FY-2008 Annual Shore & Sector Operational Safety Report

FOR SHORE-BASED FACILITIES & SECTOR OPERATIONS ASHORE

Commandant (CG-1132)
Shore & Sector Operational Safety Division
Office of Safety and Environmental Health

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PURPOSE

This report contains summaries and analyses based upon reported Fiscal Year 2008 (FY08) mishaps; where applicable, this data is compared to historical trends. The report covers all **Shore-Based Operations as well as Sector Operations Ashore**, such as the traditional Marine Safety type duties. Its purpose is to promote safety awareness and improved risk management across the spectrum of shore operations by providing personnel, program managers, and operational commanders with a snapshot of what we are doing to reduce risks to our personnel during both on-duty operations and off-duty recreational events. This report also includes key information contained in the previously released FY08 Annual Report to OSHA, which solely covered our civilian personnel.

To reduce future risk and subsequent loss within shore-based units and Sector operations ashore, we must understand our current position. We can do this by carefully examining previous mishaps, especially the more severe ones such as those that led to a loss of life or a permanent disability. By identifying the root causes of these mishaps, such as the substandard systems, practices or conditions that may have existed, we are better able to anticipate, recognize, and control future risk. Although more time and energy is generally expended in investigating and analyzing the more serious mishaps, such as the Class A and B's, much information can be garnered by also, at the unit level, looking closely at the numerous Class C's, D's and High Potential for Loss (HIPO) events that are already occurring regularly. These lower level mishaps are indicative of what Class A's and B's a unit can expect to see in the future; acting upon these lower level events by correcting the root cause(s) oftentimes prevents a more serious mishap from occurring.

We hope units with any type of shore operations will find this report useful and will discuss the information up, down, and across chains of command. Combined with the operational mishap messages that are shared service-wide, the awareness of potential hazards generated by this report should help units to take a critical look at their own operational procedures and safety programs.

As always, any ideas and comments are valuable in improving the Coast Guard's safety and environmental health program. Please share them with your Unit Safety Coordinators (USC's), Safety Managers, applicable MLC-detached Safety and Environmental Health Officer (SEHO), other applicable MLC staff, or the appropriate Headquarters point of contact listed at the end of this report.

On the following page is a refresher summary of each Class of mishap used by the Shore community.

Class of Mishap	Description
A	1. An injury or occupational illness results in a fatalit or permanent total disability. 2. The cost of reportable property damage is $1,000,000 or greater. 3. A Coast Guard aircraft or cutter is missing or abandoned, for which recovery is impossible or impractical, or is beyond economical repair. 4. A Coast Guard small boat has reportable property value of $50,000 or more and a. is missing or abandoned; b. for which recovery is impossible or impractical; c. or is beyond economical repair. 5. A midair collision, regardless of the severity of injury or amount of damage. 6. Any Coast Guard personnel are missing or missing in action.
B	1. Any injury and/or occupational illness results in permanent partial disability 2. The resulting cost of reportable property damage, or damage to cutters and aircraft, is $200,000 or more, but less than $1,000,000. 3. Three or more personnel are inpatient hospitalized. 4. Coast Guard small boats incur repairable damage of $50,000 or more.
C	1. An injury or occupational illness results in 1) any loss of time from work beyond the day or shift on which it occurred; 2) placement of any individuals on limited duty or restricted status for more than 30 consecutive days; or 3) transfer of any individuals to a different job. 2. The resulting cost of reportable property damage, or damage to cutters and aircraft, is $20,000 or more, but less than $200,000. 3. Coast Guard small boats incur repairable damage of $20,000 or more, but less than $50,000. 4. A person falls overboard accidentally from a vessel or a pier or other structure or equipment associated with Coast Guard operations. 5. A grounding, capsizing, or rollover/knockdown occurs which is greater than 90 degrees from an even keel.
D	1. An occupational injury or occupational illness occurs requiring more than simple first aid treatment but that does not meet the criteria of a Class C mishap.. This includes events where individuals are placed on limited duty status or restricted duty for less than 30 consecutive days. 2. The cost of property damage for non-aviation mishaps is $1,000 or more but less than $20,000. 3. The cost of property damage for aviation mishaps is less than $20,000. 4. An accidental firearm discharge, electrical shock, or fire occurs that does not meet the criteria of a higher classification. 5. A near midair collision (NMAC) occurs. Report as a Flight-Related Class D mishap. See section 3.F.4.a and Chapter 2 of this Manual for additional NMAC reporting requirements. 6. There is a Near Miss/High Potential (HIPO) Event. Near mishaps, lessons learned events or other events with a High Potential (HIPO) for injury, damage or Coast Guard wide implications are reportable as Class D mishaps, even though they result in MINIMAL or NO DAMAGE OR PERSONNEL INJURY.

Summary of Major Initiatives & Accomplishments

Motorcycle Safety Summit - The major accomplishments in FY 2008 were associated with the motorcycle safety program. From 25-27 August 2008, the Coast Guard held its first ever Motorcycle Safety Summit in Norfolk, Virginia. The USCG safety and motorcycle rider communities gathered alongside the U.S. Navy, U.S. Army, and other governmental agencies, such as the National Highway Traffic Safety Administration to learn about, discuss, and identify possible solutions to mitigate the increasingly negative impact that motorcycle mishaps are having on the mission readiness of USCG units.

During the summit 40 participants joined together to form working groups, providing valuable input to the sensitive discussion of CG motorcycle safety programs. Collectively, due to the overall enthusiastic participation of the attendees, the working groups were able to develop consensus on a number of contentious issues and identified the next steps in the way ahead for motorcycle safety in the CG. The final decision of the group was that more discussion was needed, ensuring that input was gathered from all levels within the organization, on the following four topics:

1. Personal protective equipment – to look at such issues as what should be required;
2. Training requirements – to look at such issues as what the CG should require above and beyond the states;
3. Leadership's roles/responsibilities & accountability (at all levels) – to look at such issues as what should leadership be doing; do leaders/managers have the tools they need to accomplish those things; how do we / can we hold leaders, managers, and members accountable;
4. Peer to Peer (Mentoring) initiatives – to look at such issues as can we / should we have unit level programs; should they be optional or mandatory.

The end result will be a CG motorcycle safety program that reflects the expertise of our motorcycle riders and significantly increases the likelihood of policy and program acceptance in the rider community.

Motorcycle Census – In June 2008, a non-mandatory motorcycle census was given to the entire CG population of military and civilian workers. The Census had 4363 respondents and of those respondents, 2981 owned and/or operated a motorcycle. The Census, being the first one ever done, helped determine the location and demographics of the riders, their training levels as well as their behaviors and attitudes and what they consider their greatest risk. This data has helped focus CG Motorcycle Program efforts on the areas of highest need, such as the training program.

Motorcycle Training Program – During the summer of FY08 the Coast Guard was able for the first time to receive approval and funding to sponsor the motorcycle Basic Rider Course for members and civilians. This course is required by USCG policy for all military members who ride a motorcycle and for all members, including civilians, who ride a motorcycle on a base. This training is in line with the Department of Defense's (DOD's) requirements for personnel who wish to ride onto one of their bases. Several DOD's services also opened their doors to Coasties who wish to take the BRC course at their facility, oftentimes at no cost to the member. More information can be found on the COMDT (CG 1132) website: http://www.uscg.mil/hq/cg1/cg113/cg1132/default.asp.

"Don't Let Your Guard Down" Campaign This motor vehicle and motorcycle campaign started in one of the two USCG regions (MLC LANT(kse)) and is spreading[1]. The campaign's overarching goal is to reduce motor vehicle mishaps by 25% by increasing the awareness of the issue; the four main themes are: speed; alcohol; fatigue; and distractions. The program has taken many different tactics

[1] As of November 2008, MLC PAC (kse) also adopted the campaign, making it currently a CG wide initiative.

such as distributing promotional materials (e.g. drive safely pins and mouse pads with the logo and leading factors of mishaps), demonstrating a new motorcycle simulator, providing training to USCG employees who want to be certified as Rider Coaches so that they can give motorcycle training, and strongly pushing new AAA Defensive Driving courses and new training media (such as videos) throughout the USCG.

