

## **FY 2006 Department of Homeland Security Annual Occupational Safety and Health Report to the Secretary of Labor**

**Fiscal Year:** 2006

**Date:** 21 December 2006

**Name of Department:** U.S. Department of Homeland Security

**Name of Component:** U.S. Coast Guard

**Address:** United States Coast Guard  
2100 2<sup>nd</sup> Street, S.W.  
Washington, D.C. 20953

**Number of Federal Civilian Employees covered by this report:**

Civilians : 7,282

Military : 42,745 (includes an end of year estimate of 1,526 active reservists.)

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## **U.S. Coast Guard Executive Summary**

The Coast Guard's FY-06 Annual Occupational Safety and Health (OSH) Report highlights the challenges and accomplishments of the service's safety and environmental health (SEH) program and summarizes its goals for the coming year. This report fulfills the Coast Guard's obligation to report the results of its safety program to the Department of Homeland Security (DHS).

Coast Guard civilian injuries and illnesses were again processed through Department of Transportation's (DOT) Workers' Compensation Information System (WCIS), as they have been since March 2003, when the Coast Guard transitioned from DOT to DHS. This will continue until such time as DHS adopts its own system. Data for this report came from a variety of sources: DOT/WCIS, Coast Guard Human Resources, and from the Coast Guard E-Mishap system. Our web-enabled E-Mishap system continues to enable field units to easily report military and civilian injuries through the internet.

Expanded Coast Guard operational response since 9/11 continued in FY-06. With the exception of the military on-duty total case rate and the civilian lost work day case rate, all other mishaps rates increased. We continue to believe that these increases are due, at least in part, to new missions, new equipment, and increased operational tempo. In FY-06, two military members died in an on-duty diving mishap, and 12 military members sustained fatal injuries in off-duty mishaps. The off-duty fatalities represent a 56% increase from FY-05, and exceed the 10-year average of 8.3 fatalities per year. Our greatest challenge continues to be translating on-duty operational risk management principles into off-duty behaviors, where motor vehicle mishaps, sports injuries, and other hazards of routine life continue to exact a troubling toll on lives and injuries.

In addition to the human impact and the negative effect on the Commandant's mandate for mission execution, injuries and illnesses and their associated costs continue to be a concern. Based on the 344 cases in the WCIS system, civilian injury and illness costs paid out in FY-06 again increased, even though the lost production day rate decreased by 16.5%. The overall Coast Guard civilian SHARE (Safety, Health, and Return to Employment) results were improved but mixed for FY-06. The total injury case rate, lost time case rate, and timeliness goals were met; the lost production day rate goal was not met.

In response to a series of operational mishaps in FY-06, the Commandant directed Area Commanders to conduct safety stand downs within their areas of responsibility. These stand downs were performed, results were reported, and a final report is being prepared for submission to the Commandant. Recommendations for best practices and lessons learned will be disseminated to field units following the Commandant's review of this report.

During FY-06, Coast Guard safety and environmental health personnel continued to provide substantial support to significant operational responses; including Hurricanes Katrina and Rita, numerous oil spills, a refinery release, a styrene tanker truck spill, a fuel oil barge spill, and a fuel facility fire. Support included classic environmental health expertise in the realm of food, water, sewage, and habitability, as well as site safety support for remediation activities. In each of these responses, the Coast Guard continued to stress risk management: balancing mission, environment, and expected outcomes to achieve the best results with the lowest risk. This risk management approach enables us to improve our readiness, to emphasize the growth, development and well being of our people, and to reinforce our stewardship of the public trust.

# United States Coast Guard

## INTRODUCTION

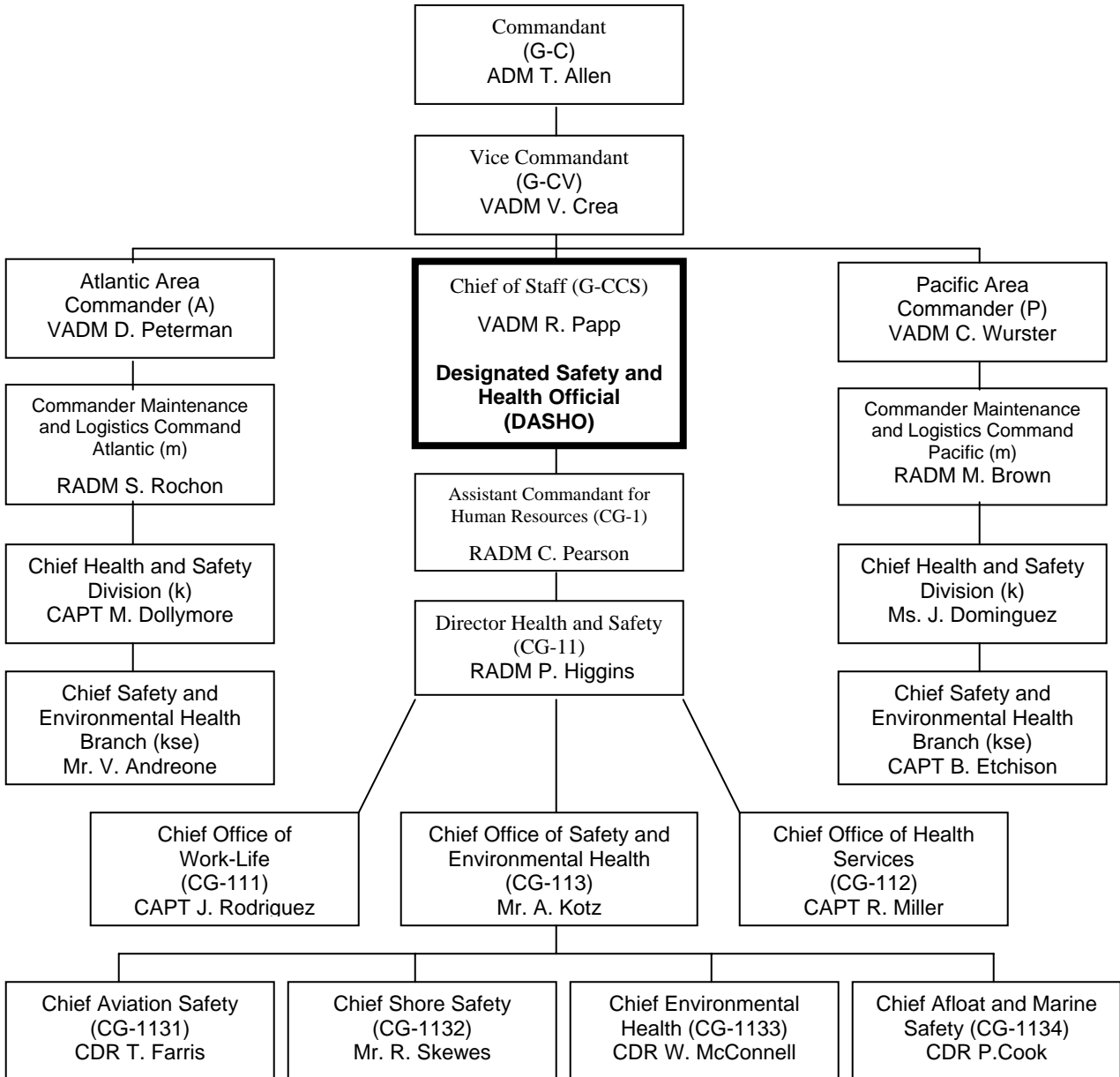
In FY-06 the Coast Guard was comprised of a 7,282 member civilian workforce and 42,745 military members, including an end-of-year estimate of 1,526 active duty reservists. We also have over 30,000 unpaid volunteer Auxiliarists (civilian volunteers). Although military members and military-specific operations may not be subject to OSHA jurisdiction, the Coast Guard's internal policy continues to apply and meet applicable OSHA regulations and standards. Accordingly, our safety program seeks to protect all members of our diverse workforce from injury and occupational disease, to minimize property losses, and to maintain operational readiness, thereby enabling mission execution.

