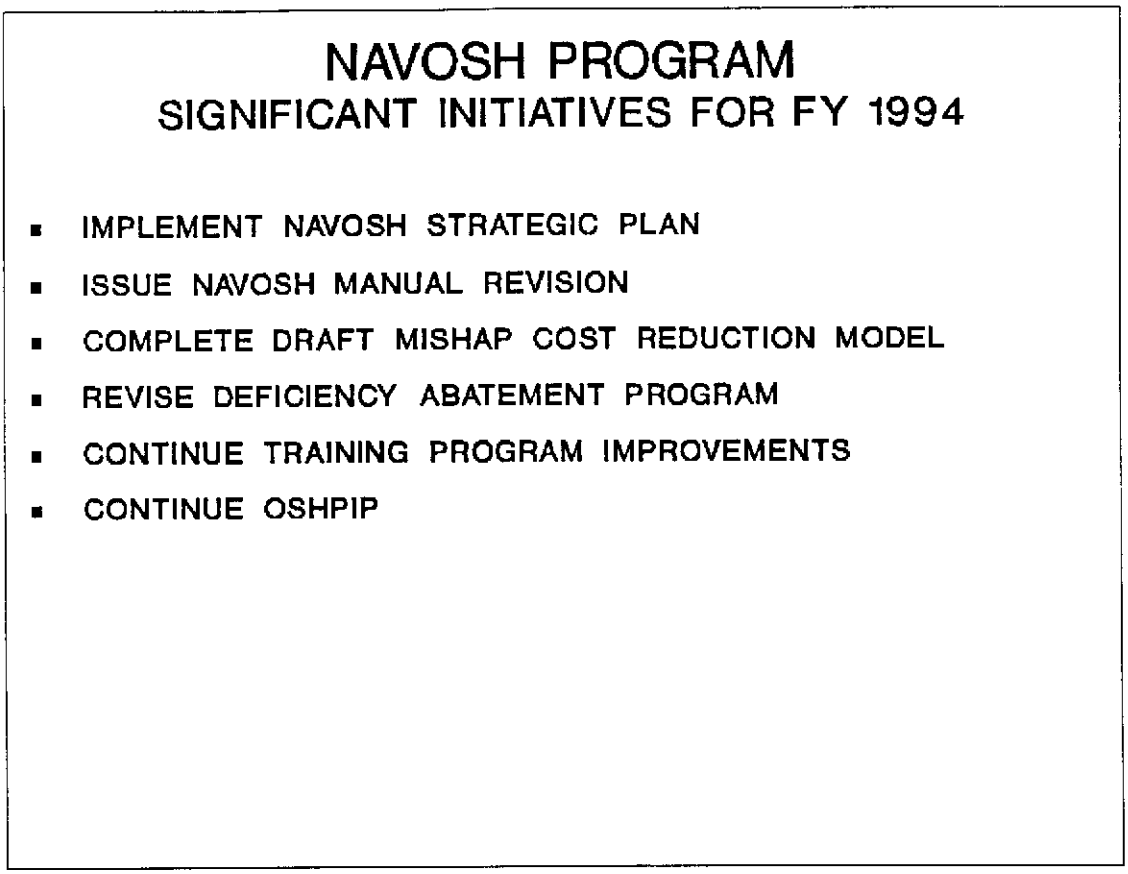


FIGURE 10

r. Continue development of special project to apply the Navy total quality leadership program to target field activity NAVOSH programs. [Deferred due to NAVOSH Strategic Plan.]

s. Continue study of safe behavior process using behavioral psychology principles at industrial activities. [Action ongoing.]

B. **CORRECTIVE ACTION PRIORITIES**. Our primary method for identifying and accomplishing mishap prevention program priorities is through OSHPIP as discussed earlier in this report. Figure 11 on the next page, summarizes the OSHPIP process. Attachment 2 provides an example of an OSHPIP. We use risk assessment codes (RAC) to determine priorities for workplace hazard correction. RAC is described in Chapter 12 of the NAVOSH Manual, Attachment 3.

C. **SIGNIFICANT INITIATIVES**. Figure 10 above summarizes what we consider to be our significant initiatives for 1994. These initiatives are discussed throughout this report.

OSHPIP: THE CNO APPROACH
OPNAVINST 5100.23C, CHAPTER 5

OCCUPATIONAL SAFETY AND HEALTH PROGRAM IMPROVEMENT PLAN (OSHPIP) IS THE CNO APPROACH TO MISHAP REDUCTION. USING TOTAL QUALITY MANAGEMENT/LEADERSHIP CONCEPTS, OSHPIP:

- FOCUSES ON ACTIONS BY HEADQUARTERS COMMANDS TO IMPROVE PROGRAMS.
- ACTIONS MUST BE TIED TO OVERALL NAVY GOAL OF REDUCING MISHAPS
- PLANS MUST OUTLINE ACTIONS THAT WILL IMPROVE PROCESSES
- STATISTICAL PROCESS CONTROL (SPC) EMPHASIZED
- CNO MONITORS IMPLEMENTATION OF PLANS
- STATISTICS PROVIDED QUARTERLY

OSHPIP PROCESS

- OBJECTIVE IS TO IMPROVE THE PROGRAM/PROCESS.
- ACTIVITY EVALUATES/ANALYZES ITS OWN ENVIRONMENT (MISHAPS, HAZARDS, RISKS, PROCESSES)
  - IDENTIFIES/DETERMINES AREAS OF IMPROVEMENT (OBJECTIVES)
  - DEVELOPS STRATEGIES FOR IMPROVEMENT
  - DEFINES SPECIFIC ACTIONS TO ACHIEVE IMPROVEMENT AND METHODS OF PERFORMANCE MEASUREMENT
- TARGET DATES FOR COMPLETION (LONG AND SHORT TERM)
- ONGOING REVIEW (CONTINUOUS IMPROVEMENT)

OSHPIP REQUIRES:

- GOOD DATA - MISHAPS/INSPECTIONS/ETC.
- GOOD ANALYSIS OF DATA
- ACHIEVABLE STRATEGIES
- MEANINGFUL ACTIONS TIED TO PROGRAM IMPROVEMENT
- REALISTIC MEASUREMENT CRITERIA
- COMMAND SUPPORT/WORKER/EXPERT INVOLVEMENT

FIGURE 11

PROGRAM EVALUATION

A. **THE NAVY INSPECTION PROGRAM.** Our three tiered inspection process has been designed not only to ensure compliance with Federal and Navy standards and policies, but also to assess the overall effectiveness of programs and implementation. Activities are required to maintain local programs requiring all workplaces to be inspected annually. In addition, risk assessments must be made of all workplaces and more frequent inspections scheduled as warranted by the level of risk. All hazards identified during inspections must be properly documented and reported, and entered into abatement programs for correction. Activities must also conduct internal reviews of program effectiveness. At the command level, commands are required to conduct periodic program management evaluations of their subordinate activities. Our primary monitoring device to measure program effectiveness, and ensure compliance is through the NAVOSH Oversight Inspection Program. This program continues to be the core of our compliance efforts and is managed under the auspices of our Inspector General. Since its inception in 1979, over 1300 oversight inspections have been conducted. Figure 12 below provides summary information charts on this program.

1. During FY 1993, 102 oversight inspections were conducted at our shore activities. These inspections were "unannounced" (less than 30 days notice) and conducted by teams of professional safety and industrial hygiene personnel. We have issued detailed evaluation guides for inspections which outline each program requirement. Attachment 9 provides the latest revision of our guide. On each oversight inspection, 29 administrative programs

NAVINSGEN OSH OVERSIGHT INSPECTIONS

	Satisfactory	Marginal	Unsatisfactory
FY83	56 (64.3%)	13	18
FY84	70 (76.9%)	10	11
FY85	80 (80.8%)	9	10
FY86	82 (81.2%)	15	4
FY87	87 (82.9%)	13	5
FY88	88 (87.2%)	7	6
FY89	94 (94.0%)	1	5
FY90	93 (96.9%)		3
FY91	93 (91.2%)		9
FY92	98 (95.1%)		5
FY93	99 (97.0%)		3

* Marginal ratings stopped after FY89

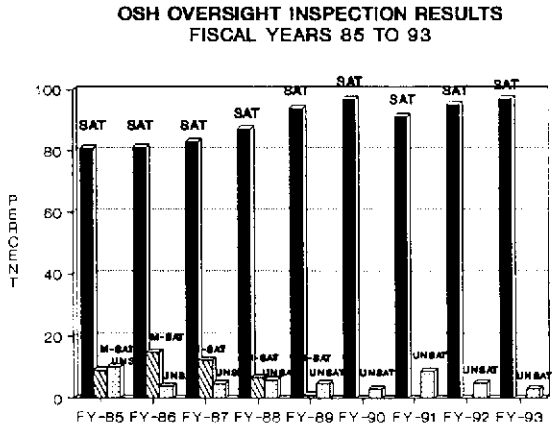


FIGURE 12

are reviewed for compliance, and oversight walkthrough reviews of worksites are made to evaluate program implementation and compliance with standards at the work unit level.

2. Since FY 1989, we have used a quantitative scoring system to rate the compliance status of the NAVOSH program at each activity inspected. Administrative and workplace compliance are weighed equally in scoring, and an overall score of 75 or higher is required for a satisfactory rating. We have now completed five years of inspections under the quantified scoring system and feel we have good baseline data to measure future inspection trends. As shown in Figure 13 below, the mean score for FY 1993 was 89 percent; our highest to date. Our satisfactory rating level for FY 1993 was 97 percent; also our highest to date.

3. We feel our oversight inspection program is without peer and serves as a driving force in our efforts to provide safe and healthful workplaces for all Navy personnel. We continually try to improve and enhance this program. Formal reports are issued by the Inspector General for each inspection, and submitted to the Secretary of the Navy. Attention and concern is high at all levels of command for this program.

4. As you can see in Figures 12 and 13, compliance and performance has remained relatively consistent since FY 1989. A summary of the findings of these inspections reveals workplace deficiencies in rank order were electrical safety, hazardous

NAVINSGEN OVERSIGHT INSPECTIONS FISCAL YEAR 1989 TO 1993

	1989	1990	1991	1992	1993
INSPECTIONS	85	85	87	90	88
REINSPECTIONS	7	1	5	8	7
FOLLOWUPS	8	10	10	5	7
TOTAL INSPECTIONS	100	96	102	103	102
MEAN SCORE	86.8	88.0	87.0	88.0	89.0

FIGURE 13

material control and management, machine guarding, respiratory protection, and fire protection. The most frequently observed program deficiencies were training, hazardous material control and management, hazard abatement, command support and staffing. Figure 14 below charts information on deficiencies observed during inspections.

5. Our inspection special emphasis areas for FY 1994 are command support for OSH, hazardous material control and management, occupational health program support, and federal employees injury compensation program management.

6. We completed our third year of our process of program management review at the major command headquarters. The purpose of these reviews is to evaluate the level of OSH management support provided to subordinate activities and recommend actions for program improvement. Using total quality management and leadership concepts, our intent is to not only assist activities in regulatory compliance but also to increase the quality of programs and mishap reduction efforts. Five major commands received reviews during the year and all were evaluated satisfactory.

MOST FREQUENT PROGRAM DEFICIENCIES
FY 1993

DEFICIENCY	FY89	FY90	FY91	FY92	FY93
OSH TRAINING	32%	50%	60%	65%	59%
HMC&M	25%	44%	43%	55%	48%
ABATEMENT	46%	31%	47%	46%	46%
• COMMAND SUPPORT					41%
STAFFING	29%	36%	35%	50%	32%
IH SURVEYS	35%	33%	41%	33%	31%

NOTE: PERCENTAGES EQUATE TO THE NUMBER OF INSPECTIONS WHERE DEFICENCIES WERE NOTED

• INITIATED IN FY93

MAJOR WORKPLACE DEFICIENCIES
FY 1993

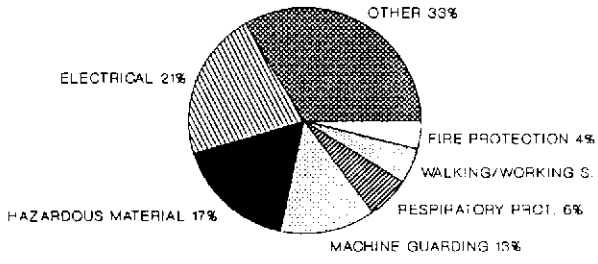


FIGURE 14

GOVERNMENT-WIDE INITIATIVES

SAFETY BELT USE PROGRAM

The Navy's policy on safety belt use is contained in OPNAVINST 5100.12F. The Navy requirements include:

1. All persons operating or riding in a government motor vehicle are required to wear a safety belt at all times.

2. All Navy military personnel are also required to wear safety belts in their personal vehicles or while riding in any private motor vehicle both on and off Navy property.

3. Navy federal civilian employees are required to wear safety belts in private vehicles off a Navy property while in a duty status. Everyone is required to wear safety belts while on a Navy property (civilian guests, contractors, dependents, etc.). Violation of the Navy's safety belt use regulation is punishable under the Uniform Code of Military Justice for Military personnel, and is the basis for administrative disciplinary action for civilian employees.

4. Occupant protection programs and activities conducted in FY 1993 include the following:

a. The Navy announced participation in the National Safety Belt Honor Roll in May 1993. The program was developed by the National Highway Traffic Safety Administration and is conducted in cooperation with the State Governor's Highway Safety Representative. The program is designed to encourage safety belt use and reward those organizations achieving 70 percent plus, 80 percent plus and 90 percent plus rates. The survey method used to achieve the award consists of the number and location of sites, number of drivers observed at each site, time of day of observations, and dates conducted. Survey teams were posted where they could clearly observe the driver of the vehicle. The surveys include all vehicles (e.g. not just government vehicles). Commands make application directly to their state's Government Highway Safety Representative for the award. So far, forty-eight Navy activities have received awards for their participation in the program.

b. Actual observations of safety belt use are periodically conducted at many Navy activities. However, there is no requirement for the results of these surveys to be centrally reported. During visits to activities by Naval Safety Center staff, seat belt surveys are conducted. These surveys are made during weekdays and include all vehicles at a particular location at the activity. Observed usage rates range from 89 to 91 percent.

c. The Navy's "I Survived" safety belt club, established in 1986, recognizes individuals who have been involved in a motor vehicle mishap and were wearing safety belts and child safety seats. Nineteen "I Survived" stories were received from Navy personnel in FY 1993 and 12 stories were published in our Safetyline magazine. The published articles reinforce the importance of correctly using safety belts and child safety seats.

d. We have issued many messages and several articles in our internal publications on safety belt use during the past year.

e. Traffic safety posters, pamphlets and brochures on occupant protection were distributed to Navy commands to reinforce traffic safety programs.

f. Traffic safety continued to be included as a "Special Interest Item" to be inspected during all Navy Inspector General inspections. Compliance with Navy safety belt regulations is included in the inspection program.

g. During FY 1993, Naval Safety Center personnel conducted 32 motor vehicle related instructor courses, certifying 384 instructors worldwide. The use of occupant protection is an integral part of these courses.

5. A summary of injuries and seat belt usage data for on-duty motor vehicle accidents during FY 1993 is presented in Figure 15 on the next page.

U.S. NAVY SAFETY BELT USE
FY-93 ON-THE-JOB MOTOR VEHICLE ACCIDENT'S GMV/PMV

Navy Civil Service

Belts Worn		Not Worn		Unknown	
Cost	$322,733 *	Cost	$ 26,473 *	Cost	$ 14,700 *
Deaths	0	Deaths	0	Deaths	0
Injuries	16 **	Injuries	4 **	Injuries	1 **
LWD	216	LWD	55	LWD	42
No Injury	24	No Injury	4	No Injury	1

Navy Military

Belts Worn		Not Worn		Unknown	
Cost	$707,894 *	Cost	$ 32,398 *	Cost	$ 61,147 *
Deaths	1	Deaths	0	Deaths	0
Injuries	7 **	Injuries	2 **	Injuries	3 **
LWD	162	LWD*	36	LWD	76
No Injury	155	No Injury	8	No Injury	3

* Cost includes injury/death cost plus any reportable property damage. Additionally:

(1) Event cost is counted only once in the "belts worn" category, if two or more people were in the vehicle and one wore a belt and the other(s) did not.

(2) Event cost is counted only once in the "not worn" category if two or more people were in the vehicle and one did not wear a belt and other belt use was unknown.

(3) Event cost is counted only once in the "unknown" category if two or more people were in the vehicle and belt use is unknown.

(4) Event cost is counted only once in Navy Military "not worn" category when an on-duty Navy person and an on duty civil service person are involved in the same mishap.

** The information above includes only those mishaps with property damage in excess of $2000 and/or injuries with five or more lost work days as reported to the Naval Safety Center.

FIGURE 15

COMMENTS, REQUESTS AND RECOMMENDATIONS

COMMENTS ON FEDERAL AGENCY PROGRAM IMPROVEMENTS

We have the same basic recommendations for Federal Agency Programs as in past years and continue to consider these improvements important:

1. We believe the targeted inspection program requires considerable improvement in order to provide a consistent and well coordinated program throughout the United States, and focus on assisting activities in program improvement rather than simply providing routine compliance inspections of worksites. The development of a reasonable level of consistency in inspection procedures between OSHA regions is essential, as is improved coordination on compliance citations. This program continues to decline from the standpoint of consistency and coordination. Published inspection lists are never completed and many inspections are scheduled near the end of the fiscal year, reports are sometimes long delayed, and citations are sometimes made of questionable validity or inconsistent with private industry application. We receive more inspections at activities not targeted than those on the targeting list.

2. Increased support and resources at the OSHA Training Institute remains necessary in order to provide adequate assistance to Federal Agencies and meet OSHA Federal Agency training assistance requirements. The creation of a distinct section at the OSHA Training Institute for Federal Agency support is again (for the third year) recommended. Our support from the training institute continues to decline. OSHA needs to meet its responsibilities to support Federal agencies in training.

3. As recommended in past years, if OSHA is to continue to use Office of Workers' Compensation claims data to monitor Federal Agency mishap experience, then the data base needs to be significantly revamped. A review should be made in coordination with agencies to update the data base and coding to reflect current organizations and data requirements. The OWCP data base coding and organization remains out-of-date.

4. The cancellation of laboratory analysis by the OSHA Laboratory in Salt Lake City, Utah, was disappointing to us, and has had a negative impact on our programs. The OSHA lab was our sole source for the analysis of some specialized chemicals. We recommend that OSHA reconsider this decision.

DEPARTMENT OF THE NAVY

OFFICE OF THE CHIEF OF NAVAL OPERATIONS

WASHINGTON, DC 20350-2000

5100
Ser N454C/3U594587
16 Nov 93

From: Chief of Naval Operations

Subj: PERFORMANCE IN MEETING OCCUPATIONAL INJURY AND ILLNESS REDUCTION GOALS FOR FISCAL YEAR 1993

Ref: (a) CNO ltr 5100 Ser 454C/3U594343 of 27 Aug 93

Encl: (1) Major Command and Industrial Activity Performance in Meeting Occupational Injury and Illness Reduction Goals in Fiscal Year 1993

1. This letter provides information on performance in meeting Navy goals to reduce the number and frequency of occupational injuries and illnesses. Enclosure (1) updates the statistical data and charts provided in reference (a) for major Echelon 2 commands and large industrial activities for fiscal year (FY) 1993.

2. We completed the FY with a frequency rate for all civilian occupational injury and illness cases of 6.13 which is 9.24 percent below the FY88 baseline frequency rate. This rate did not meet our goal for FY93 of a ten percent reduction from the baseline rate. Our case rate level rose significantly in the second half of the FY reversing long term trends. Our overall performance was the worst since FY90. The systems commands all met or exceeded our goals, however, several commands experienced significant increases in case rates.

3. FY93 was the last year of our five year special emphasis program on civilian occupational injury and illness reduction. After several years of continuous reduction in cases and frequency rates, we saw a change in FY93 with slippage in performance. We hope this slippage will not be a trend and in FY94 we will continue to improve.

4. We face many challenges in our environment of downsizing which may impact on the safety and health of our personnel. We must continue efforts and emphasis on control of costs through mishap prevention programs, as well as improving our working processes and environments. Your continuing support and attention is necessary in this effort. We will continue to focus

Subj: PERFORMANCE IN MEETING OCCUPATIONAL INJURY AND ILLNESS REDUCTION GOALS FOR FISCAL YEAR 1993

on occupational safety and health program improvement through total quality leadership principles and processes, and monitor actions and performance in mishap reduction.

William G. Mattheis

WILLIAM G. MATTHEIS
By direction

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MAJOR COMMAND AND INDUSTRIAL ACTIVITY PERFORMANCE

IN MEETING OCCUPATIONAL INJURY AND ILLNESS REDUCTION GOALS

IN FISCAL YEAR 1993

This enclosure provides injury and illness case numbers and rates for major commands, shipyards, aviation depots, and public works centers for fiscal year (FY) 1993.

The Navy goal is to reduce the total case rate (TCR) by two percent (2%) per year for five years (FY89 through FY93). First aid cases are not included in the TCR calculation or case totals.

The case rate data is summarized from the Office of Workers' Compensation Programs (OWCP) Federal Employees Compensation Act (FECA) Table #2 Reports. Case rates are calculated from full time U.S. civilian (permanent and temporary) workforce populations using the following equation:

$$\text{Case rate} = \frac{\text{Cases} \times 200{,}000 \text{ hours worked*}}{\text{End Strength} \times 520 \text{ hours} \times (n) \text{ Quarter}}$$

* 200,000 work hours = 100 employees x 50 weeks x 40 hours/week

NOTE: Case rate and trend chart data is based on actual case experience during each quarter and average employment during the quarter. The data in the Total Case Rate tables and charts is based on accummulative case experience for the fiscal year and average employment levels for the fiscal year to date.

TAB A. Major Command TCRs for FY93 with comparison charts.

TAB B. Major Industrial Activity TCRs for FY93 with comparison charts.

TAB C. Navy Case Rate and Trend Charts for FY93.

MAJOR COMMAND TOTAL CASE RATES (TCR) FOR
FISCAL YEAR 1993

MAJOR COMMAND	FY-88 TCR BASELINE	FY-93* TOTAL CASES w/o FIRST AID	AVERAGE FY-93 END STRENGTH**	FY-93 TCR	%DECREASE /INCREASE FROM TCR BASELINE***
SPAWAR ****	2.63	95	6957	1.31	-50.08
NCTC****	2.90	84	4548	1.78	-38.76
NAVFAC	6.64	1101	20298	5.22	-21.45
NAVSUP	4.59	672	17342	3.73	-18.82
INTCOM	3.24	35	1257	2.68	-17.37
NAVSEA	10.26	8979	101677	8.49	-17.24
CINCLANT	6.70	570	9799	5.59	-16.52
ONR	2.27	86	4301	1.92	-15.30
CNET	3.84	271	7983	3.26	-15.00
NAVAIR	5.73	2441	45610	5.15	-10.19
GOAL					-10.00
NAVRES	5.50	133	2341	5.46	-0.68
SECGRU	3.34	25	704	3.41	2.23
CINCPAC	5.40	656	10713	5.89	9.03
BUMED	1.88	441	11777	3.60	17.67
SPO	1.77	42	1492	2.71	52.92
MSC	5.73	378	5005	7.26	26.74
OCEAN	2.25	43	1419	2.91	29.50
BUPERS	1.88	70	2459	2.74	45.60
EUR	0.94	10	644	1.49	58.84
OTHER	NA	848	NA	NA	NA
USN	6.75	16980	266512	6.13	-9.24

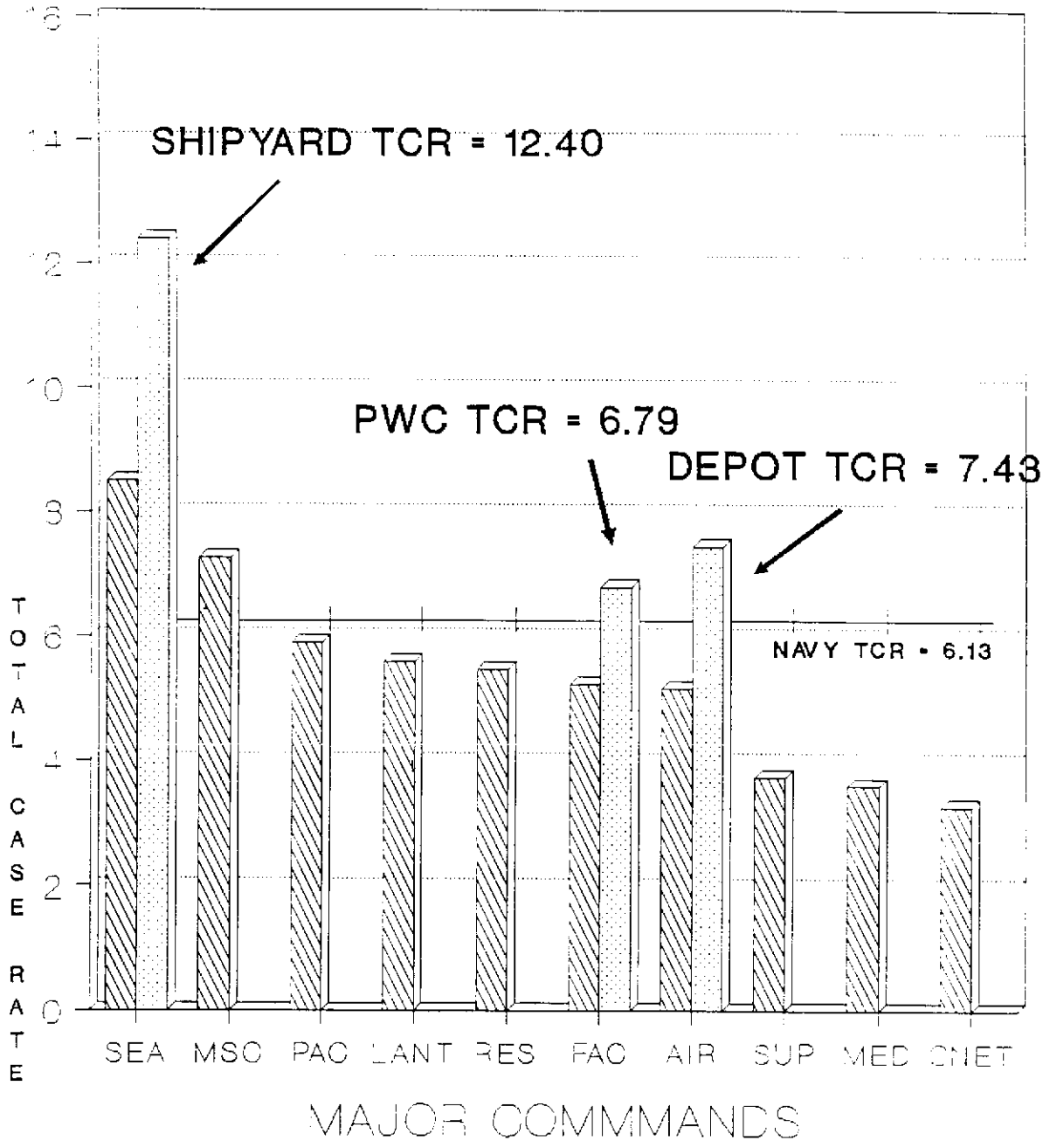
* SOURCE: OWCP/FECA TABLE #2 REPORTS

** SOURCE: NCPDS 1532 REPORTS

*** FY93 GOAL = -10.00%. COMMANDS ARE RANKED FROM BEST PERFORMANCE (DECREASE FROM BASELINE) TO POOREST PERFORMANCE (INCREASE FROM BASELINE) IN MEETING GOALS.

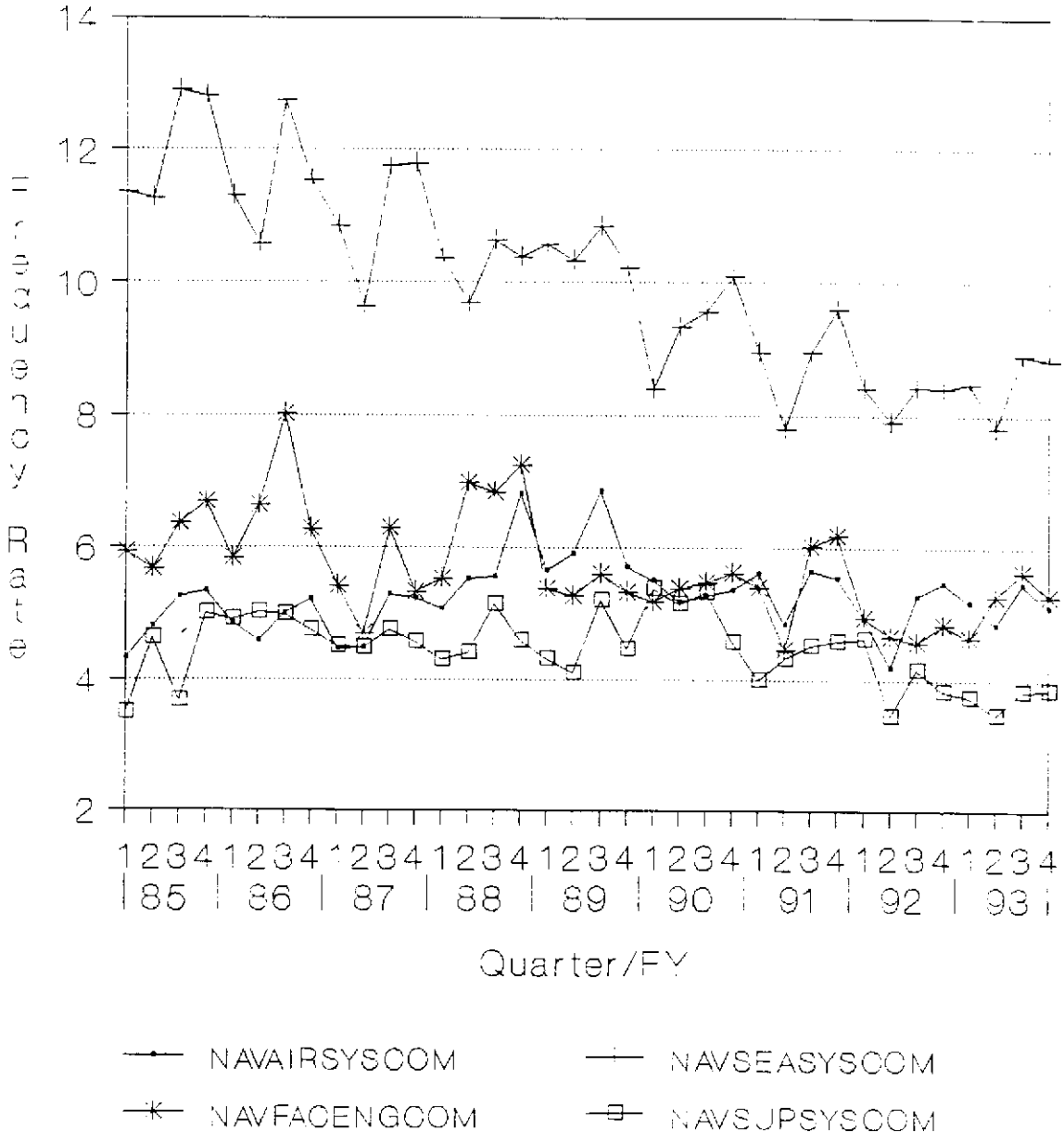
**** DATA REFLECTS AND IS AFFECTED BY ORGANIZATIONAL CHANGES.

"TOP TEN" MAJOR COMMANDS
TOTAL CASE RATES FOR FY-93



Source: OWCP FECA Table #2 Reports

MAJOR COMMAND COMPARISON CHART
INJURY CASE RATES



Source: FECA Table #2 Data

MAJOR INDUSTRIAL ACTIVITY TOTAL CASE RATES (TCR) FOR FISCAL YEAR 1993

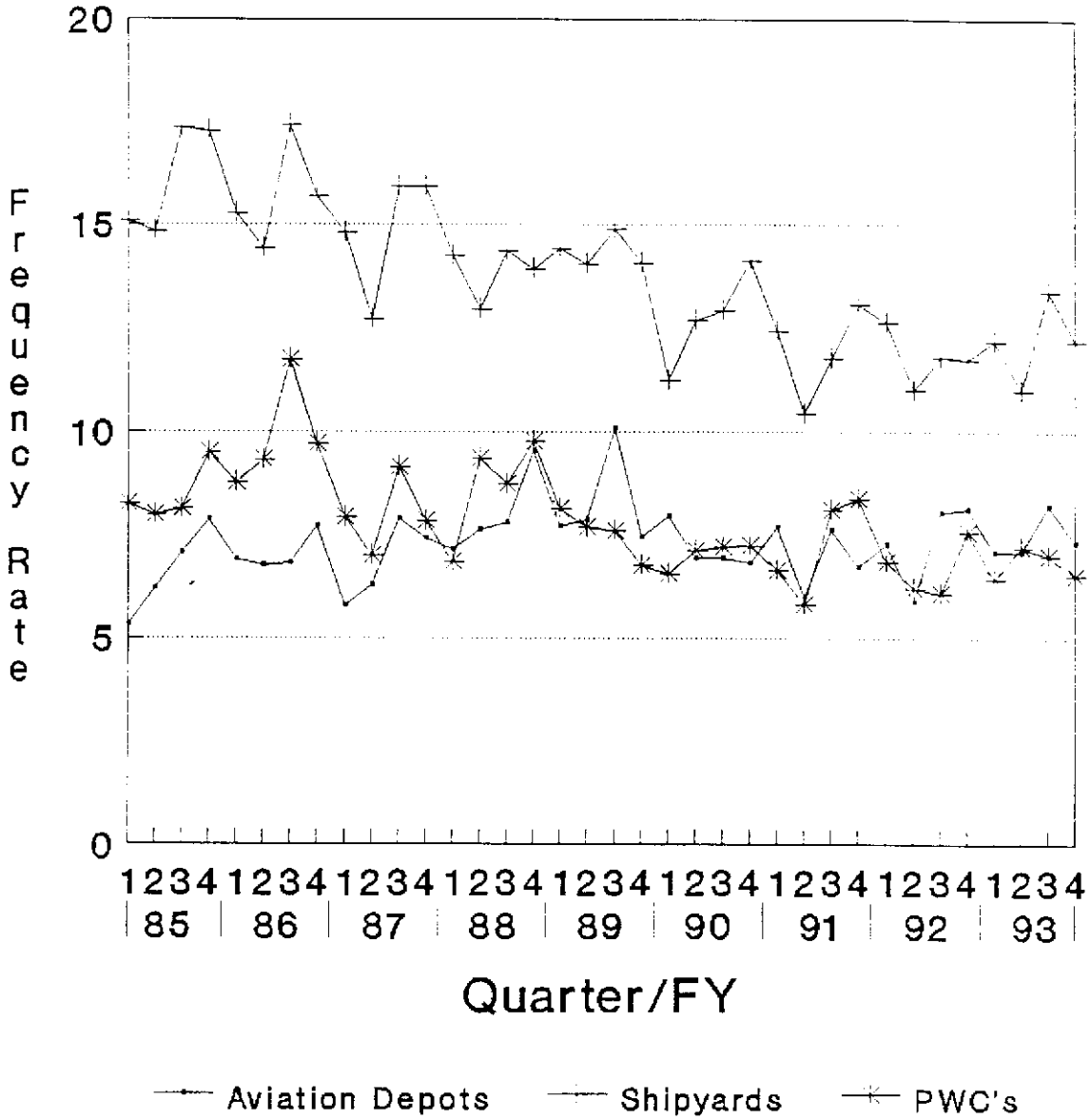
MAJOR INDUSTRIAL ACTIVITY	FY-88 TCR BASELINE	FY-93* TOTAL CASES w/o FIRST AID	AVERAGE FY-93 END** STRENGTH	FY-93 TCR	% DECREASE / INCREASE FROM TCR BASELINE***
NADEPs					
JACKSONVILLE	8.70	155	2781	5.36	-38.40
ALAMEDA	9.06	258	3345	7.42	-18.14
NORFOLK	4.56	182	4129	4.24	-7.05
NORTH ISLAND	13.23	478	3706	12.40	-6.26
CHERRY POINT	7.33	251	3091	7.81	6.52
PENSACOLA	4.19	238	3162	7.24	72.73
NADEP TOTAL	8.02	1562	20214	7.43	-7.36
SHIPYARDs					
LONG BEACH	18.37	464	4187	10.66	-41.99
PEARL HARBOR	16.70	494	4786	9.92	-40.57
NORFOLK	10.28	727	10360	6.75	-34.36
PORTSMOUTH	11.62	612	6032	9.76	-16.04
PHILADELPHIA	16.64	980	6038	15.61	-6.21
MARE ISLAND	16.24	1005	6003	16.10	-0.88
PUGET SOUND	17.21	1990	11169	17.13	-0.45
CHARLESTON	5.88	686	5378	12.27	108.59
SHIPYARD TOTAL	13.87	6958	53953	12.40	-10.60
PWCs					
NORFOLK	15.26	208	2981	6.71	-56.03
SAN FRANCISCO	9.93	120	1808	6.38	-35.73
PEARL HARBOR	10.49	141	1420	9.55	-8.98
PENSACOLA	8.50	72	829	8.35	-1.75
SAN DIEGO	7.82	217	2443	8.54	9.22
GREAT LAKES	5.23	44	584	7.24	38.52
GUAM	0.39	23	1580	1.40	258.90
YOKOSUKA	0.00	1	46	2.09	NA
PWC TOTAL	8.67	826	11694	6.79	-21.66

* SOURCE: OWCP/FECA TABLE #2 REPORTS

** SOURCE: NCPDS 1532 REPORTS

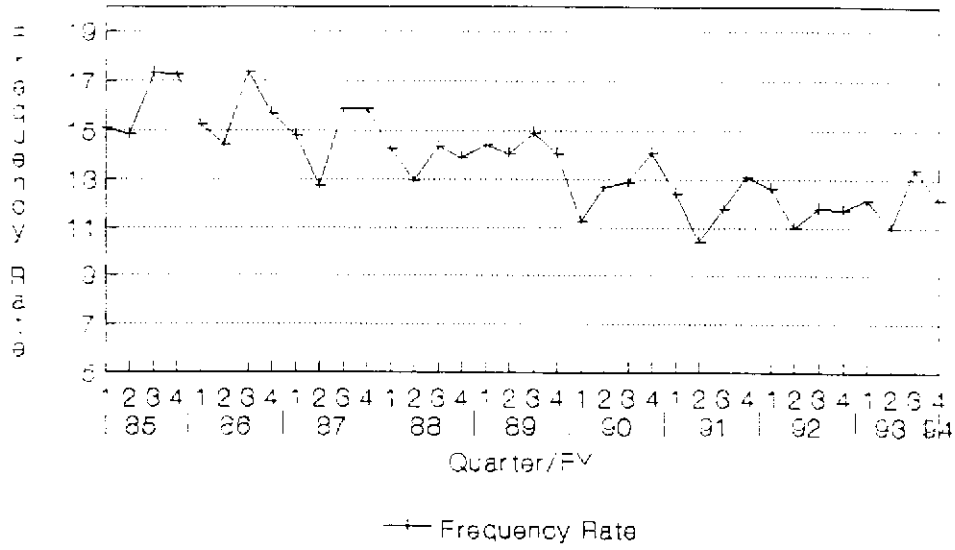
*** NAVY GOAL FOR FY93 = -10.00%. INDUSTRIAL ACTIVITIES ARE RANKED FROM BEST PERFORMANCE (DECREASE FROM BASELINE) TO POOREST PERFORMANCE (INCREASE FROM BASELINE) IN MEETING GOALS.

INDUSTRIAL ACTIVITY
COMPARISON CHART



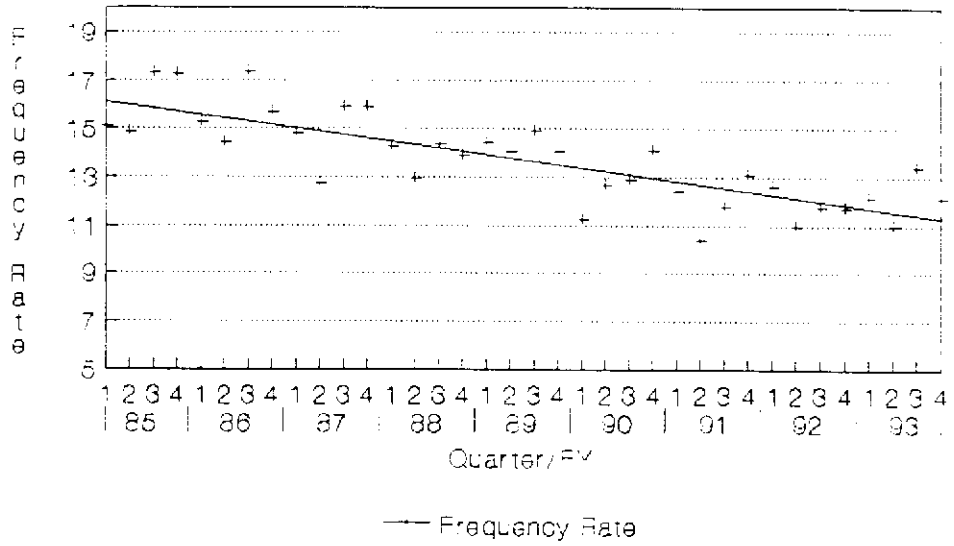
Note: Data points represent actual experience during quarter and are not cummulative.

SHIPYARD INJURY CASE RATE CHART

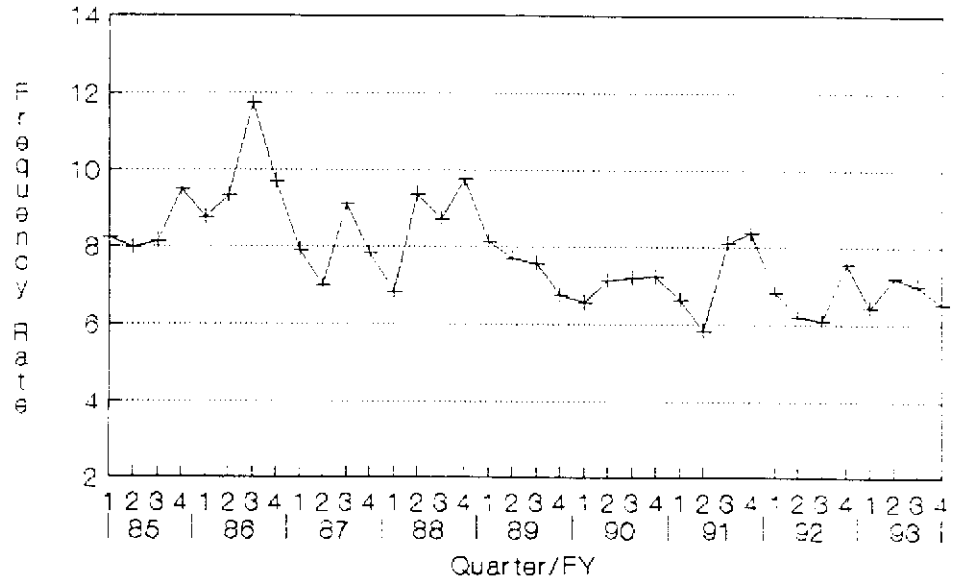


Source: OWCP FECA Table #2 Data

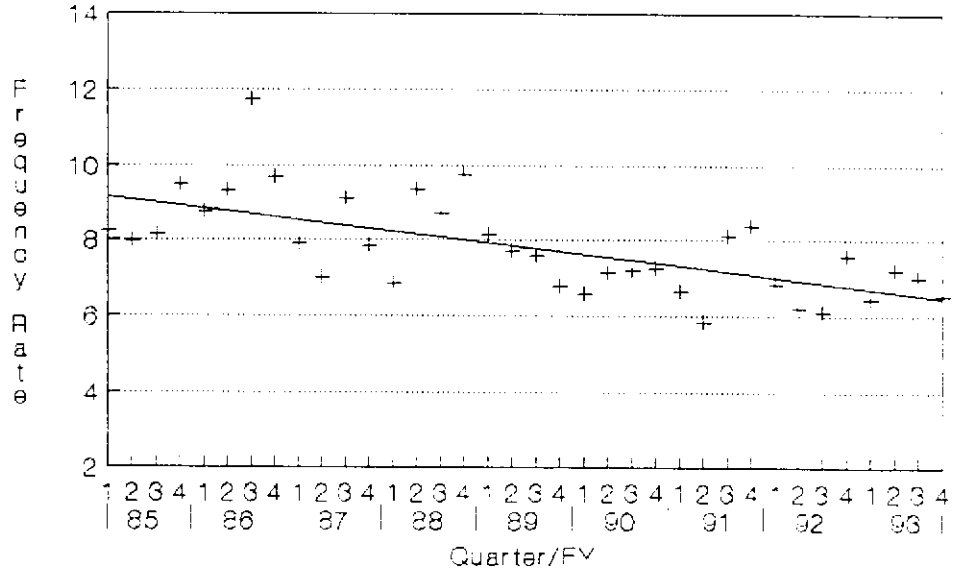
SHIPYARD INJURY CASE RATE TREND CHART



PWC INJURY CASE RATE CHART

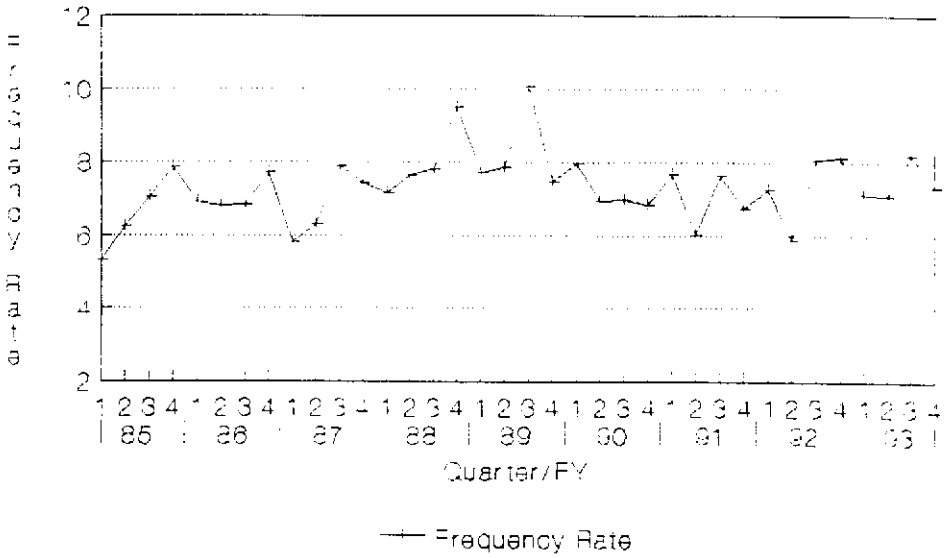


PWC INJURY CASE RATE TREND CHART

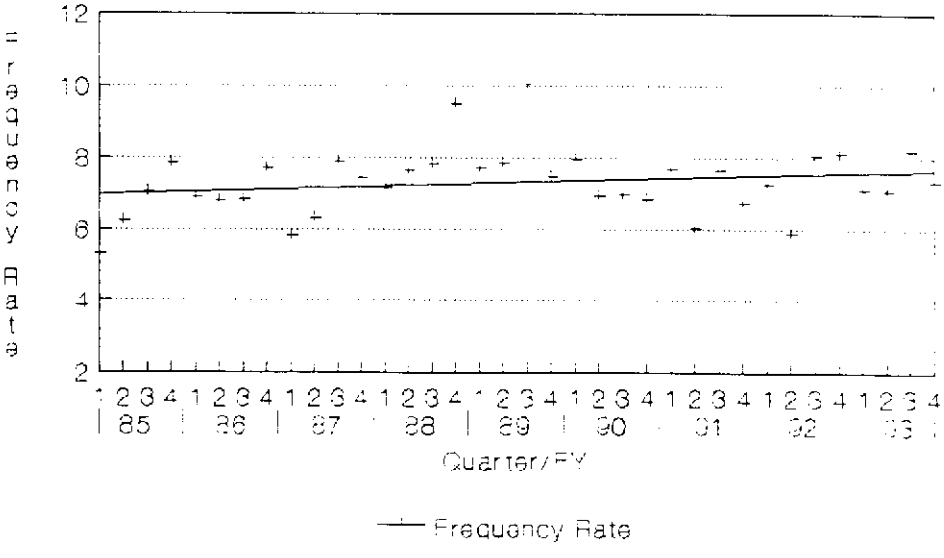


Source: OWCP FECA Table #2 Data

AVIATION DEPOT INJURY CASE RATE CHART



AVIATION DEPOT INJURY CASE RATE TREND CHART



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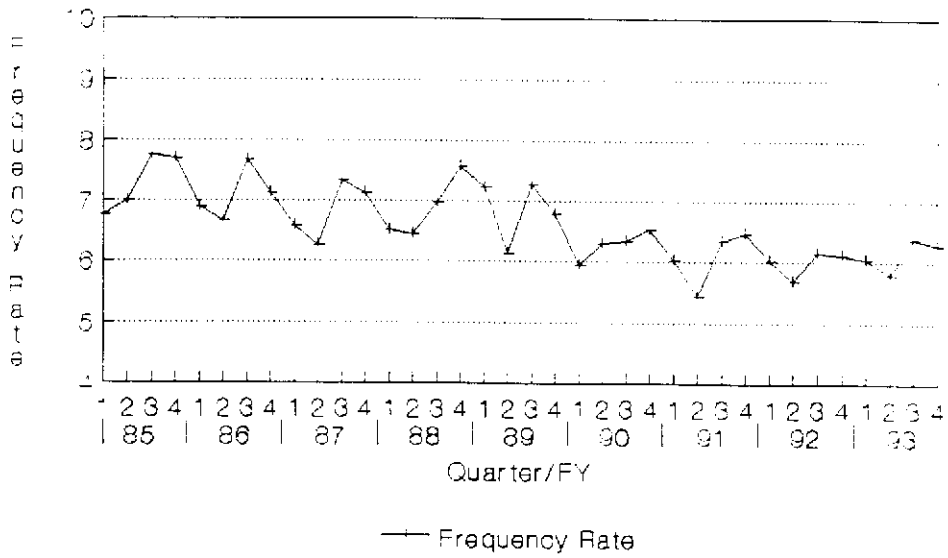

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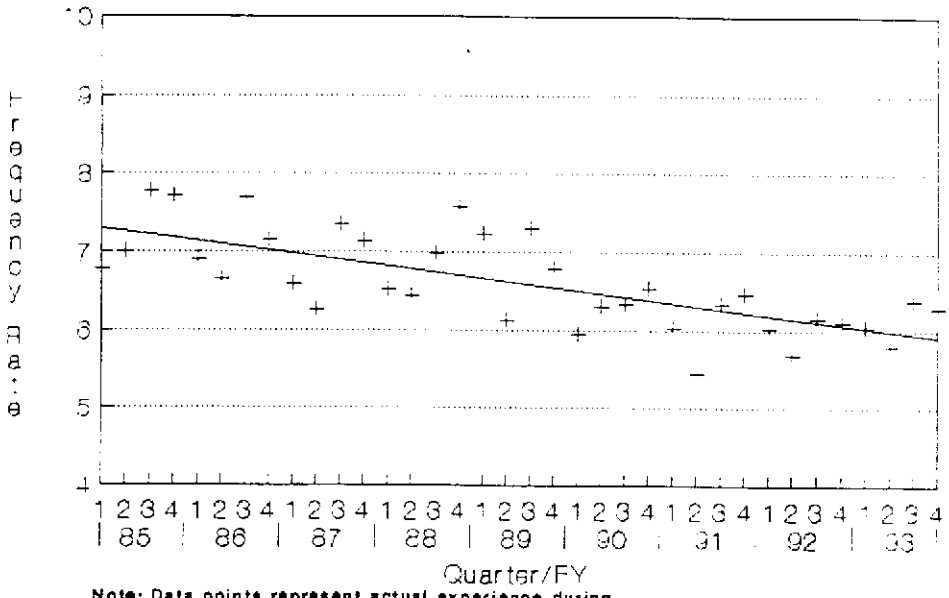
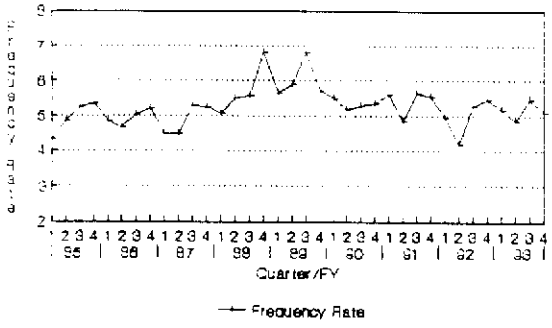


Note: Data points represent actual experience during quarter. They are not cummulative.