In June, 2008, SITREP 3 released by COMLANTAREA (R111555Z JUN 08) reinforced the policy that all leaders will identify MC riders under their command and ensure that they have received the required training. Additionally, VADM Peterman announced that AAA Driver Improvement train-the-trainer courses for Sector personnel were being held (four times in FY 2008) and that the Sectors could request training at their unit.

Training and Professional Support— There are approximately 110 formal Coast Guard safety and health (including emergency response focused) courses, with 53 directly sponsored through the Coast Guard Safety and Environmental Health Program. Training includes classroom, practical (hands-on or "on-the-job") and web-based training.

In addition to the extensive safety and health training for its civilian and military members, the Coast Guard provides multiple opportunities for professional development of its safety and health practitioners through the year. The safety and health program provides funding for attendance at conferences and courses. Additionally, the Coast Guard provides funding for two active duty personnel per year to attend an industrial hygiene / environmental health graduate school program; there is immediate benefit realized by both the civilian and military members as more educated practitioners are available to manage and implement field-level safety and health programs.

Significant Trends and Major Causes or Sources of Lost Time Disabilities for Civilian Workers

Figure 1

Overview of Civilian Workforce's Mishap Cases

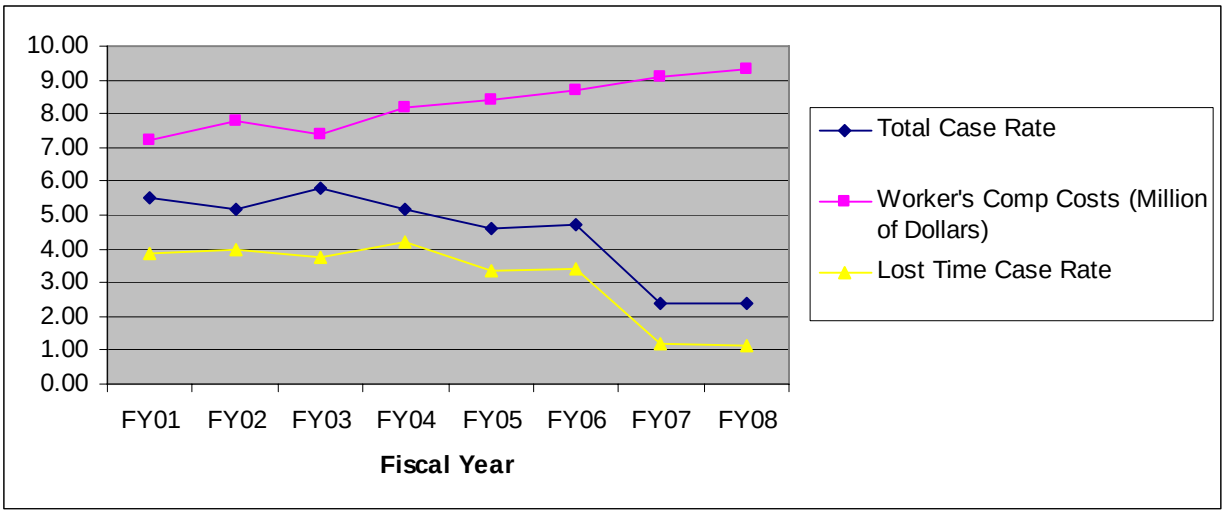


Figure 2

Nature of Injuries – Civilian Workforce

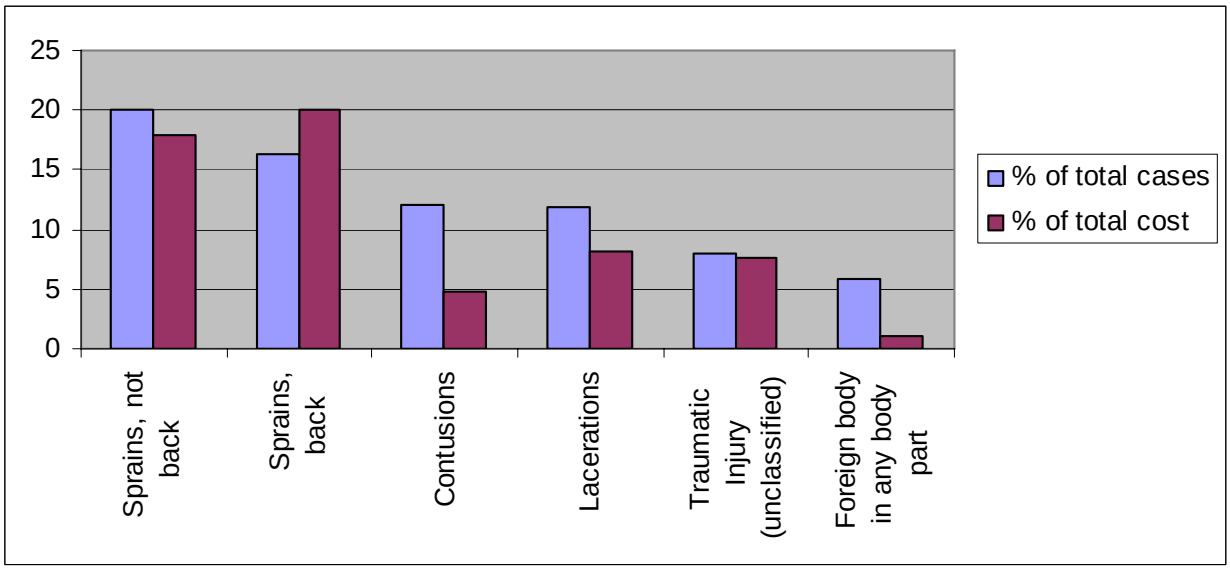
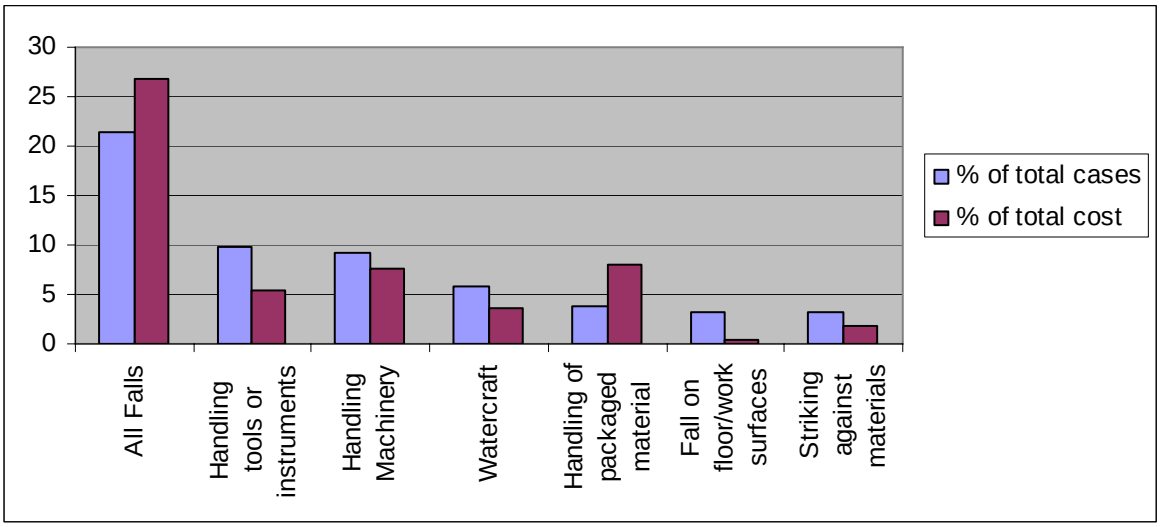


Figure 3

Cause of Injuries – Civilian Workforce



Tracking accidents for the civilian workforce:

The areas of greatest concern involved the more ergonomically-related injuries, including sprain (not including back sprains) injuries and back sprains. Sprains (not back) accounted for the most common type of injury, with the total percent of cases in FY 2008 (20.1% of all injuries) increasing from 16% in FY 2007. The number of back sprains increased slightly less, moving from accounting for 13.9% of the total cases in FY 2007 to 16.6% in FY 2008. The costs associated with back sprains accounted for the largest percent of total costs for all injuries (20.1%) increasing from FY 2007 118% while the cost for sprains (not back) decreased 38%. The aging workforce conducting physical labor is potentially impacting the elevated numbers of sprains (not back) and back sprain injuries. Some of the cost and lost work time may also be associated with longer healing time for the aging workforce.