The Coast Guard is a military service that is charged with five overarching roles: maritime safety, maritime mobility, maritime security, national defense, and protection of natural resources. Specific missions include: search and rescue, maintenance of aids to navigation, interdiction of drugs and illegal migrants, enforcement of fishery and other maritime laws, administration of bridges over navigable waterways, enforcement of environmental and pollution laws, securing of ports and waterways, domestic and international ice-breaking, emergency response, enforcement of commercial vessel safety regulations, recreational boating safety, marine safety, and homeland security. Fatigue and unusually long hours accompanied many of these missions, as the increases in operational demands in the wake of 9/11 continued throughout FY-06. These factors present unique challenges to the safety and environmental health program.

In the conduct of these missions, Coast Guard personnel take cutters, small boats, and aircraft, as well as themselves, into the most demanding environments, working long hours and often operating heavy or complex equipment. To safely carry out missions under such difficult conditions, the safety program relies on military and civilian employees using risk management principles to maximize mission effectiveness while minimizing risks. Operational Risk Management, Crew Endurance Management, Maintenance Resource Management, and Team Coordination Training protocols have been engrained into the Coast Guard culture by safety and environmental health personnel.

Coast Guard safety and environmental health policy is developed by the Office of Safety and Environmental Health (SEH), Commandant (CG-113), at Headquarters. SEH policies are implemented in the field with support from the two Maintenance and Logistics Commands (MLC); MLCPAC (Pacific) and MLCLANT (Atlantic). An organization chart is shown on the following page.

# U.S. COAST GUARD SAFETY AND ENVIRONMENTAL HEALTH FY05 ORGANIZATIONAL CHART

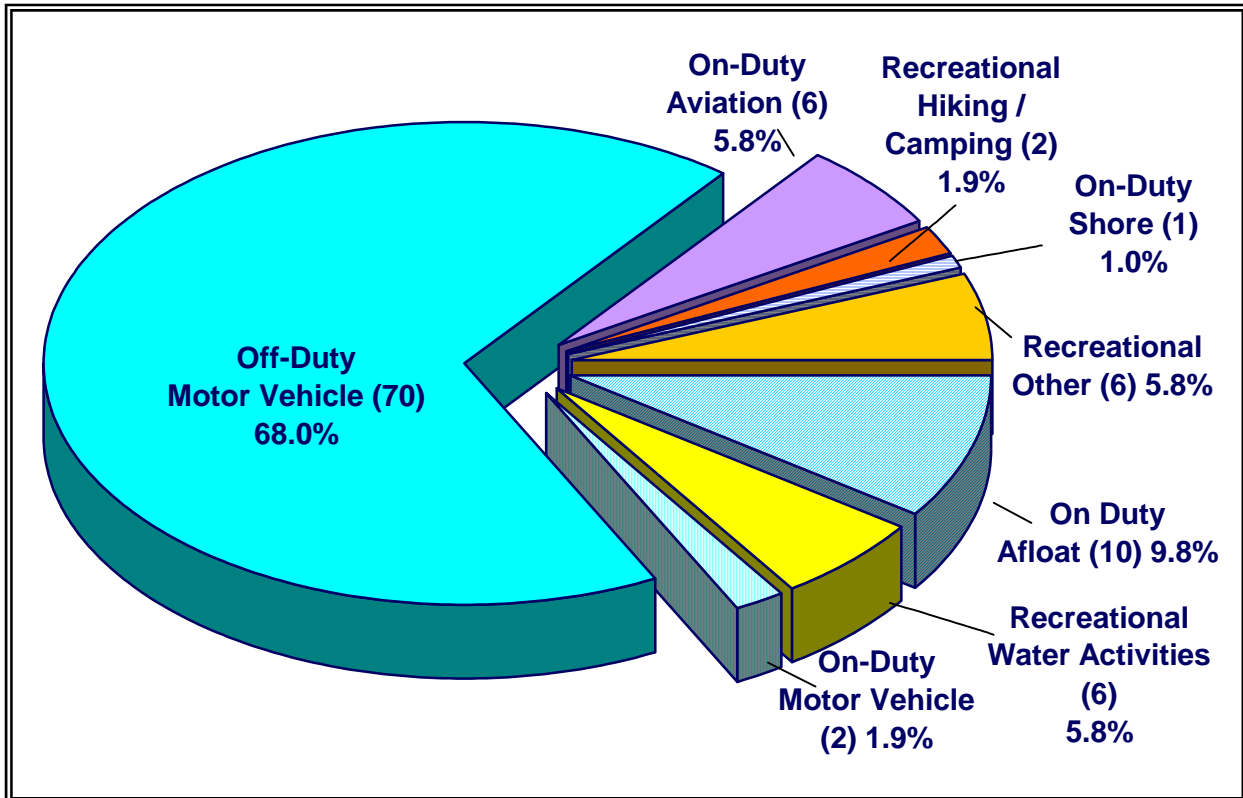


## 1. STATISTICS

**1a. INJURY / ILLNESS STATISTICS** -- The civilian injury/illness statistics were provided by USCG Human Resources (CG-1). At this time the USCG's civilian workers' compensation program remains with DOT. Military injury/illness statistics were provided through the Coast Guard E-Mishap System.