NAVAIR INJURY CASE RATE CHART



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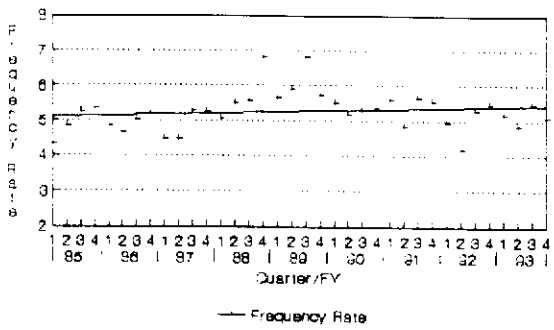

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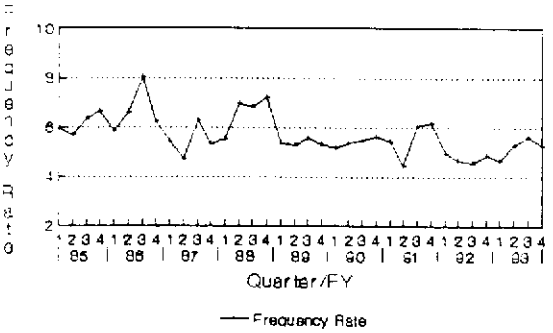
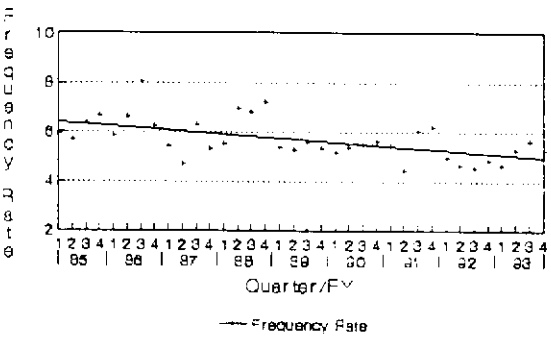


NAVFAC INJURY CASE RATE TREND CHART



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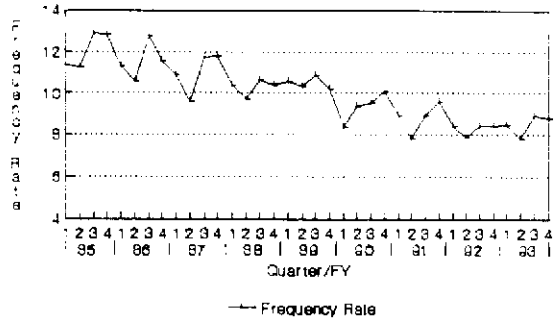

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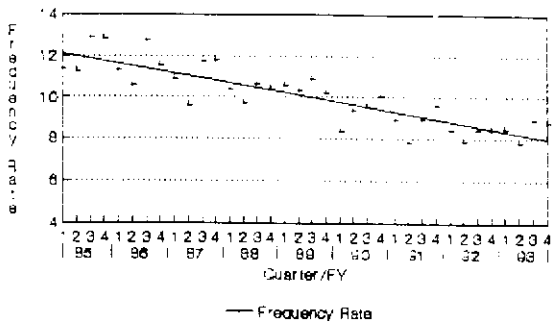

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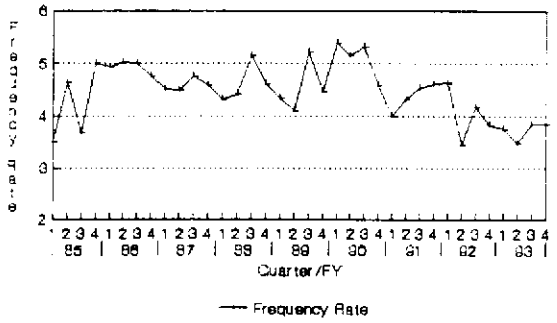

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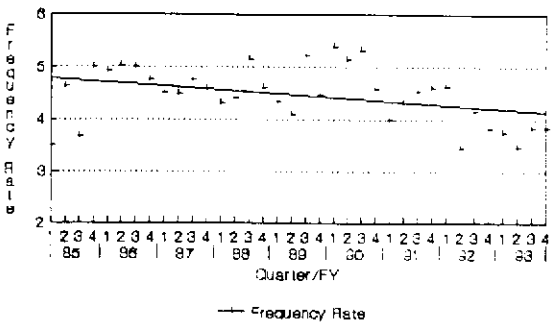

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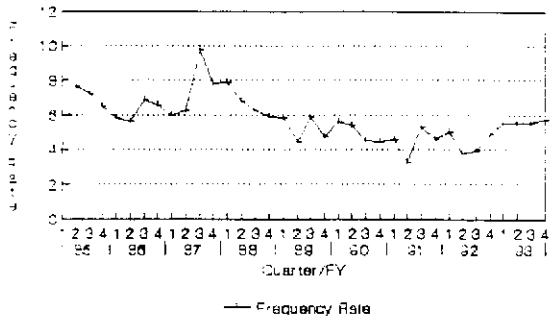

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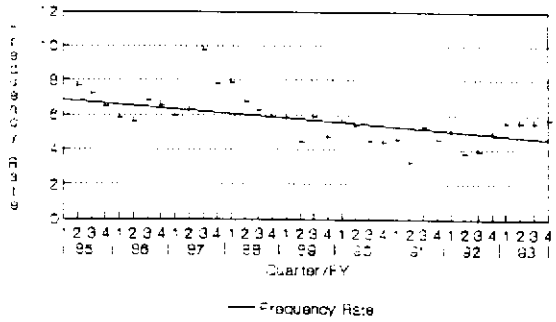

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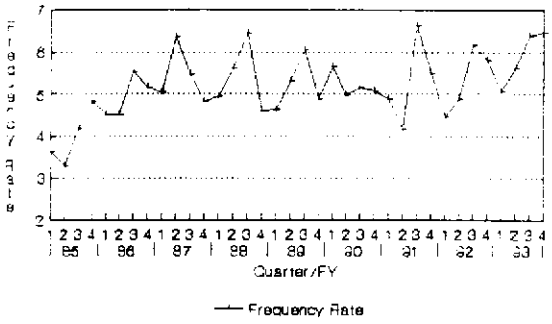

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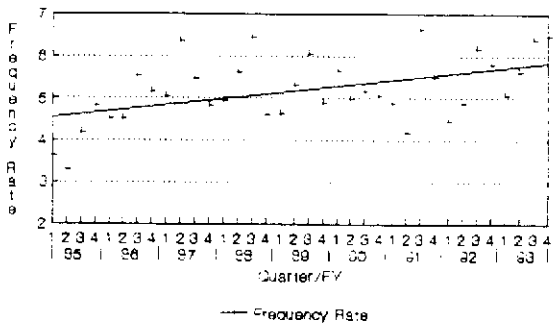
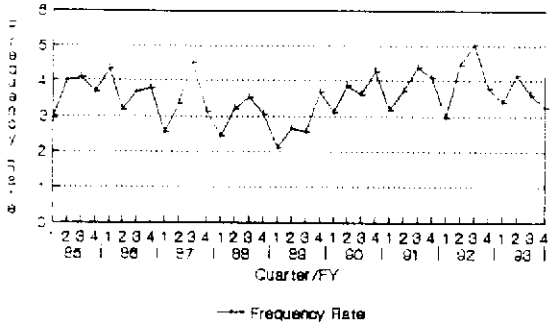


BUMED INJURY CASE RATE CHART



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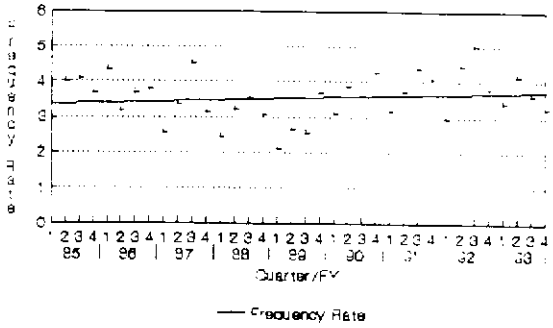
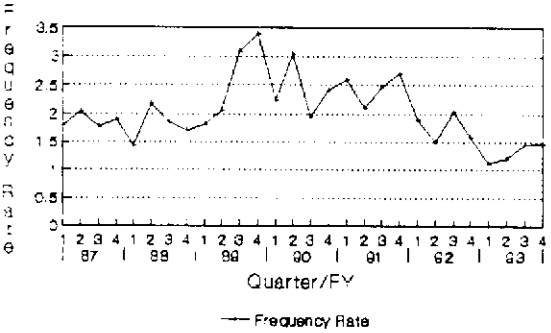


SPAWAR INJURY CASE RATE CHART



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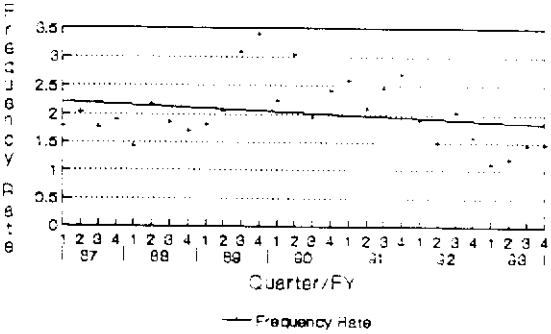

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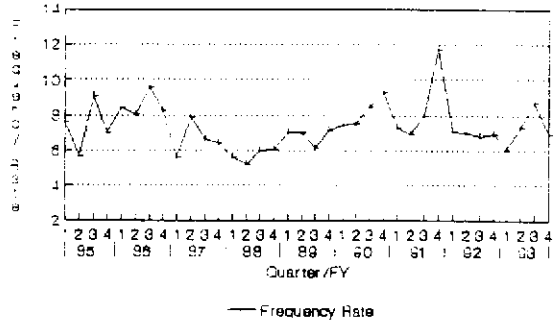

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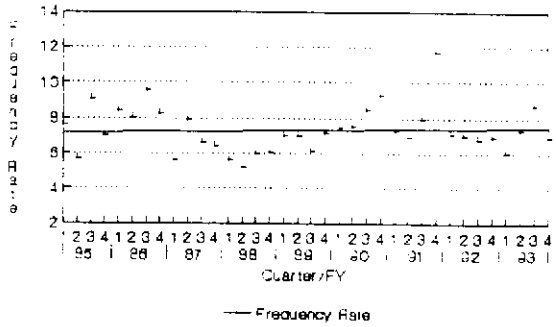

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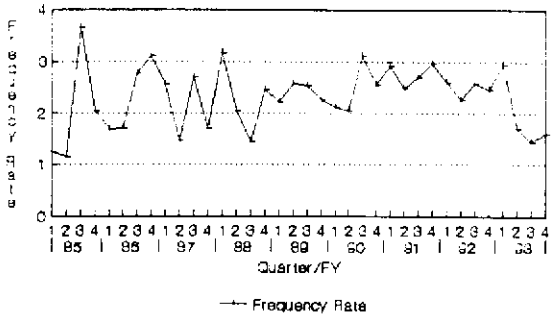

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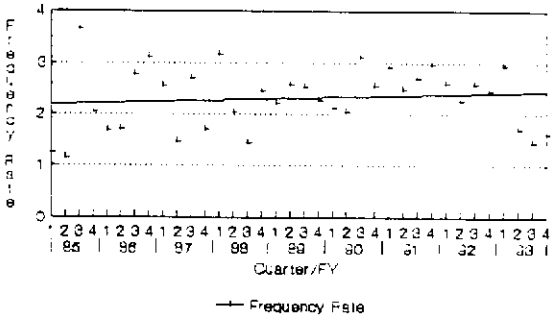

Source: FECA Table #2 Data

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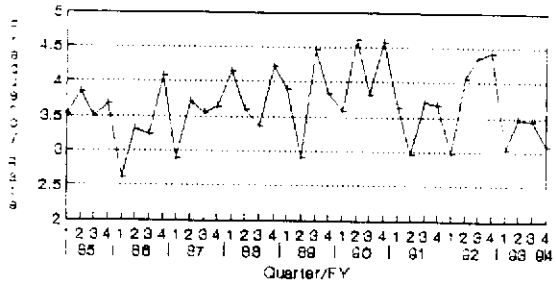

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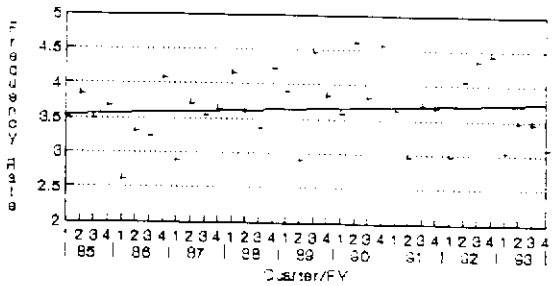
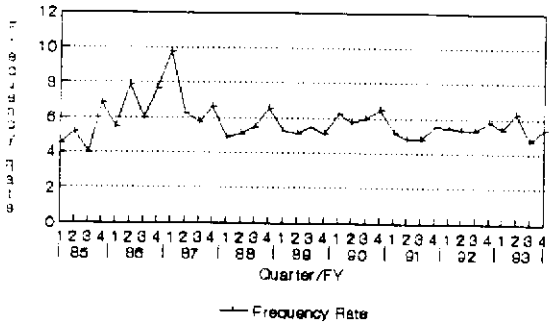


NAVRES INJURY CASE RATE CHART



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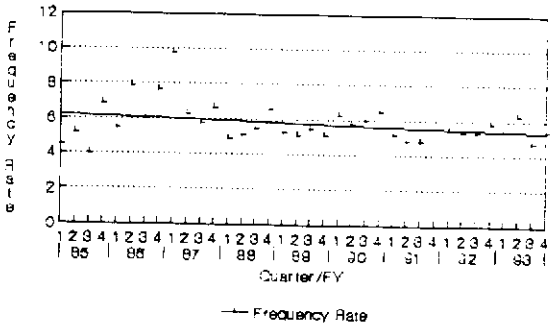
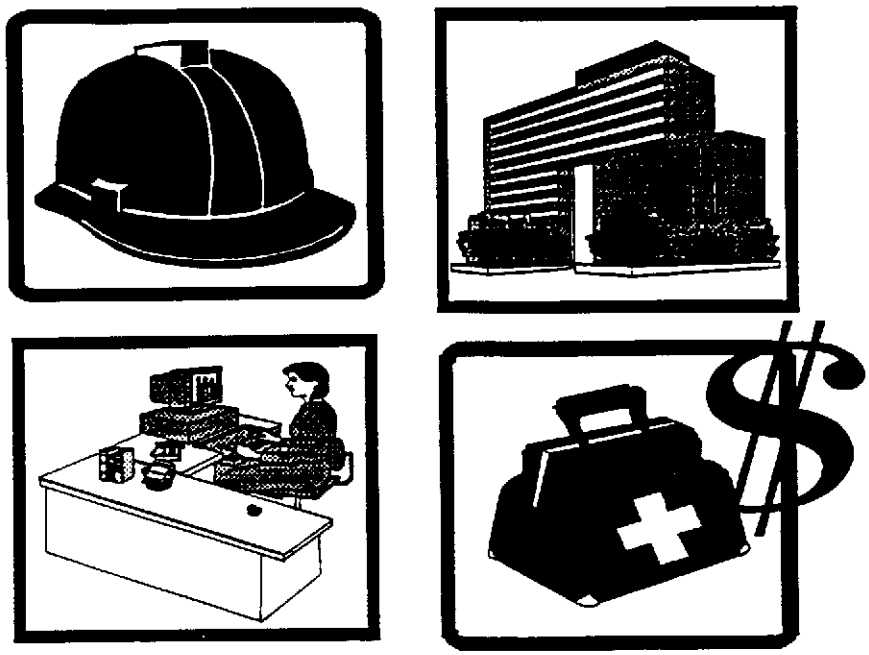
NAVRES INJURY CASE RATE TREND CHART



Naval Facilities Engineering Command
200 Stovall Street
Alexandria, Virginia 22332-2300



FY93
Occupational Safety & Health Program Improvement Plan

P-1052
October 1992

Safety & Health Office
NAVFACENGCOM 18K

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
200 STOVALL STREET
ALEXANDRIA, VA 22332-2300

IN REPLY REFER TO

21 October 1992

From: Commander, Naval Facilities Engineering Command

Subj: COMMANDER'S POLICY ON SAFETY AND HEALTH

1. Our most valuable resource is our people. A safe and healthful work environment is a key element in their well being, job satisfaction, and productivity. This directly affects the quality of cost-effective products and services provided to our customers.

2. Injuries and occupational illnesses are preventable. The increasing injury compensation cost trend can be reversed. Continuous improvement in reducing mishaps and costs requires team effort by all top managers, supervisors and employees.

3. Concern for safety and health must be integrated into every aspect of our business planning, work processes, products, and services. Facilities we design and construct must provide a safe environment for the occupants. Hazards must be identified during planning and eliminated or controlled during design. In construction, safe practices are required to protect the workers and minimize disruption to our customers' operations.

4. Environmental hazards must be identified, evaluated, and controlled. Our use of hazardous materials can be minimized. Safety and environmental protection efforts must be mutually supportive. They require a strong interface.

5. We are all accountable for safety. Because all employees play a vital role in building a safety conscious culture, I ask each of you to consider the safety impact of everything you do. Make a top-to-bottom commitment not only to improve safety, health, and environmental practices, but also to become the leader in those areas. Our work environment must be commensurate with the professional organization we are and reflect the personal involvement of all our people.

Jack E Buffington

JACK E. BUFFINGTON

We have had way too many people hurt this year. Everyone give this your personal attention. We can do a lot better.

FOREWORD

This plan was developed in coordination with NAVFAC Safety and Health Managers, Facility Design Safety Engineers and Construction Safety Program Managers. Input was solicited from NAVFAC customers and was coordinated with our field commands. The plan identifies desired outcomes, quality improvements, strategies, expected outputs and target dates.

This Occupational Safety and Health Program Improvement Plan is approved for execution in FY93. Although most actions are targeted to the NAVFAC Safety and Health community, the total quality leadership approach is required to reach a point where these activities are an integrated element of our quality products. Leadership attention throughout the Command is necessary to improve the quality of the work environment for our people, significantly reduce injuries and the fiscal cost of mishaps via proactive identification, quantification and elimination of hazards through continuous process improvement.

A. W. KATZ
Assistant Commander for
Environment, Safety and Health

ABSTRACT

This publication cancels and supersedes the FY92 Occupational Safety and Health Program Improvement Plan, NAVFAC P-1052 of October 1992.

Part I of this plan discusses development of the FY93 Plan and provides an overview of FY93 Objectives and Improvement Strategies. Part II summarizes FY92 OSH Quality Improvements achieved.

Part III specifies the FY93 Quality Improvement Plan and identifies strategies, target dates, and expected output for eight separate program areas.

TABLE OF CONTENTS

TABLE OF CONTENTS (cont)

PART I

INTRODUCTION

This section discusses our Vision of the Future, Development of our FY93 Plan and the FY93 Desired Outcomes, Strategies and Quality Improvements

VISION STATEMENT

By the year 1996, the Naval Facilities Engineering Command Occupational Safety and Health Program is recognized as the most innovative in the Navy. We have provided a work environment commensurate with the professional image and attitude of our organization.

The mishap injury rate within NAVFAC is the lowest in the Navy due to proactive involvement. Mishap reduction is recognized as the key to continued improvement in the work place and the improved morale and attitude of the workforce. Recognition of hazards to the work force, facilities and the environment; evaluation of innovative new processes, equipment and facility designs; control of conditions affecting our personnel and facilities; are considered essential to improving the quality of work life for our personnel.

Our success is based upon the conviction that our most valuable resource is our people. The employees' work environment is a key element in their well-being, job satisfaction and productivity. Therefore, we will continually improve its' quality including a variety of interpersonal factors beyond the physical setting. Safety is paramount and we will reduce injuries and maintain a workplace that is free from safety and health deficiencies. We will strengthen the caring atmosphere and involve our people in issues that affect them.

FY93 PLAN DEVELOPMENT

Input on improvement strategies for FY93 was solicited from other Systems Commands and their field activities in June 1992 through customer survey questionnaires. Three Command Safety and Health working group meetings were conducted during FY92 to explore strategies for improving our products and services, identifying barriers to process improvement, and develop quality improvement initiatives for FY93.

An Engineering Field Division (EFD) Facility Planning and Design Safety Meeting was held in December 1991 at Norfolk, Virginia with NAVFACENGCOMHQ and EFD System Safety Engineers. In January 1992 a Construction Safety Meeting was held in coordination with the USACE Safety and Occupational Health Conference held in Orlando, Florida with EFD Construction Safety Managers and NAVFACENGCOM Construction and Environmental Safety and Health Personnel. NAVFACENGCOMHQ Safety and Health Personnel and EFD, PWC, CBC and NEESA Occupational Safety and Health Managers conducted working group meetings in coordination with the Navy Environmental Health Workshop in March 1992 at Norfolk, Virginia.

Our draft plan was distributed to EFD, PWC, CBC Safety Managers as well as to selected NAVFACENGCOMHQ codes for review and comment. Many process improvement strategies initiated in FY91/92 are continued over to FY93. This FY93 plan updates our FY92 OSHPIP and is based upon the following input:

1. CNO (N454) Priorities
2. DoD/SECNAV Priorities and Reports
3. Naval Inspector General (NAVOSH OIU) Inspection Reports
4. NAVFACENGCOM Strategic Plan dated May 92
5. NAVFACENGCOM OSH Management Evaluation Findings
6. NAVFACENGCOM EFD, PWC, CBC Requirements
7. Department of Labor Occupational Safety and Health Administration (OSHA) Target Inspection Reports
8. OPNAVINST 5100.23 (Series) & OPNAVINST 5102.1 (Series) Revisions
9. Mishap Investigation Findings
10. GAO/JAG Reports
12. NAVAIR, SPAWAR, NAVSEA Requirements

Quality process reviews for the four functional areas, design safety, construction, environment safety and health, and NAVFACENGCOM personnel safety are planned for January 1993, April 1993 and July 1993.

FY93 DESIRED OUTCOMES AND IMPROVEMENT STRATEGY

An October 1989 Chief of Naval Operation (CNO) letter required each Echelon 2 Command to develop an Occupational Safety and Health Program Improvement Plan (OSHPIP). Our FY90 Safety and Health Plan was institutionalized as NAVFAC P-1052. This document provides the fourth edition of NAVFAC P-1052 and provides our Improvement Strategy for FY93.

Part II of this document provides an overview of quality improvement initiatives completed in FY92, summarizes NAVFACENGCOM accident losses, and establishes the basis for our FY93 Program Improvement Plan. It supplements the NAVFACENGCOM Strategic Plan by providing specific actions to meet customer's safety and health requirements for "Products and Services" and GOAL #2 for "People" to improve the overall working conditions for all NAVFACENGCOM employees.

This plan also identifies strategies and actions to assist Personnel Officers and Injury Compensation Program Administrators with reduction in workers' compensation claim costs.

Part III of this document, FY93 Quality Improvement Plan, contains a four page summary of the Desired Outcomes and Improvement Strategies and includes standard format for each of the quality improvements requiring action. The expected output and target date columns will be updated as significant tasks are completed.

Due to changes in the Department of Labor, Occupational Safety and Health Administration's (OSHA) Targeting Inspection Program for Naval activities and pending revision to OPNAVINST 5100.23 Series, all NAVFACENGCOM activities are required to develop activity program improvement plans for FY93. It is anticipated this NAVFAC plan with minor modifications/additions for unique problem areas can be utilized as the basis for activity plans.

The appendices include FY92 NAVFACENGCOMHQ policy/guidance, FY93 mishap and compensation claims reduction control limits, FY93 activity OSH evaluation schedule, high emphasis issues, customer service information, and plan-do-check-act guidance for safety and health quality leadership.

Team effort by all levels of NAVFACENGCOM will reduce mishaps and their associated costs. Improved quality of accident investigations and reports of serious mishaps is required. Root causes must be identified, documented, distributed, and prevented.

Craig B. Schilder

CRAIG B. SCHILDER, PE, CSP
NAVFACENGCOM Safety and Health Director

PART II

FY92 ACCOMPLISHMENTS

This section identifies Quality Improvements accomplished and summarizes our FY92 Performance on Reduction of Lost Time Injuries, Compensation Costs, Inspection Results, and Serious Mishaps sustained by NAVFACENGCOM Employees, Contractor Personnel and SEABEES

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FY92 OSH PROGRAM SUMMARY

The Chief of Naval Operations (CNO) Occupational Injury and Illness Reduction Goal for FY92 was an eight percent reduction from the FY88 baseline (two percent per year). For FY92 NAVFACENGCOM achieved a 30 percent reduction from our baseline of 6.64 total cases (lost time and no lost time cases) per 100 workyears. The nine Public Works Centers collectively achieved a 28 percent reduction from their baseline total case rate of 8.67. PWC San Francisco and PWC Norfolk led the way with reductions of 53 percent and 52 percent respectively. PWC San Francisco achieved the lowest total case rate (4.65) of any CONUS Public Works Center.

Although we far surpassed the CNO goal for reducing total injury/illness case rates we did not achieve our NAVFACENGCOM target for reduction of lost time cases. The NAVFACENGCOM lost time case rate of 3.17 cases per 100 workyears was 15.5 percent above our upper control limit of 2.75. Each lost time case that exceeds one year will cost your activity an average of $25,000 per year until the person is deceased.

To enhance our workplace ergonomics program NAVFACENGCOM sponsored two training courses at PWC San Diego and PWC Pearl Harbor. Over 357 personnel from the Public Works Centers and from other surrounding Navy activities attended. In addition, PWC San Diego and PWC Pearl Harbor hosted follow-up train-the-trainer courses.

Ten activities were inspected by the Naval Inspector General NAVOSH Oversight Inspection Unit during FY92. All, except for WESTDIV, received satisfactory ratings with NCEL, PWC Guam, and SOUTHDIV leading the way with scores of 97, 96 and 95 percent respectively.

On the downside, one Public Works Center employee was fatally injured during FY92. At least six other civilians were involved in near fatal serious mishaps. Five contractor personnel and one SEABEE were fatally injured and two others were seriously injured due to falls from roofs. Two contractors were killed when they were electrocuted while working from bucket trucks. This was the worst year for serious mishaps.

Workers' compensation costs for the billing year 1 July 91 - 30 June 1992 increased six percent over the prior year to $15.25 million. Six Public Works Centers and CBC Port Hueneme accounted for 81.4 percent of this bill which will be paid from activity FY94 budgets.

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FY92
NAVFACENGCOM
OCCUPATIONAL SAFETY AND HEALTH
QUALITY IMPROVEMENTS

CONTRACT CONSTRUCTION SAFETY (CC)

GOAL:	Reduce construction costs/prevent serious accidents
IMPROVEMENT STRATEGY:	Develop program plan for construction safety tasks. Increase OSH management evaluations and inspections. Increase/improve communications between ROICC offices, EFD and activity OSH offices. Assist ROICCs with high hazard tasks, i.e., asbestos, confined spaces, electrical safety, high work, etc.
STATUS:	Conducted Construction Safety Strategic Planning Meeting with all EFD Construction Safety Managers at Orlando, Florida 6-10 January 1992 in conjunction with the USACE Safety and Occupational Health Conference.
	RADM Bottorff's construction safety messages issued February 1992 (R 281612Z FEB 92) and August 1992 (R 101531Z AUG 92).
	EFDs distributed guidance/procedures to ROICCs on use of hazardous material (HM) at shore activities (i.e., MSDSs, inventories)
	Collateral Duty Safety Officers appointed at most ROICC offices.
	At least one person in each ROICC office completed 29 CFR 1910.120 training. Additional personnel scheduled.
	Customer interface increased between EFD and activity Safety Managers through customer surveys, questionnaires and periodic correspondence.
	Developed and distributed the first NAVFACENGCOM Construction Safety Newsletter. Periodic distribution is planned.
	Conducted survey of other major claimants and their field activities as to their satisfaction with the NAVFACENGCOM Facilities Planning and Design Safety, Construction Safety and Environmental Safety and Health Programs. Developed FY93 strategies for improving customer satisfaction.

FACILITY PLANNING AND DESIGN SAFETY (FPDS)

GOAL: Reduce planning and design cost

IMPROVEMENT STRATEGY: Develop FPDS design policy guidance and resource guide. Establish activity FPDS working groups. Establish HQ level PAT. Upgrade training, develop computer library of PHL/PHA.

STATUS: EFD System Safety Engineers Working Group Meeting conducted December 1991 in Norfolk, Virginia.

System Safety (PHA & PHL) policy incorporated in FY94 MCON Program Execution Guidance.

Library list of existing PHAs/PHLs developed/ distributed. Exploring concept of incorporating PHAs/PHLs on Construction Criteria Base.

Memorandum of Understanding (MOU) drafted and sent to NAVSEASYSCOM 665 for review/approval concerning FPDS efforts for ordnance projects.

Draft System Safety Guidelines developed/distributed for review.

Draft MIL-STD-882C reviewed and comments/ recommendations provided.

Provided HQ review of documentation for over 90 MILCON projects and provided recommendations for enhancing safety and health aspects to cognizant EFDs.

ACCIDENT PREVENTION (AP)

GOAL: Reduce new lost time case rates by 3%

IMPROVEMENT STRATEGY: Establish special emphasis programs for high risk jobs. Improve communications between NAVFACENGCOMHQs, NAVFACENGCOM activities and other activities on problems, lessons learned, successful initiatives. Continue to improve quality of training delivered. Implement NAVFACENGCOM Strategic Plan.

STATUS: Expanded/reissued PWO NAVOSH Resource Guide to all Public Works Departments.

List of Navy-wide key points of contact (experts) developed/distributed.

NAVFACENGCOM 18K3 (Mary Wingard), coordinated working group meeting with representatives from PWCs San Diego, Pearl Harbor, Norfolk, Norfolk Naval Shipyard and NORTHDIV's Navy Crane Center and held 12-13 March 1992 to identify barriers and develop recommendations for improving weight handling equipment (WHE)/rigging safety training.

NAVOSH NET demonstration conducted at NEHC workshop to increase/enhance Navy-wide participation. NET currently has 210 active participants.

Job Hazard Analyses (JHA) list prepared/distributed.

Conducted five OSH Management Evaluations and six Assist Visits at NAVFACENGCOM activities.

Customer Satisfaction Questionnaire distributed to all NAVFACENGCOM OSH Managers concerning Headquarters field support. Results compiled and improvement plan prepared.

Chairperson for Shore NAVOSH Training Working Group conducted three meetings; prepared/distributed minutes; provided status reports and participated in NAVOSH Training Steering Group meetings; coordinated technical review audits of Naval Safety School Courses.

PWC Pensacola initiated Du Pont STOP training program for supervisors. Several other activities expected to follow suit.

Internal customer survey of activity OSH Office effectiveness completed by majority of NAVFACENGCOM OSH offices. Improvement strategies initiated.

Updated/reissued NAVFAC Command Inspection Guide for Safety and Health.

Distributed revised Safety and Health training resource list.

WORKERS' COMPENSATION COST REDUCTION (WC)

GOAL: Assist Civilian Personnel Office to achieve a 3% reduction in compensation costs in FY92

IMPROVEMENT STRATEGY: Improved case management. Validate claims and aggressively pursue suspect cases. Increase use of transitional work. Request medical evaluation/update of target claims. Establish medically suitable

return to work positions for selected individuals on the long term roles. Keep Commanding Officers and management officials appraised of program status through quarterly updates. Provide training to all supervisors.

STATUS: East/West Coast ICPA working groups established.

Cost Containment Strategy Presentation conducted by "San Diego Team" at NEHC conference.

Program performance evaluated during NAVFACENGCOM IG/OSH Management Evaluation of field activities by both Headquarter Civilian Personnel and Safety Staff.

Semi-annual charge-back cost summary distributed to field activities and Headquarters.

MISHAP INVESTIGATION (MI)

GOAL: Enhance quality of serious mishap investigations, reports and lessons learned

IMPROVEMENT STRATEGY: Implement formal NAVFACENGCOMHQ investigation procedures for fatal mishaps and WHE mishaps through chain of command involvement, review of recommendations, distribution of lessons learned and intensive follow-up of corrective actions. Continue training in state-of-the-art accident investigation methodologies. Establish NAVFACENGCOM roster of certified investigators.

STATUS: Policy/procedures for serious mishap review boards established by NAVFACINST 5100.11H (NAVFACENGCOM responsibility for conducting Echelon 2 investigations at PWCs established). Headquarters GO KIT and standard operating procedure developed based upon PACNAVFACENGCOM lessons learned.

Lessons learned from selected mishaps disseminated to NAVFACENGCOM activities and major claimants for 15 mishaps via "Accident Abstracts".

An Accident Investigation Training Course sponsored by NAVFACENGCOM was conducted in June 1992. Several NAVFACENGCOM Echelon 2 investigators also received training in the CNO (N454) sponsored MORT training. Roster of certified NAVFACENGCOM investigators established.

NAVFACENGCOMHQ team investigated Navy civilian fatality at PWC Pearl Harbor in June 1992.

ERGONOMICS (E)

GOAL:	By the end of FY92, reduce the number of back injuries resulting in lost time by 50 percent
IMPROVEMENT STRATEGY:	Improve workplace quality by conducting ergonomic analysis studies of target high hazard operations, trades, etc., and design procedure modification. Establish behavior modification programs. Develop back injury mishap data base. Issue back support belt policy.
STATUS:	Revised/distributed guidance for video display terminal (VDT) workstation design.
	NAVFACENGCOM contracted with the Saunders Group to conduct ergonomic training courses in April and May 1992 for Navy activities in San Diego and Pearl Harbor and to develop resource manuals for Public Works Departments Navy-wide.
	Issued NAVFACENGCOMHQ message providing policy guidance on use of back support belts.
	PWC San Diego contracted with Saunders Group to conduct Train-the-Trainer training in September 1992 for all Naval activities in the San Diego area (Tuition Free).
	Conducted training and ergonomic evaluation of workplaces at NAVFACENGCOMHQ

HAZARDOUS MATERIAL AND WASTE MANAGEMENT (HM/WM)

GOAL:	Implement effective HM control programs and reduce quantity of waste generated
IMPROVEMENT STRATEGY:	Integrate HM authorized use lists into the procurement system. Identify least hazardous material and share successes. Define reporting requirements for HM spills/mishaps. Return HM received without MSDS to suppliers.
STATUS:	Consolidated NAVFACENGCOM authorized user list (AUL) and submitted to NAVSUPSYSCOM.
	Policy/procedures for lead based paint in family housing developed as a draft NAVFACINST.

Provided extensive comments on the draft DOD (S&OHP) policy memorandum concerning Abatement of Lead-Based Paint Hazards and Assessment of Associated Health Risks in DOD Housing and Buildings.

Distributed hazard communication training package of construction industry to the EFDs.

ENVIRONMENTAL SAFETY AND HEALTH (ES&H)

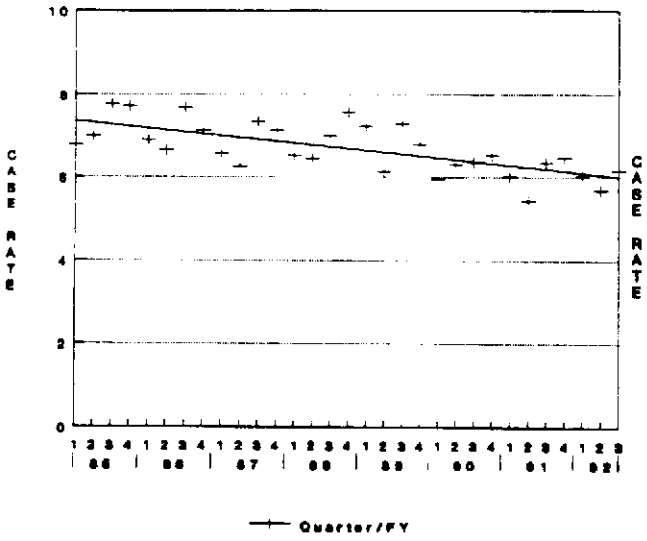
GOAL:	Improve quality of environmental safety & health programs
IMPROVEMENT STRATEGY:	Validate HM/HW training courses, NAVFACENGCOMHQ policies, procedures and manuals to ensure 29 CFR 1910.120 requirements are incorporated. Improve coordination of OSH and environmental efforts through working group meeting(s) and safety professional review of site safety plans.
STATUS:	Implementation strategy for meeting 40 CFR 61 training requirements developed and submitted to CNO (OP-45).
	Navy/Marine Corps Installation Restoration Manual issued February 1992. Chapter 12 details safety requirements.
	Audited NEESA installation restoration health and safety courses.
	NAVFACENGCOM/NEHC agreement established for occupational health review of installation restoration site safety and health plans.

MODEL ACCIDENT PREVENTION PROGRAM (MAPP)

GOAL:	Develop a corporate MAPP
IMPROVEMENT STRATEGY:	Determine key mishap/FECA cost reduction elements. Develop generic training programs and methods/media for accomplishing. Improve quality while reducing duplication of manpower resources required.
STATUS:	Process Action Team established and met in January 1992. MAPP revised to a NAVFACENGCOM OSH Managers Resource Guide.

NAVY/NAVFACENGCOM/PWC INJURY TRENDS

NAVY INJURY CASE RATE
TREND CHART



NAVFAC INJURY CASE RATE
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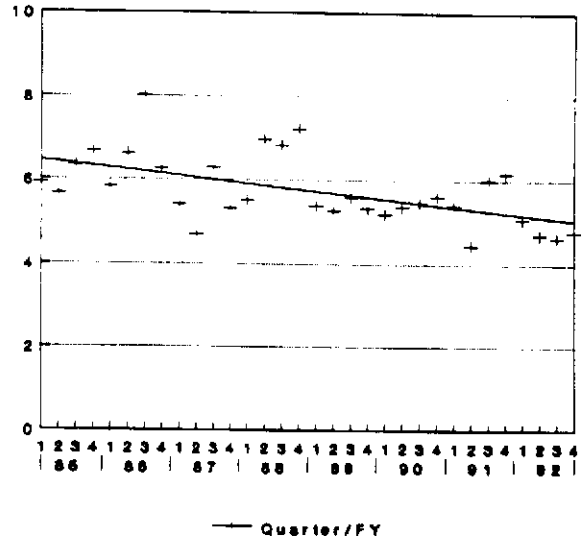

PWC INJURY CASE RATE
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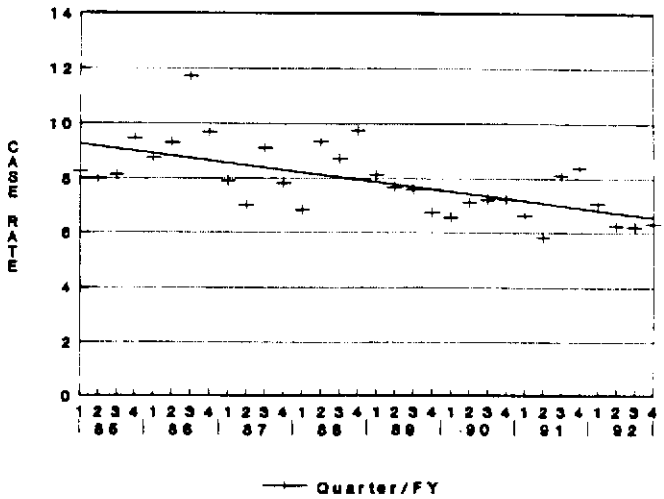


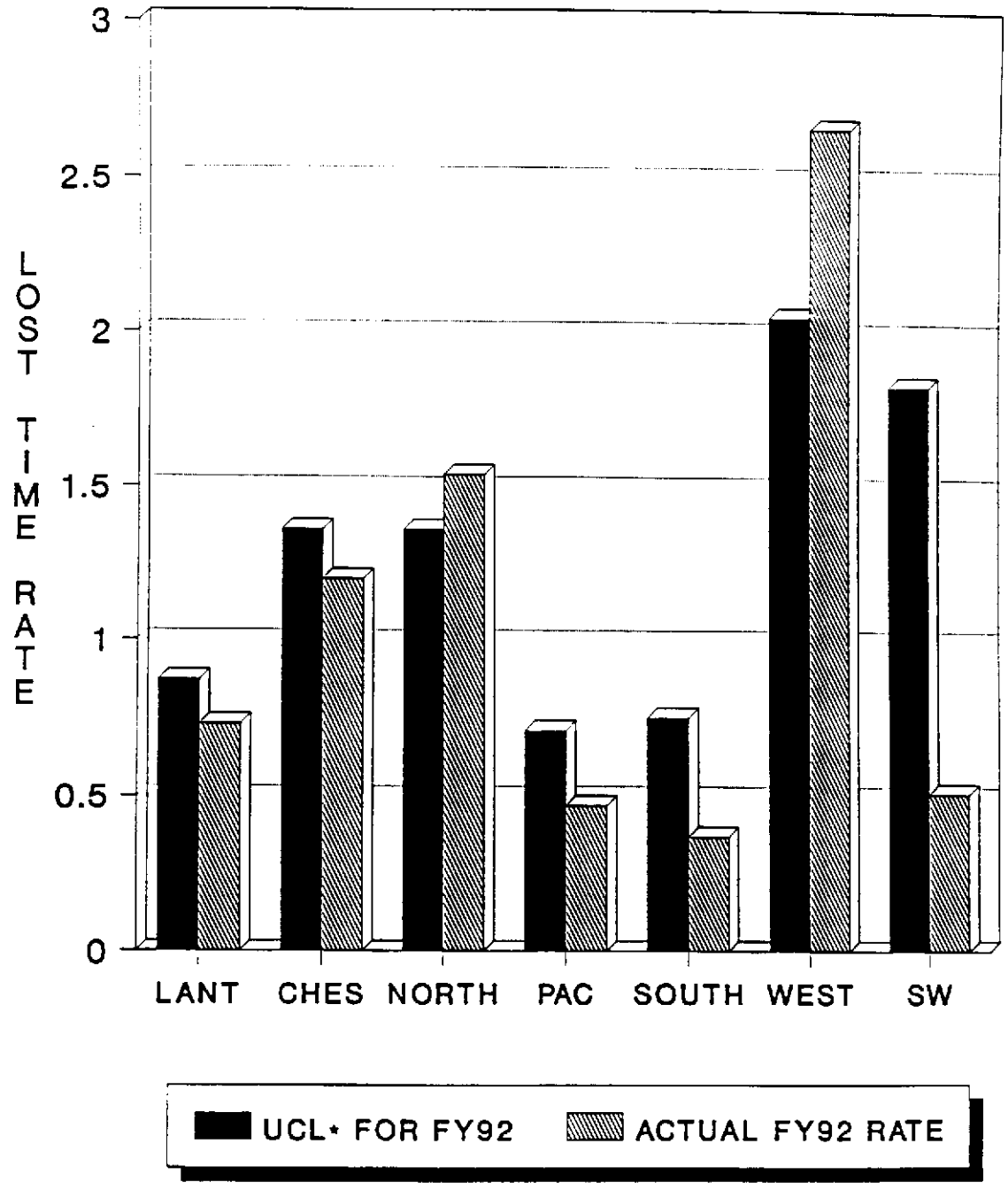
NOTE: Case Rate = Total # of comp cases per 100 workyears

FY92 NEW LOST TIME COMPENSATION CASE RATES* THROUGH SEPTEMBER 1992

ACTIVITY	UCL FY92**	ACTUAL YTD CASES***	ACTUAL YTD LT RATES
EFDs			
LANTDIV	0.87	7	0.73
CHESDIV	1.36	6	1.20
NORTHDIV	1.36	11	1.54
PACDIV	0.71	2	0.47
SOUTHDIV	0.75	3	0.37
WESTDIV	2.05	13	2.66
SOUTHWESTDIV	1.83	5	0.51
OICC MIDPAC	****	2	2.02
EFD TOTAL	1.25	49	0.97
PWCs			
GREAT LAKES	5.04	22	3.53
NORFOLK	7.61	142	5.84
PEARL HARBOR	8.28	88	5.94
PENSACOLA	4.45	36	4.19
SAN DIEGO	4.51	147	5.70
SAN FRANCISCO	2.32	38	2.52
GUAM	0.19	13	0.78
SUBIC BAY	0.02	0	0.00
YOKOSUKA	0.00	0	0.00
PWC TOTAL	3.21	486	4.32
CBCs			
DAVISVILLE	6.68	5	7.88
GULFPORT	4.45	4	0.82
PORT HUENEME	3.83	52	3.81
	4.14	61	3.19
NCEL	2.41	9	2.22
NEESA	1.94	2	1.27
NAVFAC HQ	0.64	4	0.79
	1.47	15	1.41
NAVFAC TOTAL	2.75	611	3.17

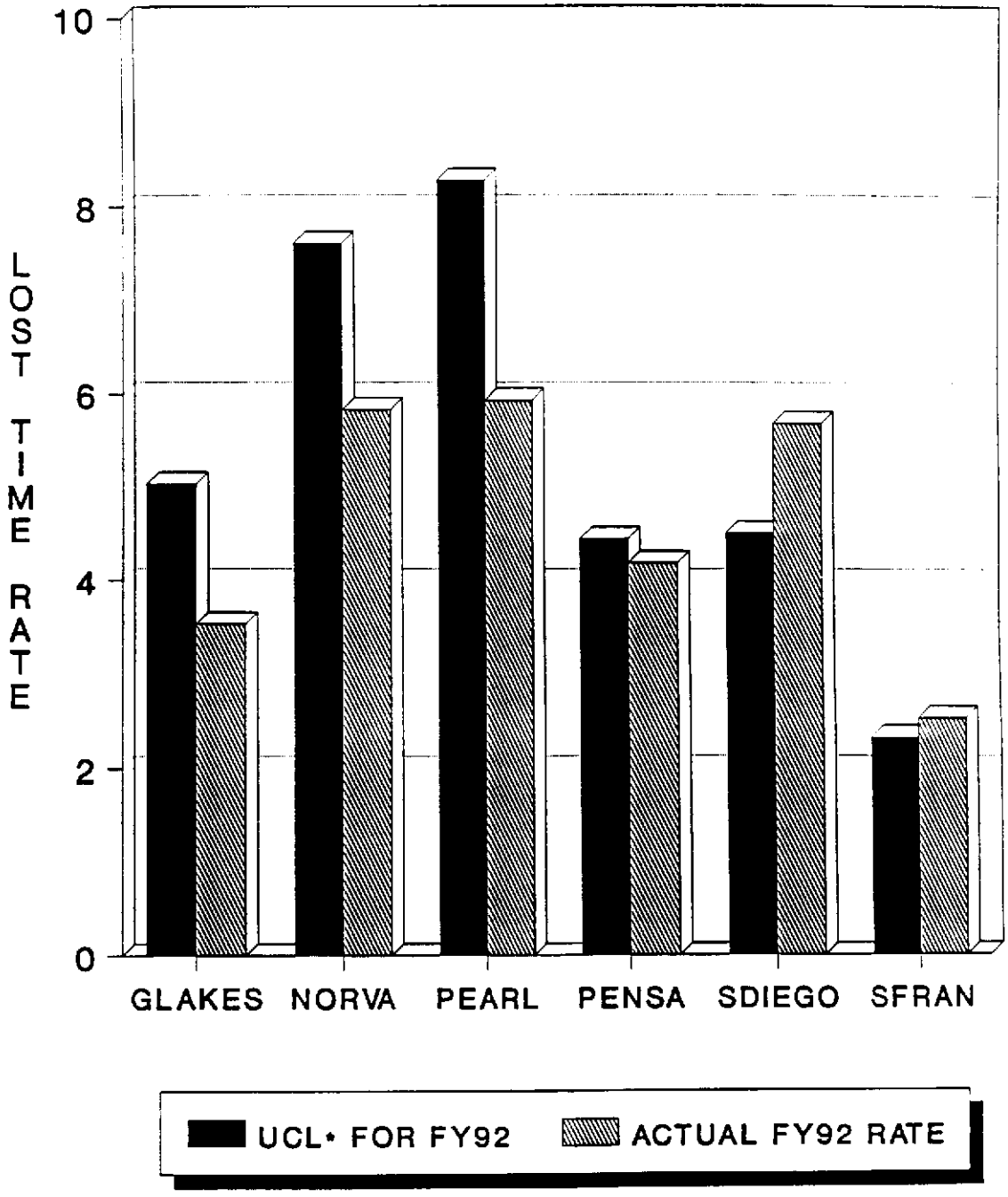
* LT CASE RATE = Cases x 200,000 hours worked divided by end strength x 173.33 hrs/mo x # of months
** Upper Control Limit (UCL) FY92 = 3% Reduction from Base (FY89/90/91 Average)
*** SOURCE: OWCP Table #2 Reports
**** Goal not established

EFD LOST TIME COMPENSATION CASE RATE



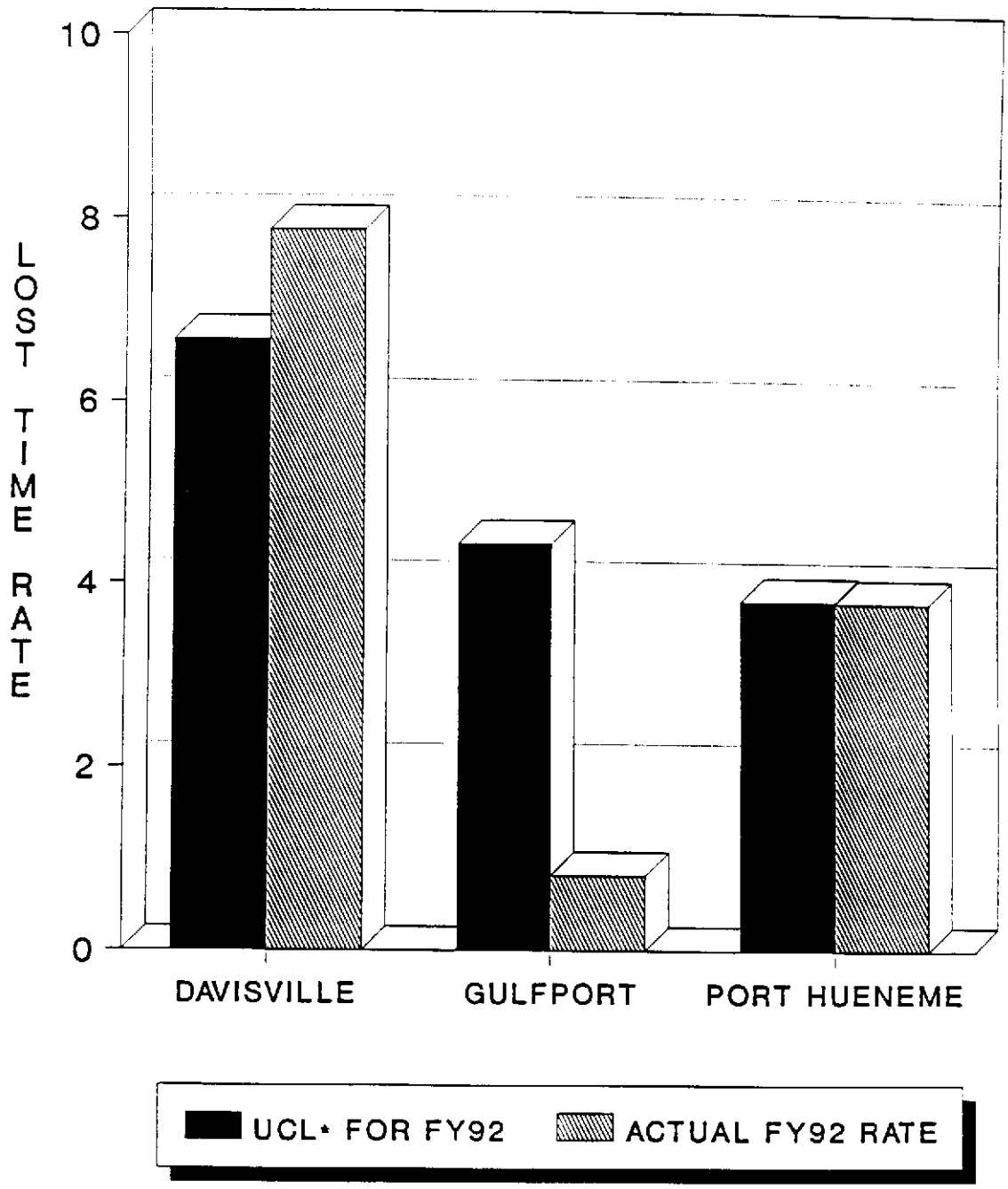
* Upper Control Limit (UCL) FY92 = 3% Reduction from Base (FY89/90/91 average)

PWC LOST TIME COMPENSATION CASE RATE



* Upper Control Limit (UCL) FY92 = 3% Reduction from Base (FY89/90/91 average)

CBC LOST TIME COMPENSATION CASE RATE



* Upper Control Limit (UCL) FY92 = 3% Reduction from Base (FY89/90/91 average)