Contusions, Lacerations and Traumatic Injury combined accounted for more than one third of all injuries in FY 2008, an increase of 4.8% from FY 2007. Contusions, within this group of injuries, had the highest increase in percent of total cases, moving from 6.8% in FY 2007 to 12.1% in FY 2008. Conversely, though, the percent of total costs related to contusions decreased. The injury type contributing to the largest increase of overall cost was lacerations. The total number of lacerations from FY 2007 to FY 2008 held steady (10.3% and 11.8% of total number of cases, respectively), but the cost increased from being 2.2% to 8.1% of the total costs (an increase of 268%). Many younger workers at Coast Guard industrial facilities, such as those involved in student training and apprenticeship programs, are more likely to experience fractures and lacerations, resulting in this trend. Senior workers, although perhaps more vulnerable to ergonomic physical stressors, have learned to avoid physical impact related injuries.

“All Falls” accounted for the largest cause and cost of injury (21.4% of total injuries and 26.8% of total costs), up from 17.5% and 19.6%, respectively, in FY 2007. Injuries from “Handling Tools or Instruments” represented the second largest cause of injury, similar to FY 2007, but there was a decrease in overall number of cases and cost associated with this causal type. A new top causal type of injury for FY 2008 (not included in FY 2007 numbers) was “Handling Machinery” which accounted for 9.3% of all injuries, an increase of 138% from FY 2007. Unlike in FY 2007, when the costs associated with “Handling of Packaged Materials” saw the most significant decline in cost, this type of

cause saw the highest increase in cost, moving from 2.2% to 8.0% of total cost (an increase of 264%).

Review of OSHA programs, including civilian personnel mishaps:

Safety, Health, and Return-to-Employment (SHARE) Initiative — The Coast Guard met all four Department of Homeland Security SHARE goals in FY 2008, but did not meet, as an individual component of DHS, the Presidential goals as established by Secretary Chao's 2006 Memorandum. The Coast Guard established its Headquarters SHARE Working Group in mid-2008 with representatives from the safety, human resources and medical offices. Many Coast Guard field organizations with higher civilian populations have instituted return-to-employment practices and case management through collaboration between their safety, human resources and medical staffs.

1. *Reduce total injury and illness case rates by 3% per year*.
   The Coast Guard's injury and illness case rates held steady from FY 2007 to FY 2008 (rate of 2.4). Although the total case rate (TCR) did not go down 3%, it is well within DHS's targeted goal of 11.6 and is in line with the U.S. Navy's projected TCR of 2.87. The U.S. Navy with the USMC was chosen as an organization to against which the USCG is compared as it has a similar workforce and work environment as the USCG.

2. *Reduce lost time injury and illness case rates by 3% per year.*
   The Coast Guard lost time case rates (LTCR) had a slight decrease of 0.07% from FY 2007 to FY 2008. It is well within DHS's goal of 5.08 and is in line with the Navy's projected LTCR of 1.83.

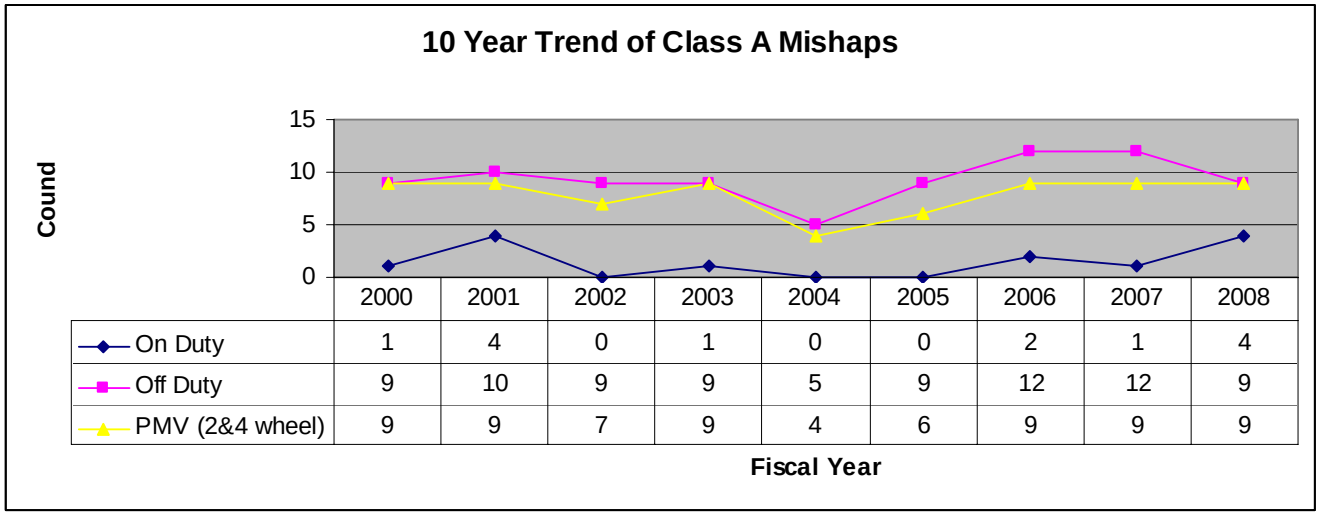
3. *Increase the timely filing of injury and illness claims by 5% per year*[2]
   This goal was met as the FY 2008 rate of timely was 78.5% (an increase of 7% from FY 2007).

4. *Reduce the rate of lost production days due to injury and illness by 1% per year.*[3]
   This data is not available due to not having COP data.

[2] Under the SHARE extension, which began in FY 2007, all agencies are now required to achieve at least a 50% timely filing rate under Goal 3. Agencies for which a 5% per year improvement from their FY 2003 baseline results in a FY 2008 goal higher than 55% will have their performance tracked against that formula-driven target, except that no agency's goal is required to exceed 95%. In FY 2009, the minimum thresholds will rise to 60%; for each year all agencies must meet the minimum level or their formula-driven goal, whichever is higher, up to a maximum of 95%.

[3] Under the SHARE extension, Goal 4 targets also have been slightly modified. Agencies with a FY 2003 baseline Lost Production Day Rate (LPDR) at or below 15 days are charged with maintaining an LPDR of 15 or less. All other agencies will have their progress measured against the formula-driven target of reducing LPDRs by 1% per year, except that no such target is required to be fewer than 15 days.