AGENCY: U.S. COAST GUARD						
	FY01	FY02	FY03	FY04	FY05	FY06
Civilian Population	6,022	6,442	6,697	6,937^	7,000^	7,282
Military Population	37,153	39,004	40,387 Includes an annual average of 2,103 reservists.	42,248 Includes 2,022 active reservists.	42,619* Includes an end of year estimate of 1,687 reservists.	42,745* Includes an end of year estimate of 1,526 reservists.
^Note: FY04 and 05 Civilian population figures are from GG-12A						
*Note: FY05 Military population figures are from GG-12A						
<b>TOTAL CASES INJURY/ILLNESS (number of injuries/illness with and without days away from work)</b>						
Civilian & Auxiliary	333	334	389	360	322	344
Military Total	786	1,175	1,140	1,158	1,149	1,206
Military On-Duty	364	553	521	587	594	534
Reserves On Duty			38	10	31	29
Military Off-Duty	422	622	581	561	524	643
<b>TOTAL CASE RATE (rate of all injury/illness cases per 100 employees)</b>						
Civilian	5.53	5.18	5.81	5.19	4.60	4.72
Military On-Duty	0.98	1.42	1.38	1.41	1.47	1.32
Military Off-Duty	1.14	1.59	1.44	1.33	1.23	1.50
<b>LOST TIME CASES (number of cases that involved days away from work)</b>						
Civilian	233	258	252	290	236	248
Military On-Duty	120	207	237	269	298	313
Military Off-Duty	189	359	376	397	393	508
<b>LOST TIME CASE RATE (rate of only the injury/illness cases with days away from work per 100 employees)</b>						
Civilian	3.87	4.00	3.76	4.18	3.37	3.41
Military On-Duty	0.32	0.53	0.59	0.64	0.70	0.73
Military Off-Duty	0.51	0.92	0.93	0.94	0.92	1.19
<b>LOST WORK DAYS (number of days away from work)</b>						
Civilian	837	569	485	634	608	529
Military On-Duty	753	1,030	2,195	1,997	2,320	2,387
Military Off-Duty	2,181	3,704	1,616	4,430	4,968	5,326
<b>LOST WORK DAY RATE (per 100 Employees)</b>						
Civilian	13.90	8.83	7.24	9.14	8.69	7.26
Military On-Duty	2.03	2.64	5.43	4.73	5.44	5.58
Military Off-Duty	5.87	9.50	4.00	10.49	11.66	12.46
<b>FATALITIES</b>						
Civilian	2 (Auxiliary)	0	0	0	0	0
Military On-Duty	2	0	1	0	0	2
Military Off-Duty	10	9	9	5	9*	12

## MISHAP FATALITY TRENDS FY1997 – FY2006



This look at the Coast Guard's fatality data for FY-97 to FY-06 reveals that of the 103 fatalities, on- and off-duty, which occurred over the last 10 years, the vast majority (69.9%) were due to motor vehicle accidents.

Since FY-97 it is evident that the majority of all fatalities (81.5%) occurred to off-duty Coast Guard Members:

- 68.0% (70 members) were lost to off-duty motor vehicle or motor vehicle-related mishaps.
- 13.5% (14 members) were lost to off-duty recreational activities.

In FY-06 there were 14 fatalities. There were 2 on-duty military fatalities, 12 off-duty military fatalities, and no civilian fatalities. The 2 on-duty fatalities were the result of a diving mishap. The 12 off-duty fatalities included 6 motor vehicle and 3 motorcycle mishaps, 2 swimming mishaps, and 1 accidental overdose.

The FY-06 fatality total represents a 56% increase when compared with a total of 9 fatalities in FY-05, all of which were off-duty military fatalities. The FY-06 figure is also above the average number of Coast Guard fatalities over the previous 5 years, which is 8.4 per year.

## 1b. OFFICE OF WORKERS' COMPENSATION PROGRAMS (OWCP) COSTS

AGENCY: U.S. COAST GUARD – Civilian Chargeback and COP Costs						
	FY01	FY02	FY03	FY04	FY05	FY06
<b>Chargeback</b>	\$7,207,731	\$7,844,390	\$7,433,189	\$8,226,932	\$8,443,154	\$8,752,693
<b>Continuation of Pay (COP)</b>	\$419,494	\$382,930	\$321,588	\$384,631	\$321,631	N/A
<b>TOTAL: Chargeback + COP</b>	<b>\$7,627,225</b>	<b>\$8,227,320</b>	<b>\$7,754,777</b>	<b>\$8,611,563</b>	<b>\$8,764,785</b>	<b>N/A</b>

Chargeback figures for FY-06 (obtained from WCIS) increased by 3.7%. COP figures are not available for FY-06, due to problems in obtaining this information from our new payroll system, and through the WCIS system. It is obvious, however, that total OWCP costs are up in FY-06, even though the civilian Lost Work Day Rate decreased.

WCIS Reports that in FY-06 the Coast Guard Auxiliary had 22 cases with \$105,644.33 total OWCP costs. This is up from 19 cases and \$77,628.88 total OWCP costs in FY-05.

### REDUCING CONTINUATION OF PAY COSTS (COP)

Commandant (CG-1213), the Coast Guard Office of Workers' Compensation Program (OWCP), continues to try to reduce OWCP program costs. By identifying unauthorized COP costs, and by charging these costs back to employees, they were able to reduce \$122,889 in unauthorized FY-03 COP costs to \$6,382, and recoup an additional \$79,315 in FY-04. For FY-05 and FY-06, figures are not available due to changes in our payroll system that precludes us from obtaining COP information.

There are various reasons for employees' showing up on unauthorized COP reports. In some cases for example, the individuals had valid OWCP claims, but misunderstood the COP entitlement and used more traumatic injury leave than allowed. In other cases, there was no approved injury on file with OWCP, and therefore they were not entitled to COP. Once COP data is again available these efforts will continue.

## 1c. SIGNIFICANT TRENDS AND MAJOR CAUSES OR SOURCES OF LOST TIME DISABILITIES.

AGENCY: U.S. COAST GUARD			
FY-06 MAJOR TRENDS			MAJOR CAUSES/SOURCES OF EACH TREND (Statistics taken from WCIS Nature of Injury Report 11/30/06)
<u>Nature of Injury</u>	<u>% of Total</u>	<u>% of Cost</u>	
Sprain (not back)	16.6%	31.8%	- Sprains and Back Sprains account for 24.6% of injury cases, and 34% of the cost of injuries. - Pain/swelling accounts for only 6.5% of cases, but 12.0% of costs. - Cardiovascular conditions account for only 0.6% of cases, but 10.2% of costs. - Fractures account for 4.0% of cases, but 8.7% of costs.
Contusion	15.7%	11.9%	
Laceration	11.4%	3.4%	
Traumatic Injury (unclassified)	9.8%	3.2%	
Foreign Body in Any Body Part	8.6%	1.8%	
Sprain – Back	8.0%	3.0%	