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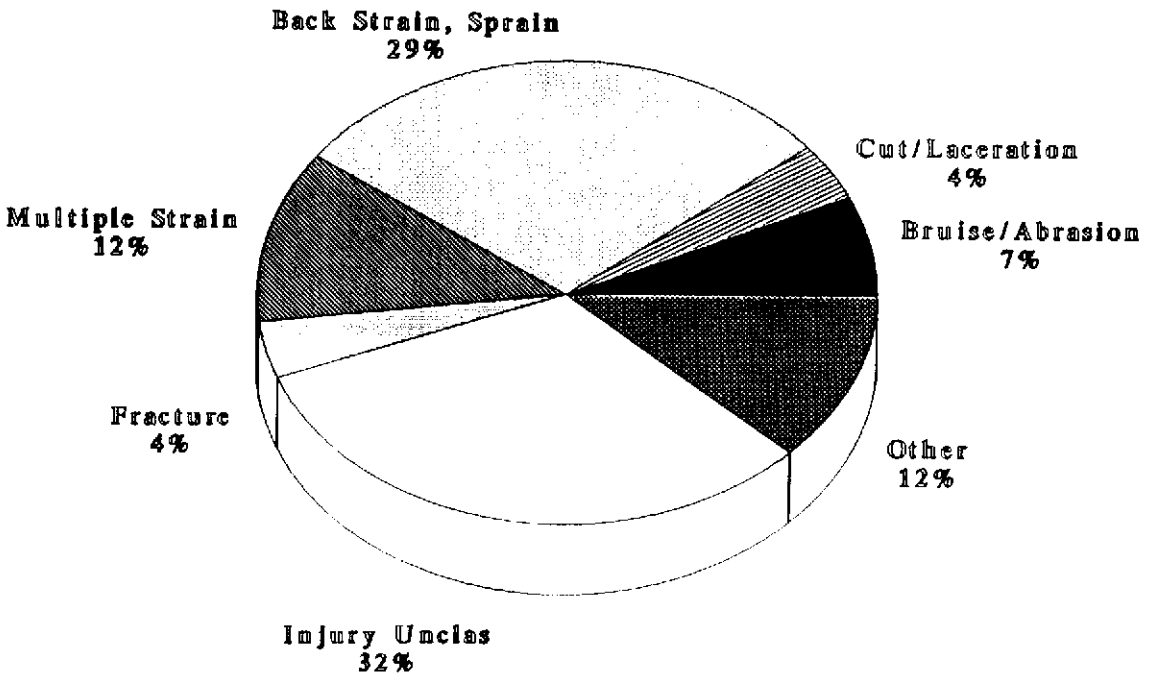
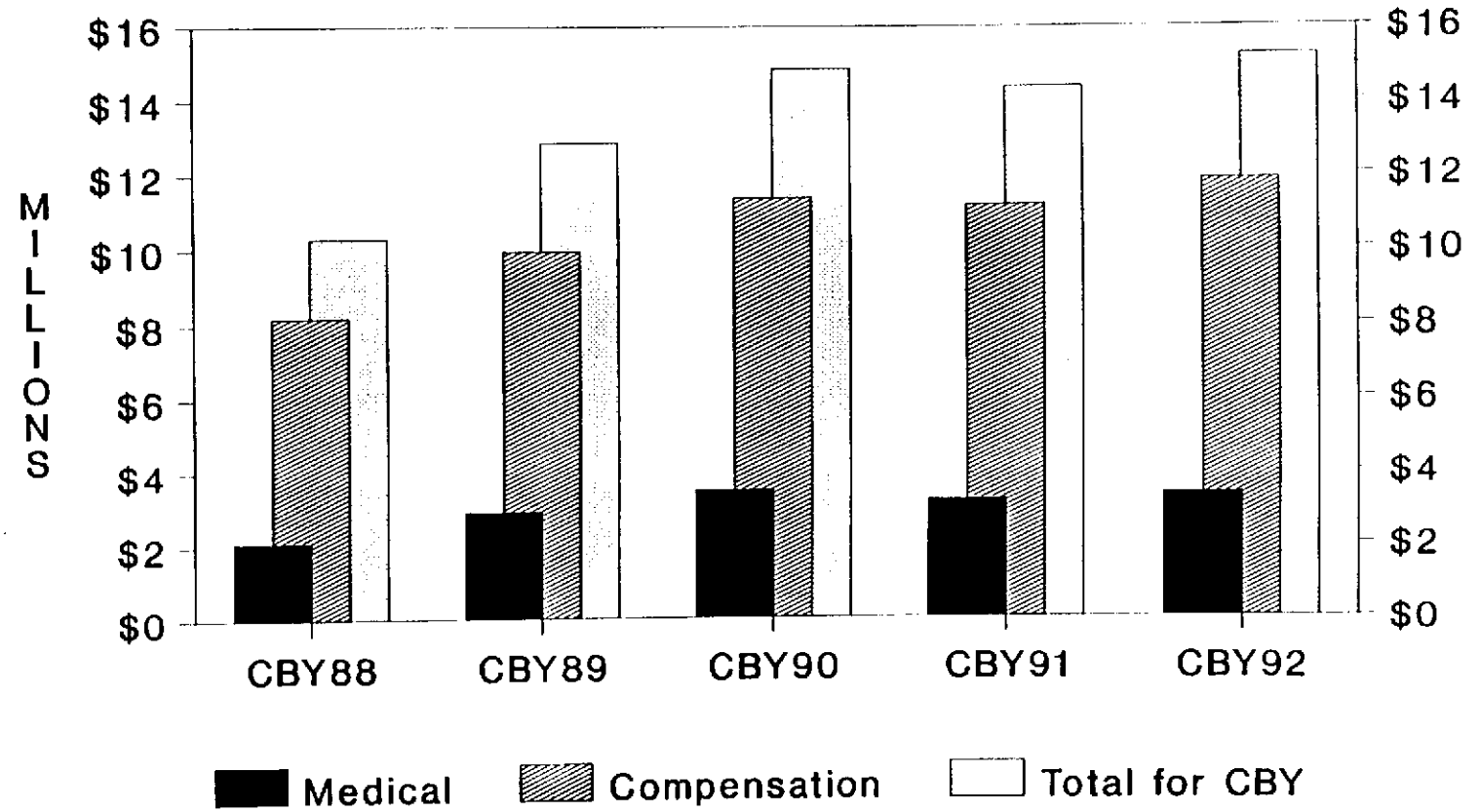
ANALYSIS OF NAVFAC COMPENSATION LOST TIME & FATAL CASES



Note: Compensation Benefit Year 1992

NAVFAC COMPENSATION COSTS
CBY88-CBY92



Source: FECA 01 Jul 88 - 30 Jun 92
Note: CBY - Compensation Benefit Year 1 July - 30 June

Sep 92

MILLION $ CLUB
CBY 1992*

Activity	Compensation Cost	% of NAVFAC Total Cost
PWC San Diego	$3,078,000	20.19
PWC Norfolk	$1,837,000	12.05
PWC Pearl Harbor	$1,784,000	11.70
PWC San Francisco	$1,731,000	11.35
PWC Great Lakes	$1,192,000	7.82
PWC Pensacola	$1,020,000	6.69
CBC Port Hueneme	$1,768,000	11.70
TOTAL	$12,410,000	81.40

* CBY = Compensation Benefit Year - 1 July 91 - 30 June 92

EQUIVALENT WORKYEARS COST

	COMPENSATION COST (MILLION)		EQUIVALENT WORKYEARS*	
	1991	1992	1991	1992
EFDs	.99	1.34	24	32.3
PWCs	10.52	10.92	345	352.3
CBCs	2.59	2.69	86	88.3
COMMAND TOTAL	14.38	15.25	462	480.0

* Estimates Used

EFDs - $41,500/per workyear
PWCs - $31,000/per workyear
CBCs - $30,500/per workyear

COMPENSATION COST COMPARISON
CBY91-CBY92

	CBY 91*			CBY 92*			
	MEDICAL COSTS (000)	COMP COSTS (000)	TOTAL COSTS (000)	MEDICAL COSTS (000)	COMP COSTS (000)	TOTAL COSTS (000)	PERCEN INCREASE, DECREAS
PWCs							
Great Lakes	269	880	1,149	274	917	1,192	
Norfolk	504	1,196	1,700	521	1,316	1,837	
Pearl Harbor	341	1,553	1,894	250	1,533	1,784	-6
Pensacola	98	659	757	258	761	1,020	35
San Diego	590	2,373	2,963	627	2,451	3,078	
San Francisco	414	1,273	1,687	381	1,350	1,731	
Guam	53	288	341	5	245	251	-26
Subic Bay	1	29	30	1	24	26	-13
Subtotal	2,270	8,251	10,521	2,317	8,597	10,919	4
CBCs							
Davisville	15	235	250	39	218	256	2
Gulfport	217	448	665	196	473	669	1
Port Hueneme	439	1,237	1,676	454	1,313	1,768	5
Subtotal	671	1,920	2,591	689	2,004	2,693	4
EFDs							
CHESDIV	11	37	48	6	226	233	385
LANTDIV	10	95	105	89	126	215	105
NORTHDIV	39	62	101	39	27	66	-35
PACDIV	9	63	72	5	67	72	0
SOUTHDIV	43	117	160	50	152	203	27
SOUTHWESTDIV	5	19	24	34	69	103	329
WESTDIV	103	374	477	86	363	449	-6
Subtotal	220	767	987	309	1,030	1,341	36
NCEL	16	80	96	49	132	181	89
NEESA	18	0	18	6	0	6	-67
FAC HQs	18	14	32	11	0	11	-66
UNKNOWN	2	128	130	0	93	94	-28
Subtotal	54	222	276	66	225	292	6
GRAND TOTAL	3,215	11,160	14,375	3,381	11,856	15,245	6

*CBY = Compensation Billing Year 1 July - 30 June
8/27/92

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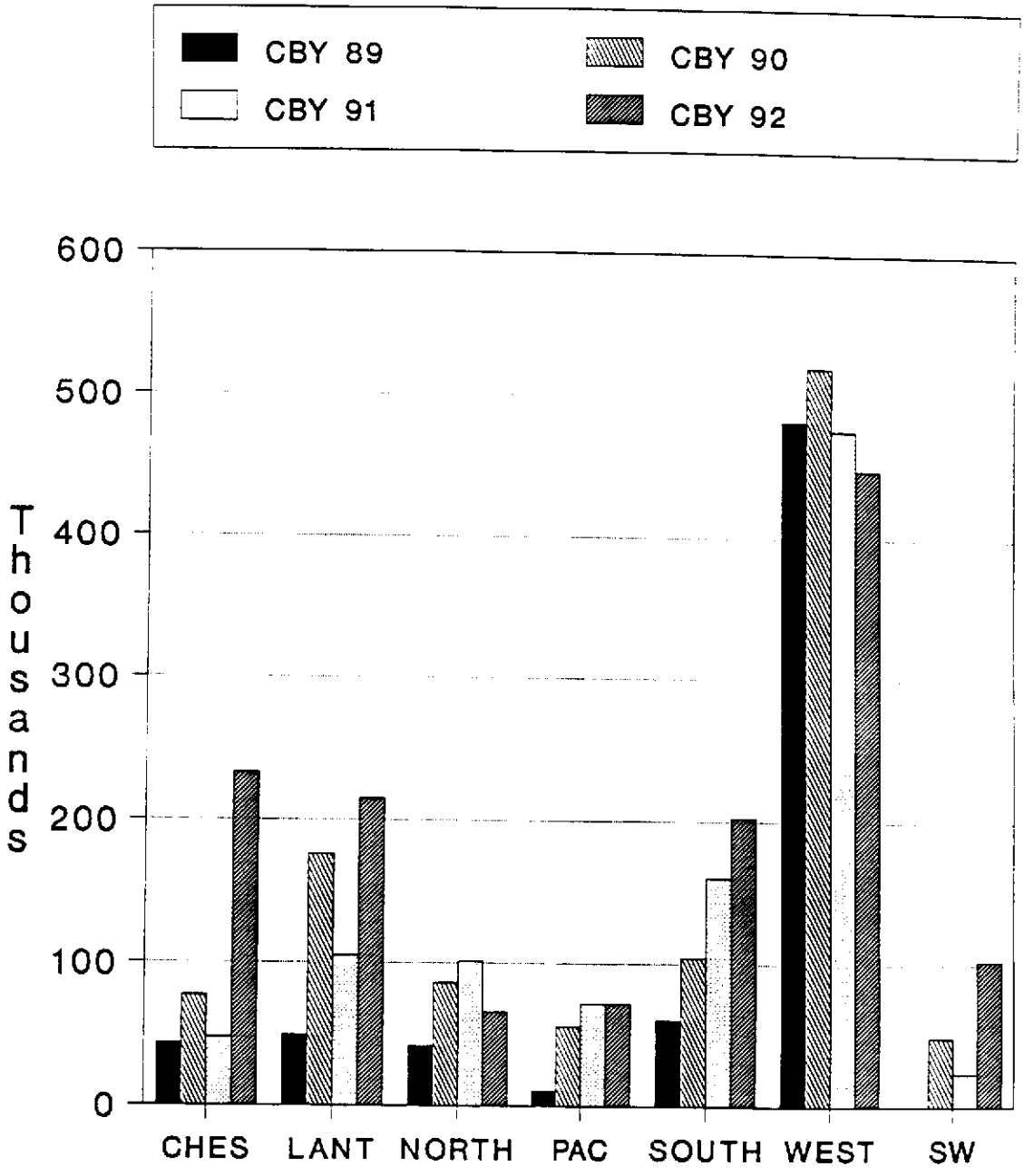
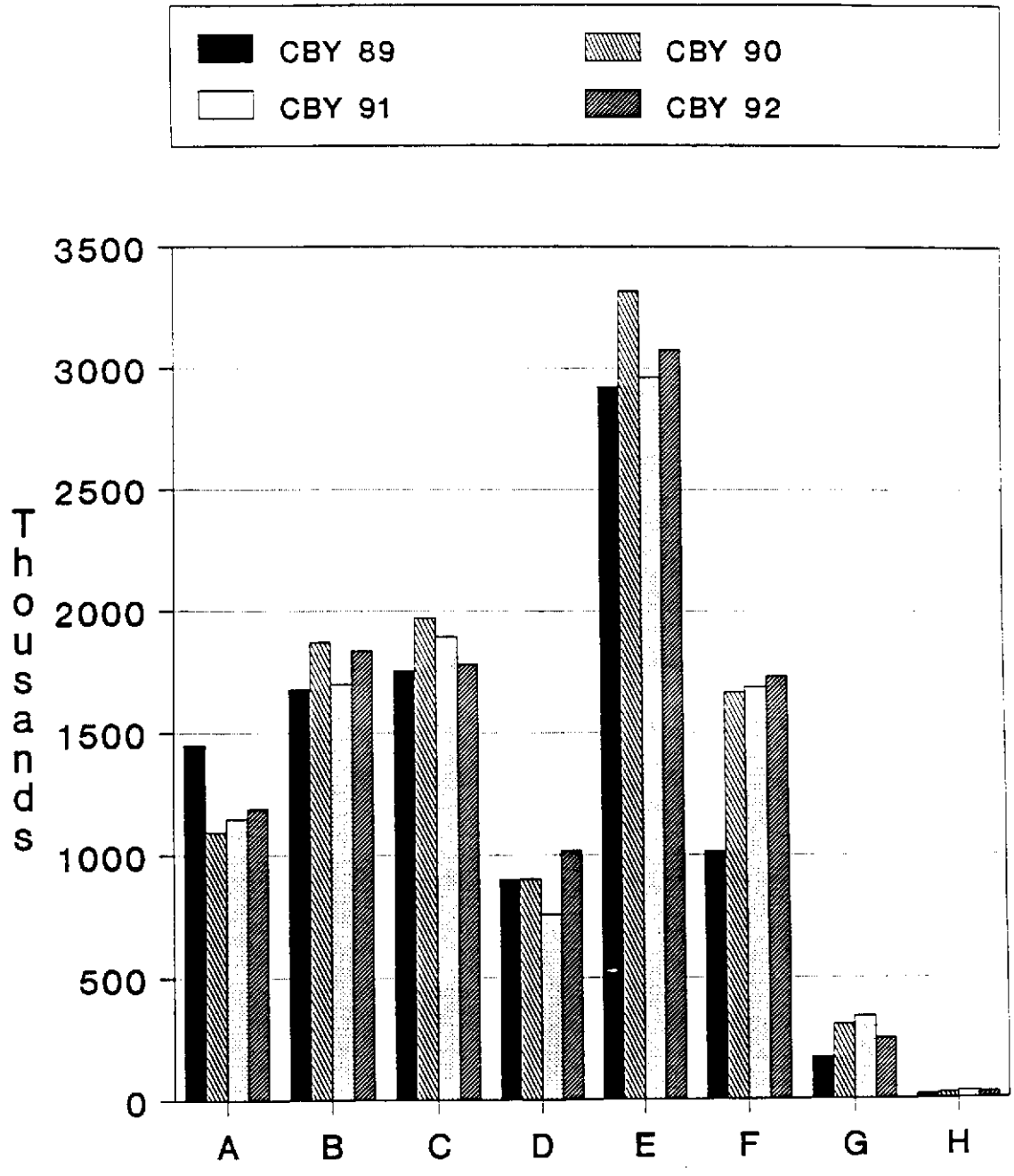
INJURY COMPENSATION COST SUMMARY
NAVFAC Engineering Field Divisions



CBY = Compensation Billing Year
1 July - 30 June

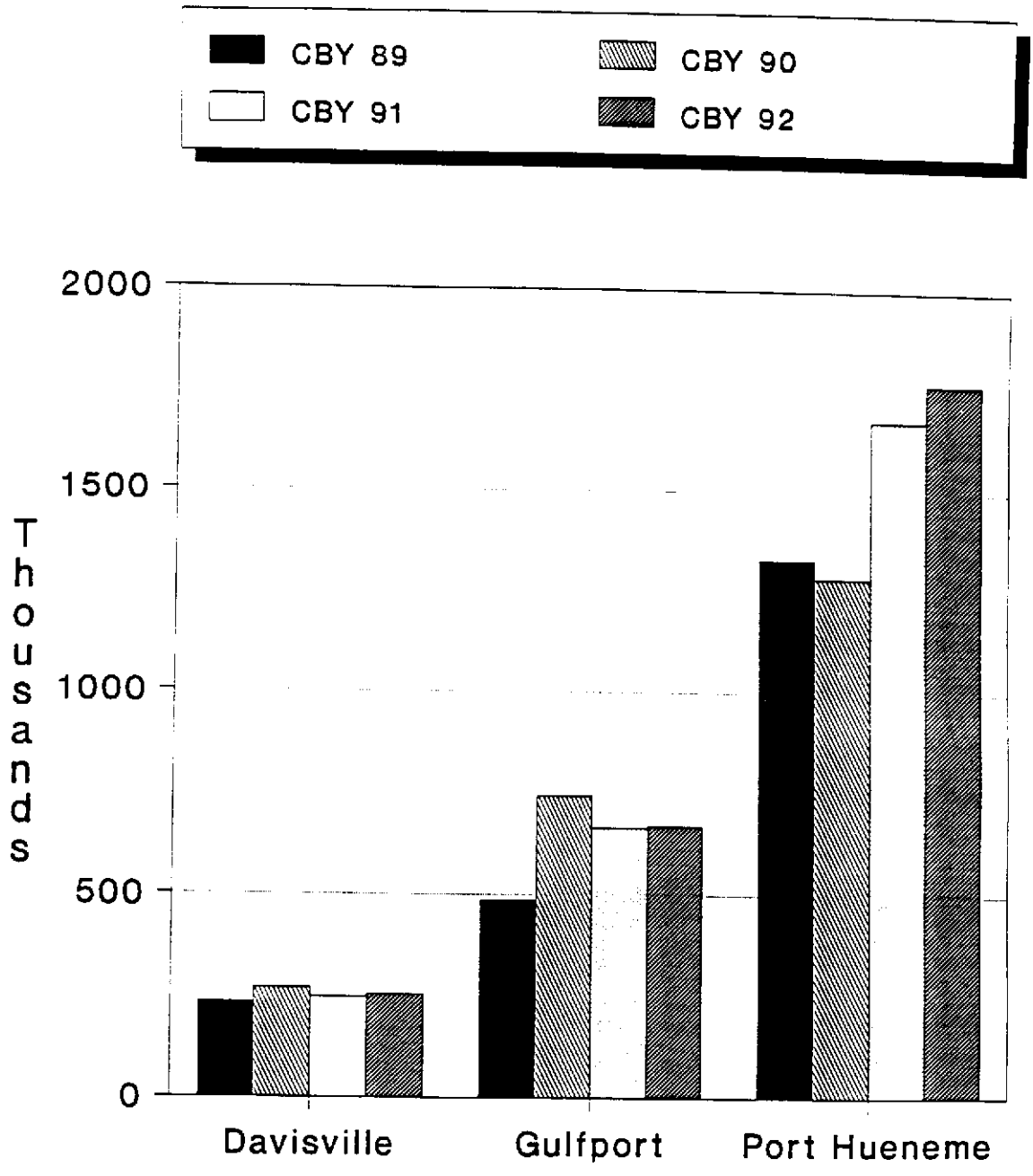
INJURY COMPENSATION COST SUMMARY
NAVFAC Navy Public Works Centers



A - Great Lakes
B - Norfolk
C - Pearl Harbor
D - Pensacola
E - San Diego
F - San Francisco
G - Guam
H - Subic Bay

CBY - Compensation Billing Year
1 July - 30 June

INJURY COMPENSATION COST SUMMARY
NAVFAC Construction Battalion Centers



CBY - Compensation Billing Year
1 July - 30 June

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FY92 SERIOUS MISHAPS SUMMARY
CONTRACTORS/SEABEES/RESERVES

NOV 91	NORTHDIV	FATALITY	CONTRACTOR FATALITY PINNED UNDER EARTH MOVER
NOV 91	IWAKUNI, JAPAN	FATALITY	SEABEE FATALITY FELL 3 STORIES OFF ROOF REMOVING TAR PAPER. UNHOOKED SAFETY HARNESS
DEC 91	LANTDIV	FATALITY	CONTRACTOR FATALITY FELL 44 FT THROUGH 4 FT ROOF OPENING DURING ASBESTOS REMOVAL JOB
DEC 91	PWC SFRAN	FATALITY	CONTRACTOR FATALITY FELL OFF 3 STORY ROOF POWER SWEEPING GRAVEL NO LIFE LINE/NET NOR PROTECTIVE BARRICADES USED
FEB 92	LANTDIV	FATALITY	CONTRACTOR FATALITY FELL 40 FT THROUGH SKYLIGHT. EITHER SITTING OR LEANING AGAINST. NO LIFE LINE USED

FY92 SERIOUS MISHAPS SUMMARY (cont)
CONTRACTORS/SEABEES/RESERVES

MAR 92	SOUTHDIV	FATALITY	CONTRACTOR FATALITY FELL 40 FT THROUGH DETERIORATED ROOF ONTO CONCRETE FLOOR
JUN 92	SOUTHWESTDIV	FATALITY	CONTRACTOR FATALITY FELL 28 FT WHILE JUMPING FROM ONE TRUSS TO ANOTHER - NO LIFE LINE USED - 2ND PERSON SAVED BY LIFE LINE, 3RD PERSON HELD ONTO BEAM
JUN 92	NORTHDIV TRENTON	SERIOUS INJURY	CONTRACTOR INJURED EARTH CAVED IN WHILE LABORER WAS CHECKING 20'X12' EXCAVATION FOR DAMAGE - NO SHORING
JUL 92	NORTHDIV GLAKES	SERIOUS INJURY	CONTRACTOR INJURED FELL 37 FT FROM MASONRY SCAFFOLD ERECTING 4TH FLOOR WALL. LANDED ON PALLET OF STRAPPING MATERIAL

FY92 SERIOUS MISHAPS SUMMARY (cont)
CONTRACTORS/SEABEES/RESERVES

JUL 92	PWC NORFOLK	SERIOUS INJURY	CONTRACTORS BURNED FLASH FIRE FROM IGNITION OF VAPORS WHILE STRIPPING FLOOR IN FAMILY HOUSING
AUG 92	PWC PEARL	FATALITY	CONTRACTOR FATALITY ELECTROCUTED WHILE TRIMMING TREES
SEP 92	NORTHDIV NETC NEWPORT	SERIOUS INJURY	CONTRACTOR INJURED ELECTROCUTED WHILE IN BUCKET TRUCK ON RISER POLE. TERMINATOR FROM POLE FELL ON TOP OF INJURED
SEP 92	SOUTWESTDIV	SERIOUS INJURY	CONTRACTOR INJURED FELL 18 FT WHILE CLIMBING DOWN LADDER DURING OFF-DUTY INSPECTION OF SITE
SEP 92	SOUTHDIV	FATALITY	CONTRACTOR FATALITY DROWNED AFTER FALLING OVERBOARD WHILE WORKING ON BOAT DURING BRIDGE REPAIR

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FY92 SERIOUS MISHAPS SUMMARY
NAVFAC EMPLOYEES/OPERATIONS

OCT 91	YOKOSUKA	SERIOUS INJURY	NAVFAC CIVILIAN - STEAM BURNS FAILURE TO FOLLOW LOCKOUT/TAGOUT/ TRYOUT PROCEDURES
NOV 91	CHESDIV	FATALITY	CIVILIAN FATALITY HEART ATTACK WHILE UNDERWAY ABOARD NAVFAC OWNED OCEAN CONSTRUC- TION PLATFORM "SEACON"
FEB 92	PWC GUAM	PROPERTY DAMAGE	NAVFAC CIVILIAN - CRANE OPERATOR $80K PROPERTY DAMAGE WHEN CRANE TIPPED OVER WITH 118 FT BOOM EXTENDED, NO LOAD; WIND GUSTS OF 12 KNOTS WERE ABEAM OF CRANE OUTRIGGERS NOT EXTENDED

FY92 SERIOUS MISHAPS SUMMARY (cont)
NAVFAC EMPLOYEES/OPERATIONS

FEB 92	PWC NORFOLK	SERIOUS INJURY	NAVFAC CIVILIAN - BURNS TO LEG AND ARM WHEN HE TOUCHED BUS TIE DURING P.M. OF SWITCHGEAR
APR 92	PWC PEARL	SERIOUS INJURY	NAVFAC CIVILIAN - FLASH BURNS TO FACE, CHEST AND ARMS (SKIN GRAPHS REQ'D), TESTING OF HV FUSES INSIDE PANEL. POOR PANEL DESIGN - FAILURE TO FOLLOW LOCKOUT/TAG-OUT/TRYOUT PROCEDURES
MAY 92	NORTHDIV	FATALITY	NAVFAC CIVILIAN - FATALITY LOW SPEED TRAIN CRASH ON WAY TO WORK CONSTRUCTION ZONE NEAR UNGATED CROSSING
MAY 92	PWC GLAKES	FATALITY	VA OUTPATIENT FATALITY HIT BY PWC TRUCK DIED 60 DAYS LATER

FY92 SERIOUS MISHAPS SUMMARY (cont)
NAVFAC EMPLOYEES/OPERATIONS

JUN 92	PWC PEARL	FATALITY	NAVFAC CIVILIAN - FATALITY WOODEN TIMBER (12"X14"X16') AND CONNECTING SECTION OF CAMEL FENDER FELL ON HIS HEAD
SEP 92	SOUTHDIV CNSY	FATALITY	SHIPYARD WORKER - FATALITY AND TWO INJURED WHEN CRANE WITH BOOM RAISED BACKED INTO POWER LINE

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FY92 INSPECTION RESULTS

NAVOSH OVERSIGHT INSPECTION UNIT (NIG):

ACTIVITY	DATE INSPECTED	RATING	RANK	TABS	RECOMMENDATION NAVFAC	RECOMMENDATION BUMED
PWC Guam	11-16 Dec 91	SAT	96%	3	9	1
PWC San Francisco	13-16 Jan 92	SAT	85%	8	8	9
CBC Gulfport	03-06 Feb 92	SAT	85%	10	28	0
CBC Port Hueneme	25-28 Feb 92	SAT	91%	6	23	4
EFD Westdiv	19-21 Feb 92	UNSAT	58%	15	65	1
NCEL	02-06 Mar 92	SAT	97%	0	0	0
PWC Yokosuka	08-13 Apr 92	SAT	92%	8	16	3
EFD Southdiv	20-24 Apr 92	SAT	95%	6	9	0
PWC Pearl Harbor	31 Aug-3 Sep 92	SAT	84%	19		
PWC San Diego	15-18 Sep 92	SAT	89%	5		

NAVFACENGCOMHQ OSH PROGRAM MANAGEMENT EVALUATIONS:

ACTIVITY	TYPE	DATE INSPECTED	RATING
EFD Chesdiv	OSH ME	21-25 Oct 91	UNSAT
PWC San Francisco	Assist	21-25 Oct 91	-
NCEL	OSH ME	28 Oct-1 Nov 91	SAT
EFD Pacdiv	OSH ME	27-31 Jan 92	MARG
CBC Port Hueneme	Assist	03-07 Feb 92	-
PWC Yokosuka	Assist	09-13 Mar 92	-
EFD Southdiv	Assist	06-09 Apr 92	-
EFD Southwestdiv	OSH ME	27 Apr-1 May 92	SAT
EFD Lantdiv	OSH ME	18-22 May 92	SAT
PWC Pearl Harbor	Assist	30 Jul-7 Aug 92	-
PWC San Diego	Assist	24-28 Aug 92	-

OSHA TARGET INSPECTIONS:

ACTIVITY	DATE INSPECTED	RESULTS
PWC San Francisco	04-09 Sep 92	SAT
PWC Pensacola	21-24 Jul 92	SAT
PWC Pearl Harbor	09-23 Sep 92	SAT

SEP 92

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PART III

FY93 QUALITY IMPROVEMENT PLAN

This part details desired outcomes, strategies, quality improvements, identifies target dates, and expected output

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FY93
SAFETY AND HEALTH
QUALITY IMPROVEMENT PLAN

CONTRACT CONSTRUCTION SAFETY (CC)

DESIRED OUTCOME: Facilities are built or repaired without seriously injuring people (activity employees, visitors, family members, ROICC/EFD, and contractor employees) or creating hazardous situations with toxic materials/ chemicals.

STRATEGY:

* Ensure contractors execute their approved Accident Prevention Plan, Phase Hazard Analysis, or Site Specific Safety and Health Plans (OSHA 1910.120)
* Ensure ROICC monitor plan compliance and standards compliance
* Accidents are thoroughly investigated, properly reported, and appropriate corrective actions are taken
* Enforce strict compliance with job safety standards
* Make safety criteria in contractor selection
* Ensure ROICC personnel are highly qualified to perform their safety and health responsibilities

RESPONSIBILITY: NAVFACENGCOMHQ/EFD/PWC/CBC

FACILITY PLANNING AND DESIGN SAFETY (FPDS)

DESIRED OUTCOME: Deliver a facility to the customer that is safe and healthful to operate, occupy, and maintain.

STRATEGY:

* Conduct pre and post occupancy inspections to evaluate adequacy of hazard controls
* Ensure during construction, assigned systems are included without improper system modifications or substitutions of more hazardous materials
* Early design is reviewed and validated to assure hazards have been identified and controlled to an acceptable customer level
* Certified Ready for Design MILCON projects only after adequate planning and identification of hazards

* Ask customers for their input to the design function (normally an EFD) on their safety and health concerns, potential hazards, other safety issues and desired solutions

RESPONSIBILITY: NAVFACENGCOMHQ/EFD/PWC/NCEL

ACCIDENT PREVENTION (MP)

DESIRED OUTCOME: Lost time mishap rates have been reduced 12 percent by FY 1996. Employees have observed a continuous improvement in the work environment. Safety is an integral part of our corporate culture and work processes.

STRATEGY:

* Target high risk jobs and operations
* Initiate behavior modification programs
* Identify and correct root causes of mishaps through comprehensive investigations, and effective Commanding Officer Green Table Reviews
* Develop and distribute "Accident Abstracts" to share lessons learned
* Solicit suggestions from and involve our employees

RESPONSIBILITY: NAVFACENGCOMHQ/EFD/PWC/CBC/NCEL/NEESA

WORKERS' COMPENSATION COST REDUCTION (WC)

DESIRED OUTCOME: Workers' compensation costs have been reduced 12 percent by CBY 1996.

STRATEGY:

* Staff NAVFACENGCOMHQ Compensation Program Manager position
* Form effective teams between Human Resource Officer, OSH Office, BUMED physicians/nurses, and management personnel
* Process valid cases expediently
* Aggressively pursue suspect cases
* Employ trained investigators
* Establish effective arrangements with specialized medical centers for evaluation (second opinion) of certain workers' compensation recipients, specifically back injuries

* Maintain continuous liaisons with OWCP regional officers and private physicians

* Screen prospective employees for pre-existing medical conditions

RESPONSIBILITY: Human Resource Offices and Senior Managers in coordination with Safety and Health Personnel

ERGONOMICS (E)

DESIRED OUTCOME: Reduce the number of back injuries resulting in lost time 50 percent by the end of FY 1996. Minimize potential for cumulative trauma disorders.

STRATEGY:

* Complete ergonomic evaluations of all workplaces and high hazard operations

* Initiate design/procedural modifications

* Promote general health awareness and employee well-being

* Establish behavior modification programs

* Conduct NAVFACENGCOMHQ evaluation/assist visits at all million dollar club activities

* Continue to improve training programs

* Develop and distribute an ergonomics resource manual

RESPONSIBILITY: NAVFACENGCOMHQ/EFD/PWC/CBC/NCEL/NEESA

ENVIRONMENTAL SAFETY AND HEALTH (ES&H)

DESIRED OUTCOME: Environmental compliance and protection operations are safe and healthful.

STRATEGY:

* Protect people

* Hazards are eliminated/minimized through engineering controls prior to operation start-up

* Determine and specify the least hazardous remediation methods and procedures

* Use least hazardous materials

* Ensure IR project health and safety plans are reviewed and approved by OSH professionals prior to start of work

RESPONSIBILITY: NAVFACENGCOMHQ/EFD/PWC/CBC/NCEL/NEESA

WEIGHT HANDLING EQUIPMENT AND RIGGING SAFETY (WHE)

DESIRED OUTCOME: Standardized qualifications and training for WHE personnel. Reduction in WHE and rigging mishaps.

STRATEGY:

* Develop a matrix of recommended minimum WHE qualifications and training requirements
* Develop and distribute NAVFAC Riggers Safety Handbook
* Identify available training sources and courses
* Continue improvement in mishap investigation and data analyses

RESPONSIBILITY: NAVFACENGCOMHQ/Navy Crane Center/EFD/PWC/PWD/CBC

HAZARDOUS MATERIAL AND WASTE MANAGEMENT (HM/WM)

DESIRED OUTCOME: Effective HM control programs are implemented and quantities of hazardous materials and hazardous waste are continually reduced.

STRATEGY:

* HM Authorized Use Lists are integrated into activity procurement systems
* Less HM are identified, substituted, and results shared throughout the Command
* HM control and waste minimization are effectively integrated through programs such as the Comprehensive Approach to Pollution Prevention (CAPP)

RESPONSIBILITY: NAVFACENGCOMHQ/EFD/PWC/CBC/NCEL/NEESA

NAVAL FACILITIES ENGINEERING COMMAND

CONTRACT CONSTRUCTION SAFETY (CC)

	QUALITY IMPROVEMENTS	FY93 TARGET DATE	EXPECTED OUTPUT
NAVFACENGCOMHQ			
CC-1	Publish newsletter to provide info and awareness to the construction community	As Needed	Newsletter distributed
CC-2	Develop/sponsor training course(s) for ROICCs w/emphasis on fall protection/prevention, electrical safety, crane and rigging safety and mishap investigation	Qtr 3	Training course(s) conduct
CC-3	Develop/revise guidelines for contractor fatality/serious mishap investigations and reports	Qtr 2	Guidelines distributed to EFDs & ROICCs
CC-4	Develop safety and health guidance/ checklists for Field Office Contract Automation System (FOCAS) on high hazard operations such as roofing, working from heights, and bucket truck operations	Qtr 1-2 Qtr 3	Safety and health guidance submitted to FOCAS program manager Revision to NAVFACINST 5100.11 issued
CC-5	Clarify NEHC/EFD 09K responsibilities and procedures for evaluation of site safety and health plans	Qtr 1	NAVFACENGCOMHQ msg issued
CC-6	Evaluate/develop contract construction safety award criteria	Qtr 1	Suggestions solicited, oth agency criteria evaluated recommendations published
EFDs			
CC-7	Provide guidance and training to all ROICCs on fall protection, asbestos, excavations and environmental projects	Qtr 1	Reinforce policy and provi training videos, sources, etc. Validate completion training during site visit Reduction in contractor accidents.

NAVAL FACILITIES ENGINEERING COMMAND

CONTRACT CONSTRUCTION SAFETY (CC)

QUALITY IMPROVEMENTS		FY93 TARGET DATE	EXPECTED OUTPUT
CC-8	Ensure all 1910.120 health and safety plans are reviewed/ approved by 09K/05K prior to project start and are site-specific	Qtr 1-2-3-4	Log of H&S plans maintained with status/quality/ discussion
CC-9	Develop procedures to ensure activity safety personnel are invited to participate in all pre-construction and pre/post occupancy evaluations	Qtr 1 Qtr 2-3-4	Policy/procedures issued to ROICCs Customers surveyed during site visits and/or use of questionnaires
CC-10	Develop POA&M for construction safety tasks e.g. inspections, training, Code 18 support, mishap investigation	Qtr 1	POA&M developed, signed by Safety Manager and CO/XO (Activity OSHPIP)
CC-11	Increase focus of safety program at each ROICC office. Officially appointed Collateral Duty Safety Officer (CDSO) or Safety Assistant is trained and keeps ROICC office aware of program needs	Qtr 2	Appointment ltrs issued; Training plan developed
CC-12	Keep CO/XO informed of construction safety activities	Qtr 1-2-3-4	Quarterly status reports of construction safety activities provided
CC-13	Increase design safety interface with ROICC, EFD-04 Engineer and Activity	Qtr 1	Ensure ROICC has preliminary hazard list or analysis for each RAC 1 & RAC 2 MCON project
CC-14	Publish lessons learned from contractor mishaps	Qtr 1-2-3-4	Lessons learned prepared and distributed. (Within 30 days of serious mishap) Others in normal EFD-05 publications
CC-15	Provide support to PWC/PWD/ Activity Safety Managers. Increase communications, accident investigation support, technical assistance	Qtr 1-2-3-4	Issue activity guidance to PW/Safety Office through EFD Code 09B.

NAVAL FACILITIES ENGINEERING COMMAND

FACILITY PLANNING AND DESIGN SAFETY (FPDS)

	QUALITY IMPROVEMENTS	FY93 TARGET DATE	EXPECTED OUTPUT
NAVFACENGCOMHQ			
FPDS-1	Update NAVFACINST 5100.11H to include appropriate system safety training courses	Qtr 2	Change to NAVFACINST 5100.11H issued
FPDS-2	Assure availability of system safety course(s) available for EFD/PWC/CBC/NCEL personnel and other Navy activities	Qtr 2-4	Identify training sources and schedules Coordinate w/USACE
FPDS-3	Develop short course for EFD to conduct for EFD and activity personnel	Qtr 2	Lesson plans distributed t EFDs
FPDS-4	Develop system safety engineering requirements/guidance for the automated installation planning and management guide	Qtr 1	Guidance/flowcharts developed; submitted to program manager
EFDs			
FPDS-5	Increase activity interface/ assure customer satisfaction	Qtr 1-2-3-4	Regular contact with activity safety manager/ engineer and planners
FPDS-6	Develop assigned section of FPDS short course (FPDS-4)	Qtr 1	1st draft of assigned section completed by each EFD and provided to 18K4
		Qtr 3	First course held at EFD
FPDS-7	Develop activity FPDS resource guide (WESTDIV lead)	Qtr 2	Resource guide developed and distributed
FPDS-8	Assure facility projects have adequate safety information prior to the certified ready for design decision	Qtr 1-2-3-4	SSE verify all required info is contained in packa prior to certifying ready for design
FPDS-9	Conduct pre and post occupancy inspection to evaluate adequacy of hazard controls	Qtr 1-2-3-4	Delivery of quality facilities to customers

NAVAL FACILITIES ENGINEERING COMMAND

ACCIDENT PREVENTION (AP)

	QUALITY IMPROVEMENTS	FY93 TARGET DATE	EXPECTED OUTPUT
NAVFACENGCOMHQ			
AP-1	Develop an activity appraisal system vs NAVFACENGCOMHQ Inspection program	Qtr 2	Elimination of inspections. TQL and partnering integrated into appraisal process
AP-2	Conduct appraisals/assist visits at all million $ club activities	Qtr 2-3-4	Increased NAVFACENGCOMHQ assistance and improved management of OSH programs
AP-3	Keep NAVFACENGCOMHQ Executives aware of OSH issues, problems, requirements, etc.	Qtr 1-2-3-4	Quarterly program status reports
AP-4	Communicate NAVFACENGCOM training needs via participation in the Shore NAVOSH Training Working Group	Qtr 1-2-3-4	Improved training programs
AP-5	Provide Guidance to PWCs on safety and health issues related to the expansion	Qtr 1-2-3-4	Working group established, issues identified and recommendations provided
AP-6	Develop recommended minimum training requirements for wharf-builders	Qtr 3-4	Training program/criteria distributed
AP-7	Establish a working group for development of the FY94 OSHPIP	Qtr 1 Qtr 3-4	Working group formed/tasked OSHPIP developed
AP-8	Develop NAVFACENGCOM mishap investigation manual	Qtr 2	Manual developed/distributed
AP-9	Develop guidance for inspection/ maintenance of Natural Gas Systems NAVFACENGCOM Board Members	Qtr 2	Guidance distributed
AP-10	Disseminate lessons learned via Accident Abstracts	Qtr 1-2-3-4	Reduction of similar type mishaps
AP-11	Assist activities with STATMAN (automated mishap data base system)	Qtr 3	Improved statistical analyses of mishap data

NAVAL FACILITIES ENGINEERING COMMAND

ACCIDENT PREVENTION (AP)

QUALITY IMPROVEMENTS		FY93 TARGET DATE	EXPECTED OUTPUT
AP-12	Keep activities appraised of new requirements, issues guidance, share successful initiatives, etc.	Qtr 1-2-3-4	Quarterly Safety & Health Memorandum
EFD/PWC/CBC/NCEL/NEESA			
AP-13	Develop local OSHPIP incorporating appropriate NAVFACENGCOMHQ OSHPIP items and activity goals and objectives	Qtr 1 Qtr 3	Activity OSHPIP prepared Semi-annual status report provided to NAVFACENGCOM 18K1
AP-14	Continue special emphasis program to complete job hazard analyses for high risk trades, work centers and processes	Qtr 1-2-3-4	Provide list to NAVFAC 18K semi-annually
AP-15	Exchange successful initiatives with other activities and NAVFACENGCOMHQ	Qtr 2-3-4	Semi-annual summary provid to NAVFAC 18K1 for distribution
AP-16	Continue special emphasis on LO/TO/TO and development of SOPs	Qtr 1-2-3-4	Develop and post SOPs for all classes of equipment
AP-17	Implement program improvements based on customer surveys	Qtr 2 Qtr 3	Internal/external customer surveyed Improvement plan developed
AP-18	Prepare/disseminate accident abstracts	Qtr 1-2-3-4	Minimum of 1 per quarter submitted to NAVFAC 18K1 f distribution
AP-19	Identify root causes of mishaps through quality mishap investi-gation	Qtr 1-2-3-4	OSH Office investigation o all Class A, B, and C mishaps
AP-20	Utilize Statistical Management (STATMAN) software to conduct mishap analyses	Qtr 1-2-3-4	Improved mishap trend analyses
PWC/CBC			
AP-21	Conduct/coordinate safety training for wharfbuilders	Qtr 3-4	Training completed

NAVAL FACILITIES ENGINEERING COMMAND

WORKERS' COMPENSATION COST REDUCTION (WC)

	QUALITY IMPROVEMENTS	FY93 TARGET DATE	EXPECTED OUTPUT
NAVFACENGCOMHQ			
WC-1	Establish a NAVFACENGCOMHQ ICPA liaison position	Qtr 1	Position established, filled
WC-2	Survey customers for problem areas, barriers and needs	Qtr 2	Barriers targeted and POA&M developed and initiated
WC-3	Sponsor cost reduction working group meeting(s)	Qtr 3	Working group meetings conducted
WC-4	Develop/coordinate claims examiner type training for ICPAs, investigators, etc.	Qtr 3-4	Training course(s) conducted
WC-5	Conduct program evaluations/ assist visits to all million $ club activities	Qtr 1-2-3-4	Improved programs; reduction in compensation costs
EFD/PWC/CBC/NEESA/NCEL			
WC-6	Train all supervisory personnel in FECA program administration/ procedures	Qtr 3-4	Training completed
WC-7	Publicize effect of COP and chargeback costs on overhead rates throughout the command	Qtr 2-4	Heightened management/ employee awareness of adverse impact
WC-8	Maintain close working relationships between OWCP Regional Claims Examiners, Managers, OSH Personnel and BUMED Physicians/Nurses	Qtr 1-2-3-4	Improved case management
WC-9	Establish/maintain effective return to work programs	Qtr 1-2-3-4	Reemployment of eligible persons
WC-10	Establish local pre-employment physical policy	Qtr 2	Documentation of prior medical conditions; Proper job placement
WC-11	Continue to identify target cases and require 3rd party medical reevaluation/update	Qtr 1-2-3-4	Revalidation of medical status and restrictions

NAVAL FACILITIES ENGINEERING COMMAND

ERGONOMICS (E)

	QUALITY IMPROVEMENTS	FY93 TARGET DATE	DESIRED OUTPUT
NAVFACENGCOMHQ			
E-1	Continue coordination of ergonomic supervisor training courses at PWCs/CBCs	Qtr 1-2-3-4	Continuous improvement of training program
E-2	Conduct additional ergonomic analysis studies at PWCs/CBCs	Qtr 1-2-3-4	Activity studies completed at all million $ club activities
E-3	Publish ergonomics resource manual	Qtr 1	Resource Manual/Guidance distributed
E-4	Analyze activity back injury prevention (BIP) mishap data to determine success/failure and NAVFACENGCOM trends	Qtr 3	Semi-annual status report
E-5	Conduct back injury prevention training for NAVFACENGCOMHQ Executives and Activity COs	Qtr 2-3	Increased top management awareness
E-6	Develop specifications for ergonomic related equipment	Qtr 1	Specifications/guidance distributed
E-7	Conduct command-wide survey to evaluate employee cumulative trauma disorder (CTD)	Qtr 2 Qtr 3	Questionnaire form developed/distributed Summary analysis completed Plan of action developed
EFD/PWC/CBC/NEESA/NCEL			
E-8	Complete VDT surveys, employee training, and upgrade of work stations	Qtr 1	Improved VDT workstation design
E-9	Develop POA&M for completion of ergonomic analyses of industrial workplaces	Qtr 1	Improved workplace design
E-10	Investigate/analyze CTD injury and illness data	Qtr 2	Targeting of high-risk operations/positions

NAVAL FACILITIES ENGINEERING COMMAND

ERGONOMICS (E)

QUALITY IMPROVEMENTS		FY93 TARGET DATE	DESIRED OUTPUT
E-11	Survey employees for symptoms	Qtr 2	Employee survey completed, problem areas identified Summary provided to NAVFAC 18K2
E-12	Provide ergonomics training to top management and supervisors	Qtr 3	Increased top management support

NAVAL FACILITIES ENGINEERING COMMAND

WEIGHT HANDLING EQUIPMENT AND RIGGING SAFETY (WHE)

	QUALITY IMPROVEMENTS	FY93 TARGET DATE	EXPECTED OUTPUT
NAVFACENGCOMHQ			
WHE-1	Revise NAVFAC P-307 (Navy Crane Center (NCC) lead)	Qtr 4	Revised P-307 issued
WHE-2	Establish recommended minimum WHE qualifications and training requirements for: - Operator (CAT II, III) - Certifying Officer - Inspector/Test Director - License Examiner/Instructor - Mechanics - Engineers - Riggers	Qtr 2-3	PAT to develop recommende requirements and training matrix for each category. Matrix submitted to NCC fo approval
WHE-3	Obtain and evaluate WHE mishap data from Naval Safety Center	Qtr 3	Trend analysis conducted a provided to WHE PAT
WHE-4	Revise NAVFAC P-306 (NCC lead)	Qtr 3	P-306 revised. Issued as P-307 Volume 2
WHE-5	Develop NAVFACENGCOM Riggers Safety Handbook (NCC lead)	Qtr 3	Handbook published and distributed
EFD			
WHE-6	Establish/provide certifying official training course to shore activities (NORTHDIV/NCC lead)	Qtr 3-4	Several classes offered
WHE-7	Evaluate commercial sources of NAVFAC P-306/307 training (NORTHDIV/NCC lead)	Qtr 2	Recommendations/endorsemen provided to activities
PWC/CBC/NCEL/NEESA			
WHE-8	Identify type, frequency, and format of local WHE-related training for all categories in WHE-2	Qtr 2	Summary submitted to FAC 18K1

NAVAL FACILITIES ENGINEERING COMMAND

WEIGHT HANDLING EQUIPMENT AND RIGGING SAFETY (WHE)

QUALITY IMPROVEMENTS		FY93 TARGET DATE	EXPECTED OUTPUT
WHE-9	Revise WHE mishap investigation report form (PWC Pearl/San Diego lead)	Qtr 1	Improved form distributed; improved mishap analysis data base
WHE-10	Conduct mishap trend analysis for previous 3 years	Qtr 2	Summary submitted to NAVFAC 18K1
WHE-11	Evaluate sources of rigging training (PWC Pearl/CBC Gulfport lead)	Qtr 1-2	Resource list/summary of all government and commercial developed

NAVAL FACILITIES ENGINEERING COMMAND

ENVIRONMENTAL SAFETY & HEALTH (ES&H)

	QUALITY IMPROVEMENTS	FY93 TARGET DATE	EXPECTED OUTPUT
NAVFACENGCOMHQ			
ES&H-1	Develop flowchart/SOP for environmental work, cradle to grave (SOUTHDIV Lead)	Qtr 2	Guidance for EFD (18, 20, 04, 05, ROICCs, etc) issued
ES&H-2	Coordinate with EFD Code 18 for review of IR project/ H&S plans	Qtr 1-2-3-4	Quality site plans in place prior to work start
EFDs			
ES&H-3	Coordinate with EFD Code 18 in development of policy/ procedures for Code 18, 09K and ROICC on environmental projects	Qtr 2	Procedure include role and responsibilities of Code 18 09K, ROICCs etc. in place
ES&H-4	Provide environmental health protection and guidance for EFD employees visiting HW sites (Codes 18, 16, 05, ROICC, 02, 20, 04 employees)	Qtr 1-2-3-4	Provide protective equipment, develop data base tracking, maintain historical records, special policy letter (SOP/JHA, etc)
ES&H-5	Ensure ROICC access to HAZMAT program requirements e.g., asbestos, lead, radon	Qtr 2	EFD Code 18 (14) provide PDC. Coordinate contact through 09K/05K.
ES&H-6	Establish procedures to ensure activity OSH Offices are provided results of contractor performed air monitoring data and lab analyses	Qtr 2	Procedures issued. Implementation validated during OSH evaluation of ROICCs
PWCs/CBCs			
ES&H-7	Coordinate HMC&M efforts with CAPP	Qtr 2-3-4	Improve control and reduction in the quantity of HM used and HW generated

NAVAL FACILITIES ENGINEERING COMMAND

HAZARDOUS MATERIAL AND WASTE MANAGEMENT (HM/WM)

QUALITY IMPROVEMENTS		FY93 TARGET DATE	EXPECTED OUTPUT
NAVFACENGCOMHQ			
HM/WM-1	Verify HM control programs fully implemented at NAVFACENGCOM activities	Continuous	Evaluation completed during OSH ME, Echelon 2 ECE audits and NAVOSH OIU findings
HM/WM-2	Enhance communications between Field, NAVFACENGCOMHQ, CNO (N45), NAVSUP, etc.	Qtr 1-2-3-4	Activity input provided to CNO (N45) at HM/WM policy meetings and initiatives provided to field
HM/WM-3	Update NAVFACENGCOM authorized use list (AUL)	Qtr 3	NAVFACENGCOM AUL resubmitted
PWC/CBC/NCEL/NEESA			
HM/WM-4	Integrate HM authorized use list (AUL) into activity procurement system	Qtr 3	Use of only approved HM
HM/WM-5	Identify and use least hazardous materials	Qtr 2-4	Each activity identifies at least 2 acceptable less hazardous materials and distributes results to all
HM/WM-6	Ensure activity AUL matches Navy AUL	Qtr 4	Audit materials in stock and dispose of all non-Navy authorized materials
HM/WM-7	Update activity AUL	Qtr 3	Revised AULs provided to NAVFACENGCOMHQ
HM/WM-8	Integrate HM and WM programs through coordination with activity/EFD environmental engineers. Explore innovative approaches such as through the Comprehensive Approach to Pollution Prevention (CAPP) program	Qtr 1-2-3-4 Qtr 1	Environmental issues addressed during quarterly OSH policy council meetings Status of activity pollution prevention plans reviewed