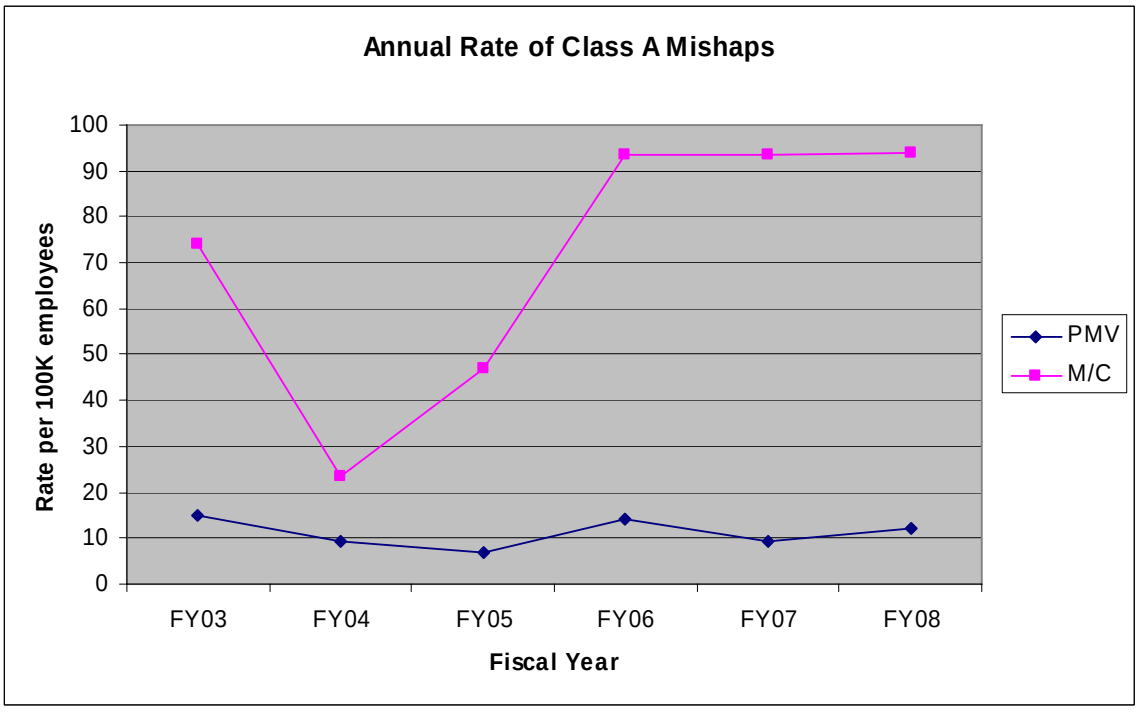
Figure 4



	2000	2001	2002	2003	2004	2005	2006	2007	2008
On Duty	1	4	0	1	0	0	2	1	4
Off Duty	9	10	9	9	5	9	12	12	9
PMV (2&4 wheel)	9	9	7	9	4	6	9	9	9

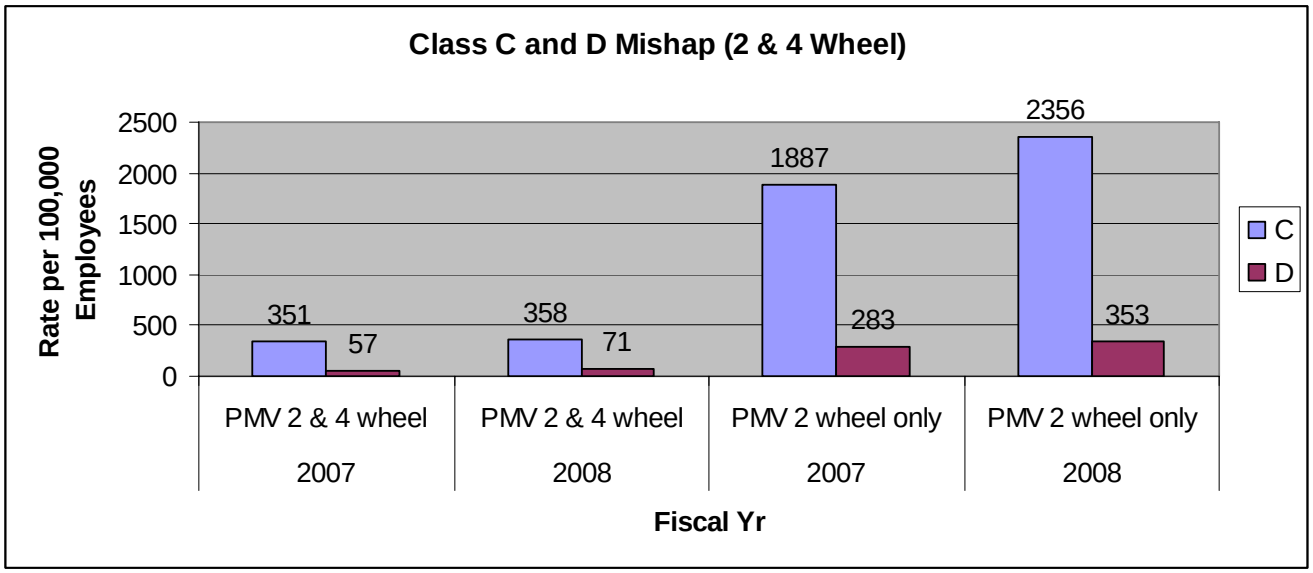
This is a breakdown of the Class A mishaps that were on and off-duty, and of those, which ones were related to Private Motor Vehicles (PMVs) both 2 and 4 wheeled.

Figure 5



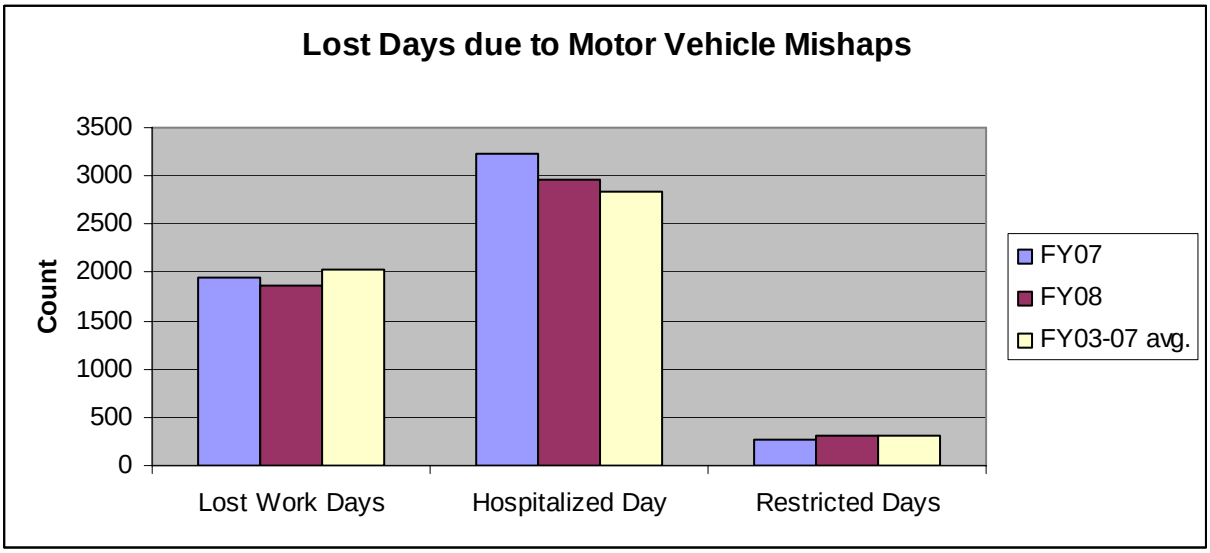
For Figure 5: Of the Class A motor vehicle mishaps, motorcycles have the highest rate of mishap. The above graph presumes that 100 percent of personnel drive 4-wheeled vehicles while 10 percent ride 2-wheeled motorcycles. This estimate was taken from the FY08 motorcycle census that found approximately seven percent of CG personnel own and ride a motorcycle. Because this census was voluntary and because it is not known exactly how many Coasties ride, an estimate of 10 percent was made. If the estimate of seven percent had been used, these rates would have been higher.