**AGENCY: U.S. COAST GUARD**

<b>FY-06 MAJOR TRENDS</b>			<b>MAJOR CAUSES/SOURCES OF EACH TREND</b> (Statistics taken from WCIS Nature of Injury Report 11/30/06)
<u>Cause of Injury</u>	<u>% of Total</u>	<u>% of Cost</u>	
All Falls	20.4%	31.2%	- Falls replaced Handling Tools or Instruments as the major cause of injury in FY-06; cases resulting from Falls increased only 5.3%, but costs increased 20.9%. - Watercraft injuries, and injuries from Striking Against Materials/Equipment, tripled in FY-06, for unknown reasons. - Injuries of Unknown Cause accounted for 1.8% of cases, but 10.1% of costs.
Handling Tools or Instruments	12.9%	7.0%	
Fall on Floor/Work Surface/Aisle	5.8%	6.6%	
Watercraft	5.5%	1.9%	
Striking Against Material / Equip	5.2%	1.1%	
Handling Packaged Material (Weight not Stated)	4.6%	13.4%	

**2. SHARE - SAFETY, HEALTH, AND RETURN TO EMPLOYMENT**

On 9 January 2004, DOL formally introduced SHARE. The SHARE goals differ slightly from the goals of the original Federal Worker 2000 initiative. President Bush extended the SHARE initiative through 2009 by Executive Order earlier this year, with slight modifications to the goals. The following DOL/OWCP website provides a description of the program and links to appropriate documents: <http://www.dol-esa.gov/share/>. (For the Coast Guard, SHARE focuses only on Civilian Employees)

**2a. The following illustrates the Coast Guard's SHARE results.**

**GOAL 1 - Reduce the overall Total Injury Case Rate (total number of injuries/illnesses per 100 employees) by at least 3% per year. FY-03 figures are the baseline.**

$$\text{Total Case Rate} = (\# \text{ of injuries/illnesses for the year} \times 100) / (\# \text{ of civilian employees})$$

<b>Goal 1 – Reduce the TOTAL Injury Case Rate per 100 employees</b>								
<b>AGENCY: U.S. COAST GUARD (Civilians Only)</b>								
<b>FY03</b>	<b>FY05</b>		<b>FY06</b>		<b>FY07</b>		<b>Was Goal Met in FY06?</b>	
<b>Baseline</b>	<b>Goal</b>	<b>Actual</b>	<b>Goal</b>	<b>Actual</b>	<b>Goal</b>	<b>Actual</b>	<b>Yes</b>	<b>No</b>
5.51	5.19	4.60	5.03	4.72	4.88		<b>X</b>	

The goal was met. There were 344 total civilian cases in the WCIS System (344 x 100/7,282 = 4.72 injuries per 100 employees).



**GOAL 2 - Reduce Lost Time Case Rate by at least 3% a year. FY-03 figures are the baseline.**

Lost Time Case Rate = (# of injuries/illnesses with lost time X 100) / (# of civilian employees)

<b>Goal 2 – Reduce the LOST Time Case Rate per 100 employees</b>								
<b>AGENCY: U.S. COAST GUARD (Civilians Only)</b>								
FY03	FY05		FY06		FY07		Was Goal Met in FY06?	
Baseline	Goal	Actual	Goal	Actual	Goal	Actual	Yes	No
3.76*	3.54	3.37	3.43	3.41	3.33		<b>X</b>	

The goal was met. There were 248 civilian cases in WCIS that had lost time. (248 x 100 / 7,282 = 3.41 lost time cases per 100 employees) \*Note: The FY-03 baseline (and subsequent goals) was adjusted due to an error found in past calculations.

**GOAL 3 - Improve the timeliness of reporting of injuries and illnesses to the Department of Labor by 5% per year. FY-03 rates are the baseline. (Improvement means the rates increase.)**

<b>Goal 3 – Improve timeliness of reporting injuries/illnesses to Department of Labor (CA-1 &amp; CA-2)</b>									
<b>AGENCY: U.S. COAST GUARD (Civilians and Auxiliarists Only)</b>									
	FY03 % in 14 Days	FY05 % in 14 Days		FY06 % in 14 Days		FY07 % in 14 Days		Was Goal Met in FY06?	
	Baseline	Goal	Actual	Goal	Actual	Goal	Actual	Yes	No
<b>USCG Civilian</b>	45.5%	50.2%	72.6%	52.7%	76.4%	55.3		<b>X</b>	

The FY06 goal was met. According to data provided by CG Human Resources, 243 out of 318 cases filed in WCIS were filed within 14 days.

**GOAL 4 - Reduce the lost production day (LPD) rate (i.e., lost production days due to injury or illness per 100 employees) by 1% per year.**

The FY-03 civilian base rates were determined using 485 LPD for a LPD base rate of 7.24; the FY-03 military base rates were determined using 2,195 military on-duty LPD for a LPD base rate of 5.43.

Lost Production Day Rate = (# of lost days for the year X 100) / (# of employees)

<b>Goal 4 – Reduce the Lost Production Day (LPD) Rate per 100 employees</b>									
<b>AGENCY: U.S. COAST GUARD</b>									
	<b>FY03</b>	<b>FY05</b>		<b>FY06</b>		<b>FY07</b>		<b>Was FY06 Goal Met?</b>	
	<b>LPD Rate</b>	<b>Goal</b>	<b>Actual</b>	<b>Goal</b>	<b>Actual</b>	<b>Goal</b>	<b>Actual</b>	<b>Yes</b>	<b>No</b>
<b>Civilians</b>	7.24	7.1	8.69	7.03	7.26	6.96			<b>X</b>
<b>Military On-Duty</b>	5.43*	5.33	5.44	5.28	5.58	5.23			<b>X</b>
<b>Military Off-Duty</b>	4.00	3.92	11.66	3.88	12.46	3.84			<b>X</b>

Civilian and military data provided from CG E-Mishap System by MLCLANT (kse) staff.

Civilian goal was not met. There were 529 civilian LPD:  $529 \times 100 / 7,282 = 7.26$  lost production days per 100 civilian employees.

Military on-duty goal was not met. There were 2,387 military on-duty LPD:  $2,387 \times 100 / 42,745 = 5.58$  lost production days per 100 military members.

Military off-duty goal was not met. There were 5,326 military off-duty LPD:  $5,326 \times 100 / 42,745 = 12.46$  lost production days per 100 military members.

## **2b. Programs established and initiatives launched in support of the SHARE Initiative.**

The Coast Guard's workforce continues to operate away from experienced/senior supervision and in dynamic and unpredictable circumstances, as it has since 2001. The safety program continues to prescribe a more proactive risk management strategy to identify risks before mishaps occur, using the tenets of Operational Risk Management, Crew Endurance Management and Team Coordination Training to do so. Efforts continue to improve mishap data collection and analysis, to enable efforts to develop and implement risk mitigation strategies.