APPENDIX A

NAVFACENGCOM POLICY/GUIDANCE
FY92

SER #	DATE	SUBJECT	ADDRESSEES
849	10/16/91	Injury Compensation Case Listings (June, July August 91)	NAVFAC Safety Managers
850	10/16/91	Inactive Participants on NAVOSHNET	Echelon 2 Commands
851	10/17/91	Accident Abstracts	NAVFAC Safety Managers
852	10/18/91	Annual Self-Evaluation	NAVFAC Safety Managers
854	10/23/91	FY92 NAVOSH Training Course Schedule	NAVFAC Safety Managers
857	10/31/91	Occupational Safety and Health Program Improvement Plan for FY92	NAVFAC Safety Managers
873	11/12/91	FY91 Nomination for SECNAV Safety Awards	Activity COs
875	11/12/91	Process Action Team Meeting	LANT/CHES/NORTH/SOUTHDIV 09Ks/408s
879	11/15/91	OSH Managers Working Group Meeting	NAVFAC Safety Managers
880	11/18/91	Dissemination of Construction Conference Literature	EFD Safety Managers/Construction Managers
882	11/19/91	Model Accident Prevention Program (MAPP Plan)	SOUTH/SOUTHWESTDIV 09Ks PWC GLAKES/PEARL/PENSA/ SDIEGO/SFRAN 09Ks
885	11/20/91	Navy Wide Specialized Expertise Program	Activity COs - PAC/WEST/NORTHDIV & NCEL
890	11/25/91	Compensation Benefit Year 91 Compensation Costs	Activity COs
892	11/27/91	USACE Biannual S&H Conference & NAVFAC Annual Construction Working Group Meeting	EFD Safety/Construction Managers
895	12/3/91	NAVFAC Command Inspection Guide for S&H	Activity Safety Managers
897	12/6/91	Electrical Safety Training	Activity COs - PWC YOKO/GUAM/PENSA
898	12/11/91	Gas Explosion at Fort Benjamin Harrison	NAVFAC Safety/Construction/System Safety Managers
R31501Z DEC 91		Use of Back Support Belts	Activity COs
915	1/6/92	Injury Compensation Case Listings (Sep)	NAVFAC Safety Managers
917	1/13/92	Asbestos Third Party Monitoring	NAVFAC Safety Managers
814	1/13/92	NAVFACENGCOM FY92 OSHPIP	Activity COs
919	1/14/92	NAVFACENGCOM FY92 OSHPIP	NAVFAC Safety Managers
920	1/14/92	Construction Safety Programs	EFD Safety Managers
925	1/21/92	FP&DS Annual Working Group Meeting	EFD Safety/System Safety Managers

SER #	DATE	SUBJECT	ADDRESSEES
932	1/31/92	Guidance for Designing Video Display Terminal Work Stations	NAVFAC Safety Managers
930	2/10/92	USACE/NAVFACENGCOM Construction S&H Meeting	EFD Safety Managers
942	2/20/92	JHA Library	NAVFAC Safety Managers
936	2/21/92	Safety & Health Memorandum 92-1	NAVFAC Safety Managers/ Engineers Echelon 2 Commands
939	2/18/92	FY92 OSHPIP Item FPDS-19	EFD Safety/System Managers
943	2/20/92	FY92 OSHPIP Item FPDS-16	EFD Safety/System Managers
944	2/24/92	Injury Compensation Case Listings - Oct & Nov	NAVFAC Safety Managers
946	2/26/92	NAVFAC OSH Manager's Annual Working Group Meeting 16-20 Mar 92	NAVFAC Safety Managers
949	2/26/92	Hazard Assessment & Analysis for MILCON Projects	EFD Safety/System/Construction Managers/Echelon 2 Commands
950	2/27/92	Navy Occupational Safety & Health Training	Activity COs
R281612Z FEB 92		Commanders Safety & Health Message	Activity COs
952	2/28/92	PWOs NAVOSH Resource Guide	NAVFAC Safety Managers Echelon 2 Commands
954	3/4/92	Injury Compensation Case Listings - Dec	NAVFAC Safety Managers
958	3/10/92	Revised USACE S&H Requirements Manual (EM-385-1-1)	EFD Safety/Construction Managers
963	3/16/92	Injury Compensation Case Listings - Jan	NAVFAC Managers
964	3/18/92	Accident Abstracts 6-12	NAVFAC Managers
972	3/30/92	S&H Requirements for Hazardous Waste Operations	EFD Safety Managers
973	4/6/92	Accident Abstracts 1-12	NAVFAC System Safety/Construction Managers Echelon 2 Commands
967	4/13/92	Employee Safety Quality Improvement Initiatives	NAVFAC Managers
971	4/13/92	NAVOSH Field Support	NAVFAC Safety/System Safety/ Construction Managers Echelon 2 Commands
976	4/4/92	SAFETYGRAM	EFD Safety Managers
978	4/6/92	NAVFAC OSH Manager's Working Group Mtg 16-20 in Virginia Beach; Additional Handouts	NAVFAC Managers
979	4/9/92	Annual NAVOSH Program Cost Report	Activity COs
982	4/17/92	Navy Subject Matter Experts by Subject	Echelon 2 Commands NAVFAC Safety/System Safety/Construction Managers
984	4/17/92	PWO Conference	EFD Safety Managers
985	4/20/92	Minutes of the 1992 Asbestos Program Managers Meeting	NAVFAC Managers

SER #	DATE	SUBJECT	ADDRESSEES
987	4/24/92	Safety & Health Memorandum 92-2	NAVFAC Safety Managers/ Engineers Echelon 2 Commands
991	5/6/92	Occupational Safety & Health Office Functions	NAVFAC Safety Managers
994	5/4/92	OSHA Evaluation of Department of Navy OSH Pgr	NAVFAC Safety Managers
997	5/4/92	OSHA Enforcement of Federal Agency Record-keeping Requirements	NAVFAC Safety Managers
1000	5/6/92	Process Safety Management of Highly Hazardous Chemicals	NAVFAC Safety Managers
1001	5/6/92	Injury Compensation Case Listings (Feb & Mar)	NAVFAC Safety Managers
1002	5/7/92	Distribution of Hazard Communication Training Video	EFD Safety Managers
1008	5/15/92	Accident Abstracts 92-13 and 92-14	NAVFAC Safety Managers Echelon 2 Commands
1009	5/15/92	Bloodborne Diseases	NAVFAC Safety Managers
1010	5/18/92	Industrial Hygiene Data Capture	NAVFAC Safety Managers
1019	6/1/92	OSH Program Performance Indicators	NAVFAC Safety Managers
1040	6/12/92	FY93 OSHPIP (Survey)	Echelon 2 Commands
No#	6/92	Construction Safety & Health Newsletter	NAVFAC Safety Managers/NAVFAC ROICC Offices
1046	7/8/92	Injury Compensation Case Listing - Apr & May	NAVFAC Safety Managers
1047	7/14/92	Command Inspection Guide for EFD S&H Programs	EFD Safety Managers
1052	7/14/92	Facility Planning & Design Safety Training Crs	EFD Safety/System Safety Managers
1053	7/14/92	FY93 NAVOSH Training Schedule	NAVFAC Safety Managers
1051	7/16/92	Distribution of S&H Plan Checklist	EFD Safety Managers
1054	7/16/92	Compliance Calendar Information	EFD Safety/System Safety Managers
1045	7/17/92	Fatal Mishap Investigation Report	CO PWC Pearl/FAC/FAC/CNO
5090 18K/920407	7/29/92	Importance of NAVOSH during Downsizing	Activity COs
5090	7/29/92	Electrical Safety	Activity COs Echelon 2 Commands
R1015312	AUG 92	Fatal Accidents	Activity COs
1060	8/18/92	47th Annual Federal S&H Conference	NAVFAC Safety Managers
1061	8/20/92	Computer Assisted Instruction	NAVFAC Safety Managers
1065	8/26/92	NAVFACENGCOM NAVOSH Customer Survey	NAVFAC Safety Managers
1067	9/17/92	Facility Planning & Design Safety Training Crs	EFD Safety/System Safety Managers
1071	9/17/92	Health, Safety & Emergency Contingency Plan Info	EFD Safety/Construction/ Environmental Managers

SER #	DATE	SUBJECT	ADDRESSEES
R171443Z	SEP 92	SECNAV Safety Awards	Activity COs
1074	9/24/92	47th Annual Federal S&H Conference	NAVFAC Safety Managers
1077	9/28/92	Injury Compensation Case Listings - June 92	NAVFAC Safety Managers
1079	9/30/92	Occupational Injury/Illness Reduction Program for FY93	NAVFAC Safety Managers

APPENDIX B

FY93/94 NAVFAC MISHAP REDUCTION GOALS
NEW LOST TIME COMPENSATION CASE RATES*

ACTIVITY	BASE**	FY93***	FY94***
LANTDIV	0.90	0.85	0.82
CHESDIV	1.40	1.32	1.27
NORTHDIV	1.40	1.32	1.27
PACDIV	0.73	0.69	0.66
SOUTHDIV	0.77	0.72	0.70
WESTDIV	2.11	1.98	1.92
SOUTHWESTDIV	1.89	1.78	1.72
	1.29	1.21	1.17
PWC GREAT LAKES	5.20	4.89	4.73
PWC GUAM	0.20	0.19	0.18
PWC NORFOLK	7.85	7.38	7.14
PWC PEARL HARBOR	8.54	8.03	7.77
PWC PENSACOLA	4.59	4.31	4.18
PWC SAN DIEGO	4.65	4.37	4.23
PWC SAN FRANCISCO	2.39	2.25	2.17
PWC SUBIC BAY	0.02	0.02	0.02
PWC YOKOSUKA	0.00	0.00	0.00
	3.31	3.11	3.01
CBC DAVISVILLE	6.89	6.48	6.27
CBC GULFPORT	4.59	4.31	4.18
CBC PORT HUENEME	3.95	3.71	3.59
	4.27	4.01	3.89
NCEL	2.48	2.33	2.26
NEESA	2.00	1.88	1.82
NAVFAC HQ	0.66	0.62	0.60
	1.52	1.43	1.38
NAVFAC TOTAL	2.84	2.67	2.58

* CASE RATE = # LOST TIME CASES PER 200,000 HOURS WORKED
** BASE: 3 YEAR AVERAGE FOR FY89/90/91
*** UPPER CONTROL LIMIT (UCL) IS 3% REDUCTION PER YEAR FROM BASE

OCT 92

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APPENDIX C

FY93/94 COMPENSATION COST REDUCTION GOALS

ACTIVITY	BASE* ($000)	GOAL FY93** ($000)	GOAL FY94** ($000)
LANTDIV	105	99	96
CHESDIV	48	45	44
NORTHDIV	101	95	92
PACDIV	72	68	66
SOUTHDIV	160	150	146
WESTDIV	477	448	434
SOUTHWESTDIV	24	23	22
	987	928	898
PWC GREAT LAKES	1,149	1,080	1,046
PWC GUAM	341	321	310
PWC NORFOLK	1,700	1,598	1,547
PWC PEARL HARBOR	1,894	1,780	1,724
PWC PENSACOLA	757	712	689
PWC SAN DIEGO	2,963	2,785	2,696
PWC SAN FRANCISCO	1,687	1,586	1,535
PWC SUBIC BAY	30	28	27
PWC YOKOSUKA	0	0	0
	10,521	9,889	9,574
CBC DAVISVILLE	250	235	228
CBC GULFPORT	665	625	605
CBC PORT HUENEME	1676	1,575	1,525
	2,591	2,436	2,358
NCEL	96	90	87
NEESA	18	17	16
NAVFAC HQ	162	152	147
	276	259	251
NAVFAC TOTAL	14,375	13,512	13,081

* BASE: COMPENSATION BENEFIT YEAR 1 JULY 91 - 30 JUNE 92
** 3% PER YEAR COST REDUCTION FROM BASE
DATA PROVIDED BY NCPC-20
OCT 92

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APPENDIX D

FY93 ACTIVITY OSH PROGRAM

EVALUATION SCHEDULE

DATE	ACTIVITY	TYPE
OCT 92	CBC PT HUENEME	IG
OCT 92	NCEL	IG
OCT 92	NEESA	IG
NOV 92	PWC WASHINGTON	ASSIST
NOV 92	PWC JACKSONVILLE	ASSIST
NOV 92	WESTDIV	IG
DEC 92	PWC NORFOLK	ASSIST (ERGO EVAL)
JAN 92	CHESDIV	IG (FOLLOW-UP)
JAN 92	PWC PENSACOLA	ASSIST (ERGO EVAL)
FEB 93	NORTHDIV	IG (FOLLOW-UP)
FEB 93	CBC PT HUENEME	ASSIST (ERGO EVAL)
MAR 93	CBC GULFPORT	IG
APR 93	SOUTHDIV	IG
APR 93	PWC PENSACOLA	IG
MAY 93	PWC SAN FRANCISCO	IG
JUN 93	PWC GLAKES	OSH ME
JUN 93	EFA NORTHWEST	ASSIST
JUL 93	PWC PEARL	ASSIST
AUG 93	NEESA/CESO/NCEL CBC PT HUENEME	ASSIST

BY NAVFACENGCOM

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APPENDIX E

HIGH EMPHASIS ISSUES

- QUALITY MANAGEMENT IN SAFETY
- ENVIRONMENT SAFETY & HEALTH
- ASBESTOS/LEAD ABATEMENT
- HAZARDOUS MATERIAL CONTROL & WASTE MINIMIZATION
- DESIGN SAFETY WORKING GROUPS
- CONTRACT CONSTRUCTION SAFETY
- PWC EXPANSION
  - STAFFING
  - INTRA-SERVICE SUPPORT AGREEMENTS
  - COMPENSATION ROLE
- MISHAP INVESTIGATION/REPORTS
  - IDENTIFICATION OF ROOT CAUSES
  - FATAL MISHAP BOARDS
  - LESSONS LEARNED
- ERGONOMICS
  - CUMULATIVE TRAUMA DISORDERS
  - BACK INJURIES
- COMPENSATION COST REDUCTION

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APPENDIX F
NAVFACENGCOM OSH Support Office

Customer Service Representatives

Activities:

SHELIA DAVIDSON*

- LANTDIV
- CHESDIV
- NORTHDIV
- PACDIV
- SOUTHDIV
- WESTDIV
- SWDIV
- EFANORTHWEST

JOHN BODI*

- PWC SFRANCISCO
- PWC SDIEGO
- PWC GLAKES
- PWC PENSACOLA
- PWC WASHINGTON
- CBC GULFPORT
- NAVFACHQ

MARY WINGARD*

- PWC PEARL
- Coordinate w/PAC
  - PWC GUAM
  - PWC YOKOSUKA
- PWC NORFOLK
- PWC JACKSONVILLE
- PWC CHARLESTON
- CBC PORT HUENEME
- CBC DAVISVILLE
- NCEL
- NEESA

* Lead inspectors for NAVFAC IG Inspections/OSH Management Evaluations/Assists and requests for technical assistance

Specialties:

SHELIA DAVIDSON

- Construction Safety
- Environmental S&H
- System Safety
- Guide Specs
- Facility Accident Investigation
- Design/Construction Safety News

JOHN BODI

- Health Hazards
- Hazardous Materials
- Protective Equip
- NAVOSHNET
- PWC/CBC DAP/MIS
- Ionizing Radiation
- Lead Paint
- Asbestos
- Ergonomics
- Automation

DOUG CRADDOCK

- Plans & Programs
- OSHPIP/TQL
- Resource Guides (PWO/ROICC)
- PWD/PWO Support
- Echelon 2 Mishap Investigations

MARIANNE BLAUM

- Program Indicator Tracking
- Workers' Comp/FECA
- Budget and Expenditures
- Mishap Trends
- Personnel Roster

DSN: 564-5193
COMM: 804-444-5193 FAX: 804-445-9454

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APPENDIX G

SAFETY AND HEALTH QUALITY LEADERSHIP

PLAN:
- Develop Safety & Health Improvement Plan
  - Include NAVFAC P-1052, NAVFACINST 5100.11H, OPNAVINST 4110.2 & NAVFACINST 11010.44E
  - Integrate in Command Strategic Plan
  - Include NAVOSH, Design, Construction and Environment

DO:
- Issue CO Policy Letter
- Investigate Accidents
- Train Employees
- Provide Protective Equipment
- Implement OSHA Standards
- Assist and Monitor ROICCs
- Provide Policy, Procedures, and Guidance
- Conduct Design Hazard Analyses
- Use Qualified Safety and Health Personnel
- Inspect Work Areas/Fix Hazards

CHECK:
- Program Quality Checks
  - CO/XO Policy Council
  - Mishap Review Boards
  - Frequent 09K Info to CO/XO
- Analyze Mishap Trends/Determine Root Causes
- Annual Program Self-Evaluation
- HQ Assistance Visits
- Process Reviews
- Conduct POEs for Safety and Health Rqmts

ACT:
- Communicate w/Customers (ask their safety concerns)
- Be Proactive to Stop Fatal Accidents
- Analyze High Risk Functions (Environmental)
- Ensure Contractor Compliance w/Safety Standards
- Provide Employees w/Quality Work Environment

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OSHA PROTOCOL

When OSHA and Navy safety personnel both conduct a mishap investigation at a Naval activity:

1. OSHA team and Navy team should work together as much as possible. Courtesy should be displayed at all times.

2. Upon arrival of OSHA personnel, follow the procedures listed in OPNAVINST 5100.23C. When briefing OSHA or other investigation personnel, only relate factual information.

3. Only allow official investigators access to the scene.

4. Investigation of the scene may be done jointly.

5. Interviews of witnesses may be done jointly. However, discretion must be used by Navy personnel. Limits to the extent of joint interviews may be necessary where disciplinary or legal action may become an issue.

6. Witness statements obtained independently as part of the safety investigation cannot be given to OSHA, JAG, NIS, etc. investigating personnel.

7. If OSHA requests copies of official information from the Navy team, all factual information such as diagrams, measurements, training records, photographs of the actual scene (properly cleared by Security, PAO, etc.) inspection records, or any official documents, must be provided. The team leader shall coordinate such requests and provide required information. A record of information released to OSHA is to be maintained as part of the investigation records and a copy given to the activity where the mishap occurred so they know what was released. However, DO NOT give OSHA copies of the individual Navy team member's notes, written speculations, copies of photographs from reenactments of the mishap or anything to do with the deliberative process used to finalize conclusions as to causes.

8. Review OSHA standards that apply to the situation. Interpretations vary.

9. Release (even to OSHA) of official mishap reports (SR, priority message report, SSIR) can only be done by COMNAVSAFECEN or upon their approval.

References: 29 CFR 1960/OPNAVINST 5100.23C, Chapter 14

REMINDER: Safety investigation is for mishap prevention. OSHA investigation is for punitive assessment.

Address questions to COMNAVSAFECEN Code 41, DSN 564-6043, COML (804) 444-6043.

Prepared by COMNAVSAFECEN September 1993

RATIONALE AND DESIGN FOR A MISHAP COST-REDUCTION MODEL FOR THE NAVY'S OCCUPATIONAL SAFETY AND HEALTH PROGRAM

DRAFT

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EXECUTIVE SUMMARY

Problem

Costs to the Department of the Navy for occupational mishaps suffered by its civilian employees have risen steadily for more than a decade, reaching one-quarter of a billion dollars in 1993. The rate of increase exceeds that expected from inflation alone, however the role played by other factors is unclear. Ample data are available to help identify the reasons for these rising costs. They reside, however, in multiple databases that are incompatible, were designed primarily for administrative purposes, and are maintained by separate organizational entities. Moreover, before they can be used to assess, for instance, the effectiveness of Navy-wide safety programs, well-recognized difficulties in making comparisons between vastly different types of facilities must be addressed.

Objective

The purpose of this report is to propose a means for using available datasources to identify factors influencing the Department's workers' compensation costs. Particular emphasis is placed on the development of methods for identifying those factors which present opportunities for the reduction or control of costs.

Approach

A design is proposed for a Mishap Cost-Reduction and Quality Assessment Model for the Navy Occupational Safety and Health Program. The proposed Model will be derived from an integrated database built from data obtained from the U.S. Department of Labor's Office of Workers' Compensation Programs (OWCP), the Navy Civilian Personnel Data System, and the Navy Inspector General Oversight Inspection Unit. These sources provide, respectively, information on the cost and occurrence of individual occupational mishaps at

Department of the Navy facilities, on worker demographics, and on facility safety inspections. Analyses will be based on mishaps at the Department's 150 largest facilities.

Results

Naval Health Research Center has obtained the necessary data and begun preparing them for integration into the proposed database. As of 30 June 1991, the 150 facilities to be included in the analyses employed 242,040 civilian workers. These individuals comprise 80 percent of the Department's entire civilian work force as of that date. In the subsequent year (1 July 1991 to 30 June 1992) this "at risk population" experienced approximately 8,500 mishaps meeting criteria for the definition of an analyzable case (e.g., mishaps resulting in time lost from work). Actuarial projections of the total costs expected to accrue as a result of all mishaps experienced by all Department of the Navy civilian employees during this time period exceed $305 million. Of this amount, approximately 75 percent is likely to be accounted for by mishaps planned for inclusion in the analyses used to build the Model.

Conclusions

While requiring considerable initial effort to manipulate, the available data nonetheless appear remarkably free from keystroke errors and other common problems associated with administrative databases. We conclude that development of the Mishap Cost-Reduction and Quality Assessment Model is feasible using these data and that creation of the Model should proceed as proposed. We conclude further that the Model has great potential for helping both to improve the Navy's Occupational Safety and Health Program, and to reduce and control its costs for occupational injuries and illnesses.

BACKGROUND

Costs to the Department of the Navy for occupationally-related injuries and illnesses suffered by its civilian workers have increased steadily for at least the last decade, rising from $133 million in 1982 to $242 million in 1992 (Figure 1). Large as they are, these numbers include only "direct" costs (principally the costs of medical care and compensation for lost wages) and do not include such "indirect" costs as lost productivity, replacement employee training, administrative overhead, and the provision of in-house medical care, all of which increase substantially the true total cost of occupational injuries and illnesses.[1,2]

This steady increase in costs, which persists even after adjustment for inflation (Figure 2), constitutes reason enough for the development of better means both to understand the forces driving these upward costs and to identify effective programs to reduce or contain them. Other imperatives apply as well, however. Citing the need to control increasing costs, President Reagan in 1983 set a government-wide goal of reducing injuries to federal civilian workers by three percent per year for five consecutive years.[3] Results for the Navy were less than desired and subsequently the Chief of Naval Operations specified a follow-up goal of reducing the Navy's total injury and illness case rate by two percent per year for the five years ending in fiscal year 1993.[4] Beginning in fiscal year 1994 individual facilities will be required to establish their own reduction goals consistent with local needs, constraints, and capabilities.[5,¶0505.6] (The Marine Corps' rate- and cost-reduction activities during this period have been conducted without the establishment of formal goals). Despite their differences, all of these efforts require or will require varying degrees of analysis if assessment of their effectiveness is to be maximally informative.

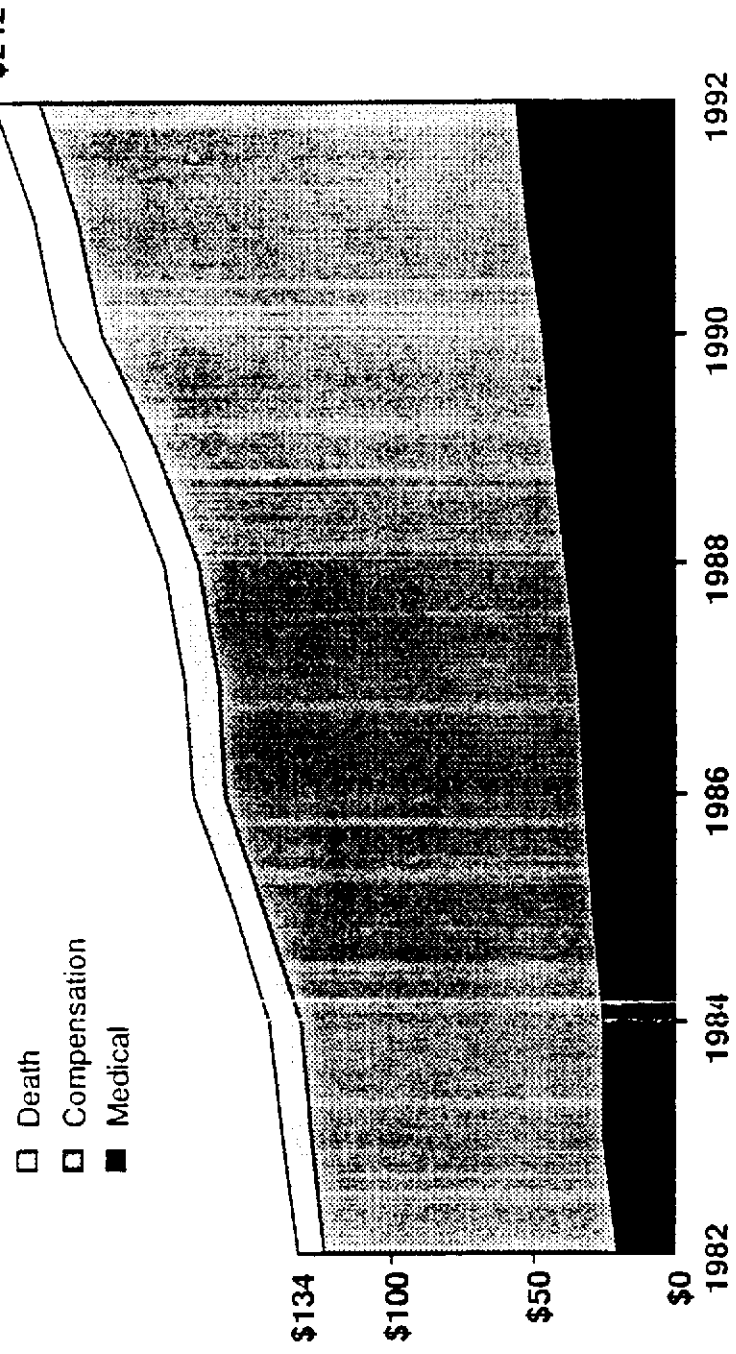


Figure 1: Chargeback costs in nominal dollars, Department of the Navy, chargeback years (1 July - 30 June) 1982-92

Source: Director's Office, Division of Federal Employees' Compensation, Office of Workers' Compensation Programs, Employment Standards Administration, U.S. Department of Labor.

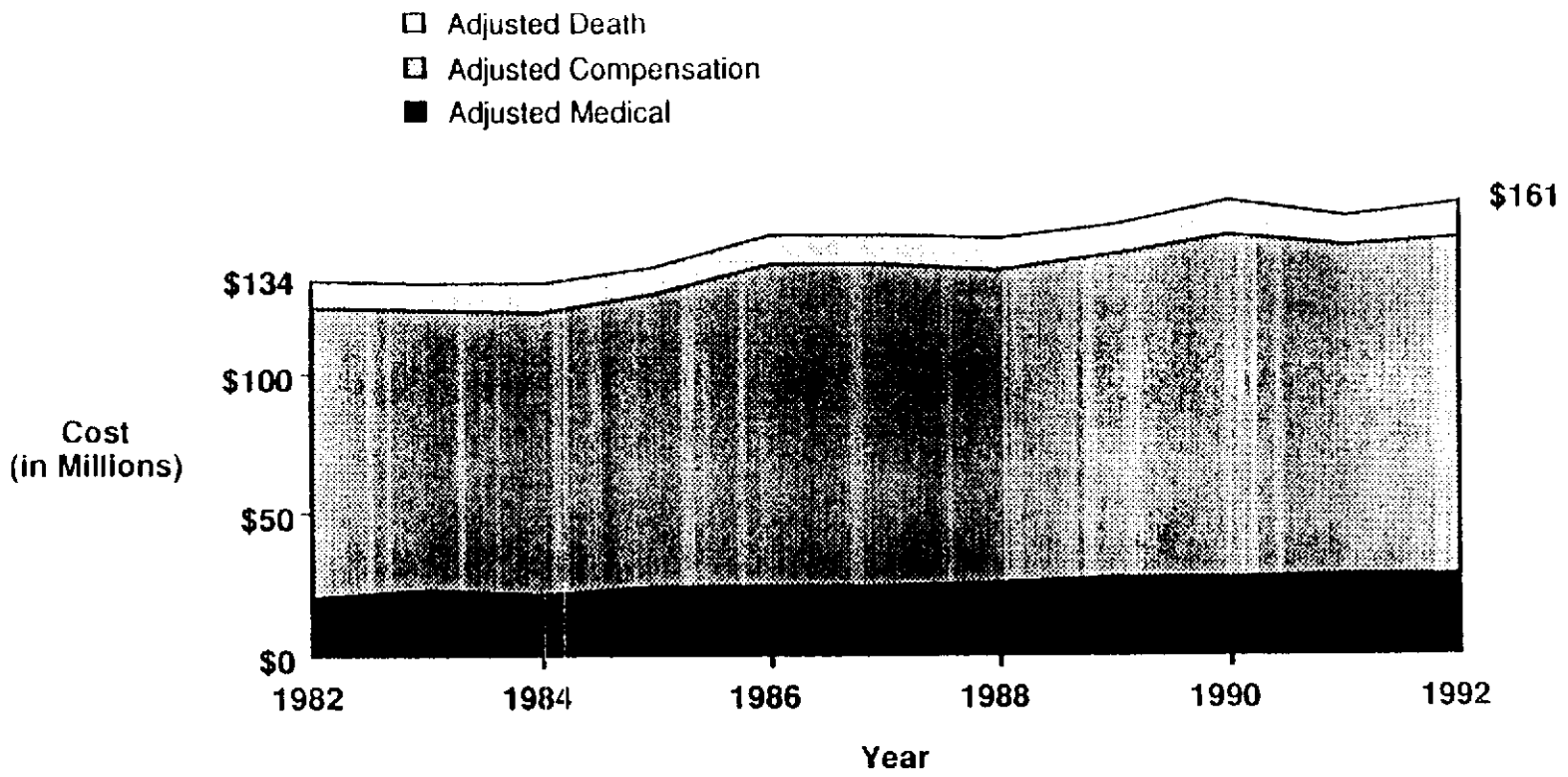


Figure 2: Chargeback costs in 1982 constant dollars, Department of the Navy, chargeback years (1 July - 30 June) 1982-92

Sources: Director's Office, Division of Federal Employees' Compensation, Office of Workers' Compensation Programs, Employment Standards Administration, U.S. Department of Labor.

Death and compensation benefits adjusted by annual federal COLA from FECA form CA-841, Office of Workers' Compensation Program, Employee Standards Administration, U.S. Department of Labor.

Medical benefits adjusted by annual medical care price index, Consumer Price Index Detailed Report, June 1992, and unpublished data, U.S. Bureau of Labor Statistics.

As the preceding discussion makes clear, most of the factors affecting the costs of injuries and illnesses once they have occurred are beyond the control of the Department of the Navy and of individual activities. Payment rates are fixed, selection of health care providers is in the hands of employees, decision-making powers are held by OWCP exclusively, and the Department has no rights of appeal. However, one cost driver does fall almost completely within the Department's realm of influence: safety.

The Navy's occupational safety and health program for its civilian work force is detailed in the *Navy Occupational Safety and Health Program Manual.*[15] The *Manual* states policy ("to provide a safe and healthful workplace for all personnel"[15 ¶0104]), assigns responsibilities, prescribes resource allocation and organizational structures, establishes reporting and recordkeeping criteria, and specifies explicit prevention and monitoring programs for a variety of known occupational hazards (e.g., noise and lead exposure). The second edition of the *Manual* was revised substantially seven times in 10 years; the third edition was released in late 1992[15] and represents a sustained effort on the party of the Navy to continually improve its occupational safety and health program. The Marine Corps' corresponding document is *Marine Corps Order 5100.8E.*[16]

Identifiable expenditures for the program exceeded $179 million in fiscal year 1992; the actual resources devoted were even greater because this total excludes the costs of uniformed personnel who provide health or safety services to civilian workers.[6] Implementation of the Navy's occupational safety and health program is assessed by means of a three-tiered inspection plan: routine workplace inspections conducted annually (or more often) under authority of activity-level commanding officers; occupational safety and health management evaluations conducted at least every three years at subordinate commands under authority of Echelon 1 and 2 commanders; and comprehensive oversight inspections

conducted under the auspices of the Navy Inspector General. The latter are meant "to evaluate all aspects of the Navy Occupational Safety and Health Program"[15 §0906a] and are primarily conducted at large, industrialized activities such as shipyards and aviation depots; results from these inspections are entered into a centralized database maintained by the Navy Inspector General's Oversight Inspection Unit and are used in part to help assess the efficacy of the overall program.

RATIONALE FOR A MODEL

Despite the effort and resources devoted to implementing the Navy's occupational safety and health program and to ensuring adherence to its requirements, costs for occupational mishaps to civilian employees are still increasing (Figures 1 and 2). This poses numerous questions. Is the increase due to rising costs per case? or to an increasing rate of cases? or both?

It is also unclear how well either of these factors is understood. Medical inflation, for instance, has obviously been driving up the cost per case. But has the actual increase exceeded that expected from inflation? and if so, why? As for rates, the Navy's occupational injury and illness case rate for its civilian workers has reportedly been decreasing since at least fiscal year 1988.[17] This should have been associated with an accompanying reduction in costs (or at least their rate of increase)—but only if those cases from which the rates are compiled are the same as those from which the Navy's workers' compensation bills are generated. Anecdotal reports suggest, however, that minor injuries not associated with compensation costs are reported to OWCP (the source of the data from which the Navy case rates are calculated) with varying degrees of rigor by different activities. Moreover, the bulk of the costs charged back by OWCP in any given year are for cases originally occurring

many years previously and which were likely to have been unaffected by current trends; for instance, 30 percent of the cases and *73 percent* of the costs on the Department of the Navy's 1990 chargeback bill are for mishaps that originally occurred before 1988. This means the underlying trend for the rates of injuries and illnesses actually driving workers' compensation costs is currently unknown. (This type of difficulty in analyzing and interpreting data on occupational injuries and illnesses is far from unique.[18] The U.S. Bureau of Labor Statistics, for instance, appears for years to have been underestimating by a factor as great as nine the rates in private industry of injury and illness-related lost workdays—the Bureau's primary measure of mishap severity—because of flawed methodology.[19])

Equally uncertain are the effects of the Navy's occupational safety and health inspection program. Initial analyses by our research team suggested that the "program" component of the inspections administered by the Navy Inspector General Oversight Inspection Unit tended to be associated with injury rates in the manner expected (higher scores with lower rates), whereas the "workplace" components showed no such associations.[20] However, subsequent analyses using more sophisticated statistical techniques have suggested just the opposite.[21]

Other researchers have found similarly conflicting results and the issue of whether inspections affect injury rates remains a topic of vigorous debate.[22] Both Viscusi[23] and Ruser and Smith,[24] for instance, found inspections administered by the Occupational Safety and Health Administration (OSHA) to be unrelated to injury rates. Robertson and Keeve, on the other hand, showed that OSHA inspections were associated with injury rates if the data were disaggregated by objective and subjective injuries and they controlled for the effect of increasing workers' compensation payment rates.[25] OSHA itself obtained similarly inconclusive results when asked to demonstrate the efficacy of the medical surveillance

programs it had imposed on industry. After collecting data from over 7,000 businesses, OSHA's principal analytic approach was to descriptively catalog the respondents' medical surveillance programs then relate facets of the programs to a variety of subjective impressions (e.g., perceived effects on employee relations). An attempt was made in the agency's *Draft Final Report* to relate medical surveillance programs and "hard" outcomes (i.e., illness rates). However, the relevant regression results (which showed significant associations of medical surveillance programs with reported illness rates among large manufacturing firms using the most hazardous materials[26]) were excluded from the published report of the study because of problems in the analysis.[27] Private industry appears to be having equal difficulties in the area, for the OSHA survey did find that among a subgroup of companies studied in detail, none had performed quantitative analyses of the effects of their medical surveillance programs on illness or injury rates because most "simply . . . did not know how."[27 p.696]

As these examples illustrate, assessing trends in an organization's costs due to occupational injuries and illnesses, along with the efficacy of its cost control and occupational safety and health programs, is difficult at best. Without question, the effort can yield both lowered mishap rates and costs.[12,18,28] But meaningful results require access to appropriate databases, experience with the data sets to be used, the informed use of sophisticated analytic techniques, perseverance, and a rational framework for organizing data and guiding their analysis—that is, a model.

Exploiting performance variation among activities

These same requirements apply to the assessment of the various etiologic-specific program components mandated in the *Navy Occupational Safety and Health Program*

Manual[15] (e.g., the hearing conservation program). They apply if cost-effectiveness comparisons are to be made between program components ("Does an investment in hearing conservation produce greater or lesser savings than an equal investment in ergonomics?"). And they apply to the assessment of individual activities.

Also required (and indeed, exploited) are individual variations in performance. As Table 1 shows, even among Navy activities similar in nature—in this case, shipyards—there are substantial differences in mishap rates and their associated costs. Four-fold differences exist between shipyards with the highest and lowest mishap rates. Cost per employee varies even more, although the differences here may be exaggerated due to the early influence of the speed with which claims are processed and payments begun. (Shipyards whose claims are processed slowly will have lower costs in the initial year of an injured cohort's formation—the first filing year—than will a shipyard whose claims processing is more efficient.)

This type of variation potentially offers the means of identifying "good" or "bad" performers, but only if competing explanations for the differences in question are first taken into account. Differences in outcome (e.g., mishap rates) may be due to differences in performance (e.g., occupational safety and health program effectiveness). But they may also be due to factors such as an activity's mission or the composition of its work force. A shipyard, for instance, will have a higher injury rate than an administrative facility, no

Table 1

Incidence Rates and First-Year Costs for Lost-Time Injuries and Illnesses In Navy Shipyards for the Twelve Months Ending 30 June 1992*

Shipyard	Incidence Rate (New Lost-Time Cases Per 100 Employees)	Mean Cost Per Case (first filing year only**), in dollars	Cost Per Employee (first filing year only**), in dollars
A	7.8	1,006	79
B	7.3	3,353	244
C	7.3	2,010	146
D	6.9	790	54
E	4.7	611	29
F	4.3	1,162	50
G	4.3	1,263	54
H	2.0	2,755	55
overall	5.5	1,484	81

* Source: OWCP annual chargeback summary tape as provided by Naval Sea Systems Command.

** Under the Federal Employees' Compensation Act, as in private industry, the bulk of all costs are generated by a minority of cases for which payments continue over many years. For this reason, and because of administrative delays in processing claims, the first-year costs incurred on behalf of a cohort of injured workers represent only a small portion of the total amount that eventually will be paid.

Actuarial studies commissioned by the Department of Labor show that the eventual total cost to OWCP for a lost-time illness or injury is more than 30 times the amount paid out the first year. This means the average projected total cost for the lost-time cases in Table 1 exceeds $44,000. For the eight Navy shipyards, 3,326 such cases occurred in the year shown, which will result in an eventual total cost of more than $146 million.

matter how well run the former's occupational safety and health program or how poorly the latter's.

A further example of the importance of taking such factors into account can be seen in Figures 1 and 2, which illustrate trends in the Department of the Navy's direct costs from occupational mishaps during the period 1982 to 1992. Figure 1 shows these costs increasing 82 percent when graphed in current, or "nominal," dollars. This trend appears less worrisome when inflation is taken into account (Figure 2). However, the size of the Department's civilian work force has been decreasing during the period shown (among blue collar workers, who experience the overwhelming proportion of occupational mishaps, there has been a 25 percent reduction in the Department's work force from 1982 to 1992), and adjusting the data additionally to show costs as if the size of the work force had remained constant would therefore reveal a steeper "real" increase than that shown in Figure 2. (This latter adjustment was not calculated because the requisite data—annual OWCP payments broken down by injury year cohorts and dating back to the year in which the first cohort receiving payment was injured—is not available.)

As this example shows, meaningful data interpretation often depends on finding suitable methods of adjustment. In particular, the need to control for key differences in groups or institutions when making comparisons using statistical models based on administrative- or claims-based data, has been described by Roos *et al.*[29] They note that testing hypotheses about the relationship between interventions (e.g., safety programs) and outcomes, distinguishing the better of two interventions, or identifying performers with especially good (or especially poor) results all depend on proper adjustments with the right covariates.

AN OCCUPATIONAL MISHAP COST-REDUCTION MODEL FOR THE NAVY

The impetus for using administrative- and claims-based data to help better understand the Navy's escalating workers' compensation costs is contained in a 1991 *Tentative Medical Requirement.*[30] The *Requirement* points out that large quantities of data are routinely generated and stored in the course of implementing and monitoring the Navy's occupational safety and health program and in the course of paying compensation expenses for workers suffering occupational mishaps. The *Requirement* notes further that the existence of these data represents an opportunity for assessing aspects of the Navy's occupational safety and health program, but that before this opportunity can be realized the data must be integrated and organized.

Figure 6 presents a proposed Mishap Cost-Reduction and Quality Assessment Model for the Navy Occupational Safety and Health Program. The Model is based on theoretical assumptions and empirical findings from the relevant literature, as well as consideration of what data are currently available from centralized sources. An overview of these data sources is provided below; a detailed description of the specific variables planned for extraction from these sources and incorporation into the Model appears in the Appendix, with the variables grouped into "domains" corresponding to those shown in the Model and categorized by whether they are fixed or modifiable.

The Model in Figure 6 is presented first in overview, then in four parts. The overview (Figure 6) depicts the broad influences on workers' compensation costs proposed in the Model: combinations of risk factors lead to mishaps, combinations of case management factors lead to costs per case, and the two multiplied together (number of cases times cost per case) give overall cost, which can be standardized as cost per employee. The first part

Figure 6: Mishap Cost-Reduction and Quality Assessment Model for the Navy Occupational Safety and Health Program

Overview

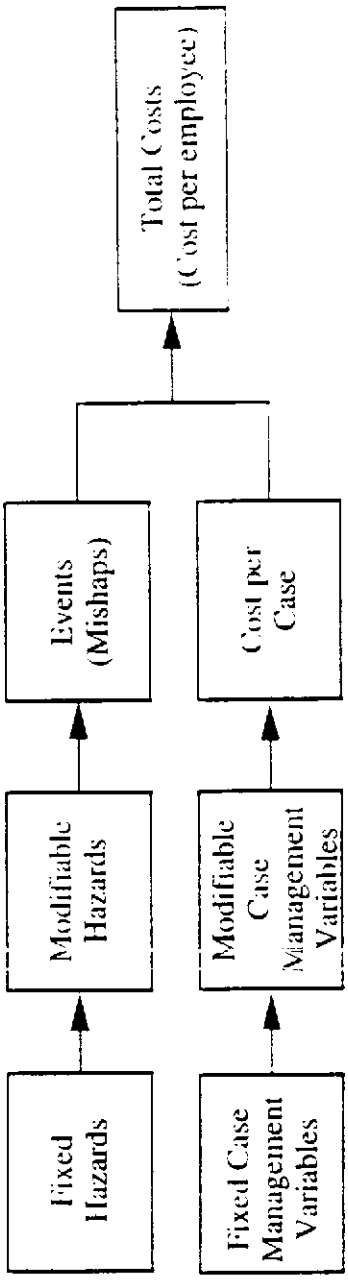
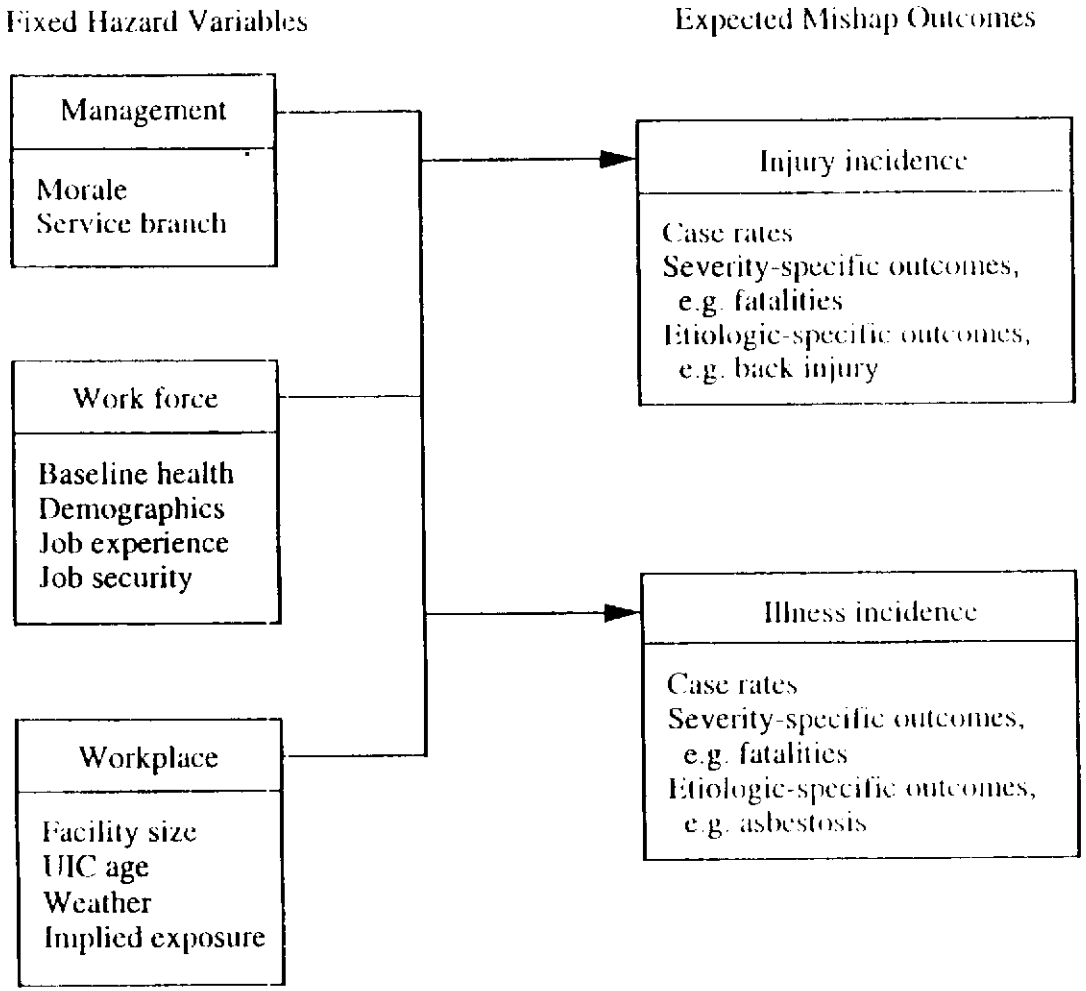


Figure 6a: Mishap Cost-Reduction Quality Assessment Model for the Navy Occupational Safety and Health Program

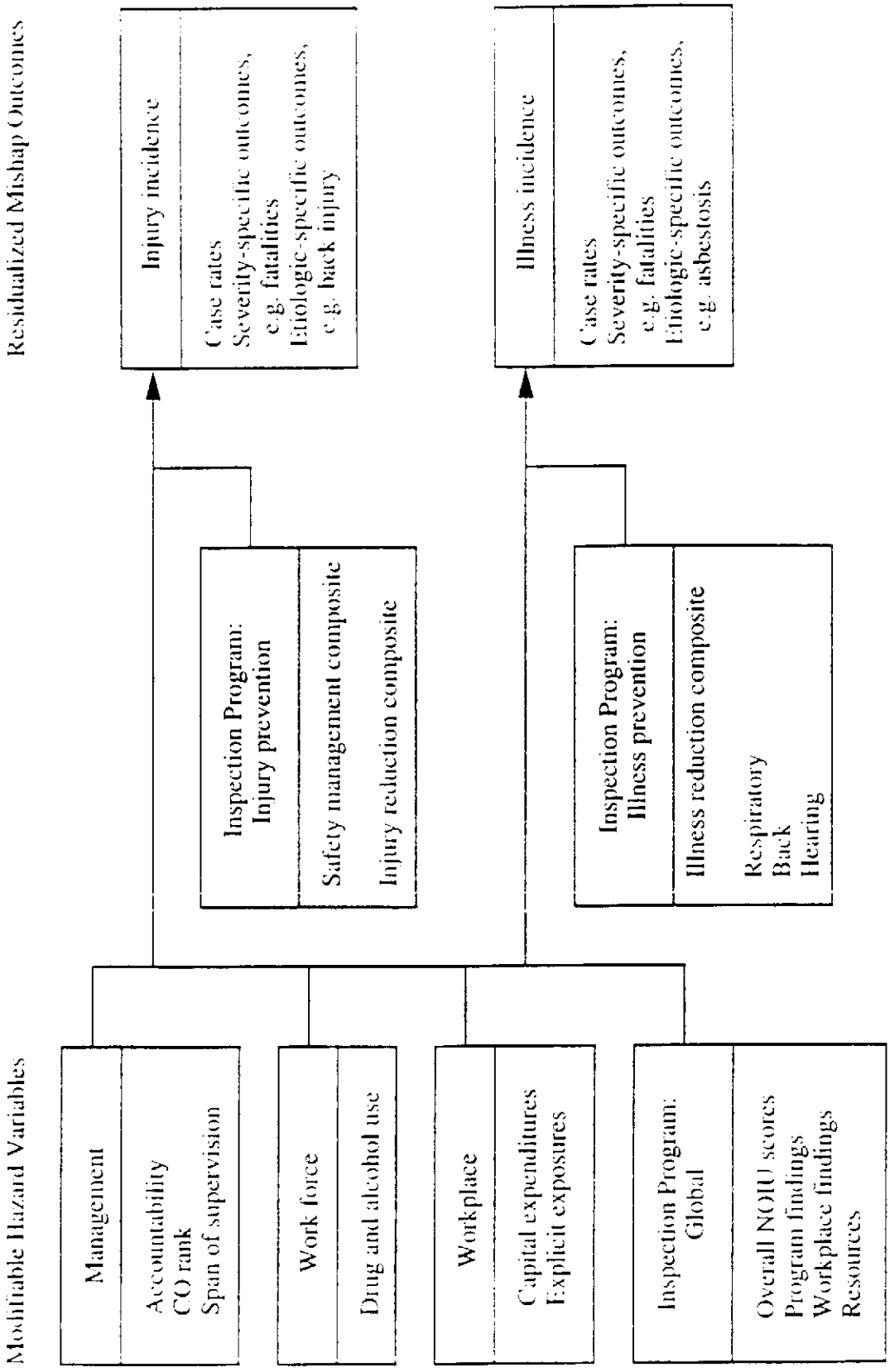
Relationship of fixed hazard variables to expected mishap rates



Note: Specific variable definitions are provided in the Appendix

Figure 6b: Mishap Cost-Reduction and Quality Assessment Model for the Navy Occupational Safety and Health Program

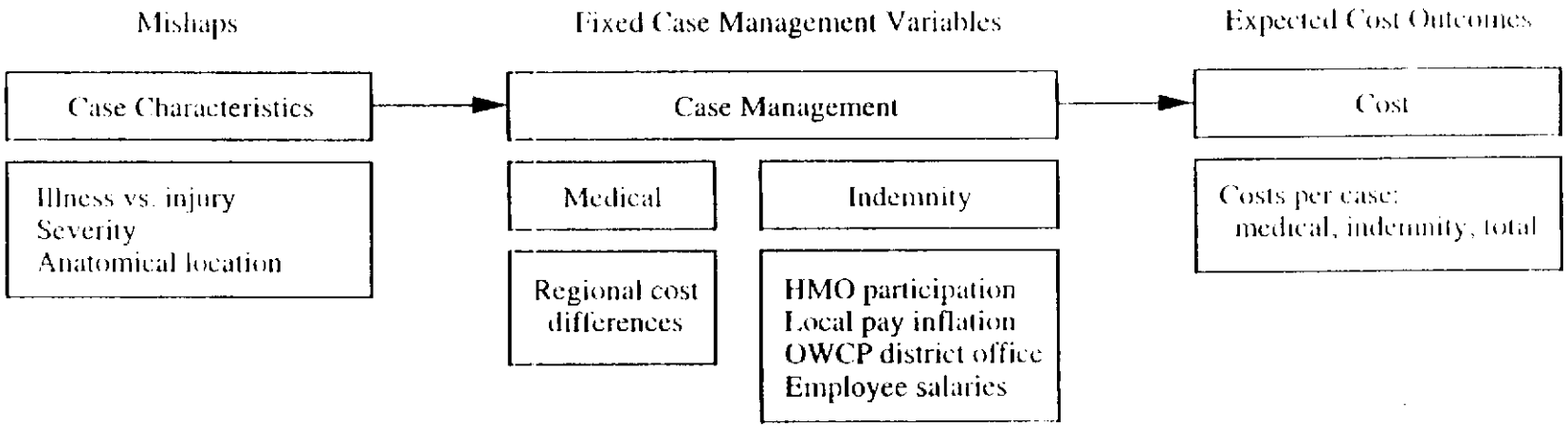
Relationship of modifiable hazard variables to residualized mishap rates



Note: Specific variable definitions are provided in the Appendix

Figure 6c: Mishap Cost-Reduction and Qu[illegible] Assessment Model for the Navy Occupational Safety and Health Program

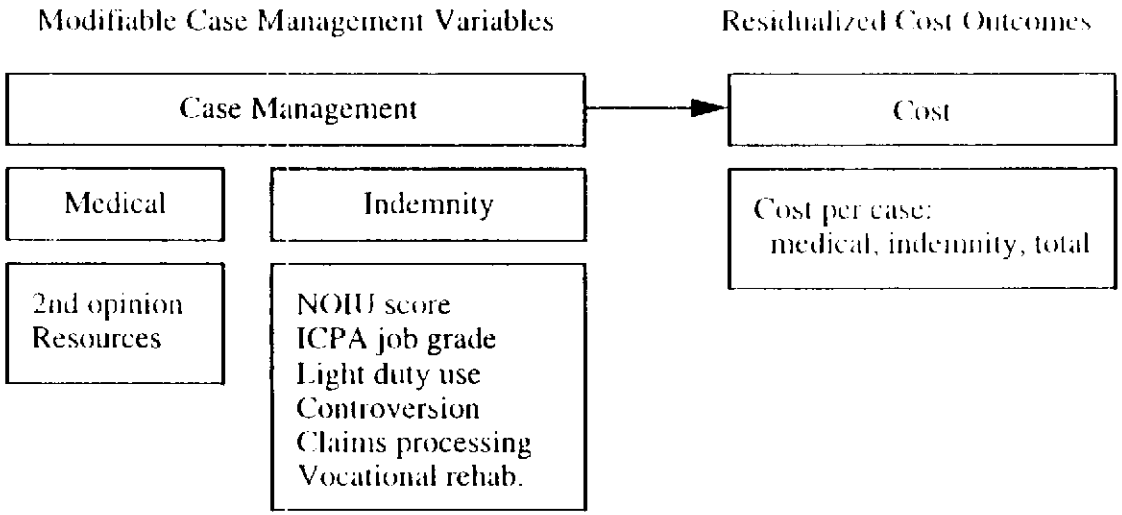
Relationship of fixed case management variables to expected cost per case



Note: Specific variable definitions are provided in the Appendix

..re 6d: Mishap Cost-Reduction and Quality ..essment Model for the Navy Occupational Safety and Health Program

Relationship of modifiable case management variables to residualized cost per case



Note: Specific variable definitions are provided in the Appendix

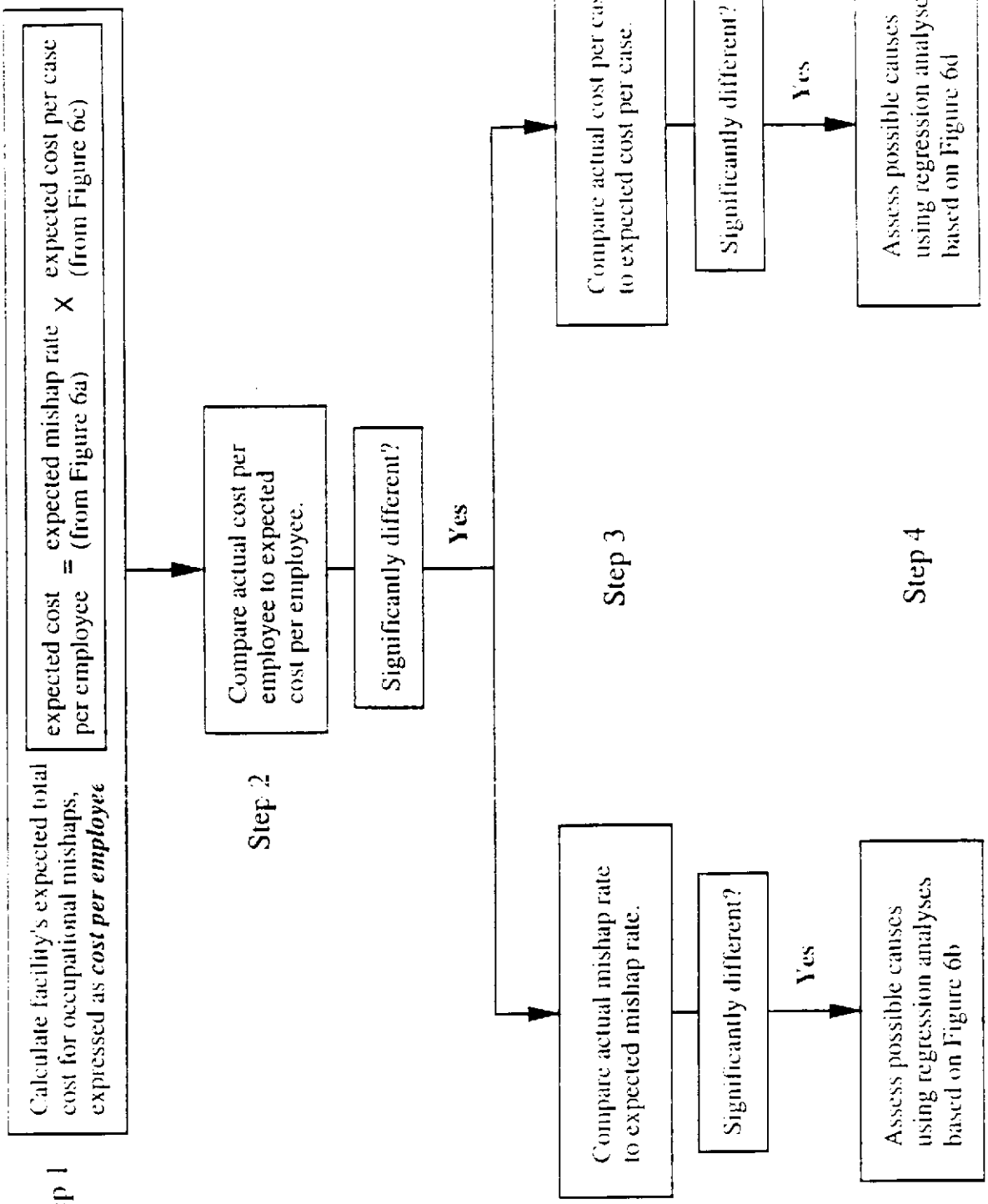
of the Model (Figure 6a) shows the hypothesized relationship for a given facility between those variables which cannot be changed via the Navy's Occupational Safety and Health Program (e.g., the mean age of a facility's work force) and the illness and injury rates which would be "expected" given these unalterable circumstances. Figure 6b shows the hypothesized relationship between those variables which *can* be changed (e.g., safety inspection scores) and residualized injury and illness rates—that is, the difference between a facility's actual and expected rates. Various aspects of a facility's ability to manage its cases and their attendant costs are unalterable; Figure 6c shows these factors and their hypothesized influences. And finally, some aspects of case management are under facilities' control and the proposed relationship between these variables and the difference between a facility's actual and expected costs is shown in Figure 6d. Breakdown of the Model in this fashion allows for the separate analysis, if desired, of explicit safety and health outcomes (i.e., injury and illness rates), of various cost drivers, and of the combined effects of all these factors on overall total costs.