Figure 6



If Class C's and D's portend the more serious mishaps, more effort needs to be focused in the coming years on motorcycle safety as the rate of mishaps for the number of riders is, on average, 5-6 times more than the rate for PMV mishaps. This graph, for the PMV 2 wheel only, presumes that 10% of the population ride PMV 2 wheeled vehicles and that 100% drive PMV 4 wheeled vehicles.

Figure 7



Similar to the graphs for recreational / off-duty and sports related mishaps, there are more days that members were hospitalized than restricted indicating that the motor vehicle mishaps were more serious than the operationally-related mishaps.

Figure 8 – Type of bike owned/operated (as determined by MC Census, June 2008)

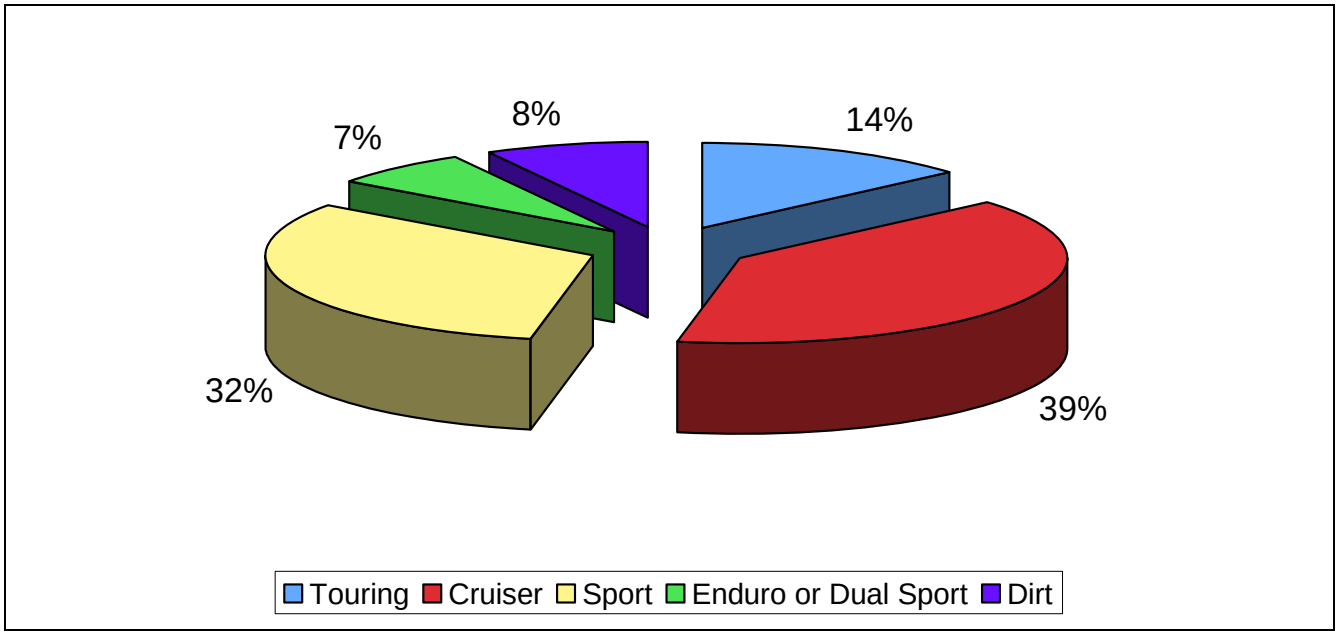
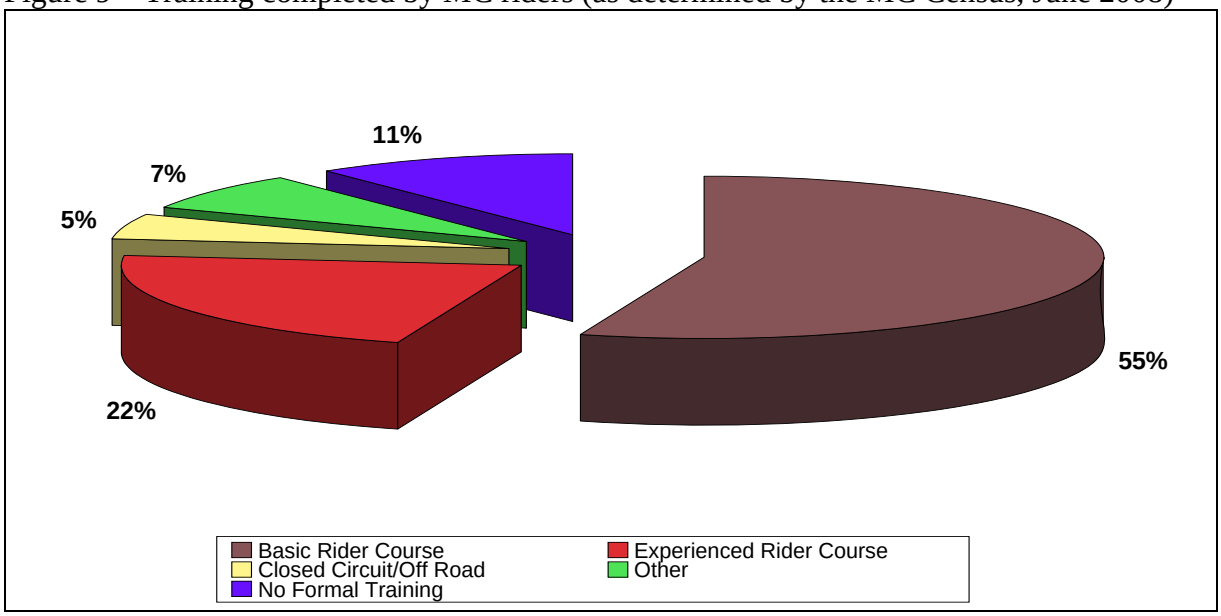


Figure 9 – Training completed by MC riders (as determined by the MC Census, June 2008)



Seat Belt Usage by Employees:

As directed by Executive Order 13043 and Coast Guard Commandant Instruction (COMDTINST) M5100.47, Chapter 10, the USCG 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 (civilian and military) Coast Guard seat belt use rate for the FY 2008 survey totaled

95.7%, up from FY 2007's total of 92%. FY 2008 survey also found 100% of child passengers properly secured up from 99.5% in FY 2007. The FY 2008 rate also surpasses the national average of 82% but falls short of the 100% goal set by the Commandant. The survey did not discern whether the seat belt user was a civilian, contractor, military Coast Guard employee or dependent.

Efforts to Improve Motor Vehicle Safety (in addition to those noted previously):

Training. The U.S Coast Guard has implemented an On-Line Defensive Driving Course (DDC) developed by the National Safety Council (NSC). Government Accounting Services partnered with NSC to provide training to all USCG commands that operate GSA contract vehicles. The training has been offered at no cost to all commands to aid in reducing the cost of damage to government motor vehicles, and in FY 2008, 9,000 employees completed the training.

The Coast Guard continued to promote the National Driver Safety Campaigns and provided unit level training courses. In FY 2008, Coast Guard field programs conducted and/or coordinated the National Safety Council (NSC) 6-hour Defensive Driving Courses and the Automobile Association of America (AAA) 8-hour Driver Improvement Courses to over 600 military and civilian members, including dependents. In addition, a video lending library containing materials addressing a myriad of motor vehicle safety issues was made available to all Coast Guard units.

"Click it or Ticket" & other ALCOASTS. The Coast Guard Headquarters Office of Safety and Environmental Health published its FY 2008 ALCOAST Seat Belt Survey message to all Coast Guard units, providing results of the annual seat belt survey and 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 contained general orders from the Commandant for all military members to obey all applicable laws, to wear seat belts in a moving vehicle while on or off duty, and, for motorcyclists, to wear a certified helmet and protective clothing as per Coast Guard instructions regardless of state requirements. The message made it clear that failure to comply with the policy could result in administrative and/or other actions under the Uniform Code of Military Justice. The message also provided references to this year's National Driver Safety Campaign: "Click it or Ticket."