Coast Guard safety staffs at Headquarters and both MLCs continue efforts to reduce the recurrence of off-duty military mishaps, through their advocacy of intrusive leadership, which is being practiced by the other military services. To evaluate the risks associated with private motor vehicle travel, efforts continued in FY-06 to activate Phase II of the Army's ASMIS (Army Safety Management Information System) for Coast Guard use. This tool will improve individual and unit ability to evaluate risks associated with motor vehicle travel.

The Safety, Environmental Health, and Food Service Branches at both Maintenance and Logistic Commands, MLCLANT (kse) and MLCPAC (kse), continue to follow up on civilian workers' compensation cases to ensure that data was also entered into the Coast Guard's E-mishap system. Data from the WCIS system is provided to MLCLANT (kse) from the CG-113 staff at Headquarters. Personnel supervisors are notified of the need to file a mishap in addition to the workers compensation claim. An ALCOAST message was distributed during FY-06 to reinforce this requirement.

The Safety Division of the Coast Guard's Aircraft Repair and Service Center (ARSC) in Elizabeth City, NC continues to work with the facility's Clinic to improve injury/illness reporting with the goal of reducing mishaps and the lost work days associated with those

mishaps. Each quarter the Safety Division is required to present the facility's Command Staff with a Safety and Health Brief that includes injury/illness trends. Overtime hours are included in the facility's trend analysis, which gives a more precise picture of the actual injury/illness trends.

At the Coast Guard Yard in Baltimore, MD the Safety Specialist conducts safety inspections, training and consultations, supplemented by two Environmental Protection Specialists as needed. This enables daily oversight inspection of the waterfront industrial work activities to identify potential sources of injury so that improvements can be made before injuries occur.

The CG Yard is currently hiring a new Occupational Nurse. In FY-05, the Clinic, the Occupational Nurse, and the Safety Staff at the Coast Guard Yard teamed up to improve the timeliness of injury reporting and to return employees to work in a timely manner. As a result, continuation of pay (COP) days declined. With the long-term absence of the nurse in FY-06, these trends reversed; however, with the new nurse on board in FY-07, improvement should be realized. To prevent mishaps from recurring, the Safety Staff, during its mishap investigations, works to uncover the root cause(s) of a mishap and then shares that information with the industrial shops and the command through the review process.

### **3. MOTOR VEHICLE / SEAT BELT SAFETY**

#### **a. Number of motor vehicle accidents experienced by federal civilian employees in FY 2005, while on official Coast Guard business.**

There were no civilian motor vehicle accidents (mishaps) for 2006. There were, however, 468 military motor vehicle mishaps, resulting in 9 motor vehicle fatalities, all of which were off-duty.

#### **b. Mechanism in place to track the percentage of seat belt usage by employees. How this information is tracked, the usage percentage, and the number of employees involved in motor vehicle accidents in FY 2005 who were wearing seat belts and the number who were not.**

As directed by Executive Order 13043 and Coast Guard Commandant Instruction (COMDTINST) M5100.47, Chapter 10, we performed an Annual Seat Belt Survey at entry points of various Coast Guard facilities nationwide. The survey encompassed Coast Guard military and civilian personnel, Coast Guard military dependents, and contractor personnel. Seat belt use percentages from the various facilities were calculated to provide an annual seat belt use rate for the Coast Guard.

The combined Coast Guard seat belt use rate for the FY06 survey totaled 92.0%. While this surpasses the national average of 79%, our results fell short of our 100% goal.

As noted earlier, there were no motor vehicle mishaps involving Coast Guard civilians; however, mishaps involving military personnel resulted in 9 fatalities. In only one of these fatal mishaps was the failure to use personal protective equipment (PPE) a contributing factor (a member failed to wear his seatbelt and was ejected from the vehicle). We continue to examine ways to improve motor vehicle data collection

capability in our E-Mishap reporting system, to enable us to better assess the effectiveness of seat belts and other PPE in the future.

The Coast Guard Headquarters Office of Safety and Environmental Health (CG-113) published its FY-06 ALCOAST Seat Belt Survey message to all Coast Guard units, providing results of the annual seat belt survey, annual motor vehicle mishap numbers including the number of Coast Guard fatalities, days hospitalized and lost workdays of Coast Guard members due to motor vehicle mishaps. The message also provided references to this year's National Driver Safety Campaign (i.e., Over the Limit, Under Arrest).

**c. Efforts taken to improve motor vehicle safety and seat belt usage.**

The Coast Guard promotes National Driver Safety Campaigns and provides unit level training courses. In FY-06, MLC (kse) staffs conducted and/or coordinated National Safety Council (NSC) 6-hour Defensive Driving Courses, and Automobile Association of America (AAA) 8-hour Driver Improvement Courses to over 1,000 military and civilian members, including dependents. In addition, both MLC (kse) staffs have video lending libraries that contain materials that address a myriad of motor vehicle safety issues.

CG-113 also published a Fourth of July and Summer Safety message, a Labor Day Weekend Motor Vehicle Safety message, and a Holiday Traffic Safety message providing statistics and precautionary tips for driving during these "higher risk" driving periods, and holiday seasons. Quarterly seasonal safety "precautions" messages (Fall, Winter, Spring and Summer) were also published, all of which included motor vehicle safety information.

During FY-06, the Coast Guard continued to work with the U.S. Army to provide the Coast Guard access to Phase II of the Army Safety Management Information System (ASMIS) risk assessment trip planning program. Using ASMIS, personnel input information on vehicle type, trip itinerary, and other related information. Personnel receive a hazard assessment of their proposed trip and a list of recommendations to lower the travel risk. As a means of intrusive leadership, supervisors of military personnel using the system review the travel plans with the member and make recommendations to the member on reducing the travel risk.

Motor Vehicle mishap data continues to be collected in our E-Mishap database, based on National Highway Transportation Safety Association (NHTSA) data collection criteria contained in the Model Minimum Uniform Crash Criteria. This increased amount and quality of data allows for better analysis of mishap casual factors, so that Coast Guard education and training resources can be targeted to mishap causes and permit comparative analysis to accident trends in the private sector and government.

The Coast Guard Motor Vehicle Safety policy (COMDTINST M5100.47, Chapter 10) was revised again during FY-06 by Commandant (CG-113). Policy changes included: revision to terminology and policy to ensure alignment with the newly revised Motor Vehicle Manual, COMDTINST M11240.9 (series) (e.g., use of the OF-346 Operator's Permit, emergency vehicles and special purpose motorized equipment (SPME) requirements; change in requirements for reporting government vehicle damage; and, inclusion of specific actions available to Commanding Officers to deal with poor/unsafe drivers.

