

# **FY-2004 Safety Report**



**FOR MARITIME OPERATIONAL FORCES –  
CUTTERS.  
CUTTER BOATS,  
SHORE-BASED BOATS,  
AND MARINE SAFETY UNITS**

**Commandant (CG-1134)  
Afloat and Marine Safety Division  
Office of Safety and Environmental Health**

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# PURPOSE

This report contains summaries and analysis based upon reported FY04 mishaps; where applicable, this data is compared to historical trends. It's purpose is to promote safety awareness and improved risk management across the spectrum of maritime operations by providing program managers, operational commanders, and individual operating units with a snapshot of how well we're doing to provide a safe and healthful workplace for our personnel aboard cutters, operating small boats, and conducting marine safety activities.

To reduce future safety risk within maritime operations, we must understand where we currently are. Having knowledge of problems that have resulted in accidents helps us to better anticipate, recognize, and control hazards throughout our workplaces and operations.

We hope units with operational maritime assets will find this report useful and will share and 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 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 and Occupational Health Coordinators (SOHC's), applicable MLC-detached Safety and Environmental Health Officer (SEHO's), or the appropriate Headquarters point of contact listed at the end of the report.

# MESSAGE FROM CHIEF, AFLOAT AND MARINE SAFETY DIVISION (CG-1134)

Thank-you for reviewing the FY04 Safety Report for Maritime Operations. Please note that we have “numberized”, changing from G-WKS to CG-1134, following the Coast Guard’s move towards numeric program indicators that are harmonized with our DOD counterparts.

Regardless of what we are called, as the Coast Guard continues to move toward fully integrating all maritime operations under Sector commands, we will continue to support all cutter operations, boat operations and maritime safety activities. Looking forward at these organizational changes brings up an important question: Where will the safety program fit into the Sector command structure? We believe the answer lies in the creation of a new role, the Sector Safety Manager. Together with the many other programs and field commands involved in implementing sectors, we are working to come up with the best way to define the associated roles and responsibilities as well as the necessary policy changes to enable this person to perform their vital function with Sectors.

The integration of traditional “O” and “M” activities under the set of Sector Response and Prevention operations also creates some interesting questions for Team Coordination Training (TCT) and Operational Risk Management (ORM). While TCT & ORM will remain fundamental to the safe and effective operation of our cutters and boats, they must now also become integral to inspection, pollution response, and port security missions. We will be engaging program managers as well as the field over the next year to better understand the unique risks and hazards of the related work environments, how communications, decision-making and other human factors-related skills contribute to effective teamwork in completing such missions, and what risk management tools will be most appropriate for these activities.

One of the most exciting developments over the last few years within the Safety & Environmental Health arena in the Coast Guard has been the development of and now near universal use of E-mishap. We’ve seen a dramatic increase in reporting during that time—not because of more incidents—but because it enabled you to more easily report the incidents you were having. Accordingly, I would like to encourage more use of the system for Near Miss / High Potential (HIPO) reporting. In FY04, there were just 23 Near Miss/High Potential (HIPO) events reported, which was significantly lower than the 39 reported in FY03. While serious accidents are important to investigate and report, HIPO reporting provides much more real-time feedback to other operators, allowing them to benefit from your experiences and to prevent similar potential situations from developing. They also help provide the safety & health community with the “intel” which is needed for managing related risks at the service-wide level. Please continue to report HIPO events when they happen -- they are especially important as we continue to add new platforms to our fleet and are reorganizing into an integrated Sector structure.

Thank-you!! Think about your risks and be safe!