COMDT (CG 1132) published a 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.

Mishap Data. The Coast Guard continued to collect motor vehicle mishap data in the 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 has allowed for better analysis of mishap casual factors so that Coast Guard education and training resources could be targeted to mishap causes and permit comparative analysis to accident trends in the private sector and government.

The Coast Guard Motor Vehicle Safety and the Mishap Investigation policies (COMDTINST M5100.47, Chapters 10 and 3, respectively) are undergoing revision to reflect the information obtained during the year's motor vehicle and motorcycle mishap investigations. Policy 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

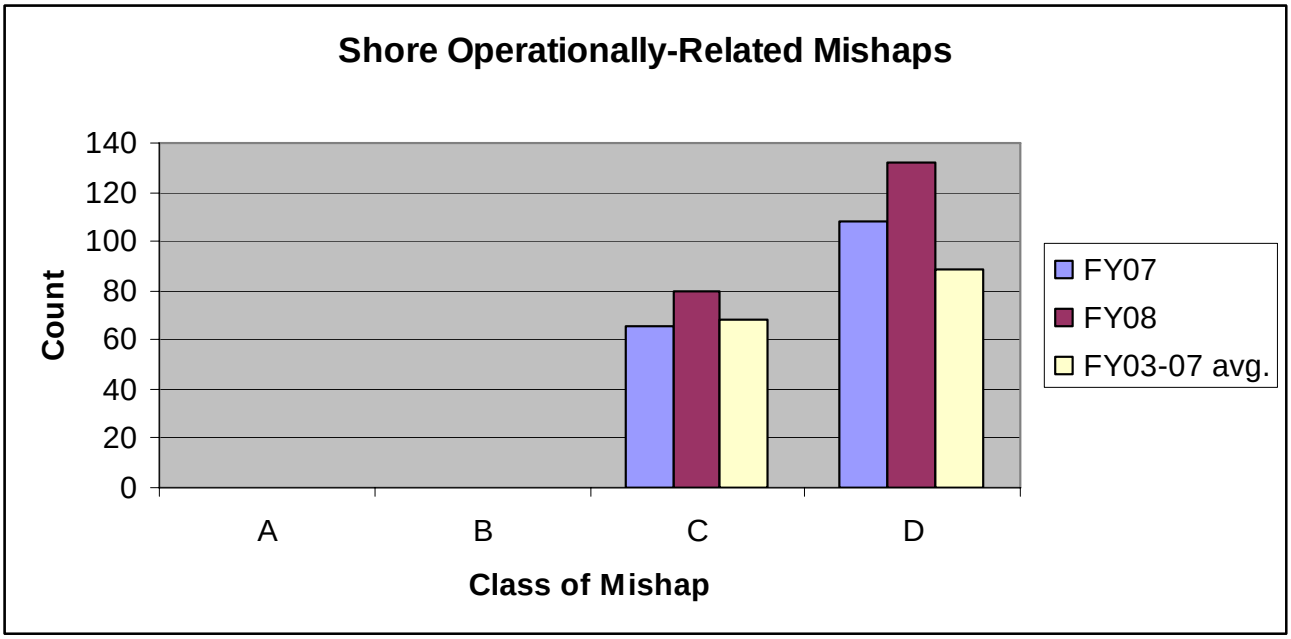
government vehicle damage; and, inclusion of specific actions available to Commanding Officers to deal with unsafe drivers.

Mishap Investigations. In Summer 2007, the Coast Guard commenced with formal, standardized motor vehicle mishap investigations for fatal and serious incidents involving military members in an off-duty status to identify human factors that caused and contributed to each mishap. This effort continued throughout FY 2008. The plight of off-duty motor vehicle mishaps has continued to negatively impact the mission readiness of those units to which these members are assigned. The off-duty motor vehicle mishap investigation and analysis process incorporates motorcycle mishaps, which are a high priority area of interest at all management levels within the Coast Guard and other military services. The Coast Guard has analyzed the results of these investigations and is acting on the mishap analysis boards' recommendations. The resultant initiatives are also being made available to the Coast Guard civilian community.

Travel Risk Planning System (TRiPS). During FY 2007, the Coast Guard launched the U.S. Army's on-line risk assessment trip planning program, the Army Safety Management Information System (ASMIS) and continued to support this initiative in FY 2008 ensuring that the commands were aware of the on-line tool and encouraging its use. In this system, known as the Travel Risk Planning System (TRiPS), 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. The ultimate purpose of the tool is to ensure supervisors take a keen interest in their employees' travel plans in their off-duty time. The assessment tool is also available to civilian employees.

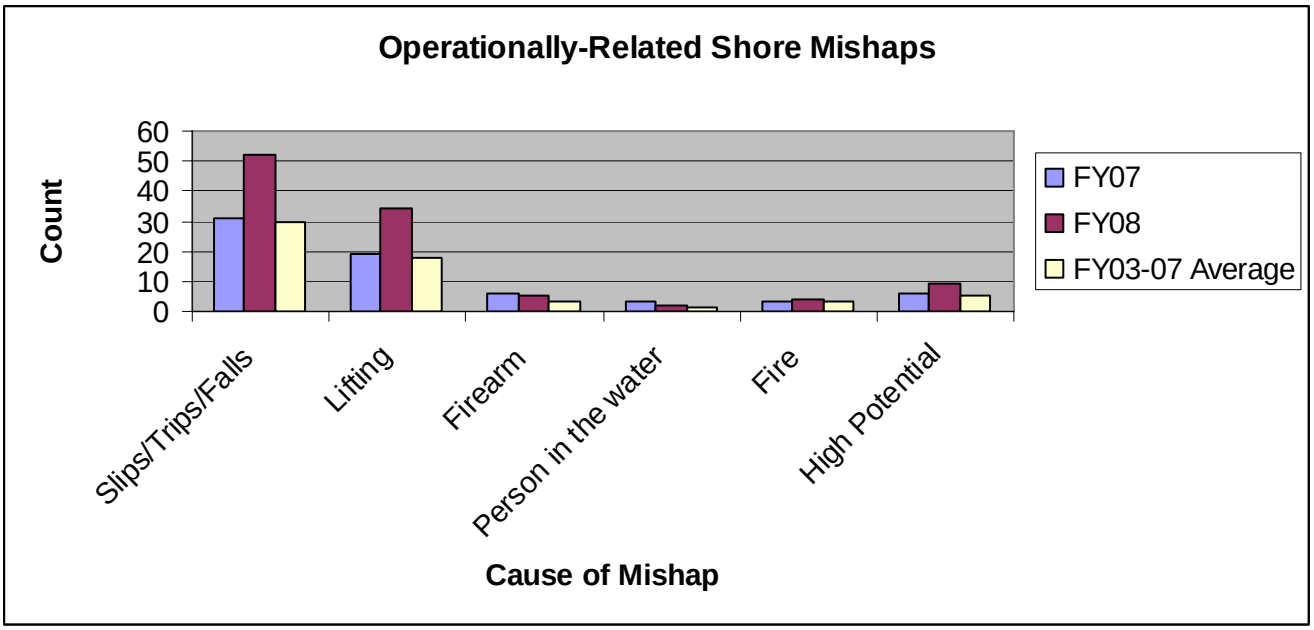
Shore & Sector Operations Ashore (including Sector sub-units)