A motor vehicle safety strategy meeting was held in December 2006. Headquarters and MLC safety personnel reviewed the current motor vehicle safety program and developed strategies for improvement, which are currently being reviewed and prioritized.

#### 4. TRAINING

- a. Coast Guard Safety and Environmental Health (SEH) personnel again helped develop and attended the Navy and Marine Corps annual Navy Occupational Safety and Health (NAVOSH) Professional Development Conference.
- b. Coast Guard SEH personnel actively served on the Motor Vehicle Safety Task Force of the DOD Defense Oversight Safety Committee (DSOC). RADM Higgins, the Coast Guard Director of Health and Safety (CG-11), attends the DSOC meetings.
- c. Coast Guard SEH personnel actively participate in the semi-annual Joint Services Safety Conference (JSSC) and the associated technical working group meetings, including Motor Vehicle Safety and Training and Education work groups.
- d. The Unit Safety Coordinator's Course continues to provide safety awareness and hazard recognition training for collateral duty safety officers. In FY-06, we trained over 1,500 personnel in safety and environmental health topics at a cost of approximately \$2.4 million in 81 resident and contract training courses.
- e. Coast Guard Instructors (military and contract) trained over 100 personnel in the Motorcycle Safety Foundation MSF Basic Rider Course in FY-06.
- f. MLCLANT (kse) provided specific unit-requested training to over 3500 members covering a full range of topics, including weapons of mass destruction, respiratory protection, HAZWOPER, fire evacuation, lockout, confined space, and weight handling.
- g. Aircraft Repair & Service Center (ARSC) – The AR&SC continued quarterly Safety Stand-downs for all production workers and military personnel, and held a pre-holiday safety stand-down to address on- and off-duty safety issues. Mandatory safety training for production workers is now available via the Web. All new supervisors are required to attend the National Safety Council's Supervisory Safety Training within the first year of becoming a supervisor.
- h. Coast Guard Yard – The Yard offered monthly safety training sessions and new employee orientation training. Topics included hearing conservation, hazard communication, fire evacuation, personal protective equipment, environmental awareness, confined space entry, and heat stress. Continuous risk assessment training is conducted monthly, ensuring each shop receives this training over a 2-year cycle.

## 5. ACCOMPLISHMENTS

### a. FY06 initiatives to control trends and major causes of fatalities and lost time disabilities.

- 1) To assist employees in identifying risks, Commandant (CG-113) provided the following ALCOAST messages to all employees on safety-related topics: Spring, Summer, Fall and Winter Safety Precautions; Holiday Traffic Safety; Fourth of July and Summer Safety; Labor Day Weekend Motor Vehicle Safety; Holiday Traffic Safety; Seat Belt Use Survey; and Fire Prevention Week. Periodic "lessons learned" messages are sent out to Coast Guard personnel following high potential incidents.
- 2) In partnership with the Department of Defense (DoD), a standardized and comprehensive approach has been developed to identify human factors contributions during mishap investigations. The Coast Guard is now using the DoD Human Factors Analysis and Classification System (HFACS) to investigate all Class A and Class B mishaps, as per a memorandum of understanding (MOU) with the DoD. The DoD HFACS offers the best opportunity to expose human contributions to mishaps and with this information have the best opportunity to control the greatest source of safety risk to operations and members.
- 3) Human factors continue to dominate as causal factors in mishaps. In March, 2006 the Coast Guard took a bold step forward to better control one of the common human factors in mishaps, fatigue or crew endurance risk, by releasing a Commandant Instruction (COMDTINST 3500.2 Crew Endurance Management) that mandates that every operational unit conduct an endurance risk assessment at least once per year. Using a state-of-the-art tool that is available on the CG safety web site (<http://www.uscg.mil/safety/cem.htm>), units can identify and manage endurance risk factors that can compromise their operational readiness and leave them susceptible to mishaps. In addition, these tools can be used to assess future operations for endurance risk and assist in the planning and execution of missions. These tools were used recently to assist aviation program managers in the planning for the National Capitol Response mission. The tools identified endurance risk associated with some duty schedules and provided alternatives that not only ensured crew endurance but also improved mission capabilities and readiness.
- 4) Final drafts of the following policies/documents were also completed this year:
  - a) Coast Guard Confined Space Entry (Chapter 6, COMDTINST M5100.47, Safety and Environmental Health Manual). This new policy consolidates confined space entry policy from a myriad of sources and instructions into one location. Included in this chapter are general instructions for all Coast Guard confined space working environments. The following operational missions and requirements are addressed in this policy: Requirements for Contracts and Contractors, Atmospheric Testing Requirements, Aircraft Fuel Cell and Tank Entry/Repair, Safe Boat Repair, Maritime Law Enforcement Inspections, Shore Based Confined Space Entry, Vessel Repair Dockside, Vessel Afloat Entry/Repair, and Marine Safety Merchant Vessel Inspections.

5) The following policy has been concurrently cleared within Coast Guard Headquarters and is being prepared for final approval:

- a) Motor Vehicle Safety - Chapter 10, COMDTINST M5100.47, Safety and Environmental Health Manual. Specific changes include: revision to terminology and policy to ensure alignment with the newly revised Motor Vehicle Manual, COMDTINST M11240.9 (series) (e.g., use of the OF-346 Operator's Permit, emergency vehicles and special purpose motorized equipment (SPME) requirements; change in requirements for reporting government vehicle damage; and, inclusion of specific actions available to Commanding Officers to deal with poor/unsafe drivers.
- b) Fire Prevention and Safety – Chapter 9, COMDTINST M5100.47, Safety and Environmental Health Manual. Specific changes include: deviation of minimum requirements (waivers); requirements for Shore Facility Emergency Action Plan development, revised requirements for notification of fires, fire inspections, fire drills, pre-fire planning, and training; new requirements for units performing hot work and work requiring fire watches; general fire safety and housekeeping practices; expanded requirements for fire detection, alarm and suppression system maintenance including requiring system maintenance to be performed by qualified individuals as required by NFPA; addition of a fire extinguisher distribution chart; revision of the fire department operations section to include expanded chart of training and certification levels by position; required use of the National Incident Fire Reporting System (NIFRS); requirement for apparatus to meet NFPA 1901 Standard for Automotive Fire Apparatus; and, revision of the Mutual Aid Agreement template for use between USCG unit and local fire organizations.
- c) Shore Safety Program – Chapter 11, COMDTINST M5100.47, Safety and Environmental Health Manual. This new chapter outlines policies and guidance for implementing a comprehensive Coast Guard-wide Shore Safety Program. Emphasis is placed on both on-duty and off-duty activities. Significant issues addressed in this Chapter include: safety and environmental health training; requirements for safety-related unit instructions; mishap reporting; fall protection; off-duty and recreational safety; personal protective equipment, industrial safety; electrical safety, and, control of hazardous energy sources (lockout/tagout).