CDR Tommey H. Meyers

# CUTTERS AND

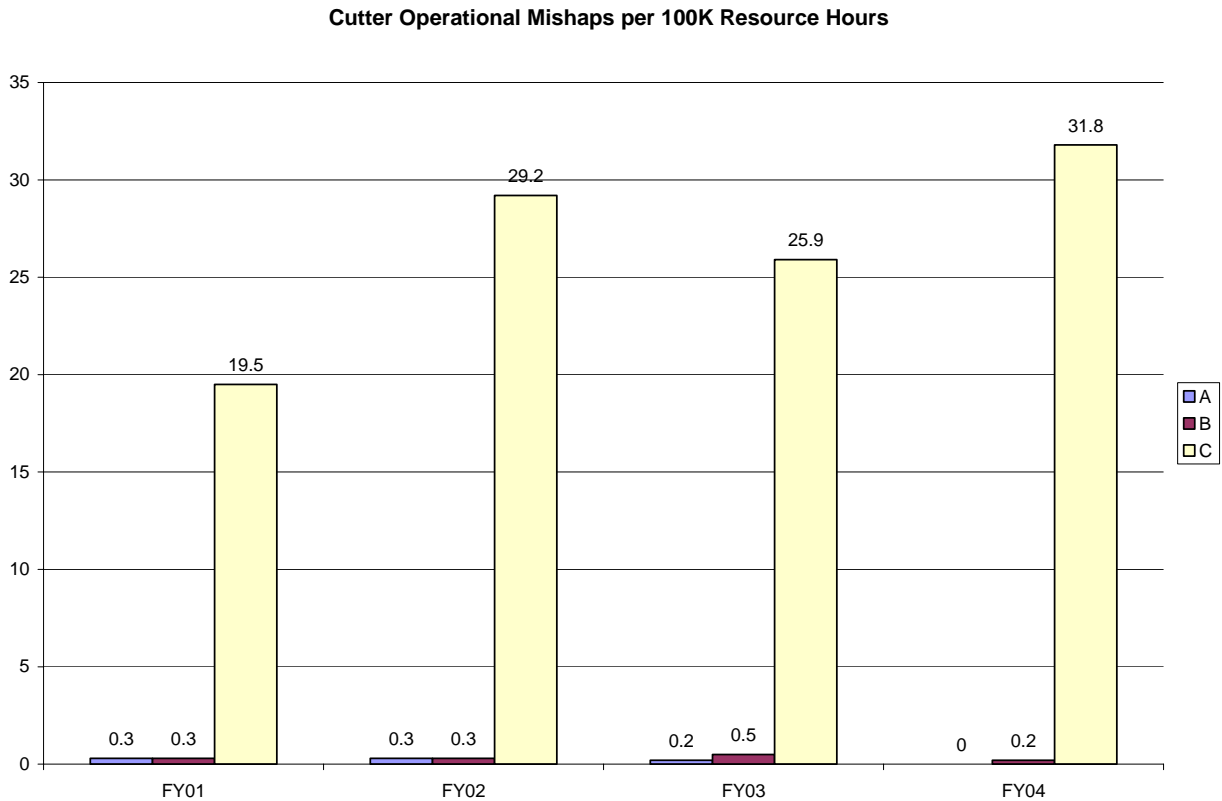


# CUTTER-BASED BOATS

## Mishap Analysis:

FY 2004 saw minor but statistically insignificant changes in overall mishap rates for the cutter fleet. (See Graph 1)

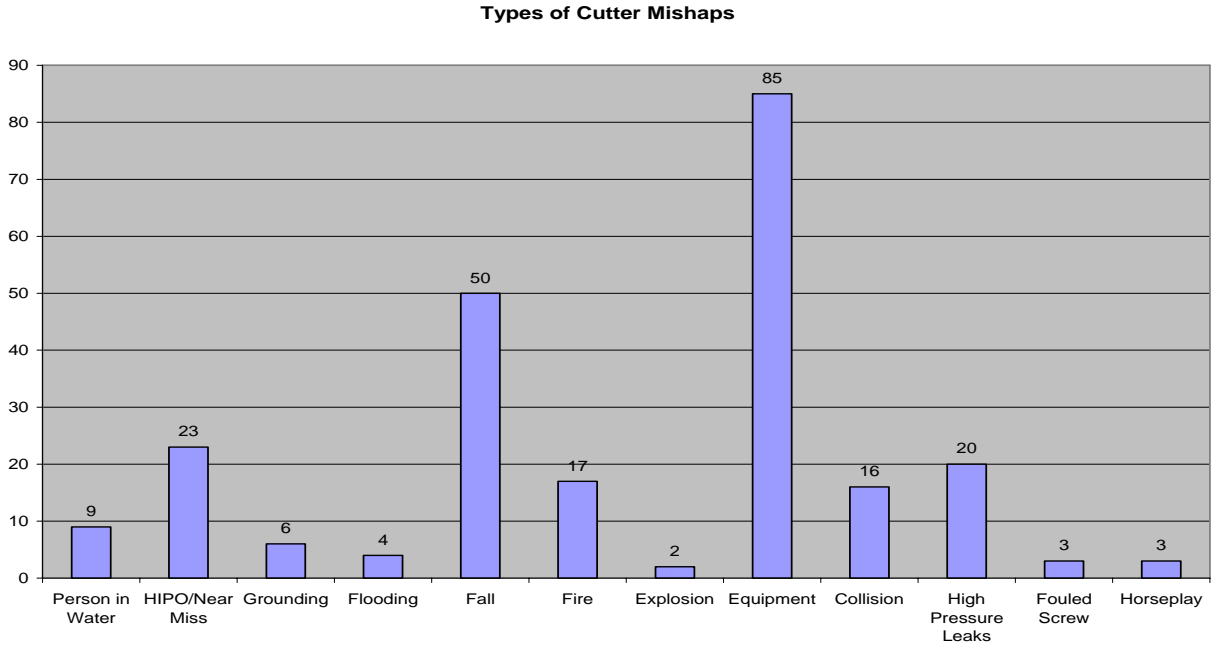
**GRAPH 1: Cutter Mishap per 100K Operating Hours**



The vast majority of operational cutter mishaps in FY2004 were equipment related (See Graph 2) with many of them engineering-related, including 17 instances of fire and 20 of high pressure fluid leaks. These mishaps could be indicative of rapidly aging cutter fleet.