Figure 10



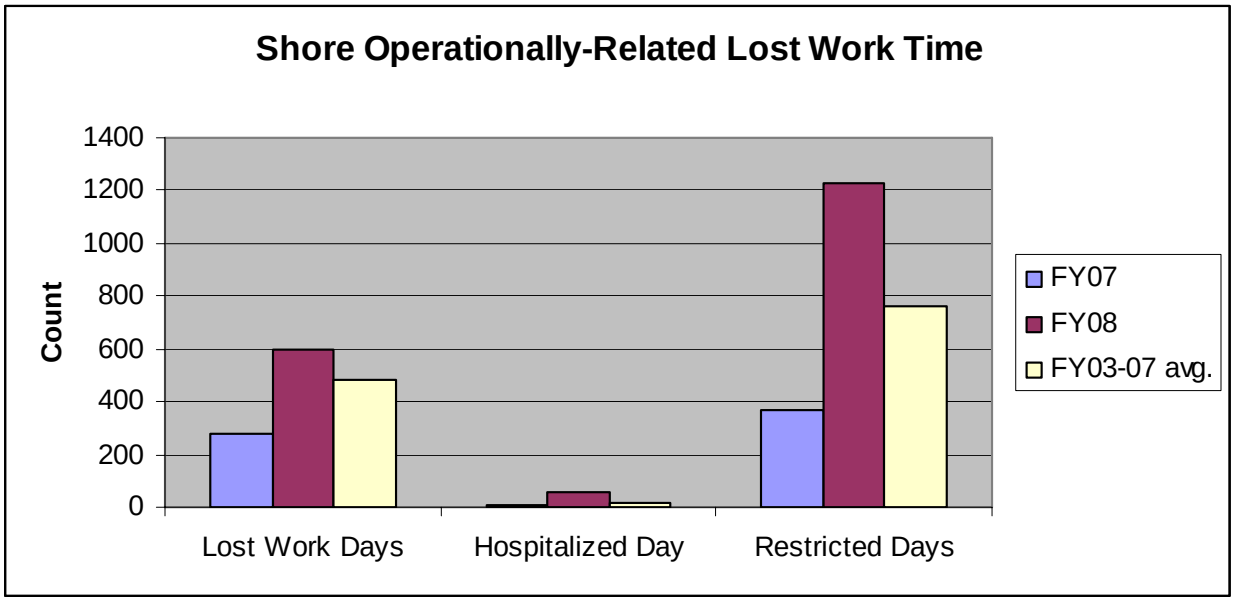
Although there were no operationally related (non-motor vehicle) deaths or permanent disability mishaps, there are numerous Class C's and D's. FY 2008 saw a 33% increase of Class D mishaps than had been experienced, on average, over the previous 5 years. Class C and D mishaps are generally thought to portend more significant mishaps and should be examined to determine the root (underlying) causes so that they may be corrected.

Figure 11



Of the Class C's and D's noted above, these are top 6 causes. These numbers do not include motor vehicle mishaps, which are captured in the previous section to this report. The number of operationally related slips/trips/falls and lifting mishaps increased over 40% than what had been experienced, on average, over the previous 5 years.

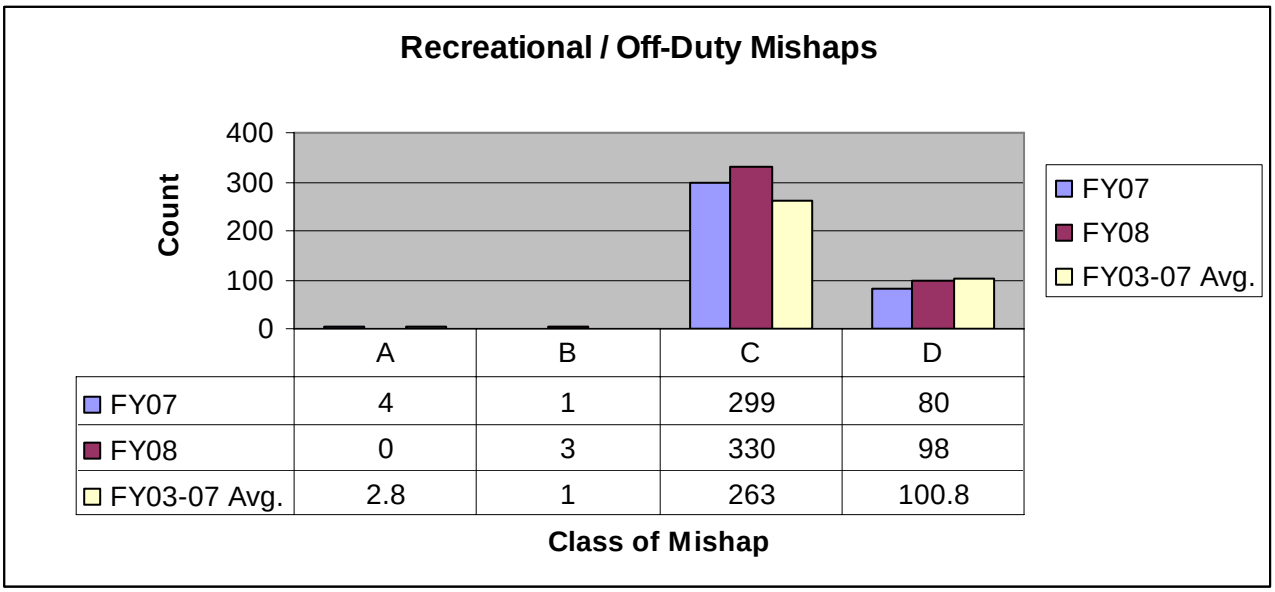
Figure 12



The number of restricted days for FY 2008 increased 38% from what had been experienced, on average, over the previous 5 years.

Recreational / Off-Duty Mishap Summaries (of all reportable personnel mishaps; excluding motor vehicle and motorcycle data which is captured separately)**:**

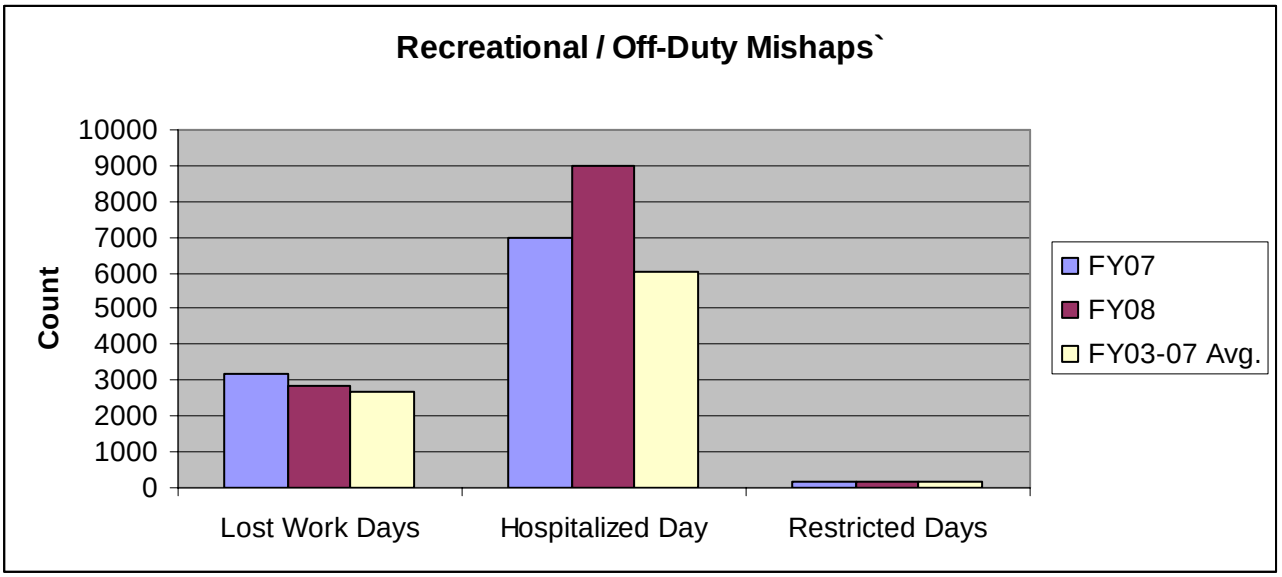
Figure 13



	A	B	C	D
FY07	4	1	299	80
FY08	0	3	330	98
FY03-07 Avg.	2.8	1	263	100.8

Of the 4 off-duty Class A mishaps in FY07, 3 were of CG members (one person went overboard on cruise vessel and drowned; 2 others were swimming related drownings). The three Class B mishaps were due to various reasons: falling off step stool; power saw kick-back; and softball game mishap.