**b. Describe accomplishments and initiatives:**

**1) Accomplishments for assessing the effectiveness of SEH programs.**

- a) Commandant (CG-113) coordinated the revision of the Unit Safety Assessment Tool and associated unit safety checklists by Headquarters and MLC safety staffs. These tools enable units to independently assess the status of their safety program and to prepare for MLC (kse) staff Risk Assessment Surveys.
- b) MLCLANT (kse) completed a combination of 276 Customer Assistance and Training (CAT) and Food Service Assistance and Training (FSAT) visits to Coast Guard (CG) units within their geographical area of responsibility. Teams identified 2,796 hazardous conditions or unsafe work practices and trained 3,500 personnel in safety, health, and food service-related topics.

- c) MLCPAC (kse) conducted 92 vessel and shore annual Risk Assessment Surveys (RAS) during FY-06; in addition to Food Service Assistance Team visits, Buoy Tender Round-ups and Food Service Symposiums.

**2) Accomplishments in the following areas:**

**a) Hazard identification, assessment, and resolution of SEH problems; prevention (recognition) and control strategies.**

1. In the wake of Hurricanes Katrina and Rita, a team of Commandant (CG-113) and MLCLANT personnel developed a Significant Event / Acute Exposure (SE/AE) Tracking tool to supplement the existing Occupational Medical Surveillance and Evaluation Program (OMSEP). The SE/AE tool enables the Coast Guard to track personnel exposure to chemical, physical and biological factors for all response personnel.
2. To support a Commandant-mandated Safety Stand Down, Commandant (CG-113) and MLC personnel developed a Safety Stand Down Reporting Tool, which could be accessed from the existing Unit Safety Assessment Tool (USAT). This tool enabled field unit to report their Safety Stand Down results, and MLC and Headquarters personnel and Area Commanders to assess those results, including responses to surveys on Operational Risk Management and Crew Endurance Management risk factors.
3. As noted earlier, Commandant (CG-113) personnel worked with Army personnel to develop the next iteration (Phase II) of the Army Safety Management Information System (ASMIS-2) for Coast Guard use. The Coast Guard version will be renamed "TRiPS" (Travel Risk Planning System). This risk management program provides personnel with a risk analysis tool for motor vehicle trip planning based on the information provided by the individual. This system also incorporates intrusive leadership by requiring the supervisor to review the trip plan with the member prior to approval of leave. TRiPS should be launched early in CY-07.
4. MLCLANT (kse) personnel conducted 113 health risk assessments which addressed issues such as asbestos, sound level surveys, indoor air quality, mold, lead, water, and general industrial hygiene.
5. MLCPAC (kse) personnel conducted 55 industrial hygiene projects addressing a myriad of safety, environmental health and industrial hygiene issues, including several evaluations of Coast Guard firing ranges.
6. The Coast Guard's Aircraft Repair and Service Center (ARSC) Safety Division in Elizabeth City, NC continued bi-annual facility inspections, and held quarterly department head briefings at which illness and injury data was discussed. They also continued to respond to an on-line program where employees submit work requests to address safety issues.



7. The Coast Guard Yard's Safety Staff conducted frequent inspections of high hazard industrial activities and provided monthly safety training topics to the industrial shops based on mishap trends. Union presidents were notified of safety inspections, and of any necessary changes in procedures.

8. Commandant (CG-1131) identified egress and crash survivability hazards associated with the new SAR Warrior vest, and immediately cautioned field units regarding this safety issue. They worked closely with ARSC to design, fund and procure an improved version that will maximize necessary operational capabilities while maintaining a high standard of safety integration. The new vest is scheduled for delivery to fleet in 2007.

9. CG-1131 also identified a snag hazard related to modifications to the H60 aircraft to enable Airborne Use of Force (AUF) capability. Specifically, aircrew wearing a newly fielded Aviation Dry Coverall could catch the garment on the flight controls while airborne. The field was notified and CG-1131 worked with ARSC to create an alternate AUF modification that eliminated the snag hazard. Early intervention avoided in-flight mishaps and enabled design change when only a few aircraft had been modified.

10. CG-1131 worked closely with CG-37 to design appropriate crew utilization schedules into the new National Capital Region Rotary Wing Air Intercept (NCRRWAI) mission. Together, they designed the crew schedule and coordinated with the CG-113 fatigue expert to monitor crews to ensure they were receiving adequate rest. A new proposal to provide better rested crews was designed and recommended, and was subsequently briefed and approved up to the Area Commanders. This new schedule began on December 20, 2006.

11. CG-1131 also advocated for and obtained approval to use a modified aircrew vest to enable quick donning by NCRRWAI strip alert crews. Use of this vest enables crews to meet aggressive launch requirement while providing floatation and signaling capability.

12. CG-1131 also worked closely with G-OCX to craft new weather and maintenance requirements for CG Auxiliary Aviation. These regulations improved the safety stance of Aux Air fleet, and eliminated areas of unnecessary risk. This effort highlighted the current readiness status of the Aux Air fleet, providing healthy transparency into oversight/execution of the program.

13. CG-1131 also proposed fleet-wide review of CG special missions tactics, training, oversight and standardization; this idea was immediately accepted by CG-37. The program is well on its way to improving execution of RWAI, AUF and tactical and non-compliant vertical insertion programs. Numerous insights have already been identified, and processes are being put in place to improve oversight and balance training against risk while considering operational need.

14. CG-1131 worked closely with CG-37 and CG-41 to improve Aircraft Configuration Control Board (ACCB) tracking. This combined effort drove a revitalization of this process, providing Headquarters oversight of field initiatives, and ensuring equipment placed on aircraft is properly tested, designed and interfaced to prevent unintended consequences and avoid repetitive capabilities.

CG wide standardization of equipment allows centralized training across aviation platforms, reducing training overhead and enabling flexibility in maintenance support processes.

**b) Awards programs for recognizing outstanding achievers.**

1. The Coast Guard continued to support the GEICO Award program that recognizes excellence in drug and alcohol abuse prevention, fire safety and traffic safety. CG-113 managed the nomination process, and coordinated the awards banquet in FY-06 which honored personnel from all military services.