Application of the Model to a hypothetical example

Figure 7 presents a decision-making algorithm showing how the costs of occupational injuries and illnesses at an individual facility might be analyzed through application of the Model. Such an application can be further illustrated with a hypothetical example.

A particular facility with 1,000 civilian employees, for instance, might report 100 occupational mishaps in a year, with an eventual projected cost for these cases of $1 million, or $1,000 per employee. In contrast, suppose the per employee cost for occupational mishaps Navy-wide is $250. Obviously, the facility's per employee cost exceeds that of the Navy as a whole. (If desired, a one-sample Z-test constructed from the values for costs per

Figure 7: Algorithm for application of the Mishap Cost-Reduction and Quality Assessment Model to the analysis of occupational mishaps at an individual facility



employee for facilities Navy-wide could be used to determine the statistical significance of the difference.) Suppose, however, that blue-collar workers comprise 50 percent of the facility's work force and that it is located in an expensive urban area where medical costs are 150 percent of the national average. Are the facility's costs still excessive? And if so, why?

Step 1 in the algorithm calls for using the Model to begin answering these questions by calculating, as shown in Figures 6a and 6c, the rate of mishaps and the cost per case that would be "expected" given circumstances of the facility which cannot be changed. In this case, doing so might indicate an expected mishap rate, given the high percentage of blue-collar workers, of 7 per 100 (as opposed to the observed 10 per 100) and an expected cost per case, given the area's high cost of medical services, of $10,500. Together, these expected figures yield an expected cost per employee for the facility of $735 (70 expected cases X an expected $10,500 cost per case / 10,000 employees). In Step 2, a one-sample t-test would be used to determine if the difference between the facility's expected $735 cost per employee and its actual $1,000 cost per employee was statistically significant.

Step 3 assumes this difference is significant and that it is important to know why. (Higher-than-expected rates? Higher-than-expected costs per case? Or both?). Each of these questions can be addressed statistically (using a one-sample test for proportions for the rate difference and a one-sample t-test for the difference in cost per case). In this hypothetical example, this facility's cost per case is actually *less* than would be expected given the prevailing high cost of medical services in its locale. Its mishap rate, however, is significantly greater than expected, even given the facility's large proportion of blue-collar workers. Step 4 calls for examining the possible reasons for this excess through the use of regression analyses based on Figure 6b of the Model; for instance, this facility might be found to have an inadequate safety program.

DATA SOURCES AND STUDY SAMPLE

Inevitably, data collected for claims or other administrative purposes have various quirks and shortcomings when used for research purposes. These have been commented on by previous researchers[18, 31]—some of whom have found themselves completely thwarted in their attempts to make use of such data[32]—and can include such problems as erratic case classification, incomplete records, coding errors, and limitations or idiosyncracies in one data set that preclude or limit the use of another.

Our research team has performed an overview of the potential Navy data sources available for use in the Mishap Cost-Reduction Model and our initial findings have been consistent with the experiences of these early workers. For instance, the only source of case-level cost and mishap data is OWCP, to which events are reported for the payment of compensation claims. The data from OWCP, whose chargeback year runs from 1 July to 30 June, include a code identifying an injured worker's employing activity; using this code and denominator data from elsewhere it is possible to calculate event rates for individual activities. To establish the reliability of these data, it would be useful to correlate them with rate data independently collected by the Naval Safety Center.[15] However, the case reporting criteria used by the two organizations are not always consistent, the Safety Center does not collect individual-level data, and the time frame for its data collection corresponds to that of the federal fiscal year (1 October to 30 September). This means it is not possible to correlate data from these two sources and that given the necessity of using the first, the second is of limited value. Similar problems became apparent with other data sources containing otherwise potentially useful information.

Figure 8 shows the data sources planned for use in the Model and the time periods from which data will be extracted. To help strengthen the causal plausibility of the Model's results, independent (i.e., predictor) variables are being extracted from data entries no later than 30 June 1991; dependent (outcome) variables are being extracted from data entries occurring on or after 1 July 1991. Additional comments on the planned data sources are provided below.

Office of Civilian Personnel Management: study sample

The Policy Analysis and Information Branch, Office of Civilian Personnel Management, Department of the Navy publishes routine reports on various demographic aspects of the Department's civilian work force. Data from the Office's report of 30 June 1991 were used to identify the 150 Department of the Navy facilities having the largest U.S. citizen civilian work forces as of that date.[33] These 150 facilities, identified by Unit Identification Codes, are listed in Table 2. The Model relies on variables (listed in the Appendix) generated from data describing these facilities.

To minimize the effect of potential cultural differences, four facilities in Guam and Puerto Rico that would have qualified based on size were excluded from the sample. Although comprising less than 10 percent of the Department's 1,544 facilities employing civilian workers on 30 June 1991, the 150 facilities selected nonetheless employed 80 percent of all civilians working for the Department at that time. Most of the Department's workers' compensation costs are generated by its large industrial facilities (e.g., shipyards and aviation rework and repair depots), and all of these facilities are included in the sample. Also shown in Table 2 is the percentage of each facility's work force comprised of blue-collar workers, which previous work has shown is related to injury and illness rates.[21]

Figure 8: Mishap Cost Reduction and Quality Assessment Model for the Navy Occupational Safety and Health Program: Planned dates of data coverage

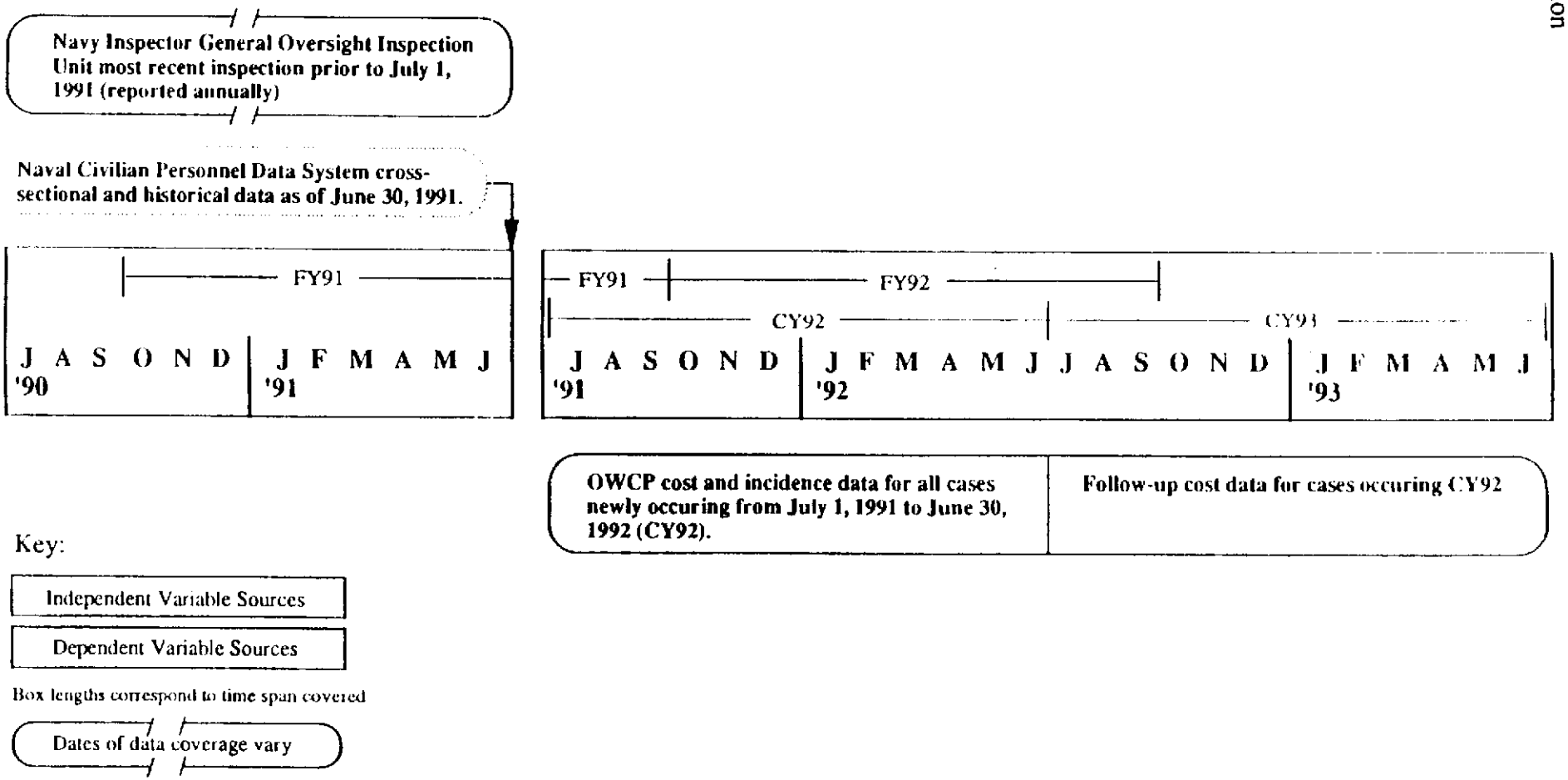


Table 2

Department of the Navy Facilities Employing Civilians: Largest 150 Facilities as of 30 June 1991, in Descending Order by Work Force Size

Unit Identification Code and facility description		Location	Pop.	Percent blue collar
00251	PUGET SOUND NAVSHIPYD	BREMERTON, WA	11470	64.21
00181	NORFOLK NAVSHIPYD	PORTSMOUTH, VA	11369	69.74
00191	NAVSHIPYD	CHARLESTON, SC	7501	66.00
00102	NAVSHIPYD	PORTSMOUTH, NH	7054	60.80
00221	NAVSHIPYD	MARE ISLAND, CA	7032	61.02
00151	NAVSHIPYD	PHILADELPHIA, PA	6925	74.11
00311	NAVSHIPYD	PEARL HARBOR, HI	5332	67.99
60530	NAVWPNSCEN	CHINA LAKE, CA	5239	6.68
60921	NAVSWC	DAHLGREN, MD	5156	9.41
65887	NAVAVNDEPOT	NORFOLK, VA	4385	63.15
65888	NAVAVNDEPOT	NORTH ISLAND, CA	4375	56.27
63126	COMPACMISTESTCEN	POINT MUGU, CA	4272	12.59
00164	NAVWPNSUPPCEN	CRANE, IN	4031	16.08
60258	NAVSHIPYD	LONG BEACH, CA	3965	73.90
65885	NAVAVNDEPOT NAS	ALAMEDA, CA	3930	63.72
65889	NAVAVNDEPOT	PENSACOLA, FL	3775	66.38
00163	NAVAVIONICCEN	INDIANAPOLIS, IN	3539	25.49
00253	NAVUSEAWARENGSTA	KEYPORT, WA	3532	40.97
66604	NUSC	NEWPORT, RI	3434	5.07
00104	SPCC	MECHANICSBURG, PA	3350	4.99
00173	NRL	WASHINGTON, DC	3226	8.59
65886	NAVAVNDEPOT	JACKSONVILLE, FL	3199	61.96
65923	NAVAVNDEPOT	CHERRY POINT, NC	3071	65.29
66001	NAVOCEANSYSCEN	SAN DIEGO, CA	3012	1.83
00421	NAVAIRTESTCEN	PAX RIVER, MD	2917	7.30
00174	NORORDSTA	INDIAN HEAD, MD	2808	28.95
42192	NAVSEA-OPER SUPP FLD	WASHINGTON, DC	2777	0

Table 2, continued:

Department of the Navy Facilities Employing Civilians: Largest 150 Facilities as of 30 June 1991, in Descending Order by Work Force Size

Unit Identification Code and facility description		Location	Pop.	Percent blue collar
62381	MSC	BAYONNE, NJ	2759	83.18
00167	DTNSRDC	BETHESDA, MD	2688	12.17
00189	NSC	NORFOLK, VA	2672	52.69
62269	NAVAIRDEVCEN	WARMINSTER, PA	2614	6.92
67004	MCLB	ALBANY, GA	2572	39.58
00197	NAVORDSTA	LOUISVILLE, KY	2528	53.44
62383	MSC PAC AREA	OAKLAND, CA	2405	84.78
63394	NAVSHIPWPNSYSENGSTA	PORT HUENEME, CA	2377	0.97
00383	ASO	PHILADELPHIA, PA	2332	8.10
68335	NAVAIRENGCEN	LAKEHURST, NJ	2298	18.36
63387	PWC	SAN DIEGO, CA	2290	60.04
00187	PWC	NORFOLK, VA	2143	69.81
67001	MCB	CAMP LEJEUNE, NC	2133	40.74
42191	NAVAIR-OPER SUPP FLD	WASHINGTON, DC	1906	0
62204	MCLB	BARSTOW, CA	1786	65.12
65540	NAVSSES	PHILADELPHIA, PA	1730	12.31
00109	WPNSTA	YORKTOWN, VA	1623	45.84
00161	USNA	ANNAPOLIS, MD	1502	38.35
00146	MCAS	CHERRY POINT, NC	1412	43.34
60701	WPNSTA	SEAL BEACH , CA	1346	35.74
00367	FLEMATSUPPO	MECHANISCBURG, PA	1345	0
62583	CBC	PORT HUENEME, CA	1316	26.98
68378	PWC	SAN FRANCISCO, CA	1307	64.65
62755	PWC	PEARL HARBOR, HI	1294	56.96
00681	MCB	CAMP PENDLETON, CA	1288	50.93
61331	NAVCOASTSYSCEN	PANAMA CITY, FL	1284	10.12
60036	WPNSTA	CONCORD, CA	1270	51.26

Table 2, continued:

Department of the Navy Facilities Employing Civilians: Largest 150 Facilities as of 30 June 1991, in Descending Order by Work Force Size

Unit Identification Code and facility description		Location	Pop.	Percent blue collar
00259	NAVHOSP	SAN DIEGO, CA	1262	18.30
00183	NAVHOSP	PORTSMOUTH, VA	1215	8.40
61339	NAVTRASYSCEN	ORLANDO, FL	1195	1.00
68381	NAVSEA PMO	WASHINGTON, DC	1191	0
00244	NSC	SAN DIEGO, CA	1172	42.49
00264	MCCDC	QUANTICO, VA	1172	40.02
68438	TRIREFFAC BANGFOR	BREMERTON, WA	1139	65.94
00168	NAVMEDCOM NATCAPREG	BETHESDA, MD	1120	20.45
64267	NAVWARFARE ASSMT CTR	CORONA, CA	1084	1.01
62474	WESTNAVFACENGCOM	SAN BRUNO, CA	1064	0.38
00193	WPNSTA	CHARLESTON, SC	1050	48.10
00612	NSC	CHARLESTON, SC	976	27.56
44466	TRIREFFAC	KINGS BAY, GA	971	62.31
62980	COMNAVMILPERSCOM	WASHINGTON, DC	960	1.35
00027	MANAGEMENT HDQTRS MC	WASHINGTON, DC	958	0.10
68322	NAVEDTRAPRODEVCEN	PENSACOLA, FL	954	2.62
62306	NACOCEANO	STENNIS SPACE CTR, MS	946	0.42
62271	NAVPGSCOL	MONTEREY, CA	854	12.30
00228	NSC	OAKLAND, CA	853	12.66
42200	NAVELEX PO	ARLINGTON, VA	822	0
64281	NAVSEA NORFOLK DET	NORFOLK, VA	818	0
62467	SOUTHNAVFACENGCOM	CHARLESTON, SC	817	0.12
62470	LANTNAVFACENGCOM	NORFOLK, VA	796	0
60478	WPNSTA	EARLE COLTS NECK, NJ	756	43.92
62472	NAVFACENGCOMNORDIV	PHILADELPHIA, PA	750	0.27
00246	NAS NO ISLE	SAN DIEGO, CA	735	25.17
60050	MCAS EL TORO	SANTA ANNA, CA	727	41.40

Table 2, continued:

Department of the Navy Facilities Employing Civilians: Largest 150 Facilities as of 30 June 1991, in Descending Order by Work Force Size

Unit Identification Code and facility description		Location	Pop.	Percent blue collar
62376	NAVAIRPROPCEN	TRENTON, NJ	716	39.80
00171	COMNAVDIST	WASHINGTON, DC	701	37.23
00619	NAVHOSP	OAKLAND, CA	701	17.83
00406	NSC PUGET SOUND	BREMERTON, WA	672	24.85
65114	PWC	PENSACOLA, FL	664	70.18
68166	NISC	SUITLAND, MD	628	1.43
63042	NAS	LEMOORE, CA	604	36.59
65584	NAVELEXSYSENGCEN	SAN DIEGO, CA	601	6.66
00216	NAS	CORPUS CHRISTI, TX	596	37.75
65912	NAVSEACENLANT	PORTSMOUTH, VA	596	0.84
00129	SUB BASE	NEW LONDON, CT	593	40.98
62661	NETC	NEWPORT, RI	593	41.48
65913	NAVSEACENPAC	SAN DIEGO, CA	593	1.01
62849	NAESU	PHILADELPHIA, PA	590	0
65113	PWC	GREAT LAKES, IL	580	70.69
62813	NAVSTA	PEARL HARBOR, HI	561	7.66
00604	NSC	PEARL HARBOR, HI	561	36.90
00207	NAS	JACKSONVILLE, FL	557	15.08
62678	SUPSHIP C/R USN	PORTSMOUTH, VA	540	28.70
63285	NAVINVESTSERCMD	WASHINGTON, DC	534	0
62791	SUPSHIP C/R	SAN DIEGO, CA	532	28.01
67399	MCAGCC	TWENTY-NINE PALMS, CA	511	33.07
62477	CHESNAVFACENGCOM	WASHINGTON, DC	509	0
60259	NAS MIRAMAR	SAN DIEGO, CA	509	42.44
00232	NAVHOSP	JACKSONVILLE, FL	503	14.71
63408	NAVMTO	NORFOLK, VA	489	24.74
62793	SUPSHIP C/R	NEWPORT NEWS, VA	488	0.61

Table 2. continued:

Department of the Navy Facilities Employing Civilians: Largest 150 Facilities as of 30 June 1991, in Descending Order by Work Force Size

Unit Identification Code and facility description		Location	Pop.	Percent blue collar
68711	SWNNAVFACENGCOM	SAN DIEGO, CA	488	0
00014	OCNR	WASHINGTON, DC	485	0.21
60191	NAS OCEANA	VIRGINIA BEACH, VA	482	34.23
68462	NORDA	BAY ST LOUIS, MS	473	0
68836	NSC	JACKSONVILLE, FL	468	16.45
00025	COMNAVFACENGCOMHQ	WASHINGTON, DC	464	0.22
61414	NAVPHIBASE	LITTLE CREEK, VA	464	44.18
00204	NAS	PENSACOLA, FL	458	13.32
62604	CBC	GULFPORT, MS	457	46.61
61463	NAVBASE	NORFOLK, VA	456	0
00620	NAS	WHIDBEY ISLAND, WA	451	9.98
00019	COMNAVAIRSYSCOM	ARLINGTON, VA	438	0.46
00024	NAVSEA HG	WASHINGTON, DC	433	2.31
67439	MARCORSUPACT	KANSAS CITY, MO	431	1.62
62789	SUPSHIP C/R	GROTON, CT	422	1.42
62795	SUPSHIP C/R	PASCAGOULA, MS	418	8.37
65580	NAVELEXSYSENGCEN	PORTSMOUTH, VA	417	0.24
00213	NAS	KEY WEST, FL	417	38.85
00030	DIRSSPO	WASHINGTON, DC	409	0
68346	NAVAIR PMO	WASHINGTON, DC	404	0
68094	NRMC	CAMP PENDLETON, CA	399	23.06
65928	NTC	ORLANDO, FL	399	35.59
65538	NAVSEALOGSUPENGACT	MECHANICSBURG, PA	399	0
60200	NAS	CECIL FIELD, FL	396	11.11
68084	NAVHOSP	CHARLESTON, SC	393	5.60
60957	FAADCPAC	SAN DIEGO, CA	388	0
68305	NAVCIVENGRLAB CBC	PORT HUENEME, CA	386	6.22

Table 2, continued:

Department of the Navy Facilities Employing Civilians: Largest 150 Facilities as of 30 June 1991, in Descending Order by Work Force Size

Unit Identification Code and facility description		Location	Pop.	Percent blue collar
47039	OFC NAVOPER	ARLINGTON, VA	377	0
63028	POMFLANT	CHARLESTON, SC	376	53.19
62742	PACNAVFACENGCOM	PEARL HARBOR, HI	375	0
68860	NAVSUPCEN	PENSACOLA, FL	370	34.86
60951	FAADCLANT	NORFOLK, VA	366	0
00236	NAS	ALAMEDA, CA	363	29.20
00318	MCAS	KANEHOE BAY, HI	358	54.19
65236	NAVELEXSYSENGCEN	CHARLESTON, SC	357	0
00296	NAS	MOFFETT FIELD, CA	357	35.85
65980	NAVELEXSYSENGACT	ST INIGOES, MD	354	1.69
68093	NAVHOSP	CAMP LEJEUNE, NC	350	18.57
62767	NAVAIRTECHSERFAC	PHILADELPHIA, PA	347	0.29
67854	MCRDAC	WASHINGTON, DC	342	3.22
42237	SUB BASE	KINGS BAY, GA	340	10.29
68057	NARDAC	NORFOLK, VA	338	0.59
	TOTAL		242,040	37.95

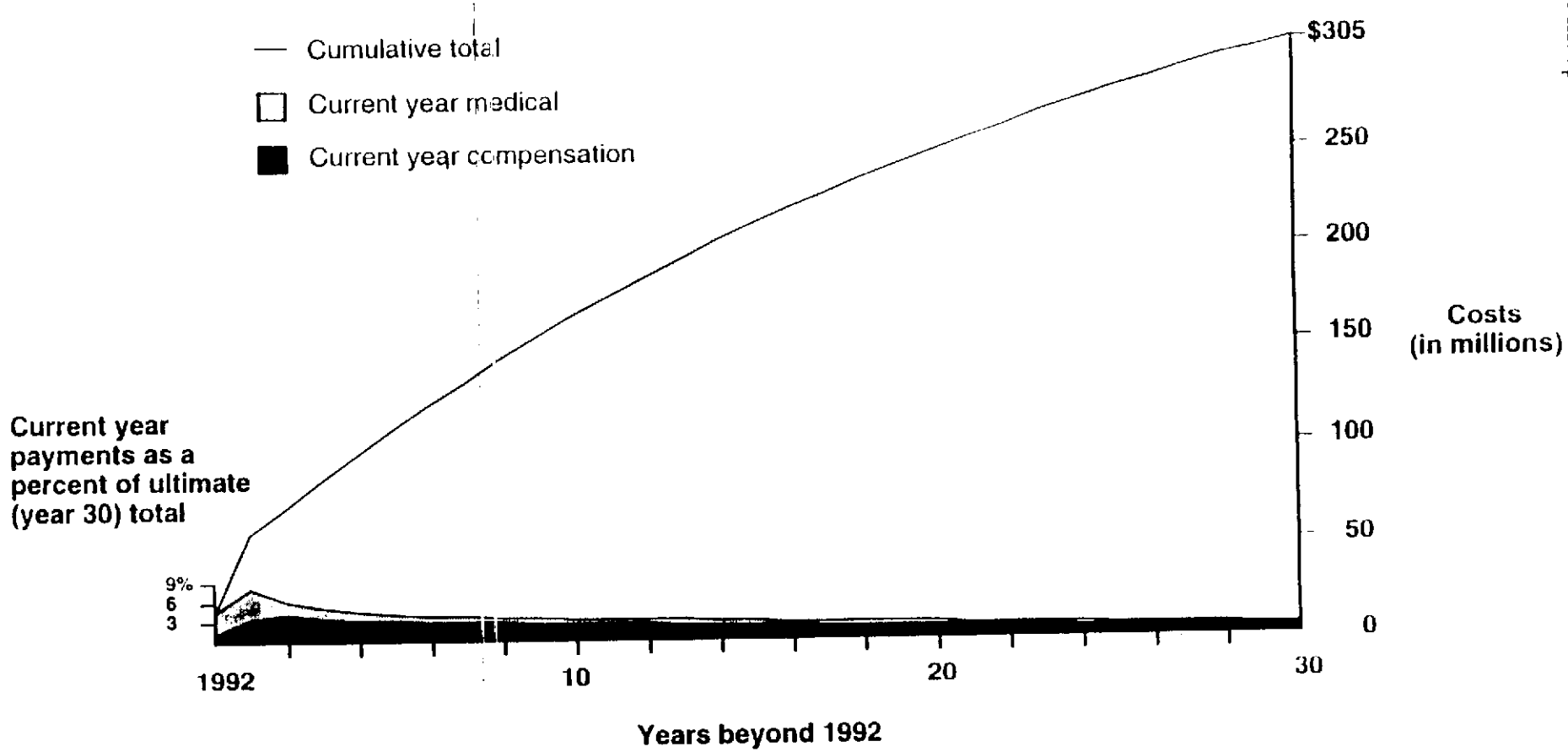


Figure 10: Actuarial projections of eventual Department of the Navy costs for occupational mishaps occurring during chargeback year 1992 (1 July 1991 - 30 June 1992)

Source: Actuarial model created for Office of Workers' Compensation Programs, Employment Standards Administration,U.S. Department of Labor, by Allord, Hartman, Wright, Spencer, & Thomas, Certified Actuaries, and revised by Naval Health Research Center; based on 1992 chargeback year medical payments of $11.3 million and compensation payments of $3.1 million.

DEPARTMENT OF THE NAVY
CHIEF OF NAVAL EDUCATION AND TRAINING
NAVAL AIR STATION
PENSACOLA, FLORIDA 32508-5100

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CNET NOTICE 5100

Subj: NAVAL SAFETY SCHOOL FY94 COURSE SCHEDULE

Ref: (a) OPNAVINST 5100.19B
(b) OPNAVINST 5100.23C
(c) OPNAVINST 5090.1A

Encl: (1) FY94 General Course Information
(2) FY94 Safety and Occupational Health Courses
(3) FY94 Hazardous Material and Environmental Protection Courses
(4) FY94 OSHA Training Institute Courses Sponsored by the Naval Safety School
(5) Other Navy Sources of Safety, Occupational Health, and Environmental Protection Training

1. Purpose. To promulgate the Naval Safety School FY94 Course Schedule and provide additional information on safety, occupational health, and environmental protection training within the Navy, in support of references (a) through (c).

2. Discussion

a. Enclosures (1) through (4) provide the FY94 Naval Safety School training offerings, along with general course information such as eligibility, costs, and quota request procedures. Enclosure (5) contains additional sources of subject-related training available to military and civilian personnel, with points of contact for further information.

b. Any necessary revisions to the information in enclosures (1) through (4) will be disseminated through messages or safety-related publications. As needs are identified and funding becomes available, additional courses may be offered by the Naval Safety School. The schedule, updates, and new offerings will also be placed on the NAVOSHNET and Naval Safety Center Bulletin Board Systems, as well as in the Catalog of Navy Training Courses (CANTRAC), NAVEDTRA 10500. Further guidance on CANTRAC and the bulletin board systems is provided in enclosure (1).

3. Action. Commands are encouraged to take full advantage of all applicable training in enclosures (2) through (5) to ensure that safety, occupational health, and environmental protection training requirements of references (a) through (c) are met. Specific attention should be paid to prerequisites and course descriptions to ensure applicability to potential students.

T. L. MCCLELLAND
Deputy and Chief of Staff

Distribution (CNETINST 5218.1F, Case A):
Lists I through VIII, X
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NAVAL SAFETY SCHOOL

FY 94 GENERAL COURSE INFORMATION

1. Eligibility and Cost. Department of the Navy personnel who meet course prerequisites are eligible to attend all courses in enclosures (2) through (4) on a space-available basis. Attendance by interested personnel from other Department of Defense (DoD) activities or federal agencies, DoD contractors, or foreign nationals will be addressed on a case-by-case basis. There are no tuition charges for government employees.

2. Quota Request/Confirmation Procedures

a. Navy and DoD Civilians. Civilians should request quotas for any Naval Safety School courses listed in enclosures (2) through (4) by submitting a typed DD Form 1556 (Request, Authorization, Agreement, Certification of Training and Reimbursement). Forward only copies 3, 4, and 5 of the DD Form 1556. Quotas cannot be requested or confirmed by phone, at this time. Forward your DD Form 1556 to:

Commanding Officer
Naval Safety School
9080 Breezy Point Crescent
Norfolk, VA 23511-3998

DSN 565-8778, COMM (804) 445-8778
FAX DSN 565-8901

NOTE: Quota requests for **Confined Space Safety (A-493-0030)** should state that the training is required by the individual's current or projected job assignment. In addition, students must take and pass a prerequisite screening examination for admission into the course. This requires initial submission of the quota request not later than 90 days prior to the course convening date to allow ample time for completion/grading of the examination.

b. Navy and DoD Military Personnel. Military personnel must request quotas by sending an official letter, using the above address, or message to NAVSAFESCOL NORFOLK VA//00/01/N2//. The letter or message should include the student's first name, middle initial, and last name; social security number; rate/rank/branch of service; position title; activity's complete mailing address and phone number (DSN/COMM); and course identification number (CIN), title, and location requested. Quotas cannot be requested or confirmed by phone, at this time.

c. Quota Confirmations. Quota confirmation letters, including exact classroom locations and reporting times, will be mailed out no earlier than 90 days before the start of the class. The Naval Safety School must be notified as soon as possible if class

quota(s) cannot be used. Activities failing to cancel unused quotas, resulting in "no shows," will be notified accordingly in writing. Notification of cancellations or substitutions may be done by phone.

3. Uniform Policy. Military personnel attending courses listed in enclosures (2) through (4) are expected to be in the uniform of the day for the particular location. Civilian personnel will dress appropriately.

4. Duty While Under Instruction. It is recommended that students reporting for training be exempt from standing duty at their parent commands.

5. Continuing Education Units (CEUs). CEUs are available for courses in enclosure (4). They may be available for selected courses in enclosure (2). They are not available for courses in enclosure (3). Contact the Naval Safety School for further information.

6. Catalog of Navy Training Courses (CANTRAC), NAVEDTRA 10500

a. Course descriptions and convening dates have been included in this schedule. However, for the most current, complete information on all courses in enclosures (2) and (3), you should consult CANTRAC. Courses listed in enclosure (4) are not currently listed in CANTRAC. For further information on courses in enclosure (4), contact the Naval Safety School directly.

b. CANTRAC provides a centralized source of information on all courses under the purview of the Chief of Naval Education and Training (CNET) and other Navy training commands. Volume II of CANTRAC, published on microfiche each April and October, contains course descriptions (course identification numbers (CINs), locations, length, prerequisites, personnel reporting procedures, quota control authority), along with convening schedules. CANTRAC is distributed Navy wide and should be available at all commands. Check with your training officer or Educational Services Officer (ESO) for further information on the location of CANTRAC at your command.

7. Naval Safety Center Bulletin Board System. Course information along with any revisions or updates, is also available through the Naval Safety Center's Bulletin Board System (BBS). For further information on accessing the BBS, contact STS1(SS) Wheaton at the Naval Safety Center, (804) 444-7233 or DSN 564-7233.

8. NAVOSHNET. Course information and revisions will be placed periodically on the NAVOSHNET. For further information on the NAVOSHNET, contact Mr. Craig Schilder at NAVFACENGCOM, 200 Stovall Street, Alexandria, VA 22232-2300, (703) 325-0435 or DSN

221-0435; or Mr. John Bodi, Code 09K1, Navy Public Works Center, Naval Station, Norfolk, VA 23511-6098, (804) 444-5193 or DSN 564-5193.

9. NAVSAFESCOL Location. The Naval Safety School is located in the center wing behind the Norfolk Naval Air Station BOQ, Ely Hall, Building SP-17, which is directly across the street from the Breezy Point Officer's Club on Fifth Avenue. After entering the Naval Air Station's Gate 4, take the first left turn at the signal light, then the first right turn onto Breezy Point Crescent. From the Naval Air Station's Gate 3, follow Bellinger Boulevard west, past the air field and hangers, to Fifth Avenue. Turn right onto Fifth Avenue at the signal light, then the first right onto Breezy Point Crescent. Parking is available behind the BOQ and next to the Naval Safety School building.

NAVAL SAFETY SCHOOL

FY 94 SAFETY AND OCCUPATIONAL HEALTH COURSES

The following safety and occupational health courses are offered by the Naval Safety School in Norfolk, Virginia, and at various exported locations throughout the world. Prospective students are advised to pay particular attention to course prerequisites and descriptions to ensure the course is applicable to their professional needs. Course lengths are given in instructional days.

TITLE: Construction Safety Standards

CIN: A-493-0021 **COURSE LENGTH:** 10 days

DESCRIPTION: The purpose of the course is to provide full-time and additional duty safety personnel, ROICC, construction inspectors, and similar personnel assigned responsibility for conducting or supervising occupational safety and health efforts at Navy construction sites with training to identify and interpret OSHA and NAVOSH standards, apply those standards to a construction site, and ensure the site is free from hazards to ensure the safety of personnel. The course content includes NAVOSH program introduction; NAVOSH construction standards; walking and working surfaces; electrical safety; fire protection and prevention; welding and cutting; materials handling and storage; tools (hand and powered); excavations; signs, signals and barricades; concrete and masonry construction; construction specific operations; occupational health and environmental controls; personal protective equipment; and hazard recognition, evaluation and control. This course confers SNEC 6021.

PREREQUISITES: None

LOCATIONS:	**DATES:**
Gulfport, MS	18-29 Oct 93
Port Hueneme, CA	24 Jan - 4 Feb 94
Gulfport, MS	16-27 May 94
Port Hueneme, CA	11-22 Jul 94

TITLE: Ergonomics

CIN: A-493-0024 **COURSE LENGTH:** 5 days

DESCRIPTION: The purpose of this course is to provide safety specialists/managers/supervisors who serve as members of safety/injury prevention teams at naval commands of all sizes with the training to independently develop and implement back injury prevention and cumulative trauma disorder (CTD) prevention programs. The course content includes back injury prevention; CTDs; workplace design; tool and equipment selection and design; displays and controls; and environmental stressors.

PREREQUISITES: None (prior safety training/work experience is recommended)

LOCATIONS:	**DATES:**
Charleston, SC	1-5 Nov 93
Norfolk, VA	3-7 Jan 94
Pearl Harbor, HI	18-22 Apr 94
Oakland, CA	8-12 Aug 94

TITLE: Confined Space Safety

CIN: A-493-0030 **COURSE LENGTH:** 8 days

DESCRIPTION: The purpose of the course is to provide Gas Free Engineers, Assistant Gas Free Engineers, and Confined Space Program Managers with the training to establish and oversee a Gas Free Engineering/Confined Space Entry Program and apply the standards outlined in NAVSEA S6470-AA-SAF-010 and OPNAVINST 5100.23C. The course content includes the reasons for gas testing; toxicology and health hazards; chemistry for gas free engineers; ventilation requirements and calculations; procedures, responsibilities and program requirements; hot work, space cleaning, inerting and pressing up procedures; selection and use of gas detection instruments; and personal protective equipment.

PREREQUISITES: Prospective students must take and pass a screening examination in order to be admitted to the course.

LOCATIONS:	**DATES:**
Norfolk, VA	7-16 Dec 93
San Diego, CA	1-10 Mar 94
Oakland, CA	7-16 Jun 94
Philadelphia, PA	23 Aug - 1 Sep 94

TITLE: Hazardous Materials

CIN: A-493-0031 COURSE LENGTH: 5 days

DESCRIPTION: The purpose of the course is to introduce civilian and military personnel assigned to full-time/collateral safety duties with the training to identify hazardous materials and hazardous materials control requirements and methods. The course content includes definitions and types of hazardous materials; chemistry of hazardous materials; human toxicology; hazard communication (HAZCOM) program; identification, labelling, marking, storage and transportation of hazardous materials; and HAZWOPER (29 CFR 1910.120).

PREREQUISITES: Job-related experience.

LOCATIONS:	DATES:
Norfolk, VA	18-22 Oct 93
San Diego, CA	6-10 Dec 93
Pearl Harbor, HI	10-14 Jan 94
Jacksonville, FL	14-18 Feb 94
Charleston, SC	4-8 Apr 94
Oakland, CA	23-27 May 94
Seattle, WA	27 Jun - 1 Jul 94
Millington, TN	1-5 Aug 94

TITLE: Laser System Safety Officer

CIN: A-493-0038 COURSE LENGTH: 8 days

DESCRIPTION: The purpose of this course is to provide personnel assigned as full-time/collateral-duty Laser Systems Safety Officers (LSSOs) with the training to identify and apply the specific requirements for control of laser radiation hazards in the ashore and afloat environments. The course content includes the physics of laser safety; laser hazard analysis; biological effects of optical radiation; laser eye and skin protection; standards utilization; laser system and range certification; and Navy Laser Hazards Prevention Program management. The course does not include information on other non-ionizing or ionizing radiation safety.

PREREQUISITES: Attendees must be serving/assigned to serve as Laser System Safety Officers.

LOCATIONS:	DATES:
Norfolk, VA	24 Jan - 2 Feb 94
San Diego, CA	20-29 Sep 94

TITLE: Safety Appraisal

CIN: A-493-0043 COURSE LENGTH: 4 days

DESCRIPTION: The purpose of the course is to provide full-time/collateral duty safety managers and assistants at ashore/afloat units and staffs with the training to establish and monitor the Safety Performance Improvement (SPI) Program in order to reduce mishap rates by reinforcing safety work practices and correcting unsafe acts. The course content includes concepts and methods; observation techniques; preappraisal steps; appraisal steps; and preparing/presenting facts, conclusions and recommendations.

PREREQUISITES: A-493-0050 or equivalent education/experience.

LOCATIONS:	DATES:
Norfolk, VA	1-4 Nov 93
San Diego, CA	24-27 Jan 94
Pearl Harbor, HI	14-17 Mar 94
Norfolk, VA	13-16 Jun 94

TITLE: Ground Safety for Marines

CIN: A-493-0047 COURSE LENGTH: 10 days

DESCRIPTION: The purpose of the course is to provide USMC personnel assigned to full-time/collateral safety duties at ashore units/staffs with training to utilize fundamental safety and occupational health concepts/techniques in the Marine Corps Accident Prevention, Safety and Occupational Health Programs. The course content includes hazard control fundamentals; Marine Corps OSH Standards (29 CFR 1910); personal protective equipment; hazardous materials; hazardous waste and environmental laws; industrial hygiene; recreation and off-duty safety; safety training; mishap investigation and reporting procedures; and motor vehicle and traffic safety programs.

PREREQUISITES: USMC E-4 and above with 3 years service, or 0-2/0-3 serving in ground safety billets.

LOCATIONS:	DATES:
Camp Lejeune, NC	18-29 Oct 93
Camp Pendleton, CA	7-18 Mar 94
Camp Lejeune, NC	13-24 Jun 94
Okinawa, JA	15-26 Aug 94

TITLE: Basic Mishap Investigation and Recordkeeping

CIN: A-493-0048 COURSE LENGTH: 4 days

DESCRIPTION: The purpose of this course is to provide supervisors and collateral-duty safety managers/officers at ashore and afloat units with training to conduct and participate in the investigation of mishaps and record and report the results of those investigations using analytical techniques and data management systems. The course content includes change analysis; energy-barrier-target analysis; interviewing witnesses; human errors; events/causal factors analysis; integrating and reporting information; and recording and reporting mishaps.

PREREQUISITES: None

LOCATIONS:	DATES:	LOCATIONS:	DATES:
Norfolk, VA	6-9 Dec 93	Jacksonville, FL	11-14 Apr
San Diego, CA	10-13 Jan 94	Oakland, CA	9-12 May
Charleston, SC	31 Jan - 3 Feb 94	Norfolk, VA	6-9 Jun
Pearl Harbor, HI	7-10 Mar 94	San Diego, CA	8-11 Aug

TITLE: Introduction to Navy Occupational Safety and Health (Ashore) (consolidated former Collateral Duty Safety Officer and Introduction to Safety Science courses)

CIN: A-493-0050 COURSE LENGTH: 5 days

DESCRIPTION: This course provides shore primary and collateral duty military and civilian safety personnel with training to independently implement, maintain and manage a comprehensive safety program. The course content includes terms, principles, concepts and requirements for mishap prevention, safety, fire, environment, and occupational health programs in the Navy; fundamentals of mishap causation, hazard recognition, evaluation and control; specific safety programs such as mishap investigation and reporting, occupational safety and health standards, hazard abatement, respiratory protection, hearing conservation, sight conservation, ergonomics, energy control and confined space entry.

PREREQUISITES: None

LOCATIONS:	DATES:	LOCATIONS:	DATES:
San Diego, CA	18-22 Oct 93	San Diego, CA	9-13 May 94
Norfolk, VA	15-19 Nov 93	Whidbey Island, WA	18-22 Jul 94
Sigonella, IT	6-10 Dec 93	Pearl Harbor, HI	25-29 Jul 94
Kings Bay, GA	14-18 Feb 94	Yokosuka, JA	1-5 Aug 94
Newport, RI	21-25 Mar 94	Norfolk, VA	12-16 Sep 94

TITLE: General Industry Safety Standards

CIN: A-493-0061 COURSE LENGTH: 5 days

DESCRIPTION: The purpose of the course is to provide full-time/collateral duty safety, fire protection and occupational health personnel and others assigned responsibility for conducting/supervising Navy occupational safety and health (NAVOSH) efforts at shore activities with training to identify and interpret OSHA standards, and apply those standards to their work environment. The course content includes standards orientation; walking/working surfaces, electrical standards; fire protection; storage and materials handling; machine guarding and portable tools; welding and cutting; hazardous materials; general environmental control; toxic and hazardous substances; personal protective equipment; and hazard communication.

PREREQUISITES: None

LOCATIONS:	DATES:	LOCATIONS:	DATES:
Norfolk, VA	15-19 Nov 93	Jacksonville, FL	9-13 May 94
Pearl Harbor, HI	13-17 Dec 93	Millington, TN	13-17 Jun 94
San Diego, CA	7-11 Feb 94	Oakland, CA	25-29 Jul 94
Charleston, SC	14-18 Mar 94	Seattle, WA	22-26 Aug 94

TITLE: Safety Certification Review

CIN: A-493-0062 COURSE LENGTH: 5 days

DESCRIPTION: The purpose of the course is to provide safety specialists and managers with a review of basis sciences and safety standards in preparation for their taking the Certified Safety Professional (CSP) Fundamentals Exam. The course content includes a review of the basic sciences (math, chemistry, physics, mechanics, statistics, and electricity) and safety (standards, fire protection, industrial hygiene, system safety, hazardous materials, ethics, and law). The course is based on the BCSP and AIA review materials for the CSP Fundamentals Exam.

PREREQUISITES: The presumption of this course is that all attendees possess the basic science/safety standards knowledge required to take the CSP Fundamentals Exam and only need to review the material in an intensive session.

LOCATIONS:	DATES:
Norfolk, VA	4-8 Oct 93
San Diego, CA	16-20 May 94

TITLE: Safety Training Methods

CIN: A-493-0063 COURSE LENGTH: 5 days

DESCRIPTION: The purpose of the course is to provide military and civilian full-time/collateral duty safety personnel assigned responsibility for safety training at shore facilities with the training to independently develop, administer and evaluate safety training efforts at their commands. The course content includes safety training program policies; safety training requirements; the safety training target audience, training methodologies and instructional techniques; development and presentation of lesson plans; and evaluation of training.

PREREQUISITES: Some formal instructor training is desirable.

LOCATIONS:	DATES:
Pearl Harbor, HI	10-14 Jan 94
Charleston, SC	23-27 May 94

TITLE: Advanced Mishap Investigation

CIN: A-493-0066 COURSE LENGTH: 5 days

DESCRIPTION: The purpose of the course is to provide full-time safety managers/officers and safety professionals at ashore and afloat units and staffs with training to determine the root causes of mishaps and formulate effective measures to prevent recurrence using a management oversight and risk assessment systems approach. The course content includes model programs for root cause analysis; failure recognition and analysis; events and causal factors analysis; investigative interviewing techniques; human errors; change analysis and identification models; hazard-barrier-target analysis; analytic trees; management and risk assessment systems analysis; information integration for investigative reports; root cause corrective action evaluation; and briefing techniques for mishap investigation results.

PREREQUISITES: Appointment to responsibilities for investigation of Class A and B mishaps. Familiarity with OPNAVINST 5100.23C, Chapter 14, is required.

LOCATIONS:	DATES:
Norfolk, VA	7-11 Feb 94
Pearl Harbor, HI	16-20 May 94
San Diego, CA	15-19 Aug 94

TITLE: Radio Frequency/Microwave Radiation Safety Workshop

CIN: N/A WORKSHOP LENGTH: 2 days

DESCRIPTION: This workshop is intended for personnel directly involved with an Radio Frequency (RF) Radiation Safety Program. Topics include hazards of electromagnetic radiation; exposure levels; indirect hazards, survey considerations; safety measures/precautions; standards; managing an RF Radiation Safety Program; and command responsibilities. The Naval Safety School is offering this workshop to members of the laser community. Subsequent offerings remain to be determined at this time. There is no CIN associated with this workshop. Specify title only when requesting a quota.