Figure 14



Note here that this is the inverse from what was seen with operational mishaps, where there were far more restricted days than days hospitalized. This may indicate that the off-duty / recreational mishaps are more serious than the operational ones, and that personnel may be taking more risks on their off-time than they would take while on duty. The same relationship is found with sports related mishaps, as seen below in Fig. 15.

Figure 15

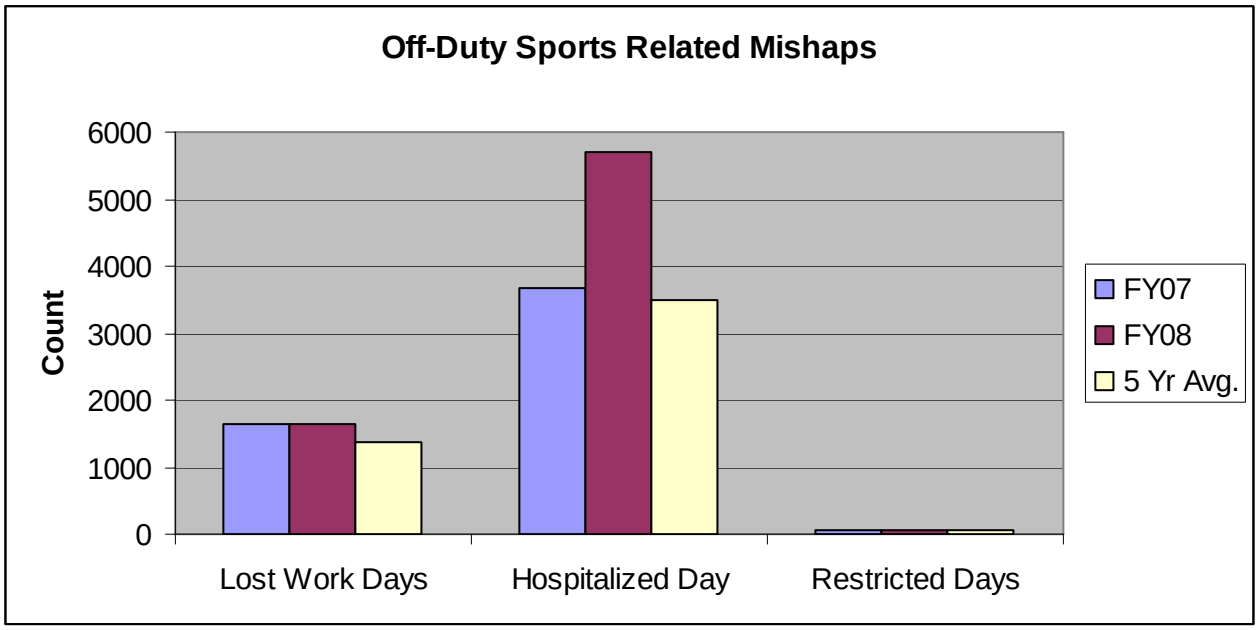
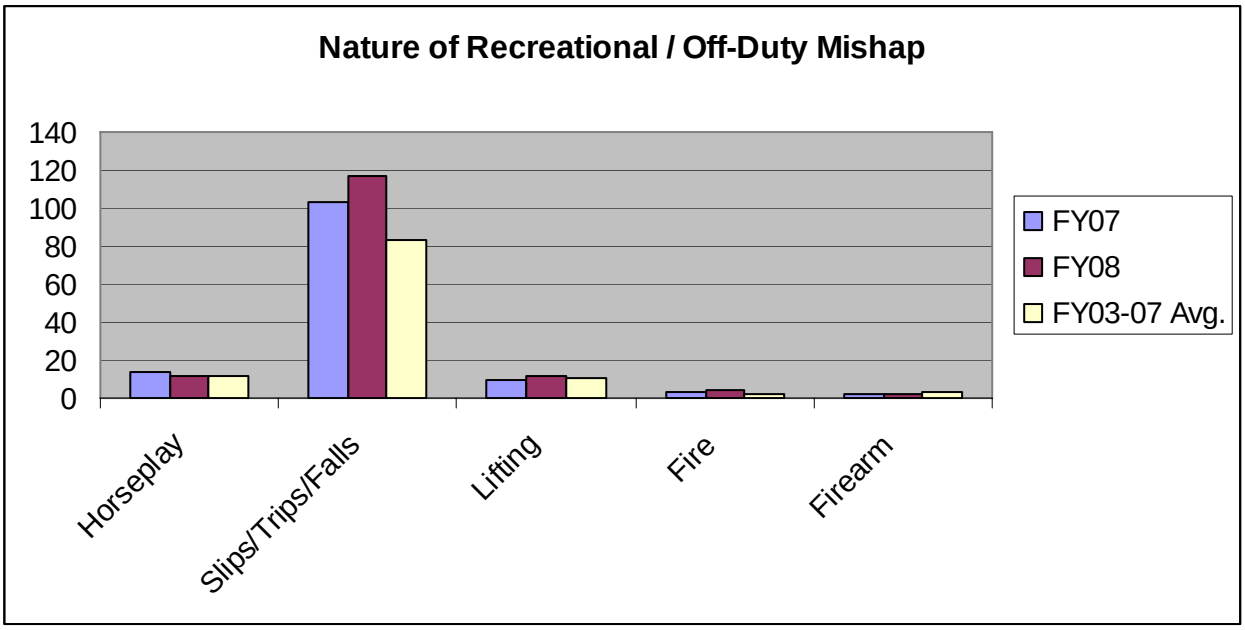


Figure 16



Slips/trips/falls, both on and off duty, are a leading cause for mishaps.

CONTACT INFO

Your comments on this report including recommended content, as well as any suggestions concerning the safety of maritime operations will always be greatly appreciated. Please feel free to call, fax, or e-mail us with any comments, questions or concerns.

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Shore and Sector Operations Ashore Safety Division

CDR Laura H. Weems	(202) 475-5216
Mr. Michael L. Smith	(202) 475-5205
Mr. Thomas Cinko	(202) 475-5204
PSCS Thomas Trumbauer	(202) 475-5147

MAINTENANCE & LOGISTICS COMMANDS
SAFETY POC's

MLC ATLANTIC (kse)

Chief - Mr. Vincent Andreone (757) 628-4392
Assistant Branch Chief- LCDR Harrichand Rhambarose (757) 628-4392
http://cgweb.lant.uscg.mil/kdiv/kseHomePage.htm

MLC PACIFIC (kse)

Chief – CDR Jeff Church (510) 637-1151
Environmental/Industrial Hygiene Section Chief – LCDR Sarah Unthank (510) 637-1243
Safety Section Chief – Mr. Duke Pettigrew (510) 637-1248
http://cgweb.mlcpac.uscg.mil/mlcpackse/

Other Helpful Information:

Office of Safety and Environmental Health:
http://www.uscg.mil/hq/cg1/cg113/default.asp

Division of Shore Safety
http://www.uscg.mil/hq/cg1/cg113/cg1132/default.asp

Motor Vehicle Safety
http://www.uscg.mil/hq/cg1/cg113/cg1132/default.asp