**c) Accountability and performance standards for managers, supervisors and employees.**

1. The Coast Guard Commandant, Admiral Allen, issued a policy statement on Safety and Occupational Health, communicating that superior mission execution requires that we employ safe tactics and doctrine to preserve the health and safety of our personnel. He has also issued an "Occupational Safety and Health Protection for Members of the United States Coast Guard" (OSHA) statement detailing rights and responsibilities for Coast Guard personnel. Periodic Coast Guard-wide safety-related messages and initiative were also distributed.
2. A Commandant-mandated Safety Stand Down was initiated in September 2006, in response to a series of mishaps which either degraded operational capabilities or led to injury and death. The Stand Down has been completed, results are being compiled, and following the Commandant's review, results will be disseminated to field units.
3. Annual ALCOAST messages (sent to all Coast Guard units) from Headquarters Flag Officers and similar District level messages stress command and individual roles and responsibilities in managing risks both on and off duty. Particular attention continues to be given to motor vehicle mishaps.
4. Aircraft Repair and Supply Center (ARSC)
  - a. The ARSC Safety Division resides in the facility's Command Staff and the Commanding Officer and the Executive Officer attend all safety stand-downs when they are conducted.
  - b. The ARSC Safety Division includes all department level managers and the union president on the Safety and Health Committee.
  - c. Items obtained from the on-line program hazard-reporting program and bi-annual facilities inspections are given to managers for corrective action.
5. Coast Guard Yard
  - a. The Safety Specialist, and the two Environmental Protection Specialists that address safety concerns, now work for the Safety and Quality Manager, who directly reports to the Commanding Officer.

- b. Time and attendance sheets are cross-referenced with the OSHA 300 Log to track traumatic injuries, and all mishaps are investigated by the safety staff.
- c. The Yard's leadership routinely reviews the effectiveness of the safety and occupational health program by incorporating the safety measures in with other critical business measures, which are reviewed on a quarterly basis by the Yard's Executive Steering Committee.

### 3) Unique or significant accomplishments

- a) In November of 2005, the Coast Guard Health and Safety Director was tasked, by the Department of Homeland Security, to develop a comprehensive, strategic plan to protect the DHS workforce. The mission was to lead DHS's Workforce Assurance Workgroup in a multi-Component team to protect, prepare, and respond to a Pandemic Outbreak. To date, the Workforce Assurance Workgroup has assisted in the development of the following: provided several rounds of technical review of Homeland Security Council's Implementation Plan for the National Strategy on Pandemic Influenza; provided critical review of made several necessary changes to the Federal Preparedness Circular 65, and the United States Department of Agriculture's Interagency Playbook; and, developed a conceptual model for determining which categories of occupations, specific to each DHS component, may be considered high risk or mission critical operations. In conjunction with this, the workgroup crafted a cost estimate calculator that each component used to estimate their personal protective equipment costs, thus allowing all DHS components with a common reporting mechanism; developed policy papers related to the use of personal protective equipment, use of anti-virals and vaccinations, teleworking, and the mandatory use of PPE and pharmacologic protective methods for the DHS Secretary's signature on Departmental policy; assisted the DHS Chief Medical Officer with developing the Proposed spend plan to the House and Senate Committees on Appropriations related to DHS Funding for Pandemic Influenza, which resulted in the Coast Guard receiving \$3.44M to proceed with measures necessary to prepare the Coast Guard workforce to continue its mission during pandemic conditions; and, assisted the Transportation Security Administration, Customs and Border Patrol, and Immigration and Customs Enforcement by providing a review of their Pandemic Influenza training programs. In addition, the Coast Guard Workgroup members developed and delivered presentations of the Workforce Assurance Workgroup's progress during the DHS Administrative Forum, Navy Occupational Safety and Health conference, and the American Industrial Hygiene Association conference.
- b) Coast Guard personnel provided Safety and Environmental Health support in the aftermath of Hurricanes Katrina and Rita, as well as response support for a myriad of operational event; including numerous oil spills, a refinery release, a styrene tanker truck spill, a fuel oil barge spill, and a fuel facility fire. Support included classic Environmental Health in the realm of food, water, sewage, and habitability, as well as site safety support for remediation activities.

- c) Coast Guard Yard
  - 1. Continued efforts by the safety staff and on-site occupational nurse have realized a reduction in the number of continuity of pay (COP) days.
  - 2. The newly hired safety specialist completed 10 safety and occupational health inspections on the waterfront and on visiting ships.
  - 3. Military and civilian personnel receive "new employee" orientation training.
- d) CG-1134 completed the development and implementation of a new manager level safety training program. This course of instruction is designed for the newly created position of Sector Safety Manager. A Sector is the Coast Guard's first level command and control element of field assets (small boats, cutters, and personnel). This new position is designed to manage and coordinate safety and environmental health issues at the sector and all of its subordinate units with the assistance of the Safety Coordinators within each Department and Subordinate Units.
- e) CG-1134 completed a content revision of the Unit Safety Coordinator Course. This update takes the training program to a performance based curriculum and serves as a technical safety training program.

## 6. RESOURCES

### **Significant one time or additional permanent resources allocated to the OSH program in FY-06.**

Several resource proposals for motor vehicle safety programs, risk management information system development, fatality reduction, dedicated Sector safety managers and aviation safety quality assurance enhancements were submitted in FY-06 for future consideration. The overall outlook for FY-07 through FY-09 budget cycles is bleak, and chances for success for these resource proposals are considered low.

## 7. FY07 AND BEYOND – GOALS, OBJECTIVES, AND STRATEGIES

The primary emphasis in FY-07 and beyond will be to continue to develop strategies to reduce off-duty fatalities. Policies will be reviewed, and strategies/initiatives developed, to reduce motor vehicle and recreational mishaps, which are the largest source of off-duty injuries and fatalities within the Coast Guard. Both MLCLANT (kse) and MLCPAC (kse) plan to emphasize motor vehicle safety interventions at the field level, particularly in the area of off-duty motor vehicle mishaps. Included in this goal will be efforts to more proactively manage and track military and civilian injuries and illnesses.

It is anticipated that the Safety and Environmental Health Manual (SEH) will be reissued in FY-07. This will entail revision and update to over 50% of the manual to ensure SHE policy is current, responsive to field unit needs, and reflective of organizational changes that have occurred.

As the new Sector organization approaches final operational construct, CG-113 will continue to work to ensure that the role of safety professionals (e.g., the Sector Safety Manager) is well defined and responsive to field commander's needs.

In accordance with the Commandant's Intent Action Order #4 (Logistics Transformation), CG-113 will continue to aggressively pursue a safety and environmental health structure which most effectively delivers Safety and Environmental Health Support to field units and Sector Safety Managers.

In partnership with DHS, efforts will be made to continue to pursue a comprehensive department-wide risk management information system, designed to improve both management of workers compensation claims and safety risks.

Efforts will also be made to continue to seek resource support for motor vehicle safety programs, Coast Guard e-mishap and risk management information system development, and aviation safety quality assurance enhancements.