PREREQUISITES: A thorough knowledge of RF radiation terminology, measurements and calculations, and RF radiation safety responsibility.

LOCATION: Norfolk, VA

DATE: 3-4 Feb 94

The following courses will be offered by the Naval Safety School during FY 94. As courses are phased in, convening dates and locations will be published. Locations and dates are contingent upon the relocation of this training to the School from other training activities, such as the Fleet Training Centers. Check CANTRAC for dates and locations or call the School for further information.

TITLE: Navy Occupational Safety and Health Program Seminar

CIN: A-4A-0051 **COURSE LENGTH:** 1 day

DESCRIPTION: The purpose of this course is to provide regular/reserve active duty officers and civilian employees who have not had more comprehensive NAVOSH training, with an overview of policies and procedures for management and technical direction of a successful NAVOSH program at major shore activities. The course content includes headquarters overview; NAVOSH oversight inspections; medical surveillance and workplace monitoring; reduction of injury claims; and hazard abatement.

PREREQUISITES: Regular/reserve active duty Navy Officers and civilian employees serving as safety officers, safety and health managers, industrial hygienists, occupational health specialists, NAVOSH coordinators, and safety engineers who are new to the NAVOSH program.

TITLE: High Risk Safety Officer

CIN: A-493-3000 (formerly J-493-3000) **COURSE LENGTH:** 3 days

DESCRIPTION: The purpose of this course is to prepare individuals to serve as high risk safety officers (HRSOs) for those courses designated in CNETINST 1500.20, as well as supervisors or managers with high risk training responsibilities. The content includes duties and responsibilities of the HRSO; high risk instructor screening, certification and evaluation; safety programs, inspections and directives; accident causation; workplace monitoring; hazard abatement; OSHA/NAVOSH programs; pre-mishap plans; mishap investigation and reporting; and mishap analysis and recordkeeping.

PREREQUISITES: E-6 and above and civilian personnel assigned or en route to duties as high risk training instructors, supervisors or managers within NAVEDTRACOM.

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TITLE: Asbestos Emergency Ripout Orientation for Shipboard Personnel

CIN: A-760-2166 (formerly K-760-2166)

COURSE LENGTH: 1 day

DESCRIPTION: The purpose of the course is to provide orientation in the proper procedures for an asbestos emergency ripout. Course content includes personnel awareness of asbestos hazards; monitoring of asbestos materials; asbestos disposal; and safe breathing.

PREREQUISITES: Students should be eligible for placement in the ship's Asbestos Medical Surveillance Program (AMSP).

NAVAL SAFETY SCHOOL

FY 94 HAZARDOUS MATERIAL AND ENVIRONMENTAL PROTECTION COURSES

The following courses will be offered by the Naval Safety School during FY 94. With the exception of A-4J-0021, locations and dates are contingentupon the relocation of this training to the school from other training activities, such as the Fleet Training Centers. Check CANTRAC or contact the school for the status of particular courses.

TITLE: Afloat Environmental Protection Coordinator (NEW)

CIN: A-4J-0021 COURSE LENGTH: 3 days

DESCRIPTION: The purpose of the course is to provide assigned collateral duty shipboard Environmental Protection Coordinators with training to assist in the operation, management and compliance of the ship's environmental protection program. Course content includes environmental protection procedures; program duties/responsibilities; recordkeeping/reporting; liability, violations, and site access; overseas environmental compliance; spill response and contingency plans; hazardous material disposal/offload; recycling/reutilization; solid waste management; air/noise pollution; medical/infectious waste management; marine sanitation/sewage; oil/oily waste management; and shipboard discharges at sea.

PREREQUISITES: E-6 and above, all ratings, surface ship and submarine personnel.

LOCATIONS:	DATES:
Norfolk, VA	25-27 Oct 93
Norfolk, VA	17-19 Nov 93
Norfolk, VA	13-15 Dec 93
Norfolk, VA	10-12 Jan 94
San Diego, CA	26-28 Jan 94
Pearl Harbor, HI	16-18 Feb 94
Norfolk, VA	28 Feb - 2 Mar 94
San Diego, CA	21-23 Mar 94
Norfolk, VA	30 Mar - 1 Apr 94
Norfolk, VA	27-29 Apr 94
Charleston, SC	1-3 Jun 94
Norfolk, VA	29 Jun 94 - 1 Jul 94
Norfolk, VA	27-29 Jul 94
Oakland, CA	31 Jul - 2 Aug 94
Norfolk, VA	24-26 Aug 94
Norfolk, VA	28-30 Sep 94

TITLE: Hazardous Materials/Hazardous Waste Coordinator

CIN: A-8B-0008 (formerly J-8B-0008) COURSE LENGTH: 2 days

DESCRIPTION: The purpose of the course is to familiarize students with existing directives, guidance and resources needed to effectively control the handling, storage, usage and proper disposal of hazardous materials/hazardous waste. The course content includes terms/abbreviations; levels of responsibility; introduction to applicable regulations, reports, reference, and instructions; proper handling, receiving, stowage/disposal of hazardous material/hazardous waste; personnel safety precautions; procedures to conduct hazardous material inspections; and required actions in response to hazardous material incidents.

PREREQUISITES: E-6 through 0-5, Supply Officers, Safety Officers, and other senior personnel designated as Afloat Hazardous Material Coordinators.

LOCATIONS:	DATES:
Norfolk, VA	28-29 Oct 93
Norfolk, VA	16-17 Dec 93
Norfolk, VA	13-14 Jan 94
Pearl Harbor, HI	14-15 Feb 94
Jacksonville, FL	22-23 Feb 94
Norfolk, VA	28-29 Mar 94
Charleston, SC	4-5 Apr 94
Norfolk, VA	25-26 Apr 94
San Diego, CA	23-24 May 94
San Diego, CA	7-8 Jun 94
Norfolk, VA	27-28 Jun 94
Norfolk, VA	25-26 Jul 94
San Diego, CA	1-2 Aug 94
Norfolk, VA	22-23 Aug 94
Oakland, CA	29-30 Aug 94
Norfolk, VA	26-27 Sep 94

TITLE: Afloat Hazardous Material For The Supervisor (NEW)

CIN: A-322-0010 COURSE LENGTH: 2 days

DESCRIPTION: The purpose of this course is to provide shipboard supervisors with the training to manage a hazardous material program within their work centers. The course content includes procurement, handling, storage, and disposal of hazardous materials, as well as inspection of storage locations. Supervisors are instructed in interpreting Material Safety Data Sheets (MSDSs), and on how to provide hazard-specific training to their workers.

PREREQUISITES: E-4 and above, any rating, functioning as a shipboard work center supervisor.

LOCATIONS:	DATES:
Norfolk, VA	2-3 Nov 93
Norfolk, VA	4-5 Nov 93
San Diego, CA	22-23 Nov 93
Norfolk, VA	30 Nov - 1 Dec 93
Norfolk, VA	4-5 Jan 94
Norfolk, VA	6-7 Jan 94
San Diego, CA	24-25 Jan 94
Norfolk, VA	1-2 Feb 94
Norfolk, VA	3-4 Feb 94
Jacksonville, FL	24-25 Feb 94
Norfolk, VA	3-4 Mar 94
Oakland, CA	10-11 Mar 94
Charleston, SC	6-8 Apr 94
Norfolk, VA	12-13 Apr 94
Norfolk, VA	14-15 Apr 94
Norfolk, VA	10-11 May 94
Norfolk, VA	12-13 May 94
Pearl Harbor, HI	26-27 May 94
San Diego, CA	9-10 Jun 94
Norfolk, VA	21-22 Jun 94
San Diego, CA	7-8 Jul 94
Norfolk, VA	21-22 Jul 94
San Diego, CA	3-4 Aug 94
Norfolk, VA	11-12 Aug 94
San Diego, CA	8-9 Sep 94
Norfolk, VA	21-22 Sep 94
Norfolk, VA	23-24 Sep 94

TITLE: Hazardous Materials Control and Management (HMC&M) Technician (NEW)

CIN: A-322-2600 (formerly J-322-2600) **COURSE LENGTH:** 5 days

DESCRIPTION: The purpose of this course is to provide shipboard hazardous material control and management technicians with the training to safely handle, use, store, and dispose of HM/HW. The course content includes functional information in the safety and environmentally proper operation of HM/HW facilities. Confers the SNEC 9595.

PREREQUISITES: E-5 through E-9, any rating, surface ship and submarine personnel.

LOCATIONS:	DATES:
San Diego, CA	15-19 Nov 93
Norfolk, VA	6-10 Dec 93
San Diego, CA	17-21 Jan 94
Norfolk, VA	7-11 Feb 94
San Diego, CA	14-18 Mar 94
Norfolk, VA	18-22 Apr 94
San Diego, CA	16-20 May 94
Norfolk, VA	13-17 Jun 94
San Diego, CA	11-15 Jul 94
Norfolk, VA	15-19 Aug 94
San Diego, CA	12-16 Sep 94

TITLE: Aviation Safety Petty Officer (NEW)

CIN: A-493-0065 COURSE LENGTH: 8 days

DESCRIPTION: The purpose of the course is to provide Aviation Safety Petty Officers with the training to assist in the operation, management, and compliance of the aviation activity's occupational safety and health program and its aviation safety program ashore and afloat. The course content includes safety and health procedures, policies and instructions; deficiency abatement program; mishap investigation and reporting, safety and health training; hazardous material control and management; maintenance of pertinent records; hazard detection, elimination, reporting and monitoring; management of an activity's safety committee; gas-free engineering safety; fall hazards; electrical hazards; and hangars, flight line and deck safety. The course confers SNEC 8301.

PREREQUISITES: E-6 through E-9 in one of the following ratings: AB, ABE, ABF, ABH, AD, AE, AF, AM, AME, AMH, AMS, AO, AS, AT, AW, AV, AZ, or PR.

LOCATIONS:	DATES:
Norfolk, VA	1-10 Nov 93
San Diego, CA	17-26 Jan 94
Norfolk, VA	7-16 Feb 94
San Diego, CA	7-16 Mar 94
Norfolk, VA	11-20 Apr 94
San Diego, CA	16-25 May 94
Norfolk, VA	13-22 Jun 94
San Diego, CA	6-15 Jul 94
Norfolk, VA	15-24 Aug 94
San Diego, CA	12-21 Sep 94

TITLE: Safety Programs Afloat

CIN: A-493-2099 (formerly J-493-2099) COURSE LENGTH: 5 days

DESCRIPTION: The purpose of the course is to train selected enlisted and officer personnel assigned primary/collateral duty safety-related duties afloat. The course content includes shipboard safety organization; safety supervisor/petty officer duties and responsibilities; governing instructions and publications; shipboard programs on hazardous materials; NAVOSH programs; mishap investigation and reporting; safety training and recordkeeping; hazard abatement plan and deficiency log; and safety standdown and zone inspections.

PREREQUISITES: E-5 through O-3 assigned assistant/collateral duties in safety aboard Navy surface ships and submarines.

LOCATIONS:	DATES:
Norfolk, VA	4-8 Oct 93
Norfolk, VA	18-22 Oct 93
Norfolk, VA	25-29 Oct 93
Norfolk, VA	1-5 Nov 93
Norfolk, VA	15-19 Nov 93
Norfolk, VA	29 Nov - 3 Dec 93
Norfolk, VA	13-17 Dec 93
Norfolk, VA	3-7 Jan 94
San Diego, CA	17-21 Jan 94
San Diego, CA	24-28 Jan 94
Jacksonville, FL	21-25 Feb 94
Norfolk, VA	28 Feb - 4 Mar 94
San Diego, CA	14-18 Mar 94
San Diego, CA	21-25 Mar 94
Norfolk, VA	25-29 Apr 94
Norfolk, VA	2-6 May 94
San Diego, CA	16-20 May 94
San Diego, CA	6-10 Jun 94
Norfolk, VA	20-24 Jun 94
San Diego, CA	11-15 Jul 94
Norfolk, VA	25-29 Jul 94
Norfolk, VA	8-12 Aug 94
Charleston, SC	29 Aug - 2 Sep 94
San Diego, CA	19-23 Sep 94
Norfolk, VA	26-30 Sep 94

FY 94 OSHA TRAINING INSTITUTE COURSES

SPONSORED BY THE NAVAL SAFETY SCHOOL

The courses below will be conducted during FY 94 for the Naval Safety School by the OSHA Training Institute staff. Courses should be requested using the CIN. OSHATI numbers are also provided for reference purposes. Contact the Naval Safety School for any further information.

TITLE: Machinery and Machine Guarding Standards

CIN: S-493-0001 **COURSE LENGTH:** 4 days
OSHATI #: 204A

DESCRIPTION: The course familiarizes the student with various types of common machinery and related safety standards. Guidance is provided on hazards associated with various kinds of machinery and control of hazardous energy sources (lockout/tagout). The course presents an approach to machine inspection that enables participants to recognize hazards such as those created by points of operation, rotating parts, and flying chips, and provides options to achieve abatement. The course also includes an introduction to robotics.

LOCATIONS:
Pearl Harbor, HI
San Diego, CA

DATES:
16-19 Nov 93
1-4 Feb 94

TITLE: Cranes and Materials Handling for General Industry

CIN: S-493-0002 **COURSE LENGTH:** 4 days
OSHATI #: 208A

DESCRIPTION: The course introduces the student to various types of overhead cranes, hoists, and powered industrial trucks used in general industry. Students are provided with basic information on overhead/gantry cranes, outdoor storage bridge crane operations, wire rope, slings, and crane inspection/maintenance procedures. Operation/maintenance of powered industrial trucks and appropriate OSHA and ANSI standards and related requirements are also discussed.

LOCATION:
Norfolk, VA

DATE:
26-29 Jul 94

TITLE: Respiratory Protection

CIN: S-493-0003 COURSE LENGTH: 4 days
OSHATI #: 222A

DESCRIPTION: The course covers the requirements for the establishment, maintenance, and monitoring of a respirator program. Topics include terminology, OSHA and ANSI standards, NIOSH certifications, and medical surveillance recommendations.

LOCATIONS:
San Diego, CA
Pearl Harbor, HI

DATES:
15-18 Feb 94
18 (1300)-22 (1200) Apr 94

TITLE: Laboratory Safety and Health

CIN: S-493-0004 COURSE LENGTH: 3 days
OSHATI #: 224A

DESCRIPTION: The course introduces the student to the hazards associated with laboratories and the control of these hazards. Topics include laboratory safety codes and standards, radiation hazards, biohazards, flammable and electrical hazards, incompatible chemicals, and health effects of chemicals.

LOCATION:
Norfolk, VA

DATE:
20-22 Sep 94

TITLE: Recognition, Evaluation and Control of Asbestos

CIN: S-493-0005 COURSE LENGTH: 4 days
OSHATI #: 231A

DESCRIPTION: The course provides information on the safety and health principles of asbestos abatement and control. Topics include OSHA asbestos regulations, health effects, worker protection, control methods, work practices, safety considerations during abatement, and industrial hygiene sampling and analytical methods.

LOCATION:
San Diego, CA

DATE:
7-10 Jun 94

TITLE: Workplace Back Injuries

CIN: S-493-0006 COURSE LENGTH: 3 days
OSHATI #: 232A

DESCRIPTION: The course covers application of biomechanical, physiological, and job design principles, and their relationship to workplace back injuries. Also discussed are the incidence/costs of back injuries and the relative merits of injury prevention strategies including worker training, conditioning, and the use of job redesign.

LOCATIONS: DATES:
Norfolk, VA 2-4 Aug 94

TITLE: Excavation, Trenching, and Soil Mechanics

CIN: S-493-0007 COURSE LENGTH: 4 days
OSHATI #: 301A

DESCRIPTION: The course presents detailed information on OSHA standards and on the safety aspects of excavation and trenching. Students are introduced to practical soil mechanics and its relationship to the stability of shored and unshored slopes and walls of excavations. Various types of shoring (wood timbers and hydraulic) are covered. Testing methods are demonstrated.

LOCATIONS: DATES:
Port Hueneme, CA 14-17 Dec 93
Gulfport, MS 4-7 Jan 94

TITLE: Principles of Scaffolding

CIN: S-493-0008 COURSE LENGTH: 4 days
OSHATI #: 308A

DESCRIPTION: The course presents detailed information on safety aspects of scaffolding, including the basics of scaffolding operations from installation to dismantling. Topics include standing and suspension scaffolds and interpretation of related standards.

LOCATIONS: DATES:
Port Hueneme, CA 8-11 Feb 94
Gulfport, MS 1-4 Mar 94

TITLE: Fire Protection and Life Safety

CIN: S-493-0009 COURSE LENGTH: 4 days
OSHATI #: 207A

DESCRIPTION: The course introduces the student to the recognition of potential fire hazards and emergency procedures. Topics include the chemistry of fire, types/effectiveness of extinguishing agents, means of egress, detection/alarm systems, fire brigades, fire prevention plans, and the Life Safety Code (NFPA 101). 29 CFR 1910, Subparts E and L, and referenced NFPA Codes provide the basis for the course.

LOCATION: DATE:
San Diego, CA 7-10 Dec 93

TITLE: Construction Standards

CIN: S-493-0010 COURSE LENGTH: 4 days
OSHATI #: 200A

DESCRIPTION: The course covers OSHA construction standards with special emphasis placed on those areas that are the most hazardous, using the OSHA standards as a guide. The course includes an introduction to OSHA's construction standards, an overview of the most frequently referenced standards, OSHA inspection procedures, rights and responsibilities under the OSH Act, and procedures for contesting citations.

LOCATIONS: DATES:
Pearl Harbor, HI 25-28 Jan 94
San Diego, CA 24-27 May 94

TITLE: Basic Instructor Course in Occupational Safety and Health Standards for Construction

CIN: S-493-0011 COURSE LENGTH: 4 days
OSHATI #: 500A

DESCRIPTION: The course is designed for personnel interested in developing safety and health programs in construction. Emphasis is placed upon the most hazardous areas in construction, using OSHA standards as a guide. Included are effective instructional approaches and use of visual aids and handouts.

LOCATIONS: DATES:
Pearl Harbor, HI 1-4 Feb 94
Norfolk, VA 23-26 Aug 94

OTHER NAVY SOURCES OF SAFETY, OCCUPATIONAL HEALTH, AND ENVIRONMENTAL PROTECTION TRAINING

In addition to the courses provided or sponsored by the Naval Safety School, safety, occupational health, and environmental training is also conducted by the activities listed below. Telephone numbers are provided for further information on specific course offerings at various locations. Consult the CANTRAC for convening dates and locations, or call the point of contact for their course schedule and more information.

Course(s)	Activities/Phone Numbers
Submarine Safety Officer (F-4J-0020)	SUBTRAFAC Norfolk - DSN 565-8783 COMM (804) 445-8783 NAVSUBTRACENPAC Pearl Harbor COMM/DSN (808) 472-7394
Afloat Safety Officer (A-4J-0020)	SWOSCOLCOM Newport - DSN 948-4963 COMM (841) 841-4963
Aviation Safety Officers (S-00-3301) Aviation Safety Command (S-00-3302) Aviation Safety Management (S-00-3326) Aviation Safety Reserve Officers (S-00-3327)	NAVPGSCOL Monterey - DSN 878-2581 COMM (408) 646-2581
NIOSH courses	NEHC Norfolk - DSN 564-7575 X473 or 320 COMM (804) 444-7575 Training Department-NEHC-04D

Various NAVOSH, environmental health, and respiratory protection courses	NEHC Norfolk - DSN 564-7575 COMM (804) 444-7575 NEPMU 2 (Norfolk) - DSN 564-7671 COMM (804) 444-7671 NEPMU 5 (San Diego) - DSN 526-7070 COMM (619) 556-7070 NEPMU 6 (Pearl Harbor) - DSN 430-9505 COMM (808) 471-9505 NEPMU 7 (Naples) - DSN 625-4468 COMM (039) 81-724-4468
Various courses in industrial ventilation, Deficiency Abatement Program/Management Information System (DAP/MIS), and hazardous waste operations	NEESA Port Hueneme - DSN 551-2639/5270 COMM (805) 982-2639/
Various courses in shore environmental protection	CECOS Port Hueneme - DSN 551-5655 COMM (805) 982-5655

DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
WASHINGTON DC 20350-2000

IN REPLY REFER TO
5100
Ser N454C/3U594462
24 Sep 93

From: Chief of Naval Operations

Subj: GUIDANCE ON OCCUPATIONAL SAFETY AND HEALTH PROGRAMS UNDER DOWNSIZING AND BASE CLOSURE

Ref: (a) CNO ltr 5000 Ser 04/2U593640 of 13 Mar 92 (ATTACHED)

1. In reference (a), the importance of maintaining effective and efficient occupational safety and health (OSH) programs during downsizing, restructuring and base closure is emphasized. Reference (a) also discusses many OSH program requirements that do not significantly or proportionally vary in relation to changes in workload or population including inspections, industrial hygiene monitoring, process reviews, and the management and coordination of federally mandated/regulated program elements (respiratory protection, hearing conservation, asbestos, lead, hazard correction, etc.).

2. As we have progressed with our downsizing and restructuring efforts, many questions and concerns have arisen about methods of maintaining effective OSH programs, inspections and the waiver of program requirements. As stated in reference (a), "all commands must clearly understand that it is the unalterable policy of the U.S. Navy that neither personnel safety nor OSH regulatory compliance will be sacrificed to meet funding and personnel constraints." Increasing costs of mishaps as well as regulatory oversight and potential fines and penalties for non-compliance accentuate the importance of mishap prevention at all times to the point of actual base closure. Even after base closure, we must assure our facilities meet all regulatory requirements until disposal, both for public safety and legal liability reasons.

3. We face significant challenges with base closure in maintaining quality OSH programs staffed with professional managers and specialists. In facing these challenges, several options exists for effective program maintenance:

a. Consolidated OSH Offices. One option for significant size reduction or closure is the use of a consolidated OSH office through a "host/tenant agreement." In such a case, the activity facing closure (tenant) enters an agreement with another local activity to provide safety and occupational health services through a consolidated office, and transfers OSH assets as appropriate. This method assures maintenance of program continuity and professional staff. As overall population supported declines through the closure process, staff of the consolidated (host) office can be reduced.

b. Regionalization. This option can be used by commands in restructuring OSH support as a result of base closure and significant activity size reductions. This option pools OSH resources by region and structures that support based on ongoing needs in the region. The option specifically applies to occupational health support but can be used by other commands where downsizing has a significant impact. Rather than each activity or installation having its own OSH function, through agreements in the command, and with activities involved, regionalization can provide program continuity, professionalism and flexibility. In addition, occupational health support staff may be moved from one region or support facility to another as necessary due to base closure and migration of programs and personnel.

c. Position Transfer. This option varies from a consolidated OSH office in that the base to be closed simply transfers OSH assets to another activity that will assume a "caretaker" status. The other activity could be a tenant or host, or may not even be located nearby. Professionalism is maintained and staffing is transferred and/or adjusted according to need. Staffing reductions can normally be achieved through attrition.

4. The inspection process must be maintained even at activities facing closure to ensure worker protection, the maintenance of mishap prevention efforts, and to meet regulatory requirements. However, this does not negate the need for careful assessment and evaluation of procedures and actions in the inspection process. For example, hazard correction identification and action should include evaluation of risk, time, ultimate disposition of facility and potential exposure. Management evaluations must be modified in accordance with the reducing size, scope and nature of the activity with emphasis on employee protection actions and realistic expectations of the future. Quality of effort should be emphasized. Oversight inspections should be evaluated on a case by case basis. Again, evaluations should emphasize employee protection and realistically judge compliance on the basis of the activity's future.

5. We all face challenges in the future of increasing efficiency and quality while downsizing, all in an environment of potentially increasing OSH regulation. In meeting the challenges, we must assure protection of our personnel and other assets through the maintenance of effective mishap prevention programs. The Navy spent over $240 million last year on civilian injury/illness compensation alone and, according to U.S. Department of Labor

estimates, the lifetime cost of each civilian lost time injury or illness case is 30 times its first year cost. Controlling these and the many other costs associated with mishaps provides the basis for the statement in reference (a), "As commands plan for downsizing....they must recognize that the need for effective OSH progams is not diminished, and may even be increased..."

5. Utilization of total quality leadership and its concepts in your mishap prevention effort is essential. Through total quality leadership we can find solutions to OSH program and process improvement, and maximize the use of our declining resources.

J. S. WALKER
By direction

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DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
WASHINGTON, DC 20350-2000

IN REPLY REFER TO
5000
Ser 04/2U593640
13 Mar 92

From: Chief of Naval Operations

Subj: IMPORTANCE OF NAVY OCCUPATIONAL SAFETY AND HEALTH DURING DOWNSIZING

1. One of the most significant challenges currently faced by Navy commands is the need to intelligently reduce costs, including personnel costs, in response to increasing budgetary constraints. This downsizing effort necessitates that we scrutinize and seek new efficiencies in all facets of Navy operations. Command Occupational Safety and Health (OSH) programs are subject to such scrutiny, and it is expected that efficiencies may be identified in some of these programs. However, all commands must clearly understand that it is the unalterable policy of the U.S. Navy that neither personnel safety nor OSH regulatory compliance will be sacrificed to meet funding and personnel constraints.

2. As commands plan for downsizing, restructuring, or even closure, they must recognize that the need for effective OSH programs is not diminished, and may even be increased, during such times. With fewer people to carry out direct mission assignments, we need those who remain to be on the job at full capacity rather than away from work or working at diminished capacity due to injuries. As reductions necessitate assigning personnel to perform new and unfamiliar jobs, additional OSH training and attention may be needed to prevent the increased injuries that often accompany inexperience. When budgets are tight, scarce funds must not be consumed by avoidable Federal Employee Compensation Act (FECA) workers' compensation costs arising from injuries that could have and should have been prevented. With staff and line management personnel at a premium, their time and energy should not be wasted in responding to external regulators for violations which should have been caught and corrected in-house. Above all, we continue to owe a safe and healthful workplace to all Navy personnel, even those at bases slated for closure.

3. The effort necessary to maintain a satisfactory OSH posture will not normally vary in proportion to changes in command workload or population. Many OSH functions arise primarily from factors which are unaffected by such changes. For example:

a. Safety and health inspections of workplaces are driven by the nature and number of facilities to be inspected, rather than by the workload or population within them.

b. Workplace health monitoring to evaluate employee exposure to stressors is driven by the number of potentially hazardous processes performed by the command rather than the number of people performing them.

c. OSH review and input for work procedures, instructions, training plans, technical manuals, etc., is driven by the number of processes for which such documents are developed, rather than by the number of times those processes are repeated in carrying out the assigned workload.

d. Management and coordination of mandatory OSH program elements such as respiratory protection, asbestos, lead, hazard abatement, employee hazard reporting, medical surveillance, etc., will normally continue at approximately the same level, even if fewer command personnel are participating in such programs.

e. Recent and pending regulatory requirements are creating increased demands for OSH support in areas such as hazardous material control and management, environmental protection, back injury prevention, ergonomics, and electrical safety.

f. In response to increasing general awareness of OSH issues, coupled with the Navy's broad objectives to reduce injuries, achieve and maintain OSH regulatory compliance, and reduce FECA costs, it is expected that command managers will place greater demands on OSH data and trends, interpretation of regulations, and development of OSH improvement plans.

4. As difficult budget and personnel decisions are made in the upcoming months and years, we must ensure that OSH programs are not compromised. Our objective should be to provide a safe workplace and compliance with all applicable OSH regulations. Each command must ensure that it identifies and programs the resources necessary to effectively carry out that responsibility.

S. F. LOFTUS
By direction

Distribution:
(next page)

Subj: IMPORTANCE OF NAVY OCCUPATIONAL SAFETY AND HEALTH DUR
DOWNSIZING

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Navy Occupational Safety and Health Program Evaluation Guide for Shore Activities

NAVSAFECEN PUB 5100/1 (10/93)

Report No._____

NAVY OCCUPATIONAL SAFETY AND HEALTH

PROGRAM EVALUATION GUIDE

FOR

SHORE ACTIVITIES

_____

ACTIVITY

_____

DATES OF INSPECTION

CHIEF INSPECTOR/ASST. CHIEF INSPECTOR

REFERENCES

INST. NO.	TITLE
29 CFR 1910, 1926	General Industry Standards/Construction Standards
SECNAV 5100.14 Series	Military Exempt Lasers
SECNAV 5100.15	Department of the Navy Awards for Achievement in Safety Ashore
OPNAV 12810.1	Federal Employees' Compensation Act (FECA) Program
OPNAV 4110.2 Series	Hazardous Material Control and Management Program
OPNAV 5040.7 Series	Naval Command Inspection Program
OPNAV 5100.23 Series	Navy Occupational Safety and Health (NAVOSH) Program
OPNAV 5102.1 Series	Mishap Investigation and Reporting
MEDCOM 6260.5 Series	Occupational Noise Control and Hearing Conservation
MEDCOM 6470.2 Series	Laser Health Hazards
NAVSEA S6470-AA-SAF-010	Gas Free Engineering Program
SPAWAR 5100.12 Series	Navy Laser Radiation Hazards Prevention Program
ANSI Z88.2 Series	Practices for Respiratory Protection
ANSI Z88.6 Series	Respirator Use - Physical Qualifications for Personnel

TABLE OF CONTENTS

TABLE OF CONTENTS
(CONT'D)

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 0207.a. and 0209.	Has the CO issued an OSH policy statement adopting and enhancing/expanding the Navy's OSH policy established in sec. 0104., and does the OSH policy statement reflect the CO's commitment to OSH and programs to prevent or minimize occupational mishaps?				
OPNAVINST 5100.23C, sec. 0207.o.	Has the CO established annual (fiscal year) OSH Program Improvement Plans for commands with greater than 500 personnel?				
OPNAVINST 5100.23C, sec. 0505.b.	For activities with over 500 personnel, are OSHPIPS submitted annually (fiscal year) to cognizant Echelon 2 commands 30 days prior to the beginning of the fiscal year, or as otherwise directed?				
OPNAVINST 5100.23C, sec. 0505.a.	Has the activity conducted an annual OSH program self-evaluation to identify goals and objectives for program improvement?				
OPNAVINST 5100.23C, sec. 0209.c.	Has the activity commander stated the location(s) where personnel can review copies of the NAVOSH standards, records of safety and health committees and their actions and recommendations, and various documentation on the command/activity/unit OSH Program?				
OPNAVINST 5100.23C, sec. 0207.i.	Has the CO established procedures to protect all Navy personnel from coercion, discrimination or reprisals for participation in the NAVOSH Program?				
OPNAVINST 5100.23C, sec. 0209.e.	Have DD Forms 2272 "Department of Defense Occupational Safety and Health Protection Program" been posted in prominent locations such as all official bulletin boards?				
OPNAVINST 5100.23C, sec. 1605.c.	Are all command publications, instructions, manuals, specifications, technical orders, etc., which contain OSH provisions reviewed and updated to conform to NAVOSH standards?				
OPNAVINST 5100.23C, sec. 1412.	Is the CO reviewing all lost time mishaps with five or more lost workdays with cognizant first line supervision and/or the next level of management involved?				
OPNAVINST 5100.23C, sec. 0207.h.	Does the CO, at minumum, review semiannually the activity hazard abatement program plan?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 0303.a. and 0304.c.	Is the OSH Office organizationally placed on the immediate staff of the commander, commanding officer, director or the officer in charge?				
OPNAVINST 5100.23C, sec. 0303. a., b., c., and d.	Based on functional responsibilities (direct and indirect) is the OSH office adequately staffed? _____ an OSH professional as head _____ safety and health professionals _____ clerical support Activity workforce population (full-services) _____ Category A _____ Category B _____ Category C _____ Tenant activities fully serviced _____ Tenant activities workforce population serviced _____ Category A _____ Category B _____ Category C _____ Total professionals required				
OPNAVINST 5100.23C, sec. 0303.c.	Is the OSH professional assigned collateral duties unrelated to the functions listed in par. 0303.b.?				
OPNAVINST 5100.23C, sec. 0304.a.	Are written agreements established between the activity furnishing the OSH services and the users of that service? If so, do the agreements specify specific services to be provided?				

STAFFING SUMMARY

Primary Factors:

Minimum Core Requirements - All OSH offices

Direct:		Indirect:	
1.a.	OSH Program Management	2.a.	Supervision
b.	OSH Reviews	b.	Admin/Clerical
c.	OSH Inspections	c.	Travel
d.	Def. Abatement	d.	Meetings
e.	Consultation	e.	Cleanup
f.	Investigation, Reporting & Recording of Mishaps		
g.	Hazard Reports		
h.	Anaylsis of Programs Effectiveness		
i.	Attend & Conduct Meetings		
j.	Training, Promotion and Education		

REFERENCE	NAVOSH PROGRAM ELEMENT				
	k. PPE l. HMC&M m. Occ. Health <u>Most activities including bases and activities with industrial operations</u> n. Confined Space Entry o. Asbestos p. Respiratory Protection q. Radiation Safety (ion., nonion., lasers, RFR) <u>Additions</u>: Determined locally or by <u>Workload Analysis</u> 1. Motor Vehicle 2. Wpns & Explosives 3. Fire Prevention 4. Rec. & Home Safety 5. Diving 6. Mercury 7. Contractor Oversight 8. Industrial Hygiene 9. Environmental Protection <u>Other Considerations</u>: - Geography - # of Locations - Sub units and tenants				
	.0033 x first 1200 persons in CAT.A = ___ + .0025 x next 800 persons in CAT.A = ___ + .0020 x remaining persons in CAT.A = ___ + .0020 x total number of persons in CAT.B = ___ + .0016 x total number of persons in CAT.C = ___ Total professionals required = ___ A = High B = Moderate C = Low Activity population exceeding 600 need full time clerical support, with additional clerical support of one person per five professional staff.				

Activity: _____ Date of Insp: _____ Senior Inspector: _____

SECTION 2A - FEDERAL OSHA INSPECTIONS OF NAVY CIVILIAN WORKPLACES

10/93

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 1104.c.	Has the activity designated by letter to the appropriate OSHA Regional Office, a coordinator with whom Federal OSHA officials may interface for inspection purposes? If so, Has a copy of the letter been provided to: CNO (N45) and Chain of Command? Reference/date of letter: _____				
OPNAVINST 5100.23C, sec. 1104.i.	Have Federal OSHA officials issued reports or notices of unsafe or unhealthful working conditions discovered during their inspections? If so, Case/file number/date of inspection: _____ Has a summary report, with a copy of such notices, been forwarded immediately to CNO (N45)? Reference/date report forwarded: _____ Were information copies provided to the Chain of Command? Reference/date information provided: _____ Were deficiencies discovered during such inspections entered into the activity's NAVOSH Deficiency Abatement Plan? Date deficiencies entered in abatement plan: _____				
OPNAVINST 5100.23C, sec. 1104.j.	If a response is required, has the command provided an official response to such inspections? If so, Reference/date responses forwarded: _____ Were information copies provided to CNO (N45)? Reference/date copy forwarded: _____ Were information copies provided to the Chain of Command? Reference/date copy forwarded: _____				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	OSH Management Evaluations - (ECH 1 and 2 Commanders, as appropriate)				
OPNAVINST 5100.23C, sec. 0904.	Has an OSH Management Evaluation of the activity been conducted either separately or in conjunction with an ISIC command inspection at a minimum of every three years?				
OPNAVINST 5100.23C, sec. 0904.c.	Does the OSH Management Evaluation written report forwarded to the CO contain: _____ An overall evaluation of the activity OSH program; _____ NAVOSH Program deficiencies observed; and _____ Recommended corrective actions?				
OPNAVINST 5100.23C, sec. 0904.c.	Are OSH Management Evaluation reports retained on file for at least 5 years following the end of the fiscal year to which they relate?				
OPNAVINST 5100.23C, sec. 0904.c.	Are procedures established by echelon 1 or 2 commands to follow-up on the correction of deficiencies identified during OSH Management Evaluations?				
OPNAVINST 5100.23C, sec.2308.a. (4)	Did the OSH Management Evaluation include a review of ergonomics program elements in command goals and progress toward achieving these goals?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 0207.k.	Has the command developed procedures to measure and recognize superior or deficient OSH performance for civilian supervisors?				
OPNAVINST 5100.23C, sec. 0207.k.	Do evaluations for civilian supervisors reflect OSH performance and personal accountability that are consistent with the duties of the position?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 0903.a.	Are all workplaces inspected at least annually?				
OPNAVINST 5100.23C, sec. 0903.a.	Have guidelines been established for the increased inspection frequency of high hazard areas?				
OPNAVINST 5100.23C, sec. 0903.a.	Are high hazard areas inspected more frequently than annually as established by the major command, installation or local activity?				
OPNAVINST 5100.23C, sec. 0903.b.	As a general rule, are competent safety & health personnel conducting the workplace inspections as per paragraph 0902.b.?				
OPNAVINST 5100.23C, sec. 0903.c.	Are inspectors provided appropriate technical test equipment? (i.e., ground impedance tester, tic tracer, etc.)				
OPNAVINST 5100.23C, sec. 0903.h.	Are written reports of workplace inspections provided to the official in charge of the operation inspected NLT 15 working days after the inspection?				
OPNAVINST 5100.23C, sec. 0903.h.	Are OPNAV Forms 5100/12 or a computer generated form containing the same information used to document activity level inspection reports?				
OPNAVINST 5100.23C, sec. 0903.j.	Are follow-up workplace inspections conducted to verify corrections have been made or to focus on specific problem areas?				
OPNAVINST 5100.23C, sec. 0903.j.	Is Section C of OPNAV Form 5100/12 or the computerized form used to document follow-up inspections?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 1202.b.	Have copies of OPNAV Form 5100/12 for RACs 1, 2 and 3 deficiencies been posted in the area of the deficiency until the hazard was abated?				
OPNAVINST 5100.23C, sec. 1202.b.	Does the official in charge of the operation take prompt action to correct the deficiency within 30 days of the date of the notice, complete Section B of OPNAV Form 5100/12 and return a copy to the activity OSH office? Does Section B of OPNAV Form 5100/12 indicate the status of the deficiency as follows: - the deficiency has been corrected, or - specific abatement action taken				
OPNAVINST 5100.23C, sec. 1202.c.	Are deficiencies assigned RACs 1, 2 and 3 requiring more than 30 days for correction, recorded in a formal installation hazard abatement plan? AND				
OPNAVINST 5100.23C, sec. 1202.c.	Does the formal installation hazard abatement plan include the following standard data for each deficiency? (1) Date of hazard identification. (2) Location of the hazard(s). (3) Description of the hazard(s) including reference to applicable standards. (4) Estimated RAC (with hazard severity, probability of single occurrence, and annual personnel exposure cited separately) or calculated RAC. (5) Interim control measures in effect. (6) Description of the abatement action, including estimated cost and completion date. (7) Abatement priority. (8) Close out statement, indicating: completed abatement action and actual cost, with date of completed action; or process discontinued or worksite vacated. (for archive record on file.)				
OPNAVINST 5100.23C, sec. 1202.b.	Are OSH deficiencies reported by higher echelons (including NOIU Oversight Inspections and OSH Management Evaluations) transcribed to OPNAV Form 5100/12 and processed by the OSH office?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 1203.	Are interim controls documented on the NAVOSH Deficiency Notice and measures in effect for more than 60 days reviewed and approved by the activity OSH office and revised as appropriate?				
OPNAVINST 5100.23C, sec. 1206.	Are all funds (local) expended for correction of NAVOSH deficiencies reported to CNO (N4), via the chain of command, through use of existing reporting systems?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 0608.e. (2)	Has the activity established and implemented a local, written training plan for OSH and HAZCOM consistent with activity needs?				
	<u>Management personnel</u>				
OPNAVINST 5100.23C, sec. 0602.a. & App. 6-A	Do Management personnel receive OSH training to enable them to actively and effectively support OSH programs in their specific areas of responsibility?				
	<u>Supervisors and Employee Representatives</u>				
OPNAVINST 5100.23C, sec. 0602.b. & App. 6-A	Is OSH training conducted annually for supervisors?				
OPNAVINST 5100.23C, sec. 0602.b.	Do newly appointed supervisors receive OSH training within 120 days of their appointment?				
	<u>Nonsupervisory Personnel</u>				
OPNAVINST 5100.23C, sec. 0602.c. & App. 6-A	Are nonsupervisory personnel receiving specialized job safety and health training appropriate to the work performed by the employees?				
	<u>New Employees</u>				
OPNAVINST 5100.23C, sec. 0602.c.	Are all new (military and civilian) personnel provided initial OSH training close to the time of assuming their duties and does it include: ___(1) Local policy on occupational safety and health? ___(2) Work unit policy on occupational safety and health? ___(3) Individual responsibility for safety and health? ___(4) Employee reporting procedures for hazardous operations/conditions? ___(5) Awareness of hazards common to the individual's worksite, trade, occupation, or task? ___(6) Specific hazards of chemicals/ materials used in the workplace and the activity's hazard communication plan?				
	<u>Safety and Health Personnel</u> (Recommended minimum requirements)				
OPNAVINST 5100.23C, sec. 0602.d. & App 6-A	Are safety and health personnel receiving 8 CEUs, or equivalent training, or one college level course?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 0602.d.	Is an individual development plan established for each OSH professional? ___Head, OSH office ___technical staff members				
OPNAVINST 5100.23C, sec. 0602.e.	Have collateral duty personnel received training (4 CEUs/yr) that assures they are technically qualified for the performance of OSH duties specified by Navy programs?				
OPNAVINST 5100.23C, sec. 0602.f. (1)(a) & (2)	Has the OSH manager identified those specific individuals requiring first aid and/or CPR training?				
OPNAVINST 5100.23C, sec. 0602.f. (1)(b)	Is first aid and/or CPR training provided to personnel who require it?				
OPNAVINST 5100.23C, sec. 0602.f. (1)(c)	Are appropriate records, or documentation, maintained?				
OPNAVINST 5100.23C, sec. 0602.f. (4)	Is refresher training in first aid and/or CPR conducted as necessary to maintain qualifications of trained personnel?				
OPNAVINST 5100.23C, sec. 0605.	Does the activity maintain training records for five years?				
OPNAVINST 5100.23C, sec. 0605.	Does the OSH office maintain files of OSH training records?				
OPNAVINST 5100.23C, sec. 0605.a.	Does the minimum required recordkeeping data for individuals include? ___Name ___Org. Code/Shop ___Job Title ___Signature (or valid elec. media equivalent) ___GS/GM/WG grade, series, rate/rank				
OPNAVINST 5100.23C, sec. 0605.b.	For each training session or course an individual completes, is the following data maintained? ___Course date(s) ___Instructor's Name ___Description and/or reference to Lesson Plan ___Course Title ___Course Length (Hrs.)				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec 0605.c.	Does the OSH office maintain copies of lesson plans for local training courses?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 1005.a.	Does the activity publicize (e.g., posting, training) the existence of the employee hazard reporting program and notify personnel regarding their rights and obligations in reporting hazardous situations?				
OPNAVINST 5100.23C, sec. 1002.b.	Are blank copies of forms (such as OPNAV 5100/11) and procedures for employees to report unsafe/unhealthful working conditions located in areas convenient to all workplaces, e.g., bulletin boards, time clocks, etc.				
OPNAVINST 5100.23C, sec. 1002.c.	Upon receipt, does the OSH office log in the hazard report, contact the originator by telephone to acknowledge receipt and discuss the seriousness of the reported hazard, and advise the cognizant supervisor that a hazard has been reported?				
OPNAVINST 5100.23C, sec. 1002.d.	Does the OSH office investigate all reports brought to its attention? _____ Imminent danger - 24 hours _____ Serious - 3 days _____ Health - cognizant medical authority				
OPNAVINST 5100.23C, sec. 1002.e.	Does the OSH office provide an interim or complete response in writing to the originator of the report within 10 working days of <u>receipt</u>?				
OPNAVINST 5100.23C, sec. 1002.e. & f.	Does the response include: ___ Interim - expected date of complete response? ___ Complete - summary of action taken for abatement and the basis for negative determination when no hazard exists? ___ - encourage the originator to informally contact the OSH office if he/she desires additional information or is dissatisfied with the response? ___ - state or provide the reference for procedures for making appeals and appeal levels?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 1404.a. and 1406.	Has the activity established guidelines delineating roles and responsibilities for reporting and investigating all classes of mishaps and have personnel conducting class A, B, and C mishap investigations completed formal mishap investigation training?				
OPNAVINST 5100.23C, sec. 1404.a.	Is a safety investigation of every mishap, major or minor, conducted? Do investigators complete a written report with firm, factual findings and recommendations for specific corrective action(s) to be taken to prevent recurrence?				
OPNAVINST 5100.23C, sec. 1409.h. (20(b)2.	Are reportable mishaps mailed to COMNAVSAFECEN within 30 calendar days of the date the mishap becomes reportable by SR format (Appendix 14-E)?				
OPNAVINST 5100.23C, sec. 1409.h. (3)(a)	Are priority telephone reports to NAVSAFECEN and cognizant headquarters made within 24 hours when any of the following occupationally related events occurs: (1) fatality, or permanent total disability, (2) hospitalization of 5 or more Navy and non-Navy personnel/or permanent partial disability?				
OPNAVINST 5100.23C, sec. 1410.a. (1)	Does the activity maintain Local Form 5102/7 or equivalent "Log of Navy Injuries and Occupational Illnesses" accurately and properly?				
OPNAVINST 5100.23C, sec. 1410.a. (3)	Does the activity accurately complete and forward Local Form 5100/31 "Annual Report of Navy Civilian Occupational Injuries and Illnesses" to NAVSAFECEN within 30 calendar days following the close of each fiscal year?				
OPNAVINST 5100.23C, sec. 1410.a. (4)	Does the activity accurately compile and post an annual summary report of occupational injuries and illnesses for civilian personnel in a conspicuous space not later than 45 days after the close of the fiscal year and leave in place for at least 30 days?				
OPNAVINST 5100.23C, sec. 1410.b.	If the activity has military personnel attached, is a log maintained similar to the one described in par. 1410.a.(1) for on-duty military personnel mishaps?				
OPNAVINST 5102.1C, ch. 7 par. 702.	Is a separate log maintained for recording military personnel off-duty mishaps?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 0402.f. (1)	Has the activity established an OSH council to consider pertinent OSH matters and does it meet quarterly?				
OPNAVINST 5100.23C, sec. 0402.f.	Is this council chaired by the CO, XO, or equivalent?				
OPNAVINST 5100.23C, sec. 0402.f. (2)	Does the OSH office develop proposed agendas and presentations for the council, and assure meetings are scheduled?				
OPNAVINST 5100.23C, sec. 0402.f. (1)	Are minutes maintained by the activity OSH office?				
OPNAVINST 5100.23C, sec. 0402.f.	Are members appointed in writing and include civilian and military personnel representing key organizational elements as well as safety and health professionals?				
OPNAVINST 5100.23C, sec. 0402.f.	Are civilian employees represented on the council when they constitute a significant portion of the work force?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	Design/Project Reviews:				
OPNAVINST 5100.23C, sec. 0503.b.	Do safety professionals and cognizant industrial hygienists participate in the review of plans and specifications for local projects and are recommendations submitted in writing?				
	Operating Procedures:				
OPNAVINST 5100.23C, sec. 0503.c.	Are SOPs or similar directives that direct the manner in which work is performed coordinated with cognizant safety and health personnel prior to issuance and are recommendations for changes/ additions to the directive for safety/health purposes submitted in writing to the originator?				
	Purchasing Procedures:				
OPNAVINST 5100.23C, sec. 0503.d.	Are personnel responsible for developing specification for equipment/material purchases coordinating with cognizant OSH personnel to ensure that NAVOSH requirements are considered?				
	Contracts:				
OPNAVINST 5100.23C, sec. 0503.d.	Are contracts that require work to be performed by contract personnel at Navy facilities coordinated with cognizant OSH personnel?				
OPNAVINST 5100.23C, sec. 0506.c. (2)	Has a Facility System Safety Working Group (FSSWG) been established to review designs for new MILCON projects to ensure hazards are identified and controlled? Does it include the activity safety manager, IH, environmental engineer, planner, user, and NAVFAC EFD safety engineer (MILCON projects)? Does the FSSWG provide the EFD a list of hazard concerns, track hazard and risk resolution, conduct pre-occupancy inspections and assist the EFD construction safety engineer to verify required hazard controls are installed IAW design requirements?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	FECA Program				
OPNAVINST 12810.1, par. 5.d.(1)	Has the Civilian Personnel Director (CPD) appointed a professional specialist as Injury Compensation Program Administrator (ICPA)?				
OPNAVINST 12810.1, par. 5.c.(4) and OPNAVINST 12810.1, par. 5.d.(3)	Has the CO established a light duty program for injured workers to permit them if possible, to remain on the job during medical treatment and rehabilitation? Is it administered by the CPD?				
OPNAVINST 12810.1, par. 5.c.(5) and OPNAVINST 12810.1, par. 5.d.(4)	Has the CO established a Return-to-Work (RTW) program geared to rehiring eligible rehabilitated injured workers into necessary and meaningful jobs and removing them from OWCP compensation rolls? Is it administered by the CPD?				
OPNAVINST 12810.1, par. 5.d.(6)	Does CPD assure accuracy of the Naval Civilian Personnel Data System on Unit Identification Codes (UIC) and activity names used for chargeback reports?				
OPNAVINST 12810.1, par. 5.d.(9)	Does the CPD provide reports and statistics to the CO on costs and trends?				
OPNAVINST 12810.1, par. 4.i.	Have supervisors, managers and FECA program operating officials been trained on current injury compensation laws, regulations, and local injury compensation program policy?				
OPNAVINST 12810.1, par. 5.c.(2)	Has an Injury Compensation Cost Reduction Committee been established to recommend local policy and operational improvements for managing and reducing FECA costs, if the annual FECA bill exceeds $1 million? Does it consist of at least the CO, CPD, ICPA, and OSH manager and does it meet quarterly?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 2303.a.	Has the activity conducted an annual analysis of its injury and illness experience, including both injury/illness log records (OPNAV 5102/7) and medical injury compensation records?				
	AND				
OPNAVINST 5100.23C, sec. 2303.a. and sec.2308.h. (1)	Does the analysis identify the departments and operations experiencing Cumulative Trauma Disorder (CTD) cases, part involved, nature of injury/illness, time of day, frequency, severity, physical location, job description, and cost of CTD cases that have occurred during the past 5 years?				
	AND				
OPNAVINST 5100.23C, sec. 2303.b.	If the analysis determined that an ergonomics program was not needed, was the rationale for this determination documented?				
	Where an Ergonomics Program is Needed				
OPNAVINST 5100.23C, sec. 2303.c.	Has the activity conducted a screening survey of at least 20% of industrial shops and workplaces (or 20% of the job categories) in the 3 departments or codes that the injury/illness data indicated were at higher risk of CTD than other departments to define the commands ergonomics program?				
	TRAINING				
	Back Injury				
OPNAVINST 5100.23C, sec. 2305.b.	Is training in back injury prevention and care targeted for personnel at risk for back injury?				
	AND				
OPNAVINST 5100.23C, sec. 2305.b.	Does back injury training include as a minimum: (1) anatomy and physiology to explain how the back works; (2) biomechanics of lifting and lifting techniques; (3) how to avoid back injuries on and off the job; (4) weight control; and (5) physical fitness?				
	Management Personnel				
OPNAVINST 5100.23C, sec. 2305.c. (1)	Do managers receive sufficient training on ergonomic issues to effectively carry out their responsibilities for health and safety of employees?				
	AND				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 2305.c. (2)	Supervisors Do supervisors (who supervise employees that are potentially exposed to ergonomic hazards) receive training which includes: (1) recognizing hazardous work conditions/practices and symptoms of CTD; (2) steps needed to remove ergonomic hazards, to reinforce the ergonomics program; and (3) understanding job hazard analysis and its use as a formal instruction tool?				
	AND				
OPNAVINST 5100.23C, sec. 2305.c. (3)	Employees Do employees who are potentially exposed to ergonomic hazards receive formal training in (1) hazards associated with their jobs and equipment; (2) varieties of CTD, and (3) the means of prevention, causes, early symptoms, and treatment of CTDs?				
OPNAVINST 5100.23C, sec. 2305.c. (4)	OSH Personnel Do safety and industrial hygiene personnel responsible for conducting ergonomics program or screening surveys receive formal training on the recognition of ergonomic hazards?				
	AND				
OPNAVINST 5100.23C, sec. 2305.c. (6)	Facility Engineers Do engineering staff responsible for planning, designing, or writing specifications for equipment and processes receive instruction in methods for eliminating or reducing ergonomic hazards in the workplace?				
	GOALS				
OPNAVINST 5100.23C, 2308.h. (3)(a)	Has the activity established and published appropriate goals for the reduction of CTD cases?				
OPNAVINST 5100.23C, sec. 2308.g.	MEDICAL PROGRAM Has the CO of the cognizant medical command, activity or treatment facility: (1) monitored CTD trends using appropriate logs or records; (2) verified low risk of light duty assignments; (3) provided health education for personnel with a past history or current symptoms of CTD; (4) assisted line activities in the rehabilitation of CTD cases and the implementation of limited or light duty programs; and assisted, when requested by line activities, in the development of physical requirements for positions?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
SECNAVINST 5100.15, encl. (3)	Supervisors: Has the activity implemented "The Navy Accident Prevention Award (Supervisors)" for military and civilian supervisors who complete specified periods of time without a disabling work/duty injury to themselves or to personnel under their supervision?				
SECNAVINST 5100.15, encl. (4)	Group: Has the activity implemented "The Navy Accident Prevention Award (Group)" for work groups such as shops, section crews, and similar components which are engaged in sufficiently hazardous work and which have completed a calendar year without a disabling work/duty injury?				
SECNAVINST 5100.15, encl. (5)	Driving: Has the activity implemented "The Navy Safe Driving Awards" for drivers of Navy motor vehicles who have completed 12 consecutive months of safe driving?				
SECNAVINST 5100.15, encl. (6)	MH-CE: Has the activity implemented "The Navy Materials Handling and Construction Equipment (MH-CE) Operator's Safety Award" for military and civilian personnel for 12 consecutive months of safe operation of materials handling and construction equipment?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
NAVSEA S6470-AA-SAF-010, par. 2-2	Has the activity issued an instruction, directive, manual or other implementing document establishing a gas free engineering program?				
NAVSEA S6470-AA-SAF-010, par. 2-3a	Does the activity have one person trained, qualified and certified by the CO as a gas free engineer?				
NAVSEA S6470-AA-SAF-010, par. 2-4.1	Are the assistant GFE and GFE technician(s) qualified?				
NAVSEA S6470-AA-SAF-010, par. 2-6.1	Are all gas free engineering personnel recertified annually by the CO?				
NAVSEA S6470-AA-SAF-010, par. 2-7.3	Is the gas free engineer directly responsible to the CO or OSH Director for all aspects of the gas free engineering program?				
NAVSEA S6470-AA-SAF-010, par. 2-6.1	Is an evaluation of the gas free engineering program made annually?				
NAVSEA S6470-AA-SAF-010, par. 3-6	Is entry into confined, closed, or enclosed spaces prohibited until the space has been tested and found to be safe?				
NAVSEA S6470-AA-SAF-010, par. 2-9.1	Is a gas free engineering log or equivalent maintained for all tests and inspections of confined or enclosed spaces?				
NAVSEA S6470-AA-SAF-010, par. 3-8.2	Is the following information documented by the GFE or GFET for each certificate issued? (1) Date and time of test. (2) Date and time of certificate expiration. (3) Date and time of retesting and update of certificate. (4) Signature of gas-free engineering personnel performing tests or retests as applicable. (5) Name of unit/activity. (6) Location/identification of space. (7) Type of operation for which the certificate is requested such as hot work, spray painting, etc.				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	(8) Category of conditions found to exist (e.g., "Safe for Personnel - Not Safe for Hot Work). (9) Requirements for conditions or operations within the space. (10) Special conditions shall be noted under remarks.				
NAVSEA S6470-AA-SAF-010-, par. 3-10.3	Are records maintained of all equipment calibration checks?				
NAVSEA S6470-AA-SAF-010, par. 3-9	Are emergency and rescue procedures established?				
NAVSEA S6470-AA-SAF-010, par. 2-8c.	Does the command prohibit the gas free engineer from testing confined spaces for contractor operations or personnel except where failure to do so would create an extreme emergency and would endanger personnel and property?				
NAVSEA S6470-AA-SAF-010, par. 1-8.3	Are supervisors trained/familiar with the provisions of the manual as they relate to personnel or operations under their supervisory control?				
NAVSEA S6470-AA-SAF-010, par. 1-8.3a.	Do supervisors train/explain to all employees under their supervision the nature of the hazards associated with the operations and the precautions necessary to control such hazards?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 2703.	Is a qualified Confined Space Program Manager (CSPM) appointed in writing by the CO?				
OPNAVINST 5100.23C, sec. 2704.e.	Has the CSPM successfully completed Confined Space Safety SO-240 (formerly OSH 245E) or equivalent?				
OPNAVINST 5100.23C, sec. 2704.e. (2)	Do assistants receive at least 8 hours initial classroom instruction followed by 8 hours of OJT? AND				
OPNAVINST 5100.23C, sec. 2704.e. (2)	Is 2 hours annual refresher training provided for CSP assistants?				
OPNAVINST 5100.23C, sec. 2704.e. (2)	Are assistants recertified by the CSPM annually?				
OPNAVINST 5100.23C, sec. 2704.a.	Have all confined spaces having a reasonable potential for personnel entry been identified and evaluated?				
OPNAVINST 5100.23C, sec. 2704.a. 6.	Does the CSPM maintain a current inventory of all permit required confined spaces on the installation?				
OPNAVINST 5100.23C, sec. 2704.b.	Are caution signs posted for each permit required confined space in a conspicuous location near likely entry points and do they contain the correct information?				
OPNAVINST 5100.23C, sec. 2704.e. (3)	Are attendants, when required, instructed as to their duties?				
OPNAVINST 5100.23C, par. 2704.e.(4)	Has the CSPM ensured that rescue team personnel are aware of potential entry hazards and the necessary precautions? AND				
OPNAVINST 5100.23C, sec. 2704.e. (4)	Has the confined space rescue team performed at least one practice rescue per calendar year with records of such rehearsals and critiques maintained by the CSPM for 1 year?				
OPNAVINST 5100.23C, sec 2704.e. (5)	Has the responsible manager/supervisor ensured that all authorized entrants are aware of the hazards likely to be encountered and appropriate safety measures?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 2708.	Is there a written emergency plan consistent with the operation and conditions to cover confined space entry?				
OPNAVINST 5100.23C, sec. 2704.c. (2)(e) NOTE:	Does the CSPM ensure instruments used to perform atmospheric testing are calibrated according to the manufacturer's instructions? Are functional or calibration checks made before and after use and are records maintained for a period of 1 year?				
OPNAVINST 5100.23C, sec. 2704.d. and Appendix 27-A	Does the confined space entry permit contain all the required data and is a copy of each permit maintained by the CSPM? (1) Description and location of space (2) Authorized activity to be conducted within space. (3) Authorized entry personnel (4) Authorized attendants (5) Pre-entry atmospheric test data: (1) Time and date of test (2) Test results (3) Person conducting test (4) Instruments used and calibration/function check dates. (6) Follow-up test requirements and data (7) Other required safety precautions: (1) Personal protective clothing/ equipment (2) Lockout/tagout requirements (3) Ventilation or other space preparation requirements. (8) Emergency instructions and required emergency/rescue equipment. (9) Date of permit (10) Expiration date (and time) of permit (11) Signature of CSPM (or qualified assistant).				
OPNAVINST 5100.23C, sec. 2709.c.	Are separate confined space entry permits issued where Navy and contractor personnel occupy the same space at the same time?				
OPNAVINST 5100.23C, sec. 2704.f.	Is an evaluation of the CSE program conducted at least annually or following a mishap?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 1901.a.	Are employees provided adequate eye protective equipment at government expense?				
OPNAVINST 5100.23C, sec. 1902.a.	Has a complete survey of all activity work areas, processes, and occupations to determine which are eye hazardous and which personnel require eye protection, including in the workplace vicinity potentially exposed, been conducted?				
OPNAVINST 5100.23C, sec. 1902.a.	Does the activity OSH Manager maintain a list of all areas, processes, and occupations that require eye protection?				
OPNAVINST 5100.23C, sec. 1903.	Are all personnel exposed to eye-hazardous processes or operations scheduled for initial and annual sight screening examinations at the cognizant medical command?				
OPNAVINST 5100.23C, sec. 1907.	Is a training program on the need for, and the use of, protective eyewear conducted?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 4110.2, par. 8.i.(1)	Does the activity have a written Hazardous Material Control and Management (HMC&M) Program? AND				
OPNAVINST 5100.23C, sec. 0702.e. (2)	Has the OSH office developed a written Hazard Communication (HAZCOM) plan that addresses the key elements contained in Enclosure (3) of OPNAVINST 4110.2? Key elements are: (1) list of hazardous chemicals. (2) Material Safety Data Sheets (MSDS) (3) labels and other forms of warning (4) training (5) hazards of non-routine tasks (6) contractor operations (7) host/tenant command relationships (8) location of program information				
OPNAVINST 4110.2, encl. (3) and 29 CFR 1910. 1200(e)					
OPNAVINST 4110.2, par. 8.i.(2)	Are procedures established and implemented to control, track, and reduce the variety and quantities of Hazard Material (HM) in use, in storage or stock, or disposed as Hazardous Waste (HW)?				
OPNAVINST 4110.2, par. 8.i.(4)	Has the activity developed and implemented an "authorized HM use list" using an inventory that identifies and quantifies HM?				
OPNAVINST 5100.23C, sec. 0702.b. (2)	Is HM uniquely identified on the master inventory for reference, retrieval, and cross-reference between the inventory and its corresponding MSDS?				
OPNAVINST 5100.23C, sec. 0702.b. (3)	Do OSH functions include ensuring all routine and non-routine uses of HM are evaluated by experienced health/safety professionals and assessed using industrial hygiene and risk assessment guidelines to establish authorized HM use? AND				
OPNAVINST 5100.23C, sec. 0702.b. (5)	Do OSH functions include providing reports and recommendations resulting from evaluations of routine and non-routine uses to line supervisors, managers and the activity Hazardous Material Control Committee as appropriate?				
OPNAVINST 5100.23C, sec. 0702.j. (3)	Does the OSH office perform random, periodic spot checks to verify that HM is approved for use, and the conditions of use are appropriate and included in OSH surveillance, industrial hygiene baseline surveys, and the workplace monitoring plan?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
29 CFR 1910. 1200(g)(1)	Does the activity have an MSDS for each hazardous chemical which is used?				
OPNAVINST 5100.23C, sec. 0702.e. (5)	Do OSH office functions include developing a program to ensure MSDSs for all HM in local use are readily accessible to employees during each work shift?				
29 CFR 1910. 1200(f)(5)	Are containers of hazardous chemicals in the workplace labeled, tagged or marked with the following information?: (1) identity of the hazardous chemical(s). (2) appropriate hazard warnings.				
OPNAVINST 5100.23C, sec. 0702.e. (7) and APP-6-B	Has the OSH office developed and implemented a program to ensure employees receive required HAZCOM training and appropriate HAZCOM courses are available? AND				
29 CFR 1910. 1200(h)	Does the program include: (1) requirements of the HAZCOM standard? (2) any hazardous operations in their work area where hazardous chemicals are present? (3) location and availability of the written HAZCOM program, including the required list(s) of hazardous chemical and MSDSs? Employee training shall include: (1) Methods and observations that may be used to detect the presence or release of hazardous chemicals in work area. (2) Physical and health hazards of chemicals in work area. (3) Protective measures employees can take such as appropriate work practices, emergency procedures and PPE. (4) Details of the HAZCOM program including explanation of labeling system, MSDSs and how to obtain and use hazard information.				
29 CFR 1910. 1200(h)	Is training provided at time of initial assignment and whenever a new hazard is introduced into their work area?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 0702.i.(2)	functions include providing technical assistance and consultation during formulation of response plans and actual emergency responses?				
	<u>Treatment, Storage, and Disposal (TSD) Facilities</u>				
29 CFR 1910.120(p)(7)	Have employees conducting operations at HW TSD facilities received the 24 hour initial training as required?				
29 CFR 1910.120(p)(7)(ii)	Have employees conducting operations at TSD facilities received 8 hours annual refresher training?				
29 CFR 1910.120(f)(2)(i)	Has a medical surveillance program been instituted for all employees who work at TSD facilities who are or may be exposed to hazardous substances or health hazards at or above the permissible exposure limit, without regard to the use of respirators, for 30 days or more per year, or who wear a respirator for 30 days or more per year. AND				
29 CFR 1910.120(f)(3)	Are such workers receiving the appropriate examinations? Preplacement, Annual and Termination or Reassignment.				
29 CFR 1910.120(f)(7)(i)	Has the activity obtained and furnished the employees with a written opinion from the attending physician?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 0802.2	Have all Navy workplaces been evaluated initially (baseline) by an industrial hygienist in order to identify and quantify all potential health hazards?				
	AND				
OPNAVINST 5100.23C, sec. 0802.3	Were all workplaces with potential health hazards evaluated at least annually by the cognizant medical industrial hygienist? During the periodic evaluation, was a determination made on the status of the workplace?				
OPNAVINST 5100.23C, sec. 0802.3	Have all workplaces with potential health hazards been evaluated within the past year?				
OPNAVINST 5100.23C, sec. 0802.3	Has the cognizant industrial hygienist established procedures to ensure he/she is notified of any change which could affect worker exposure to potential health hazards and are changes in the workplace re-evaluated?				
OPNAVINST 5100.23C, sec. 0802.3	Does the initial survey indicate when evaluations are required more frequently than annually?				
	AND				
OPNAVINST 5100.23C, sec. 0802.3	During periodic evaluations, was a determination made on any changes required in the monitoring plan or frequency of periodic followups?				
OPNAVINST 5100.23C, sec. 0802.2. a.	Was the information listed below obtained by the cognizant industrial hygienist or qualified industrial hygiene technicians during the walk-through survey of each workplace? (1) Descriptions of operations and work practices including sketches and the time course of events taking place. (2) List of potentially hazardous materials used or stored, how used, and quantities involved. (3) List of potential physical hazards, (e.g., noise, radiation, etc.) and brief description of source. (4) Brief description of existing controls (hoods, PPE, etc.) and an evaluation of their use. (5) Number of persons assigned to the operation/workplace and specific worksite occupied.				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 0802.2. b.	Based on the walk-through survey, has an assessment of each workplace been made by the cognizant industrial hygienist?				
	AND				
OPNAVINST 5100.23C, sec. 0802.2. b.	Do records include rationale for any negative determination?				
OPNAVINST 5100.23C, sec. 0802.2.	Was a survey report as described in TECHNICAL MANUAL TM91-2, Industrial Hygiene Field Operations Manual, provided to the cognizant line activity?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 0802.2 c.	If the exposure assessment conducted as part of the industrial hygiene survey indicated potential employee exposure above the action level, to toxic chemicals and/or harmful physical agents: Was a workplace monitoring plan prepared and implemented? Was the workplace monitoring plan based on a sampling strategy designed to obtain samples representative of actual exposures and to analyze the data collected in such a way as to minimize any bias involved in the process? Was OPNAV Form 5100/14 or a computer generated facsimile used in developing the workplace monitoring plan and completed with the following information for each hazard to be monitored? (1) Number of measurements/samples required to evaluate each hazard (2) Method of measurement (e.g., direct reading instrument, charcoal tube, etc.) (3) Type/location of measurement (e.g., general area, breathing zone, etc.) (4) Frequency of a required series of measurements/samples during year (5) Work load requirements (work hours of workplace monitoring per year)				
OPNAVINST 5100.23C, sec. 0802.2 d.	Is all workplace monitoring conducted by industrial hygienists, industrial hygiene technicians, or certified monitors under technical direction of an industrial hygienist?				
OPNAVINST 5100.23C, sec. 0802.5 c.(1)	Are the sampling survey forms contained in Appendix A of the Industrial Hygiene Field Operations manual (NEHC-TM91-2) or computerized equivalents used? AND				
OPNAVINST 5100.23C, sec. 0802.5 c.(2)	Have commanding officers and officers in charge of activities with industrial hygiene responsibilities established quality assurance programs to ensure that the forms are accurately completed before they are forwarded for laboratory analysis and/or entered into industrial hygiene data banks or survey reports?				
OPNAVINST 5100.23C, sec. 0802.5 c.(3)	Are activities that submit their samples to other than CIHLs forwarding copies of the results to the Navy Environmental Health Center?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 0802.2 g. and sec. 0805.a. (2)(b)	Has the monitoring data been evaluated by the cognizant medical industrial hygienist to determine: (1) Degree of actual personnel exposure? (2) Whether controls are required - both interim and permanent where indicated? (3) Whether periodic monitoring of the hazardous agent(s) is required and nature of monitoring (what, where, how, and how often)? (4) The relative priority to be assigned to the workplace?				
OPNAVINST 5100.23C, sec. 0802.4	Are records which are pertinent to an individual's exposure incorporated into his/her medical record?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 0803.1 a. and b.	Are military and civilian employee medical treatment and surveillance programs for pre-placement or baseline, periodic or special purpose, and termination medical examinations established?				
OPNAVINST 5100.23C, sec. 0803.2 (2)c.	Is selection of personnel for medical surveillance examinations based primarily on results of the industrial hygiene program as interpreted by qualified occupational health professionals?				
OPNAVINST 5100.23C, sec. 0801.b. (2)	Does the cognizant medical command provide support to the OSH office to ensure employee medical surveillance lists are compared with industrial hygiene medical surveillance placement records? (To remove employees from medical programs not warranted?)				
OPNAVINST 5100.23C, sec. 0803.3a.	Is the cognizant medical command, branch clinic, etc., maintaining the required military and civilian medical records? (Are they available?)				
OPNAVINST 5100.23C, sec. 0803.2b. (1)	Does the cognizant medical command use the Medical Surveillance Procedures Manual and Medical Matrix as a minimum for medical surveillance and job certification exams?				
OPNAVINST 5100.23C, sec. 0803.2 a.(1)	Is OPNAV Form 5100/15 "Medical Surveillance Questionnaire" used to record employees occupational exposure history?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	Are operations involving asbestos conducted at the activity e.g., lagging removal/ripout, brake-arcing, brake drum cleaning, gasket fabrication/removal, and Transite wallboards?				
	Sampling				
OPNAVINST 5100.23C, sec. 1708.a.	Has a workplace monitoring plan been established to characterize occupational exposures to asbestos?				
	AND				
OPNAVINST 5100.23C, sec. 1708.b.	Are personal samples collected in the breathing zone which are representative of both the 8 hour TWA exposure and the 30 minute excursion limit exposure?				
OPNAVINST 5100.23C, sec. 1708.a.	Are repetitive operations involving asbestos within a class/category sampled at least every 6 months to verify that the operation has remained in the same class?				
	AND/OR				
OPNAVINST 5100.23C, sec. 1708.a.	Are non-repetitive removal operations sampled at least once to determine maximum exposure potential?				
	AND/OR				
OPNAVINST 5100.23C, sec. 1701.a. (2)	Is periodic monitoring of non-exempted construction activities conducted on a daily basis except where the employees within the regulated area are equipped with supplied-air respirators operated in a positive-pressure mode? (35)				
	Analyses				
OPNAVINST 5100.23C, sec. 1708.a. and b.	Are air samples collected and analyzed using the NIOSH 7400 method?				
	AND				
29 CFR 1910. 1001, App. A (QC.3) or 29 CFR 1926. 58, App. A (QC.3)	Have personnel who count asbestos fibers taken the NIOSH course for sampling and evaluating airborne asbestos or an equivalent course?				
	AND				
OPNAVINST 5100.23C, sec. 1708 c.(2)	Have personnel who perform fiber identification using dispersion staining been specifically trained?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	AND				
OPNAVINST 5100.23C, sec. 1708.c. (3)	Do laboratories who count asbestos fibers participate in Proficiency Testing (PT) Programs?				
	Notification				
OPNAVINST 5100.23C, sec. 1703.c.	Are employees notified of asbestos sampling results below the PEL within 15 working days of receipt, and are employees exposed above the PEL notified in writing as soon as practicable but not later than 5 days after the finding? Did this notification include corrective action(s) taken?				
	Contract and Facility Management				
OPNAVINST 5100.23C, sec. 1705. and Appendix 17-B	Has the activity established and implemented an ashore asbestos management program containing the five key elements? (1) Inventory (2) Assessment (3) Abatement (4) Operation and Maintenance plans (5) Training				
	AND				
OPNAVINST 5100.23C, sec. 1712.d. (4)	Has the CO ensured that an asbestos program coordinator is appointed with the responsibility to develop and manage the activity's asbestos operations and maintenance program per section 1705?				
OPNAVINST 5100.23C, sec. 1710.c.	Does a contract clause require contractors who are involved in work which releases asbestos fibers into the environment to measure and control the asbestos boundary to less than 0.1 fiber/cc at all times? In addition, do controlled/regulated areas meet this criteria prior to release for unrestricted access?				
	AND				
OPNAVINST 5100.23C, par. 1704.c. (4)	Do contracts governing the laundering of asbestos contaminated clothing require contractors to comply with the precautions specified in 29 CFR 1910.1001(h)(3) or 29 CFR 1926.58(i)(2)?				
29 CFR 1910. 1001(e)(1) or 29 CFR 1926. 58(e)(1)	Are regulated areas established where exposures exceed the TWA and/or excursion limit?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23B, sec. 1704.a. (4)	Are specific procedures established to minimize the accumulation of asbestos laden waste, dust and scrap materials, and the handling of asbestos materials to minimize secondary air contamination (wet-down procedures, filtered vacuum cleaning, etc)?				
	<u>Respirators</u>				
OPNAVINST 5100.23C, sec. 1704.d. (3)	Are respirators for asbestos exposures selected in accordance with this paragraph and the summary table provided on page 17-9?				
	AND				
OPNAVINST 5100.23C, sec. 1704.d. (3)(b)	Does the command provide a powered air purifying respirator whenever the employee requests it and it provides adequate protection?				
OPNAVINST 5100.23C, sec. 1704.e. (2)	Is quantitative fit testing performed for full-face negative pressure respirators every six months? Is qualitative fit testing for half-face respirators performed every six months?				
	<u>Protective Clothing and Change Rooms</u>				
OPNAVINST 5100.23C, sec. 1704.c. (1)	Do personnel engage in handling asbestos-containing materials during "rip-out" operations or in situations where the concentration of airborne fibers is likely to exceed the PEL wear the required protective clothing?				
	AND				
OPNAVINST 5100.23C, sec. 1704.c. (2)	Are procedures promulgated for the removal of protective clothing, i.e., vacuum clothing prior to removal while still wearing a respirator and using a HEPA filter vacuum cleaner approved by the cognizant industrial hygienist?				
OPNAVINST 5100.23C, sec. 1704.c. (2) & c.(3).	Are change rooms provided as close as practicable to the work area? Are shower facilities located between the "clean" and "dirty" change rooms? Are separated "clean" and "dirty" locker facilities provided?				
	AND				
OPNAVINST 5100.23C, sec. 1704.c. (3)	Does the command ensure employees exposed at or above the PEL shower at the end of their work shift?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	Training				
OPNAVINST 5100.23C, sec. 1707.a. & c.	Do Navy employees who work with or handle asbestos or may be exposed to asbestos fibers in excess of the medical surveillance action level and their supervisors receive the following training prior to or at the time of initial assignment and annually thereafter? (1) The health effects/hazards of asbestos. (2) Association between the use of smoking tobacco products and asbestos exposure in producing lung cancer. (3) Uses of asbestos which could result in an exposure. (4) Engineering controls and work practices associated with an employee's work assignment. (5) Purpose, proper use and limitations of protective equipment. (6) Purpose and description of medical surveillance program. (7) Description of emergency and clean-up procedures. (8) Overall review of this chapter and the command's/activity's program.				
	MEDICAL SURVEILLANCE				
OPNAVINST 5100.23C, sec. 1709.b. and c.	Are appropriate Navy employees included in the AMSP? AND				
OPNAVINST 5100.23C, sec. 1709. d.	Are asbestos workers receiving the appropriate medical examinations? - Preplacement - Periodic - Termination				

AGE OF EMPLOYEE

Years since first asbestos exposure	15 to 35	35 to 45	45 +
0 to 10	every 5 yrs	every 5 yrs	every 5 yrs
10 +	every 5 yrs	every 5 yrs	annual

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 1709. d.	Medical examinations shall include: (1) Comprehensive occupational history using Initial Medical Questionnaire (DD Form 2493-1) for preplacement, or periodic Medical Questionnaire (DD Form 2493-2) for periodic exams. (2) Physical examination with emphasis on chest (3) Chest X-ray - 14" x 17" posterior-anterior interpreted by certified B reader (4) Pulmonary function tests (5) Judgement of the individual's ability to use respirators				
	<u>Medical Surveillance Counseling and Opinions</u>				
OPNAVINST 5100.23C, sec. 1709. d.(4)	Do personnel receive counseling on any abnormality detected during the examination? Is this noted in the medical record and signed by the counseling physician?				
	AND				
OPNAVINST 5100.23C, sec. 1709. f.	Is a written signed opinion of the employees health as it relates to asbestos obtained from the examining physician placed in the employee's health records, and provided to the command? Was this opinion also provided to the affected employee and the employee's command within 30 days of the medical examination?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 1802.1a. & 1802.3a.	Noise Surveys Have all work environments been surveyed to identify potentially hazardous noise levels and personnel at risk, and was the noise survey conducted as part of the industrial hygiene surveillance program?				
	AND				
OPNAVINST 5100.23C, sec. 1802.3a. (1)	Was the survey conducted by qualified personnel (IH or safety personnel, workplace monitors, or others suitably trained by an IH or thru a recognized course of instruction)?				
OPNAVINST 5100.3C, sec. 1802.3a. (3)	Is personal dosimetry conducted where area monitoring is inappropriate?				
OPNAVINST 5100.23C, sec. 1802.3a. (4)	Are noise hazardous work environments (i.e., greater than 84 dB(A) or 140 dB peak) resurveyed within 30 days of any significant modifications or changes in work routines?				
OPNAVINST 5100.23C, sec. 1802.3a. (7)	Are noise measurements recorded on NEHC Forms 5100/17 & 5100/18 and are all required data elements properly filled out?				
	Roster				
OPNAVINST 5100.23C, sec. 1802.8b.	Have all personnel who routinely work in designated hazardous noise area been identified and a current roster of such personnel maintained and kept current?				
	Training				
OPNAVINST 5100.23C, sec. 1802.7a.	Have all Navy personnel included in the hearing conservation program received instruction in: (1) Elements of and rationale for a hearing conservation program? (2) Proper wearing and maintenance of hearing protection? (3) The command program and their individual responsibilities? (4) Off-duty practices which will aid in the protection of their hearing?				
	AND				
OPNAVINST 5100.23C, sec. 1802.7b.	Is instruction provided to all personnel upon reassignment to a new job which is noise hazardous?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	AND				
OPNAVINST 5100.23C, sec. 1802.7c.	Is appropriate training repeated annually for each employee in the hearing conservation program?				
	Personal Hearing Protective Devices				
OPNAVINST 5100.23C, sec. 1802.6a.	In the absence of an IH's documented judgement to the contrary, are hearing protective devices worn by personnel when they enter or work in an area where the operations generate noise levels greater than 84 dB(A) or 140 dB peak sound pressure level or greater?				
	Hearing Monitoring				
OPNAVINST 5100.23C, sec. 1802.5	Are personnel required to work in designated noise hazard areas or with noise hazardous equipment which produce sound levels greater than 84 dB(A) in an eight hour TWA exposure, or 140 dB peak sound pressure levels entered in a hearing testing program?				
OPNAVINST 5100.23C, sec. 1802.5b. (1)	Have all military personnel received a reference (baseline) hearing test upon entry into naval service? Have all civilian personnel employed in areas that involve routine exposures, to hazardous noise received a reference hearing test?				
	AND				
OPNAVINST 5100.23C, sec. 1802.5c. (1)	Are monitoring tests given annually thereafter for as long as the employee remains in a noise hazard environment?				
OPNAVINST 5100.23C, sec. 1802.5e. (1)	Do personnel who exhibit a significant threshold shift on monitoring hearing tests receive required follow-up hearing testing? (See Appendix 18-A)				
OPNAVINST 5100.23C, sec. 1802.5e. (1)	Are personnel who exhibit a significant threshold shift informed of this, in writing, within 21 days?				
	AND				
OPNAVINST 5100.23C, par. 1802.5e. (1)	Are significant threshold shifts (which are considered recordable) reported to the OSH office for entry on the Log of Navy Injuries and Occupational Illnesses.				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 1802.8a.	Are hearing tests recorded on DD 2215, Reference Audiogram, or DD 2216, Hearing Conservation Data as appropriate? Are originals placed in the health record, copy one sent to NEHC, and copy two maintained for local files?				
	Audiometric Equipment and Personnel				
OPNAVINST 5100.23C, sec. 1802.5a.	Are audiometric chambers certified every year by cognizant industrial hygienists, an audiologist, or personnel under the supervision of an industrial hygienist, to meet the requirements of ANSI S3.1-1977?				
NAVMEDCOMINST 6260.5, encl. (1) par. 3.a. (3)	Are audiometers calibrated at least annually for compliance with ANSI S3.6?				
OPNAVINST 5100.23C, sec. 1802.5a.	Are hearing tests performed by qualified personnel? (audiologist, otolaryngologist, qualified physician or person certified by the Council for Accreditation in Occupational Hearing Conservation or who has received equivalent Navy training accepted by the NEHC)				
NAVMEDCOMINST 6260.5, encl. (1) par. 3.a. (9)	Are technicians recertified at least every 3 years?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	Respiratory Protection Program Manager				
OPNAVINST 5100.23C, sec. 1501.c.	Has the commanding officer appointed a certified Respiratory Protection Program Manager (RPPM) in writing?				
	AND				
OPNAVINST 5100.23C, sec. 1512.b. & c.	Has the RPPM completed the required course work and/or passed the exam to receive a numbered certificate from NEHC?				
	Program Audit				
OPNAVINST 5100.23C, sec. 1513.a. (8)	Does the respiratory protection program provide for an annual audit of the respiratory protection program?				
	Respirator Use				
OPNAVINST 5100.23C, sec. 1502.a. (1)	Is the use of any respiratory protection equipment by employees other than that identified by the RPPM prohibited?				
OPNAVINST 5100.23C, sec. 1509.a. (3)	Are employees with beards prohibited from wearing all respirators except positive pressure supplied-air hoods?				
	Breathing Air				
OPNAVINST 5100.23C, sec. 1505.b. & c.	Does the breathing air meet the specified requirements for Grade D breathing air? (CGA G7.1-1989) Is the routine monitoring of breathing air quality a part of the command's workplace monitoring plan? Is breathing air from oil-lubricated compressors monitored/analyzed quarterly?				
	Facilities and SOPs				
OPNAVINST 5100.23C, sec. 1513.a. (1)	Is there a centrally located facility staffed to maintain and issue respirators?				
	AND				
OPNAVINST 5100.23C, sec. 1510.a.	Is the inspection, cleaning and repair of respirators performed at the respirator facility by personnel who have received training approved by the RPPM?				
OPNAVINST 5100.23C, sec. 1513.a.(2)	Are there written standard operating procedures (SOPs) governing the selection, care, issue, and use of respirators? Is emergency and rescue guidance included in SOPs?				
	AND				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 1513.a.(2)	Have specific worksite SOPs been developed and posted in the general area of work requiring respirators?				
	Training				
OPNAVINST 5100.23C, sec. 1511.a.	Do all respirator users and their supervisors receive initial and annual refresher training?				
OPNAVINST 5100.23C, sec. 1511.a. (1)-(4)	Does the respiratory training include as a minimum: (1) nature and degree of respiratory hazards; (2) respirator selection; (3) donning procedures and fit testing; (4) care of the respirator; and (5) wearing of contact lenses in contaminated atmosphere with respiratory protection equipment?				
OPNAVINST 5100.23C, sec. 1511.b.	Do the command's training records document respirator training by respirator type and model for which the individual has been trained?				
	Fit Testing				
OPNAVINST 5100.23C, sec. 1509.a.	Are all personnel required to wear respirators with tightly fitting facepieces given a fit test at the time of initial fitting? AND Is fit testing repeated every six months thereafter when exposures are to lead or asbestos? AND Is fit testing repeated annually for all other exposures?				
OPNAVINST 5100.23C, sec. 1509.c.	Is respirator fit testing documented by respirator type, brand name and model; method of test and test results; test date; and the name of the instructor/tester?				
	Medical				
OPNAVINST 5100.23C, sec. 1513.a.(4) & b.(1)	Are respirator wearers evaluated medically in accordance with ANSI Z88.6-1984 and NEHC TM 91-5 to assure they are physically able to perform their assigned tasks while wearing their respirators?				
OPNAVINST 5100.23C, sec. 1513.b. (1)(e)	Is a medical statement for each user, noting whether the respirator user is qualified, qualified with restrictions, or not qualified to wear respirators?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 1513.b. (2)	Medical Audit Has the cognizant medical command provided the RPPM an annual written evaluation on the effectiveness of the program based on occupational medicine and industrial hygiene reviews?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 2204.7	Have sources of Radiofrequency Radiation (RFR) hazards been evaluated by competent occupational health and safety personnel using ANSI C95.3-1973, ANSI C95.5-1981, and subsequent revisions?				
	AND				
OPNAVINST 5100.23C, sec. 2204. 14e.(1)(b)	Are RF surveys or updates to existing surveys accomplished whenever changes are incurred through installation or relocation of RF radiating antennas, changes in antenna operating conditions, new construction in the vicinity of a RF radiating antenna, or revision to RF exposure standards when such changes may affect restrictions or boundaries improved for limiting personnel exposures to RF fields?				
OPNAVINST 5100.23C, sec. 2204.7	Are copies of the surveys, reports and theoretical calculations for each RFR source retained by the activity for no less than 5 years?				
	Controls				
OPNAVINST 5100.23C, sec. 2204.14e.(1)	Have Commanding Officers established and controlled access to areas in which RFR exposures above the PELs could occur?				
OPNAVINST 5100.23C, sec. 2204.9c.	Are RFR hazard warning signs posted at all access points to areas in which RFR levels may exceed the PEL?				
OPNAVINST 5100.23C, sec. 2204.9d.	Are warnings and controls other than signs used where RFR levels greater than 10 times the PEL exist? (such as flashing lights, audible signals, fences, and interlocks - depending on potential for exposure).				
	Training				
OPNAVINST 5100.23C, sec. 2204.11	Have personnel who work with RFR sources or in an area where the potential may exist for exposure to RFR above the PELs received general awareness RFR training as a part of all basic training and in conjunction with the more detailed technical training associated with a particular RFR source?				
	AND				
OPNAVINST 5100.23C, sec. 2204.11	Was annual refresher RFR training, as required, provided to reinforce and reemphasize command training objectives?				

REFERENCE	NAVOSH PROGRAM ELEMENT				
	Overexposure Incidents				
OPNAVINST 5100.23C, sec. 2204.8 b.(1)(a)-(e)	Were exposure incidents involving alleged or actual RFR exposures which are five times the PEL or greater investigated to include: (1) measurements of RFR exposure levels, (2) appropriate medical examinations, (3) a detailed description of the circumstances surrounding the incident, (4) recommendations for more detailed medical follow-up (if necessary), and (5) recommendations to prevent any future occurrence of the incident?				
	AND				
OPNAVINST 5100.23C, sec. 2204.8 b.(2)	Were any exposure incidents which were above five times the PEL or greater, reported to BUMED (03) by message within 48 hours after the incident was discovered?				
	Medical Surveillance				
OPNAVINST 5100.23C, par. 2204.8 a.	Were medical examinations conducted of personnel who may have been exposed to RFR levels that exceeded five times the PEL?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 2203.7	Does the command have Class III, Class IV, or military exempted lasers? If yes,				
	LSSO				
SPAWARINST 5100.12A, CH-1, par. 7.e.(2) & Encl. (7), 1.b.	Has the CO appointed a Laser System Safety Officer (LSSO) and forwarded his/her name, code, and telephone number to COMSPAWARSYSCOM (OOF)?				
	AND				
SPAWARINST 5100.12A, CH-1, Encl. (7), 1.b. & Encl. (8), 5.b.	Has the LSSO successfully completed the Laser Safety Course taught by the Naval Safety School with either a CAT I or CAT II category rating?				
SPAWARINST 5100.12A, CH-1, Encl. (7), 1.b.	Does the LSSO have direct access to the CO and have the authority to suspend, restrict, or terminate the operation of a laser or laser system?				
	List/Inventory				
SPAWARINST 5100.12A, CH-1, Encl. (7), 1.g.	Does the program include maintaining a list of all lasers and their locations at the activity and submitting annually by 31 August a list of all local military exempt lasers and class 3b and class 4 non-exempt lasers to COMSPAWARSYSCOM (OOF)?				
	Program Requirements				
SPAWARINST 5100.12A, CH-1, Encl. (7), 1.c.	Is each laser approved by the LSSO and classified and labeled prior to use?				
SPAWARINST 5100.12A, CH-1, Encl. (7), 1.a.	Are laser safety regulations and standard operating procedures for indoor and outdoor operations and maintenance promulgated?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
SPAWARINST 5100.12A, CH-I Encl. (7), 1.i.	Are safety responsibilities of personnel who supervise laser operations documented? Do these duties include: (1) safety planning for the installation of laser systems; (2) providing and enforcing operational procedures; (3) ensuring employees receive appropriate training; (4) investigating incidents; and (5) logging laser firings per Enclosure (9) of the instruction?				
SPAWARINST 5100.12A, CH-1, Encl. (7), 1.e.	Do local laser facilities and ranges receive safety compliance inspections at least annually? Are laser radiation hazard surveys and evaluations performed on laser ranges to determine the degree of laser radiation hazard and to recommend proper controls whenever changes occur or at least every three years?				
SPAWARINST 5100.12A, CH-1, Encl. (7), 1.d.	Is appropriate laser protective equipment i.e., eyewear, clothing, barriers, screens, etc., provided to employees? Is eyewear labelled with the wavelength and optical densities and inspected periodically to ensure its integrity?				
	<u>Military Exempt Lasers</u>				
	Are there any military exempt lasers? (Those designed for combat, combat training, or classified)				
	IF YES				
SECNAVINST 5100.14B, 7.a.(1)	Have all military exempt lasers in use been reviewed and approved safe by the Laser Safety Review Board?				
SECNAVINST 5100.14B, 7.b.(2)	Is the required caution label affixed to all military exempt lasers?				
	<u>Training</u>				
SPAWARINST 5100.12A, CH-1, Encl. (7), 1.j.	Are procedures established to qualify workers as laser operators or maintenance technician workers? Do the procedures include periodic review to ensure that personnel are complying with requirements?				
OPNAVINST 5100.23C, sec. 2203. 10b.	Are all personnel in areas using Class IIIb (and Class IIIa with danger logo) or Class IV lasers receiving formal classroom training on the potential hazards associated with accidental exposure to laser radiation? Is annual refresher training appropriate to the operation(s) conducted?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 2203. 10b.	Does the training emphasize the extraordinary danger of eye damage due to absorption and do the training topics include: (1) general laser hazards; (2) hazards specific to the equipment; (3) required eye protection; (4) manufacturer's operating and safety information; (5) medical surveillance requirements and; (6) standard operating procedures for each laser operation?				
OPNAVINST 5100.23C, sec. 2203. 10c.	Have laser range safety officers, laser maintenance personnel, and industrial laser supervisors completed a formal activity laser safety training course? Did the course include: (1) theory of lasers, (2) laser hazards and hazard categories, (3) maximum permissible exposures, (4) nominal ocular distances, (5) eye protection, (6) medical surveillance, and (7) laser operating records, safety instructions, range procedures, and maintenance and operating procedures?				
	Medical Surveillance				
NAVMEDCOMINST 6470.2A, par. 7.b.	Has the LSSO determined and designated incidental and laser personnel?				
NAVMEDCOMINST 6470.2A, par. 7.c.(1)	Laser Personnel - Do laser personnel receive preplacement, periodic (triennially or when suspected exposure occurs) and termination examinations? Do examinations include at least an ocular history, visual acuity, and external ocular and fundus examinations?				
NAVMEDCOMINST 6470.2A, par. 7.c.(2)	Incidental Personnel - Have all incidental personnel received eye examinations for visual acuity?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	Are operations involving lead conducted at the activity (e.g., melting, spray painting, burning, blasting lead paint)?				
OPNAVINST 5100.23C, sec. 2106.a.	Have all operations involving lead been evaluated annually and within 5 working days of any work process or control change? Where a potential for exposure from inhalation of airborne lead particulates or personnel contamination is found, has a workplace monitoring plan been established to characterize exposures?				
OPNAVINST 5100.23C, sec. 2106.a. (1)(a)1. & 2.	Are all operations where exposures are above the action level (AL) 30 ug/m^3 monitored every 6 months or less or whenever they occur until two consecutive sample sets, collected at least 7 days apart, indicate that other sampling frequencies in the instruction are appropriate?				
	AND/OR				
OPNAVINST 5100.23C, sec. 2106.a. (1)(b)1. & 2.	Are all operations where exposures are above the permissible exposure limit (PEL) 50 mg/m^3 monitored at 3 month intervals or less or whenever they occur until two consecutive sample sets, collected at least 7 days apart, indicate that other sampling frequencies in the instruction are appropriate?				
	Notification				
OPNAVINST 5100.23C, sec. 2107.	Are all employees notified in writing of results that represent their exposure by the command within 5 working days of receipt of lead monitoring data?				
	Respirators				
OPNAVINST 5100.23C, sec. 2103.d. (2)	Are respirators for lead work selected based on the selection Table 21-1 of the instruction?				
	AND				
OPNAVINST 5100.23C, sec. 2103.d. (1)(d)	Are negative pressure respirators prohibited from being worn for more than 4.4 hours per day?				
	AND				
OPNAVINST 5100.23C, sec. 2103.d. (1)(h)	Are powered air-purifying respirators with HEPA filters available in lieu of negative pressure respirators upon employee request and if they provide adequate protection?				
OPNAVINST 5100.23C, sec. 2103.d. (1)(d)	Are quantitative respirator face fit tests performed at the time of initial fitting and at least every 6 months thereafter?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	PPE				
OPNAVINST 5100.23C, sec. 2103.c. (1)(a)-(d)	Do protective clothing and equipment used by above employees meet established criteria?				
	AND				
OPNAVINST 5100.23C, sec. 2103.c. (2)	Does the command provide clean protective clothing at least weekly or daily when the 8 hour TWA airborne concentration exceeds 200 mg/m^3?				
OPNAVINST 5100.23C, sec. 2103.c. (1)	Do employees remove personal clothing worn to and from work and wear protective clothing provided by the Navy?				
	AND				
OPNAVINST 5100.23C, sec. 2103.c. (3)	Are protective clothing removal procedures posted in the change room and do they include vacuuming of clothing (before removal and while still wearing a respirator, if one was required for the task) using a HEPA filter vacuum?				
	Change Rooms				
OPNAVINST 5100.23C, sec. 2103.c. (3)	Are change rooms provided to employees who work where airborne lead concentrations exceed the PEL? Are change rooms maintained under positive pressure relative to adjacent lead work areas?				
	AND				
OPNAVINST 5100.23C, sec. 2103.c. (4)	Are shower facilities located between "clean" and "dirty" change rooms and do the change rooms have two separate clothing lockers for each employee?				
	AND				
OPNAVINST 5100.23C, sec. 2103.c. (4)	Are employees exposed above the PEL required to shower at the end of the shift?				
OPNAVINST 5100.23C, sec. 2103.a. (3)	Engineering/Work Practices Are procedures established to maintain work surfaces as free of lead dust as is practical?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 2103.b. (3)	Are ventilation systems used to control lead exposures tested by qualified entineers or industrial hygienists every 3 months or within 5 days of operational change and are ventilation records held for a minimum of 50 years? Where devices such as manometers, pitot tubes, etc. are installed to continuously monitor the effectiveness of ventilation systems, are employees who use the system instructed on the meaning and importance of the measurements and to immediately contact the OSH office if the measuring devices indicate a malfunction?				
	<u>Training</u>				
OPNAVINST 5100.23C, sec. 2105.	Have all personnel who work in areas where the potential exists for lead exposure (above the AL) received initial training? Annual training?				
	AND				
OPNAVINST 5100.23C, sec. 2105. a.-f.	Does the training include as a minimum: (1) specific nature of the operations during which exposure is possible, (2) purpose, proper selection, fit testing, use and limitations of respirators, (3) adverse health effects of lead with particular attention to the reproductive effects upon both males and females, (4) purpose and description of the medical surveillance program, including the use of chelating agents and medical removal protection benefits, (5) engineering controls and work practices to be applied and used in the employee's job, including PPE and personal hygiene, measures, and (6) the contents of the commands compliance plan.				
	<u>Contracts</u>				
OPNAVINST 5100.23C, sec. 2109.c.	Do contracts which may involve the release of lead dust require the contractor to measure and control lead dust outside of the work boundary to less than 30 mg/m^3 at all times and to meet this criteria prior to release for unrestricted access?				
	<u>Medical Surveillance</u>				
OPNAVINST 5100.23C, sec. 2108.a.	Are employees potentially exposed to airborne lead, at or above the AL for 30 days or more per year, in a medical surveillance program?				
	AND				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 2108.b. (1), (2) & (3)	Does it contain preplacement medical evaluation, semiannual blood lead and ZPP monitoring, and follow-up medical evaluations as outlined in the reference? AND				
OPNAVINST 5100.23C, sec. 2108.b. (3)(c)3.	Is a written signed opinion per 29 CFR 1910.1025 of the employee's health as it relates to lead obtained from the examining physician and provided to the employee?				
OPNAVINST 5100.23C, sec. 2108.b. (2)	Are blood analyses conducted every 2 months when an employee's blood lead level exceeds 30 mg/100 g of whole blood? AND/OR				
OPNAVINST 5100.23C, sec. 2108.c. (1)	Are employees notified of the following in writing with 5 working days after receipt of results which show a blood lead concentration at or above 30 mg/100 g whole blood? a. Blood lead level concentration. b. That temporary medical removal is required with medical removal benefits. AND/OR				
OPNAVINST 5100.23C, sec. 2108.b. (3)(a)	Are employees reassigned to non-lead work when their blood lead concentration exceeds 60 mg/100 g whole blood or their last 3 measurements average in excess of 50 mg/100 g whole blood? AND/OR				
OPNAVINST 5100.23C, sec. 2108.b. (3)(c)4.	Does the cognizant industrial hygienist investigate the cause of each verified blood lead concentration at or above 30 mg/100 g whole blood?				


UNITED STATES NAVAL
READINESS THROUGH SAFETY
SAFETY CENTER

Navy Occupational Safety and Health Program Evaluation

Guide

for Shore Activities

Supplement

NAVSAFECEN PUB 5100/1 SUPPLEMENT (10/93)

1 October 1993

SUPPLEMENTAL NAVOSH PROGRAM EVALUATION GUIDES FOR SHORE ACTIVITIES

REFERENCES

NAVMED P-5055	Radiation Health Protection Manual
NAVMEDCOMINST 6470.6	Radiation Protection Survey and Equipment Performance Test of Diagnostic X-Ray Equipment
BUMEDINST 6470.19	Laser Safety for Medical Activities
29 CFR 1910.1450	Occupational Exposure to Hazardous Chemicals in Laboratories
29 CFR 1910.1047	Ethylene Oxide
29 CFR 1910.1048	Formaldehyde
29 CFR 1910.1028	Benzene
29 CFR 1910.1030	Bloodborne Pathogens
NAVMEDCOMINST 6570.1	Antineoplastic Drug Guidelines
OPNAVINST 5100.23C, Chapter 25	Polychlorinated Biphenyls
OPNAVINST 5100.23C, Chapter 26	Man-Made Mineral Fibers
NAVFACINST 5100.11H	NAVFACENGCOM Safety and Health Manual
NAVFAC ltr 05A1/181	Environmental Safety and Health Training of 4/11/91 for Construction Personnel
NAVFAC P307	Management of Weight-Handling Equipment Volume 1, Maintenance and Certification
29 CFR 1910.306	Specific Purpose Equipment and Installations
ANSI B30.16-1981	Overhead Hoists
29 CFR 1910.184	Slings
NAVFAC P-300	Management of Transportation Equipment
ANSI B-153.1-1981	Safety Requirements for the Construction, Care, and Use of Automotive Lifts
NAVFAC MO-118	Inspection of Vertical Transportation Equipment
NAVFAC P-306	Testing and Licensing of Weight Handling and Construction Equipment Operators
29 CFR 1910.1027	Cadmium
OPNAVINST 6250.4A	Pest Management Programs
NAVMED P-5010-8	Manual of Naval Preventive Medicine, Chapter 8, Navy Entomology and Pest Control Technology
NEHC-TM91-5	Medical Surveillance Procedures Manual and Medical Matrix

TABLE OF CONTENTS

REFERENCE	OSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
NAVFAC P-307, vol. I, ch. 2. par. 13.1	The test weights for Weight Handling Equipment (WHE) certification must be certified by the facility.				
NAVFAC P-307, vol.I, ch. 2. par. 11.	The certifying officer for WHE shall be designated in writing by letter by the Commanding Officer of the activity.				
NAVFAC P-307, vol. I, ch. 2. par. 19.	Each activity shall establish and maintain an individual equipment history record file on each unit of WHE.				
NAVFAC P-307, vol. I, ch. 2. par. 12.	Each unit of WHE shall be condition inspected before, during, and after the load test.				
NAVFAC P-307, vol. I, ch. 2. par. 10.	WHE shall be condition inspected, load tested, and certified at least once annually.				
NAVFAC P-307, vol. I, ch. 2. par. 3.	A Maintenance Inspection Specification and Record form for each unit of WHE shall be used to record conditions at each inspection and filed in the equipment history record file.				
NAVFAC P-307, vol. I, ch. 2. par. 5.	Lubrication instructions for each unit of WHE shall be developed using the manufacturer's manuals. These instructions will be recorded and maintained in the equipment history record file.				
NAVFAC P-307, vol. I, ch. 2. par. 11.	A Certification of Load Test and Condition Inspection for WHE shall be signed by the test director, inspection and test personnel, and the certifying officer.				
NAVFAC P-307, vol. I, app. E, par. 1.4.3a	A nondestructive test of general purpose service crane hooks is valid for five certification periods. Nondestructive tests shall be performed prior to load tests.				
NAVFAC P-307 vol. I, ch. 2, par. 11.	A card or tag with the crane identification number, certified capacity, and date of certification for WHE shall be posted in a conspicuous location on or near the crane.				
NAVFAC P-307, vol. I, app. E. par. 1.4.2	A throat dimension base measurement shall be established by installing two tram points on the hook of each unit of WHE.				

REFERENCE	OSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
29 CFR 1910.306(b)(1)(ii)	A disconnecting means, capable of being locked in the open position, shall be provided in the leads from the runway contact conductors or other power supply on any crane or monorail hoist.				
ANSI B30.16-1981, sec. 16-1.3.2	The supporting structure, including trolleys, monorail, or crane, if an, shall be designed to withstand the loads and forces imposed by the hoist.				
ANSI B30.16-1981, sec. 16-1.2.9	Hoist hooks shall be equipped with latches unless the application makes the use of the latch impractical.				
NACFAC P-307, vol. I, ch.2. par. 8.	The user shop shall have the responsibility for the safe and proper operation of assigned WHE and for reporting problems to the cognizant crane inspection organization.				
29 CFR 1910.184(e)(1)	Alloy steel chain slings shall have permanently affixed durable identification stating size, grade, rated capacity, and reach.				
29 CFR 1910.184(e)(3)	A thorough periodic inspection on alloy steel chain slings shall be made on a regular basis. Inspection intervals shall in no event be at intervals greater than once every 12 months.				
NAVFAC P-300, par. 21-22. b.(2)(a)	Platform/truck shall be given an annual condition inspection and load test. In addition, the truck shall be certified by the responsible individual at the activity. A copy of the certification shall be posted in the cab of the truck. A locally developed condition inspection, load test, and certification format for this purpose shall be used.				
ANSI B153.1-1981, sec. 6. par. 6.3	The owner or employer shall establish a periodic inspection procedure as recommended by the manufacturer to ensure the safe operation of the automotive lift.				
ANSI B153.1-1981, sec. 5. par. 5.2	The automotive lift shall be permanently marked to show the manufaturer's name, rated load capacity, model and serial number.				
ANSI B153.1-1981, sec. 6. par. 6.2.1	The automotive lift manufacturer shall supply lift operating instructions, which the owner or employer shall display in a conspicuous location in the lift area.				

REFERENCE	OSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
NAVFAC MO-118, ch.2. par. 2.7.1	Specified tests are required to be performed annually for electric vertical transportation equipment elevators while other tests are required every five years. Division 110 through 119 of ANSI/ASME A17.2-1988 manual describes various operational tests that are required to be performed.				
NAVFAC P-306, ch. 1, Part 1, par. 1.1.1.1	All personnel who are or may be assigned to duties involving the operation of government furnished WHE shall be tested and licensed before being permitted to operate such equipment.				
NAVFAC P-306, ch. 1, Part 3, par. 1.3.2.3	Operators who have been issued a valid license (NAVFAC Form 11260/2) shall have such license on their person when operating WHE.				
NAVFAC P-307, vol. I, App. E, par. 1.4.5	All hooks shall be uniquely identified with some type of permanent marking in order to provide a positive traceability to its nondestructive test.				
29 CFR 1910. 184(d)	Slings used to connect the load to the material equipment shall be inspected each day before being used by a competent person designated by the employer. The sling and all fastenings and attachments shall be inspected for damage or defects. Damaged or defective slings shall be immediately removed from service.				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	BUMED Activities Only				
NAVMED P-5055, par. 1-4.(8)	Does the activity maintain a Radiation Health Protection Program where military or civilian personnel may be exposed to ionizing radiation?				
	AND				
NAVMED P-5055, par. 1-4.(8) (d)	Are measures established to ensure individual exposures are maintained at levels as low as reasonably achievable and no greater than the specified limits?				
NAVMED P-5055, par. 2-2.	Are the required medical exams for radiation exposure performed? Pre-placement? (Only For Routinely Exposed Personnel or exposed to > 500 mrem) (Reexamination Over Age 25 Every 5 years) (Over Age 50 Every 2 years) (Age 60 Annually) Situational? (Due to Exposure) Termination?				
NAVMED P-5055, par. 2-5.(1) (h)	Do the radiation medical exams clearly state whether the individual is qualified or not physically qualified for occupational exposure to ionizing radiation?				
NAVMED P-5055, par. 2-5.(1) (i)	Are employee health records or medical files marked to indicate a termination radiation medical exam is required?				
NAVMED P-5055, par. 6-2.(3)	Is personal exposure monitoring (dosimetry) conducted on the following personnel? (1) All adult personnel who are likely to receive from sources external to the body a dose in excess of: Total Effective Dose Equivalent (Whole Body) ..00.500 rem/yr Shallow Dose Equivalent (Extremities) ...05.000 rem/yr Shallow Dose Equivalent (Skin) ...05.000 rem/yr Eye Dose Equivalent (Eyes) .....01.500 rem/yr NOTE: If the dose to the eye is expected to be less than or approximately equal to the Deep Dose Equivalent, then whole body monitoring may be used in lieu of a special device for monitoring the eye dose. For example, in fluoroscopy a deep dose monitoring device worn at the collar to control deep dose body exposure will suffice to control the eye exposure.				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	(2) All personnel entering a high radiation area (i.e., an area where the exposure rate is greater than 100 mrem (1 mSv) per hour). (3) Declared pregnant women likely to receive, from sources external to the body, a dose in excess of 50 mrem (0.5 mSv) to the embryo/fetus during the entire pregnancy. (4) Minors who are likely to receive in one year from sources external to the body a dose in excess of 50 mrem (0.5 mSv). (5) Radiographers and radiographers' assistants as defined in Title 10, Part 34 of the Code of Federal Regulations in addition to a self indicating and alarming dosimeter. (6) Any other personnel deemed necessary.				
NAVMED P-5055, par. 5-2.(1)(a)	Are the results of personal exposure monitoring entered in the computerized database at least quarterly?				
NAVMED P-5055, par. 5-3.(3)	Are radiation exposures recorded on NAVMED 6470/10 or an update of the individual's computerized exposure database which can generate this form made at least quarterly?				
NAVMED P-5055, par. 1-6.(1(1)(g)	Is the radiation health program audited semi-annually and are audit reports retained for 3 years?				
29 CFR 1910.96(n)(1)	Are employees notified of their individual exposures annually?				
NAVMEDCOMINST 6470.6, par. 6.a.(2)	Are equipment performance tests and radiation protection surveys of the facility conducted at least every two years? NOTE: Request for surveys that cannot be fulfilled shall be forwarded to BUMED (formerly MEDCOM)-21.				
NAVMEDCOMINST 6470.6, par. 6.a.(1)	Are radiation protection surveys and performance tests of diagnostic x-ray equipment conducted at the following times: a. Within 30 days after the new x-ray equipment is installed? b. Following major mechanical or electrical repairs or alterations of the equipment; replacement or reinstallation the x-ray equipment in a new location?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	c. After any structural change which may effect the radiation protection barriers?				
NAVMEDCOMINST 6470.6, par. 6.c.	Are performance tests and radiation protection surveys conducted by qualified individuals? NOTE: Qualified Individual. Individuals who are board certified radiological physicists (certified by the American board of Radiology American Board of Health Physics board eligible radiation physicists or individuals who have knowledge and training to perform the following:				
NAVMEDCOMINST 6470.6, par. 5.e.(1) and 6470.5.e.(2) and par. 5.e.(3)	a. Assess and make necessary measurements of ionizing radiation from diagnostic x-ray equipment as required. b. Evaluate radiation protection programs and provide advice regarding radiation protection of needs of medical and dental installations. c. Evaluated the performance of diagnostic x-ray devices including imaging devices, and advise regarding imagining technique improvement and quality assurance programs.				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
BUMEDINST 6470.19, par. 6.a.	Does the command have class 3, or class 4 laser systems? If yes,				
	LSO				
BUMEDINST 6470.19, par. 6.a.(1)	Has a laser safety officer (LSO) been appointed in writing by the CO?				
	AND				
BUMEDINST 6470.19, par. 6.a.(1)	Has the healthcare LSO received training which meets the following minimum requirements?				
ANSI Z136. 3-1988 App. D. Table D3	(1) Review of basic laser concepts (2) Introduction to hazards and biological effects (3) Laser effects on the eye and skin (4) Associated laser hazards (5) Laser hazard analysis and laser standards (6) Introduction to hazard classifications (7) Laser controls in the medical environment (8) Examples of safe practices and programs in the medical environment (9) Medical surveillance (10) Anesthesia problems (11) Understanding local, state and federal regulations (12) Practices recommended in ANSI Z136.1				
BUMEDINST 6470.19, par. 6.a.(2)	Has the command coordinated with the Navy Environmental Health Center to have the Laser Safety Review Board (LSRB) evaluate any locally designed, constructed, or modified laser or laser system not used as originally intended by the manufacturer or any unclassified laser?				
BUMEDINST 6470.19, par. 6.b.(1)	Does the LSO conduct a laser hazards evaluation at least annually of class 3 laser, class 4 laser and laser system use areas and ensure that action is taken to correct any problems or discrepancies?				
BUMEDINST 6470.19, par. 6.b.(2)	Does the LSO investigate all laser accidents and incidents and submit the required reports as required by NAVMEDCOMINST 6470.2A?				
BUMEDINST 6470.19, par. 6.b.(3)	Does the LSO maintain an inventory of all lasers and laser systems and forward a copy to NAVENVIRHLTHCEN annually by 30 June?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
BUMEDINST 6470.19, par. 6.b.(4)	Does the LSO ensure that safe operating practices are established for each laser system and space containing a laser? Are written safety procedures available for each laser?				
BUMEDINST 6470.19, par. 6.b.(5)	Does the LSO ensure that operational checklists are developed for each laser?				
BUMEDINST 6470.19 par. 6.b.(6)	Does the LSO ensure that appropriate laser protective equipment is available and used?				
BUMEDINST 6470.19, par. 6.b.(8)	Does the LSO ensure operators and support staff receive "appropriate" education and safety training? (Command-specific requirements as well as appropriate information recommended by ANSI Z136.1 and NAVMEDCOMINST 6470.2A.) Is a record documenting training maintained?				
	MEDICAL SURVEILLANCE				
NAVMEDCOMINST 6470.2A, par. 7.b.	Has the LSO determined and designated incidental and laser personnel?				
BUMEDINST 6470.19, par. 6.b.(7)	Does the LSO ensure personnel receive medical surveillance examinations as required below? NOTE: Incidental personnel - those whose work makes it possible but unlikely for them to be exposed to laser energy sufficient to damage eyes or skin. (e.g., clerical, supervisory personnel) Laser personnel - Those who work routinely in laser environments.				
NAVMEDCOMINST 6470.2A, par. 7.c.(1)	Laser Personnel - Do laser personnel receive preplacement, periodic (triennially or when suspected exposure occurs) and termination examinations? Do examinations include at least an ocular history, visual acuity, and external ocular and fundus examinations?				
NAVMEDCOMINST 6470.2A, par. 7.c.(2)	Incidental Personnel - Have all incidental personnel received eye examinations for visual acuity?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
29 CFR 1910.1048	AL=0.5ppm, STEL=2ppm/15min, PEL=0.75ppm as 8-hr TWA Does the activity have operations/processes that involve potential employee exposure to formaldehyde? If so, what are the locations?				
29 CFR 1910.1048(d)(2)	Have employees been initially monitored to determine their exposure to formaldehyde? NOTE: Monitoring is not required if it can be documented using objective data that the presence of formaldehyde or formaldehyde-releasing products in the workplace cannot result in airborne concentrations of formaldehyde that would cause any employee to be exposed at or above the Action Level (AL) or the Short Term Exposure Level (STEL).				
29 CFR 1910.1048(d)(2)	Did the employer identify all employees potentially exposed at or above the AL or at or above the STEL and accurately determine the exposure by sampling each employee or by developing a representative sampling strategy to measure sufficient exposures within each job classification for each workshift to correctly characterize the exposure to any employee within each exposure group? NOTE: Detector tube sampling does not meet the accuracy requirements of the standard. See 29 CFR 1910.1048(d)(5).				
29 CFR 1910.1048(d)(1)(iii)	Were samples taken which were representative of the employees full shift or short-term exposures, as appropriate?				
29 CFR 1910.1048(d)(3)	Was periodic monitoring performed where required? - At or above the AL - every six months? - At or above the STEL - annually under worst conditions?				
29 CFR 1910.1048(d)(6)	Were employees notified in writing (posting is acceptable) of sampling results within 15 days of receipt?				
29 CFR 1910.1048(f)(1)	Has the employer instituted engineering and work practice controls to reduce and maintain employee exposure to formaldehyde at or below the TWA and the STEL?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
29 CFR 1910. 1048(f)(2)	Whenever feasible engineering and work practice controls cannot reduce employee exposure to or below either of the Permissible Exposure Limits (PELs), are controls applied to the extent feasible and are they supplemented by respirators?				
29 CFR 1910. 1048(g)(1)	Where respiratory protection is required, does the employer provide respirators at no cost to the employee and assure that they are properly used?				
29 CFR 1910. 1048(g)(2)(i) and Table 1	Are respirators selected from those specifically approved for protection against formaldehyde?				
29 CFR 1910. 1048(h)(1)(i)	Has all contact of the eyes and skin with liquids containing one percent or more of formaldehyde been prevented by the use of chemical protective clothing made of material impervious to formaldehyde and by the use of other personal protective equipment such as goggles and face shields?				
29 CFR 1910. 1048(i)(1)	Have change rooms as described in 29 CFR 1910. 141 been provided for employees who are required to change from work clothing to protective clothing to prevent skin contact with formaldehyde?				
29 CFR 1910. 1048(l)(1)(i)	Have medical surveillance programs been instituted for all employees at or exceeding the AL or exceeding the STEL?				
29 CFR 1910. 1048(l)(3)	Does the medical surveillance program include the following?: a. Administration of a medical disease questionnaire? b. Determination by the physician based on evaluation of the medical disease questionnaire of whether a medical examination is necessary for employees not required to wear a respirator?				
29 CFR 1910. 1048(l)(4)	Where medical examinations are required are they performed at the time of initial assignment and annually thereafter?				
29 CFR 1910. 1048(l)(5)	Were medical examinations made available as soon as possible to all employees who were exposed to formaldehyde in an emergency?				
29 CFR 1910. 1048(l)(7)	For each medical examination performed, was a written opinion obtained from the examining physician and provided to the affected employee(s) within 15 days of its receipt?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
29 CFR 1910.1048(n)(1)	Have all employees who are assigned to workplaces where there is a health hazard from formaldehyde participated in a training program? NOTE: A training program is not required when the employee can show, using objective data, that employees are not exposed to formaldehyde at or above 0.1ppm.				
29 CFR 1910.1048(n)(2)	Is information and training on formaldehyde provided to employees at the time of initial assignment and whenever a new hazard from formaldehyde is introduced into their work area?				
29 CFR 1910.1048(n)(2)	Is the training reported at least annually? NOTE: 29 CFR 1910.1048(n)(3) gives the required contents of the training program. - 1910.1048 contents - MSDS contents - Med. surveillance - purpose/description - potential health hazards (signs/symptoms) - reporting problems - formaldehyde work ops. & safe practices - PPE purpose and use - spills, emergencies/clean up - eng./work practices - emerg. procedures & duties				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
29 CFR 1910.1047(d)(2)(i)	Has initial monitoring been conducted to determine the airborne concentration of Ethylene Oxide (ETO) to which employees may be exposed?				
	and				
29 CFR 1910.1047(d)(1)(ii)	Have representative 8-hour Time-Weighted Average (TWA) employee exposures been determined on the basis of one or more samples representing full-shift exposure for each shift for each job classification in each work area? NOTE: Monitoring only one shift is acceptable if the employer can document that exposure levels are equivalent for similar operations on different shifts.				
	and				
29 CFR 1910.1047(d)(1)(ii)	Have representative 15-minute Excursion Limit (EL) exposures been determined on the basis of one or more samples representing 15-minute exposures associated with operations that are most likely to produce exposures at or above the EL of 5.0 ppm.				
	PERIODIC MONITORING				
29 CFR 1910.1047(d)(3)(i)	Is monitoring repeated every 6 months for employees exposed to ETO at or above the Action Level (AL) of 0.5 ppm but at or below the 8-hour TWA Permissible Exposure Limit (PEL) of 1.0 ppm?				
	and				
29 CFR 1910.1047(d)(3)(ii)	Is monitoring repeated every 3 months for employees exposed to ETO above the 8-hour TWA PEL?				
	and				
29 CFR 1910.1047(d)(3)(iv)	Is monitoring repeated every 3 months for employees exposed to ETO above the 15-minute EL?				
	and				
29 CFR 1910.1047(d)(5)	Is monitoring repeated whenever there is a change in the production, process, control equipment, personnel or work practices that may result in new or additional exposures?				
	EMPLOYEE NOTIFICATION				
29 CFR 1910.1047(d)(7)(i)	Are employees notified in writing within 15 days of receipt of monitoring results, either individually or by posting?				
	and				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
29 CFR 1910. 1047(d)(7)(ii)	Does written notification contain the corrective action taken to reduce exposures when they exceed one of the PELs (TWA or EL)?				
	REGULATED AREAS/SIGNS/LABELS				
29 CFR 1910. 1047(e)(1)	Is a "regulated area" established where occupational exposure to ETO exceeds or can be expected to exceed either of the PELs?				
29 CFR 1910. 1047(e)(2)	Is access to regulated areas limited to authorized persons?				
29 CFR 1910. 1047(j)(1)(i)	Are signs containing the following information used to demarcate regulated areas?: DANGER ETHYLENE OXIDE CANCER HAZARD AND REPRODUCTIVE HAZARD AUTHORIZED PERSONNEL ONLY RESPIRATORS AND PROTECTIVE CLOTHING MAY BE REQUIRED TO BE WORN IN THIS AREA				
29 CFR 1910. 1047(j)(1)(ii)	Are containers of ETO whose contents are capable of causing employee exposure at or above the AL labeled with the following legend?: DANGER CONTAINS ETHYLENE OXIDE CANCER HAZARD AND REPRODUCTIVE HAZARD				
	METHODS OF COMPLIANCE				
29 CFR 1910. 1047(f)(1)(i)	Have engineering controls and work practices been instituted where feasible to reduce exposures exceeding the TWA and/or EL PELs?				
29 CFR 1910. 1047(f)(2)(i)	Where the TWA or EL is exceeded, has the activity established and implemented a written program to reduce exposures? and				
29 CFR 1910. 1047(f)(2)(ii)	Does the written compliance program include a schedule for periodic leak detection surveys? and				
29 CFR 1910. 1047(f)(2)(iii)	Is the compliance plan reviewed at least every 12 months and updated as necessary.				
	PPE				
29 CFR 1910. 1047(g)(1)	Does the activity provide respirators and ensure they are used where required?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	- During installation of engineering and work practice controls? - During operations for which engineering controls are not feasible? - During emergencies? and				
29 CFR 1910. 1047(g)(2)	Are respirators provided at no cost to the employee and their use enforced? and				
29 CFR 1910. 1047(g)(2)(ii)	Are respirators selected from those approved by MSHA/NIOSH for protection against ETO?				
29 CFR 1910. 1047(g)(4)	Are protective clothing and equipment provided and its use enforced where eye or skin contact with liquid ETO or ETO solutions may occur?				
	EMERGENCY PLANS				
29 CFR 1910. 1047(h)(1)(i)	Has a written plan for emergency situations been developed for each workplace where there is a possibility of an emergency? and				
29 CFR 1910. 1047(h)(1)(ii)	Does the plan specifically require respiratory protection for employees correcting emergency conditions? and				
29 CFR 1910. 1047(h)(1)(iii)	Does the plan include the elements prescribed in 29 CFR 1910.38 "Employee emergency plans and fire prevention plans"? NOTE: The following are required: (1) Emergency escape procedures and emergency escape route assignments. (2) Procedures to be followed by employees who remain behind for critical operations. (3) Procedures to account for all employees after emergency evacuation has been completed. (4) Rescue and medical duties for those employees who are to perform them. (5) The preferred means of reporting fires and other emergencies.				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	(6) Names or regular job titles of persons or departments who can be contacted for further information.				
	and				
29 CFR 1910. 1047(h)(2)	Has a means to alert employees to the possibility of ETO exposure during emergencies been developed?				
	MEDICAL SURVEILLANCE				
29 CFR 1910. 1047(i)(1)(i)	Has the activity instituted a medical surveillance program for employees: - Who are exposed above the AL for at least 30 days per year? - Who have been exposed to ETO in an emergency situation?				
	and				
29 CFR 1910. 1047(i)(2)(i)	Are medical examinations available at the following times?: - Prior to assignment to areas with ETO exposures? - Annually for employees exposed above the AL? - At termination of employment or reassignment? - As appropriate for emergency exposures? - If signs and symptoms of overexposure occur? - As the physician deems necessary?				
	and				
29 CFR 1910. 1047(i)(2)(ii)	Do medical examinations include the following: - A medical and work history? - A physical examination? - A complete blood count?				
29 CFR 1910. 1047(i)(3)	Is the following information provided to the examining physician? - A copy of 29 CFR 1910.1047 and its Appendices? - A description of employees duties? - Employee's actual/anticipated exposure levels? - Respirators/personal protective equipment used? - Information from previous examinations?				
29 CFR 1910. 1047(i)(4)(i)	Is a written opinion obtained from the examining physician which contains:				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	- Results of the medical examination? - Presence of any medical conditions which places the employee at increased risk? - Any recommended limitations on the employee or upon the use of personal protective clothing, equipment or respirators? - A statement that the employee has been informed by the physician of the results of the medical examination?				
	and				
29 CFR 1910. 1047(i)(4) (iii)	Are employees provided a copy of the physician's written opinion within 15 days of receipt?				
	TRAINING PROGRAM				
29 CFR 1910. 1047(j)(3)(i)	Do employees potentially exposed to ETO at or above the AL or the EL receive information and training on ETO at the time of initial assignment and annually thereafter?				
29 CFR 1910. 1047(j)(3) (ii)	Are employees informed of: - Requirements of 29 CFR 1910.1047 and its Appendices A and B? - Any operations in their work area where ETO is present? - Location and availability of the ETO Standard? - The medical surveillance program with an explanation of the information in Appendix C (Medical Surveillance Guidelines for ETO)?				
	and				
29 CFR 1910. 1047(j)(3) (iii)	Does employee training include: - Methods and observations to detect the presence or release of ETO? - Physical and health hazards of ETO? - Measures employees can take to protect themselves from ETO hazards, including procedures the employer has implemented to protect employees (controls, work practices, alarms, personal protective equipment, respiratory protection, etc.)? - Details of the hazard communication program, including an explanation of the labeling system and how to obtain and use hazard information?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
1910.1028(c) 1910.1028(b)	PEL = 1 ppm TWA, STEL = 5 ppm/15 min, AL = 0.5 ppm TWA Does the activity have operations/processes that involve potential employee exposure to benzene? (e.g., benzene concentration $\geq$ 0.1%)				
1910.1028(a)	NOTE: Exclusions to standard: (Not all listed) 1. Storage, transportation, sale, distribution, dispensing and use of gasoline, motor fuels, or other fuels containing benzene. 2. After September 12, 1989 liquids containing $\leq$ 0.1% benzene. 3. Cleaning and repair of barges and tankers which have contained benzene are excluded from certain compliance and monitoring requirements.				
1910.1028(e)(1)(i)	Have employees been monitored to determine their exposure to benzene using breathing zone air samples?				
1910.1028(e)(1)(ii)	Were samples taken representative of 8-hr TWAs?				
1910.1028(e)(1)(iii)	Were samples taken representative of the STEL as appropriate?				
1910.1028(e)(3)	Was periodic monitoring performed where required? a. At or above AL but at or below PEL - annual b. Above PEL - every 6 months c. STEL - repeated as necessary to evaluate				
1910.1028(e)(7)(i)	Were employees notified in writing (posting acceptable) of sampling results within 15 working days receipt?				
1910.1028(f)(1)	Were engineering and work practice controls instituted where feasible to reduce and maintain employee exposure to benzene at or below the PEL? NOTE: PPE may be primary control if benzene used less than 30 days, or where respirators are required.				
1910.1028(f)(2)	When exposures are above the PEL, has a written program been established and implemented to reduce employee exposures?				
1910.1028(g)(2)(i)	Where respirators are required or allowed, are they selected from Table 1?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
1910.1028(h)	Is personal protective clothing and equipment provided and worn where appropriate to prevent eye contact and limit dermal exposure to liquid benzene?				
1910.1028 (i)(1)(i)	Has a medical surveillance program been instituted for the following employees: a. employees exposed at or above the AL, 30 or more days a year. b. employees exposed at or above the PEL, 10 or more days a year.				
1910.1028 (i)(2)(i)	Is a medical examination provided before the time of <u>initial</u> assignment? and Does it include: (1) detailed occupational history (2) complete physical exam (3) appropriate laboratory tests (CBC required) (4) additional tests as necessary (5) a pulmonary function test for personnel who use respirators more than 30 days a year				
1910.1028 (i)(3) and 1910.1028 (i)(5)	Are periodic medical examinations given: a. annually b. additionally, whenever an employee develops any signs or symptoms associated with toxic exposures?				
1910.1028 (i)(4)	Were appropriate medical examinations provided for emergency exposure situations?				
1910.1028 (i)(7)(i)	For each medical examination, was a written medical opinion obtained from the examining physician and provided to the affected employee within 15 days?				
1910.1028 (i)(8)	Has a medical removal plan been implemented where appropriate?				
1910.1028 (j)(1)(i)	Have appropriate signs been posted at entrances to benzene regulated areas?				
1910.1028 (j)(1)(ii)	Are containers appropriately labeled?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	DANGER BENZENE CANCER HAZARD FLAMMABLE-NO SMOKING AUTHORIZED PERSONNEL ONLY RESPIRATOR REQUIRED				
1910.1028 (j)(3)(i)	Have employees, who are assigned to work areas where benzene is present, participated in a training program? Is training provided at the time of initial assignment and annually thereafter where exposures exceed the AL?				

REFERENCE	OSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
NAVMEDCOMINST 6570.1, par. 3.a.	Is an antineoplastic drug officer appointed to manage and monitor the antineoplastic drug control program?				
NAVMEDCOMINST 6570.1, par. 3.b.(1)	Are all antineoplastic drugs used or stored in the facility listed on a registry maintained by the occupational medicine division?				
NAVMEDCOMINST 6570.1 par. 3.b.(2)	Are all personnel who may be required to work with (preparation, administration, disposal or spills) antineoplastic drugs included in a training program?				
OSHA PUB. 8-1.1 IV. H.2.	NOTE: Knowledge and competence of personnel should be evaluated after the first training session and then annually?				
NAVMEDCOMINST 6570.1, par. 3.b.(3) Encl. (6)	Are personnel routinely exposed to chemotherapeutic agents in the course of admixture, compounding and administration included in a medical surveillance program (preplacement and annually).				
NAVMEDCOMINST 6570.1, par. 3.b.(4)	Is there an emergency plan covering spillage and accidents involving antineoplastic drugs?				
NAVMEDCOMINST 6570.1, par. 3.b.(6)	Is a log of all staff who are required to work or come in contact with antineoplastic drugs permanently maintained by the occupational health officer?				
NAVMEDCOMINST 6570.1, par. 3.c.	Are inspections conducted and findings reviewed annually to verify acceptable conformance with NAVMEDCOMINST 6570.1 and OSHA PUB 8-1.1?				
NAVMEDCOMINST 6570.1, par. 3.	If the command is unable to comply with NAVMEDCOMINST 6570.1, have they obtained written approval from BUMED prior to using any antineoplastic drugs?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	Are operations involving Man-Made Vitreous Fibers (MMVF) (e.g. lagging removal/ripout, non-matrixed refractory lining) conducted? If yes continue:				
	PEL's, Fibrous glass - 10mg/m^3, Mineral wool - 10 mg/m^3, Refractory ceramics - 15 mg/m^3, Action Level - 1/2 the PEL				
	WORKPLACE CONTROLS				
OPNAVINST 5100.23C, sec. 2604.b. (1)	Are wet methods utilized whenever possible when MMVF operations are conducted?				
OPNAVINST 5100.23C, sec. 2604.b. (2)	Are containments provided if needed to keep exposures below the PEL during removal procedures, including glove bags where applicable?				
OPNAVINST 5100.23C, sec. 2604.b. (3)	Are work areas vacuumed at the end of each shift using a HEPA vacuum?				
OPNAVINST 5100.23C, sec. 2604.b. (4)	Are personnel involved in MMVF operations prohibited from eating, drinking, smoking, chewing tobacco or gum, and applying cosmetics while in the work area?				
	VENTILATION				
OPNAVINST 5100.23C, sec. 2604.c. (1)	Are ventilation systems used to control MMVF exposures designed, constructed installed and maintained in accordance with specified references?				
OPNAVINST 5100.23C, sec. 2604.c. (2)	Are powered tools used for machining MMVF products (i.e., saws, drills, grinders) equipped with local exhaust to collect dust at the source?				
	PERSONAL PROTECTIVE EQUIPMENT				
OPNAVINST 5100.23C, sec. 2604.d. (1)	Are personnel working with MMVF materials required to wear eye protection, long sleeved clothing, impenetrable gloves, and coveralls? If non-disposable coveralls are used, are they thoroughly vacuumed prior to leaving the work area and laundered separately from other clothing before wearing again?				
OPNAVINST 5100.23C, sec. 2604.d. (2)	Do personnel who experience skin irritation ensure long sleeved clothing is closed at the neck and wrists?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 5100.23C, sec. 2604.d. (4)	Are personnel handling MMVF materials required to wash thoroughly with soap and water before breaks and at the end of the shift? (end of shift showering is recommended)				
	DISPOSAL PROCEDURES				
OPNAVINST 5100.23C, sec. 2605.	Is MMVF waste adequately wetted before being placed in heavy duty plastic bags or other suitable impermeable containers for disposal?				
	TRAINING				
OPNAVINST 5100.23C, sec. 2606.a.	Are personnel who work with or handle MMVF or who may be exposed to MMVF in excess of the action level (AL) trained prior to, or at the time of initial assignments and annually thereafter in the following: (1) health effects/hazards of MMVF (2) uses of MMVF products which could result in exposure. (3) engineering controls and work practices (4) purpose, proper use, and limitations of PPE required when working with MMVF. NOTE: Training records shall be maintained in accordance with Chapter 6 of OPNAVINST 5100.23C				
	INDUSTRIAL HYGIENE SURVEILLANCE				
OPNAVINST 5100.23C, sec. 2607.a.	Is a workplace monitoring plan established to characterize exposures for employees occupationally exposed to MMVF above the AL (1/2 the PEL)? NOTE: If the initial sampling or the periodic monitoring results statistically indicate that personnel exposure are below the AL routine monitoring of personnel may be discontinued.				
	AND				
OPNAVINST 5100.23C, sec. 2607.c.	Is monitoring conducted whenever changes in production, engineering controls, work practices, or personnel occur?				
	AND				
OPNAVINST 5100.23C, sec. 2607.d.	Are breathing zone air samples representative of the 8 hour TWA of each employee collected using NIOSH analytical method 0500 or 0600 as appropriate?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	MMVF MEDICAL SURVEILLANCE				
NAVINST 5100.23c, sec. 2608.	Is medical surveillance conducted in accordance with NEHC-TM91-5? NOTE: NEHC-TM91-5 requires annual physicals for personnel exposed above the medical surveillance AL (1/2 of PEL) for more than 30 days per year or 10 days per quarter.				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	Are operations involving PCB's conducted at the activity (e.g., retrofilling PCB-containing electrical transformers, removing PCB-impregnated felts or gaskets, or working with synthetic rubber or plasticizers.				
	If yes				
	Permissible Exposure Limits (PEL's)				
OPNAVINST 5100.23C, sec. 2503.a	NOTE: The PEL's for PCB's are: (1) Chlorodiphenyl (42 percent Chlorine)- 1.0 mg/m^3 (2) Chlorodiphenyl (54 percent chlorine)- 0.5 mg/m^3				
	General Workplace Control Practices				
OPNAVINST 5100.23C, sec. 2504.a. (1)	Are good housekeeping procedures strictly observed to avoid the possibility of secondary surface contamination when working with PCB1-impregnated materials?				
OPNAVINST 5100.23C, sec. 2504.a. (2)	Are personnel involved in PCB related work activities forbidden to eat, drink, smoke, chew tobacco or gum, or apply cosmetics in the work area?				
OPNAVINST 5100.23C, sec. 2504.a. (3)	Is PCB containing waste, scrap, and debris, and PCB-contaminated clothing (consigned for disposal) collected and disposed of in sealed impermeable bags or other impermeable containers and are the containers properly labeled?				
OPNAVINST 5100.23C, sec. 2504.a. (4)	Is hot work forbidden in the immediate area when work is performed with PCB material?				
	Personal Protective Equipment				
OPNAVINST 5100.23C, sec. 2503.b.	Are personnel's skin exposure to PCB's prevented or reduced to the extent necessary through the use of engineering controls, work practices, or PPE, such as gloves, coveralls, goggles, or other appropriate PPE?				
OPNAVINST 5100.23C, sec. 2504.b. (1)	Are personnel engaged in handling PCB-contaminated or PCB-impregnated material during which skin contact with PCBs is considered probable required to wear the following PPE: (a) Full-body, one-piece disposable coveralls constructed of Tyvek® material or comparable substitute material. (b) Nitrile 6, Vitron®, Neoprene or butyl gloves				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	(c) Nitrile or neoprene foot coverings if the work situation involves the probability of foot contamination by any means.				
	(d) Face shield, vented goggles or other appropriate eye protective equipment shall be provided and used wherever the possibility of eye contact exists.				
OPNAVINST 5100.23C, sec. 2504.b. (2)	In work situations where it is likely that workers' clothing will be saturated with PCB containing liquids are protective clothing materials selected from ACGIH Guidelines for the selection of chemical protective clothing and does the protective clothing have "greater than 24 hours" breakthrough times?				
	Respiratory Protection				
OPNAVINST 5100.23C sec. 2504.c. (2)	Where air sampling results indicate that the PEL's for PCB's have been exceeded is a supplied air (Type 2) respirator having a full facepiece and operated in the pressure-demand or other positive-pressure mode used?				
	Medical Surveillance Program				
OPNAVINST 5100.23C, sec. 2505	Is the medical surveillance requirements of the NEHC Technical Manual, "Medical Surveillance Procedures Manual and Medical Matrix" followed for PCB exposed personnel?				
NEHC-TM 91-5, pages 4-149-150	NOTE: Placement in Medical Surveillance Program is for personnel exposed to PCB's above the medical surveillance action level (1/2 the PEL) based on airborne concentrations of PCB's.				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	Does the activity have employees with occupational exposures to bloodborne pathogens? NOTE: Occupational exposure means reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employees duties.				
29 CFR 1910. 1030(c)(1)	Has the activity established a written Exposure Control Plan designed to eliminate or minimize employee exposure, and does the plan contain the following elements: (1) The exposure determination required by paragraph (c)(2)? (2) The schedule and method of implementation for methods of compliance, hepatitis B vaccination and post-exposure evaluation and follow-up, communication of hazards to employees, and recordkeeping? (3) The procedure for the evaluation of circumstances surrounding exposure incidents?				
29 CFR 1910. 1030(c)(1)(iii)	Is the Exposure Control Plan accessible to employees?				
29 CFR 1910. 1030(c)(1)(iv)	Is the Exposure Control Plan reviewed and updated at least annually and whenever necessary to reflect new or modified tasks and procedures which affect occupational exposure and to reflect new or revised employee positions with occupational exposures?				
29 CFR 1910. 1030(c)(2)	Has the activity prepared an exposure determination and does it contain the following: (1) A list of all job classifications in which all employees have occupational exposure? (2) A list of job classifications in which some employees have occupational exposure? (3) A list of all tasks and procedures or groups of closely related tasks and procedures in which occupational exposure occurs and that are performed by employees in job classifications identified as having occupational exposure?				
29 CFR 1910. 1030(d)(1)	Does the activity observe universal precautions to prevent contact with blood and other potentially infectious material? (See 1030 (d)(2))				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
29 CFR 1910. 1030(d)(2)	Has the activity used engineering and work practice controls to eliminate or minimize employee exposure?				
29 CFR 1910. 1030(f)(2)(i)	Is hepatitis B vaccination made available to all employees who have occupational exposure after the employee has received the required training and within 10 working days of initial assignment? NOTE: Vaccination is not necessary if the employee has previously received the complete hepatitis B vaccination series, or if antibody testing has revealed that the employee is immune, or if the vaccine is contraindicated for medical reasons. An employee who declines the vaccination by signing the statement in Appendix A of the standard may still receive the vaccination at no cost at a later date.				
29 CFR 1910. 1030(f)(3)	Following a report of an exposure incident, does the activity immediately make available to the exposed employee a confidential medical evaluation and follow-up including at least the following elements: (1) Documentation of the routes of exposure, and the circumstances under which the exposure incident occurred? (2) Identification and documentation of the source individual, unless the activity can establish that identification is not feasible or prohibited by state or local law? (3) Testing of the source individual's blood as soon as feasible and after consent is obtained to determine HBV and HIV infectivity? (4) Collection and testing of the exposed employee's blood for HBV and HIV serological status? (5) Post-exposure prophylaxis, when medically indicated? (6) Counseling? (7) Evaluation of reported illnesses?				
29 CFR 1910. 1030(f)(4)(i)	Does the healthcare professional, who is responsible for the employee's hepatitis B vaccination, have a copy of 29 CFR 1910.1030?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
29 CFR 1910.1030(f)(4)(ii)	Is the healthcare professional, who is evaluating an employee after an exposure incident, provided the following information: (1) A copy of 29 CFR 1910.1030? (2) A description of the exposed employee's duties as they relate to the exposure incident? (3) Documentation of the routes of exposure and the circumstances under which exposure occurred? (4) Results of the source individual's blood testing, if available? (5) All medical records relevant to the appropriate treatment of the employee including vaccination status?				
29 CFR 1910.1030(f)(5)	Does the activity obtain and provide the employe with a copy of the evaluating healthcare professional's written opinion within 15 days of the completion of the evaluation?				
29 CFR 1910.1030(h)(1)	Does the medical record for each employee with occupational exposure include the following: (1) The name and social security number of the employee? (2) The employee's hepatitis B vaccination status, including the dates of all the vaccinations? (3) All results of examinations, medical testing, and follow-up procedures? (4) A copy of the healthcare professional's written opinion? (5) A copy of the information provided to the healthcare professional?				
29 CFR 1910.1030(g)(2)(i)	Have all employees with occupational exposure participated in a training program provided at no cost to the employee and during working hours?				
29 CFR 1910.1030(g)(2)(ii)	Is training provided as follows: (1) At the time of initial assignment to tasks where occupational exposure may take place? (2) Within 90 days after the effective date of the standard? (3) At least annually thereafter?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARK
29 CFR 1910. 1030(2)(vii)	Does the training program contain, as a minimum, the following elements: (1) An accessible copy of 29 CFR 1910.1030 and an explanation of its contents? (2) A general explanation of the epidemiology and symptoms of bloodborne diseases? (3) An explanation of the mode of transmission of bloodborne diseases? (4) An explanation of the activity's exposure control plan and the means by which the employee can obtain a copy of the written plan? (5) An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials? (6) An explanation of the use and limitations of methods that will prevent or reduce exposure including appropriate engineering controls, work practices, and personal protective equipment? (7) Information on the types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment? (8) An explanation of the basis for selection of personal protective equipment? (9) Information on the hepatitis B vaccine, including information on its "efficacy", safety, method of administration, the benefits of being vaccinated, and that the vaccine and vaccination will be offered free of charge? (10) Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials? (11) An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available? (12) Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident? (13) An explanation of the signs and labels and/or color coding required by 29 CFR 1910.1030(g)(1)? (14) An opportunity for interactive questions and answers with the person conducting the training session?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
[illegible] CFR 1910.1100.0(h)(2)(i) [illegible]ar.	Do training records include the following information: (1) The dates of the training sessions? (2) The contents or a summary of the training sessions? (3) The names and qualifications of persons conducting the training? (4) The names and job titles of all persons attending the training sessions?				
29 CFR 1910.1030(h)(2)(ii)	Are training records maintained for three years from the date of training?				

REFERENCE	OSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
NAVFACINST 5100.11H par. 1.2.2	Is the head of the OSH office a Safety Engineer?				
NAVFACINST 5100.11H par. 2.8.2	Is a mishap analysis conducted at least quarterly?				
NAVFACINST 5100.11H par. 3.5.1	Is there a "Design Representative for Safety" and "Planning Representative for Safety" designated to serve as primary liaison for all matters pertaining to OSH? Is the name, GS or GM series and grade, organizational code and phone number sent to Headquarters (09K) at the start of each fiscal year?				
NAVFACINST 5100.11H par. 3.7	Has the EFD designated in writing, with a separate copy to Headquarters (09K), an engineer to be the activity's "System Safety Engineer"?				
NAVFACINST 5100.11H par. 3.8	Has a NAVMEDCOM Industrial Hygienist been assigned to the EFD?				
	If yes, then:				
NAVFACINST 5100.11H par. 3.8.1	Has the EFD provided physical and administrative support for the industrial hygienist?				
	and				
NAVFACINST 5100.11H par. 3.8 and Appendix C	Has the industrial hygienist completed NAVSAFSCHOL courses SS400 and ST300?				
NAVFACINST 5100.11H par. 4.5.1	Does each prime contractor give the ROICC/OICC/OIC a copy of the mishap record or report which was made to meet OSHA requirements?				
NAVFACINST 5100.11H par. 4.5.2	Is OSHA Form 200 or equivalent sent to the EFD from field level OICCs, OICs and ROICCs on a monthly or quarterly basis?				
NAVFACINST 5100.11H par. 4.4	Does the EFD inspect construction contract work? If yes, is there a formal training program on safety and health in contract construction operations?				
	Do all construction engineers/inspectors/representatives take this training?				
NAVFACINST 5100.11H par. 5.10(1)	Does the safety manager review all contracts involving environmental work to assure appropriate statements of work are included, hazard control techniques are properly applied, and all safety and health requirements are addressed?				

REFERENCE	OSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
NAVFAC ltr 05A1/181 of 4/11/91	Has the activity established a comprehensive environmental training plan?				
NAVFAC ltr 05A1/181 4/11/91 Encl (2)	Are personnel medically evaluated by the local Navy medical clinic to determine if they are physically able to perform the rigors of OSHA mandated environmental training while wearing personal protective equipment.				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	- Designation of personnel responsible for chemical hygiene plan and assigrment of a Chemical Hygiene Officer - Provisions for additional protection for work with particularly hazardous substances				
	Employees Information and Training				
29 CFR 1910. 1450(f)(1)	Does the employer provide employees with information and training to ensure they are apprised of the hazards of chemicals present in their work area?				
	Medical Consultation and Medical Examinations				
29 CFR 1910. 1450(g)(1)	Does the employer provide all employees who work with hazardous chemicals an opportunity to receive medical attention, including any follow-up examination which the examining physician determines to be necessary when: (a) An employee develops signs or symptoms associated with a hazardous chemical. (b) Where exposure monitoring exceeds the action level (or in the absence of an action level, the PEL) for a regulated substance. (c) Whenever an event in the work area results in the likelihood of a hazardous exposure.				
	Recordkeeping				
29 CFR 1910. 1450(j)(1)	Does the employer establish and maintain an accurate record of any measurements to monitor employee exposures and any medical consultations and examinations?				

REFERENCE	OSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
29 CFR 1910.1027(a)	Are operations involving cadmium conducted at the activity (e.g., melting, spray painting, burning, blasting paint or metalizing etc.)?				
29 CFR 1910.1027(d)(1)(i) and 1027(d)(4)	Have all operations involving cadmium been monitored initially and/or after any work process or control change? NOTE: Further sampling not required if initial measurements are below AL and sampling is conducted twice with at least seven days separating sampling dates.				
29 CFR 1910.1027(d)(3)(i)	Are all operations where exposures are above the Action Level (AL) of 2.5 ug/m^3 monitored every 6 months or less or whenever they occur until two consecutive sample sets, collected at least 7 days apart indicate that other sampling frequencies in the instruction are appropriate?				
	NOTIFICATION				
29 CFR 1910.1027(d)(5)(i)	Are all affected employees notified individually in writing by the command within 15 working days of receipt of cadmium monitoring data and have the results been posted in a common area?				
29 CFR 1910.1027(e)(2)(i)	Where the Permissible Exposure Level (PEL) is exceeded has the command established and implemented a written compliance program to reduce employee exposure to or below the PEL by means of engineering and work practice controls?				
	RESPIRATORS				
29 CFR 1910.1027(g)(2)(i)	Are respirators for cadmium work selected based on the selection table 2 of the standard?				
	AND				
29 CFR 1910.1027(g)(1)(ii)	Are air powered air-purifying respirators with HEPA filters available in lieu of negative pressure respirators upon employee request and if they provide adequate protection?				
29 CFR 1910.1027(g)(4)(ii)	Are quantitative/qualitative respirator face fit tests performed at the time of initial fitting and at least annually thereafter for all personnel exposed above the AL who wear a tight fitting air purifying respirator (either negative or positive pressure)? NOTE: Qualitative fit tests may be used only for respirators where exposures are less than 10 times the PEL.				

REFERENCE	OSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	PPE				
	NOTE: For personnel in situations where concentrations can exceed the PEL or where the possibility of skin and eye irritation exists.				
29 CFR 1910.1027(i)(1) thru 1027(i)(2)	Is protective clothing and equipment provided by the Navy and used by above employees?				
	AND				
29 CFR 1910.1027(i)(3)(i)	Does the command provide clean protective clothing at least weekly?				
	AND				
29 CFR 1910.1027(i)(3)(iii)	Does the command prohibit the removal of cadmium from protective clothing and equipment by blowing, shaking or any other means that disperses cadmium into the air?				
	CHANGE ROOMS				
29 CFR 1910.1027(j)(1)	Are change rooms/lunchrooms that comply with 29 CFR 1910.141 provided to employees who work where airborne cadmium concentrations exceed the PEL?				
	AND				
29 CFR 1910.1027(j)(2) and 29 CFR 1910.141(c)(3)	Do change rooms have separate clothing lockers for street clothes and protective clothing and equipment?				
29 CFR 1910.1027(j)(3)(i)	Are employees exposed above the PEL required to shower at the end of the shift?				
	MEDICAL SURVEILLANCE				
29 CFR 1910.1027(l)(1)(i)(A) and (l)(4)(i)	Are employees potentially exposed to airborne cadmium, at or above the AL for 30 days or more per year, in a medical surveillance program?				
	AND				
	Are employees who prior to the effective date of this section of the standard who might previously have been exposed to cadmium at or above the AL enrolled in the medical surveillance program?				

REFERENCE	OSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
	NOTE: Those employees may be removed from medical surveillance if the employer can demonstrate that the employee did not, prior to the effective date of this section, work for the employer in jobs with exposure to cadmium for an aggregated total of more than 60 months.				
9 CFR 1910. 1027(l)(2)(i) and (l)(4)(i)	Does it contain an initial (preplacement) medical evaluation, a periodic within one year after the initial examination, and biennial follow-up medical evaluations as outlined in the reference?				
	NOTE: Biological monitoring is to be conducted annually.				
	AND				
29 CFR 1910. 1027(l)(2)(ii)(A)-(I)	Does it contain: a detailed medical and work history, or update thereof; a complete physical examination with emphasis on blood pressure; respiratory, and urinary systems; a standard sized posterior-anterior chest x-ray; pulmonary function tests; biological monitoring; blood analysis; urinalysis, prostate palpitation for males over 40 years old; and any additional tests deemed appropriate by the examining physician?				
	AND				
29 CFR 1910. 1027(l)(2)(B)(1)-(3)	Did the biological monitoring include: 1. Cadmium in urine (CdU) 2. Beta-2 microglobulin in urine (B_2-m) 3. Cadmium in blood (CdB)?				
	AND				
29 CFR 1910. 1027(l)(10)(i)	Is a written signed medical opinion of the employee's health as it related to cadmium obtained from the examining physician for each medical examination performed on each employee?				
	AND				
29 CFR 1910. 1027(l)(15)(i)	Is a copy of the physicians written medical opinion provided to the examined employee within two weeks after receipt?				
	AND				
29 CFR 1910. 1027(l)(3)(ii)	Is a reassessment of occupational exposure to cadmium made within two weeks when biological monitoring tests show the level of CdU to exceed 3ug/gcr.				

REFERENCE	OSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
29 CFR 1910. 1027(l)(3)(c)(2)(iii)	Are employees reassigned to non-cadmium work when their biological monitoring results indicate that: cdu exceeds 15ug/gOcr; or cdB exceeds 15ug/luG; or B_2-m exceeds 1500ug/gCR, and in addition cdu exceeds 3ug/gcr or cdB exceeds 5ug/liter of whole blood?				
	ENGINEERING/WORK PRACTICES				
29 CFR 1910. 1027(k)(1)	Are all surfaces maintained as free of cadmium dust as is practical?				
29 CFR 1910. 1027(f)(3)(i)	Are ventilation systems used to control cadmium exposures measured as necessary to maintain their effectiveness?				
	TRAINING				
29 CFR 1910. 1027(m)(4)(i) and (ii)	Have all personnel who work in areas where employees are potentially exposed to cadmium received initial training? Annual training?				
	AND				
29 CFR 1910. 1027(m)(4)(iii)(A) thru (H)	Does the training include as a minimum (a) specific nature of the operations during which exposure is possible, (b) purpose, proper selection, fit testing, use and limitations of respirators, and protective clothing, (c) the measures employees can take to protect themselves from exposure to cadmium, including modification of such habits as smoking and personal hygiene, and specific procedures the employer has implemented to protect employees from exposure to cadmium such as appropriate work practices, emergency procedures, and the provision of personal protective equipment, (d) purpose and description of the medical surveillance program, including medical removal protection benefits, (e) engineering controls and work practices to be applied and used in the employee's job, (f) the contents of this standard and its appendices and (g) the employees right of access to records under 1910.20(g)(1) and (2).				
	LABELING/DISPOSAL				
29 CFR 1910. 1027(k)(7)	Are all waste, scrap, debris, bags, containers, PPE, and clothing contaminated with cadmium and consigned for disposal, collected and disposed of in sealed impermeable containers and labeled in accordance with paragraph (m)(2).				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
OPNAVINST 6250.4A, Encl. (1), Part I, par. 2.a.	Have all installations which proform more than 0.5 workyears of pest control effort developed, executed, and maintained a comprehensive pest management plan (PMP)?				
OPNAVINST 6250.4A, Encl. (1), Part (I), par. 6.f.	Does the PMP address hazardous spill management?				
OPNAVINST 6250.4A, Encl. (1), Part I, par. 3.b.	Are all pest control personnel trained and is 80 percent of an in-house work force certified under DOD pesticide applicator competency standards?				
OPNAVINST 6250.4A, Encl. (1), Part I, par. 4.	Are pest control operations performed by station forces directed from a shop designed for this function? Are new shops isolated from other structures or shop functions?				
NAVMED P-5010, ch. 8, sec. IV, par. 8-22 (2)(a)	Is as current listing of all pesticides in storage maintained and readily available for emergency use? The list should include the following information: Manufacturer or distributor, chemical name or group, concentration, type of formulation, (e.g., oil solution, dust), toxicity, quantity, flashpoint, type of container (e.g., glass, drum), common or brand name and EPA registration number.				
NAVMED P-5010, ch. 8, sec. IV, par. 8-22.(1)(f)	Are written safety procedures to be followed in case of pesticide spills posted? Do these procedures include the medical department, phone number, and the location of decontamination material?				
OPNAVINST 6250.4A, Encl. (1), Part I, par. 4.	Are individuals working with pesticides supplied with personal protective materials and equipment, emergency decontamination facilities, and separate laundry facilities for work clothing?				
OPNAVINST 6250.4A, Encl. (1), Part I, par. 4.	Are separate ventilation systems designated "clean" and "chemical" areas, and specialized disposal procedures addressed in designing and maintaining a pest control facility? Are adequate facilities for formulating pesticides, rinsing containers, and personal washing and showering available?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
NAVMED P-5010, ch. 8, sec. IV, par. 8-22(4)(a)	Is smoking prohibited in the pesticide handling area? Are "NO SMOKING" signs posted at the pesticide facility?				
NAVMED P-5010, ch. 8, sec. IV, par. 8-22.(1)	Is the formulation of pesticide performed in areas removed from office and locker spaces?				
NAVMED P-1050, ch. 8, sec. IV, par. 8-22(1)(a)	Is the pesticide handling area capable of containing spills?				
NAVMED P-5010, ch. 8, sec. IV, par. 8-22(1)	Is the pesticide formulation area equipped with a ventilation hood?				
NAVMED P-5010, ch. 8, sec. IV, par. 8-22(2)(h)	Is the pesticide storage area liquid tight with a raised sill or a floor at least 4 inches below the surrounding floor?				
NAVMED P-5010, ch. 8, sec. V, par. 8-22(2)(g)	Is the pesticide storage area constructed of fire resistant material with a concrete floor and good lightning?				
NAVMED P-5010, ch. 8, sec. IV, par. 8-22(2)(h)	Is the pesticide storage equipped with self-closing fire doors?				
NAVMED P-5010, ch. 8, sec. IV, par. 8-22(2)(e)	Is the pesticide storage area locked, posted, and restricted from unauthorized personnel?				
NAVMED P-5010, ch. 8, sec. IV, par. 8-22(2)(g)	Does the pesticide Storage Facility's ventilation system provide at least six fresh air changes per hour?				
NAVMED P-5010, ch. 8, sec. IV, par. 8-22(2)(g)	Is the light and exhaust switch with a pilot light located outside the door to the pesticide storage area? Is it marked with a sign reading: **"OPERATE VENTILATION SYSTEM DURING OCCUPANCY"**				
OPNAVINST 6250.4A, Encl. (1), Part I, par. 6.F.	Are pesticide spill kits ready-to-use in every pesticide storage/mixing facility and in each vehicles used to transport or apply pesticides?				
OPNAVINST 6250.4A, Encl. (1), Part I, par. 4.	Are single - purpose trucks (not passenger vehicles or vans) equipped with lockable compartments provided?				
OPNAVINST 6254.4A, Encl. (1), Part I, par. 4.	Are pesticide transported and stored away from the passenger compartment? Is personal protective equipment segregated at all times?				

REFERENCE	NAVOSH PROGRAM ELEMENT	YES	INAD	NO	REMARKS
VMED P-5010, . 8, sec. IV, par. 8-23(11)	Is all movable equipment used for handling pesticide containers designated as pest control equipment? Is such equipment decontaminated prior to removal from the work area?				
NAVMED P-5010, ch. 8, sec. IV, par. 8-22.(2)(c)	Has the medical department been informed of the potential for pesticide poisoning so the proper antidotes are available?				
OPNAVINST 6250.4A, Encl. (1), Part I, par. 5.c.	Does the medical department provide appropriate medical surveillance? (medical surveillance is primarily directed toward the measurement of cholinesterase activity to estimate inhibition by organophosphate and carbonate compounds) NOTE: Cholinesterase testing schedule (1)I Individuals exposed to organophosphate or carbamate pesticides labeled "Danger" during any part of 3 or more days per week - test every two weeks. (2) Individuals exposed to pesticides marked "Danger" during any part of 2 or fewer days per week and those individuals exposed to pesticides labeled "Warning" - test monthly. The above frequency of testing applies only during the period that the worker is exposed during 7 or more days in any 30 day period. (3) Personnel who only handle pesticides labeled "Caution" and those who handle pesticides labeled "Danger" or "Warning" less frequently than described above shall be tested annually.				