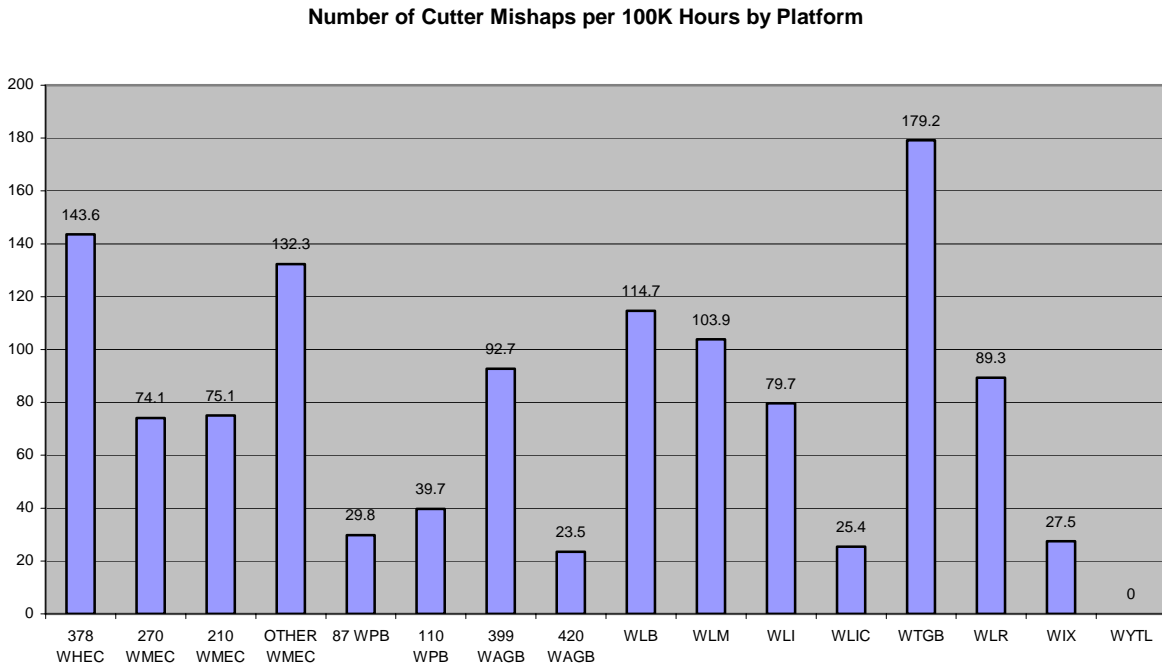
However, in contrast to the focus upon equipment & engineering issues, FY04 also saw 50 instances of falls, making them the second most prevalent type of cutter mishap. Our cutter sailors need to remain constantly aware of their surroundings and their supervisors must exercise and enforce proper risk management, even for the most mundane of tasks.

## GRAPH 2: Cutter Mishaps by Mishap Type



As noted above regarding the types of mishaps, there are ongoing concerns about replacement of our aging platforms. As seen below (Graph 3), the older platform-types did have a tendency for higher numbers of mishaps.

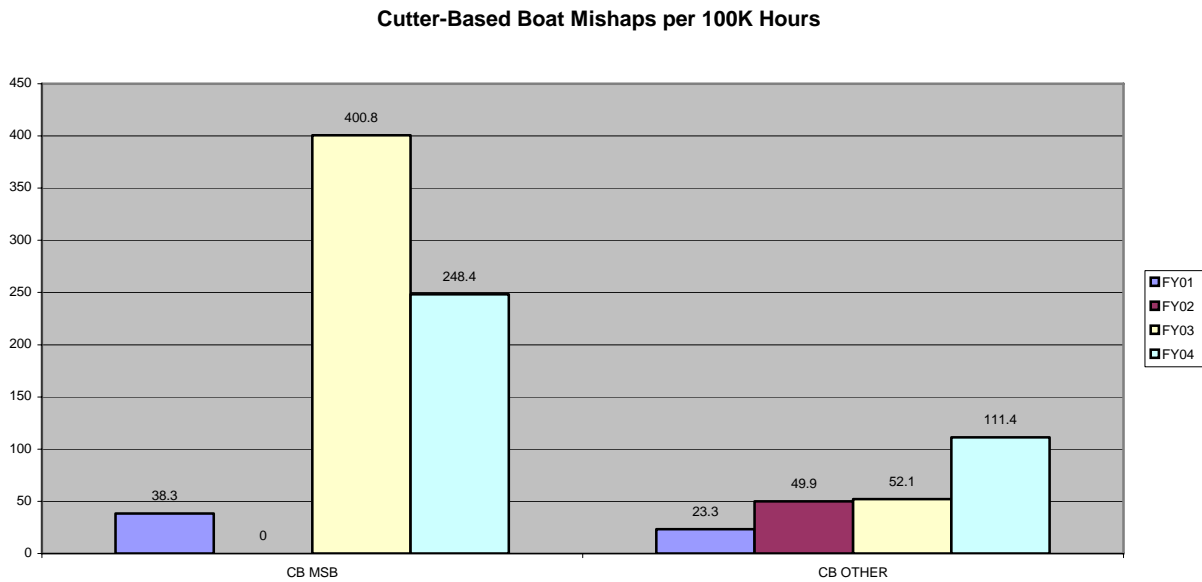
## GRAPH 3: Cutter Mishaps per 100K Operating Hour by Cutter Type



## CUTTER-BASED BOATS:

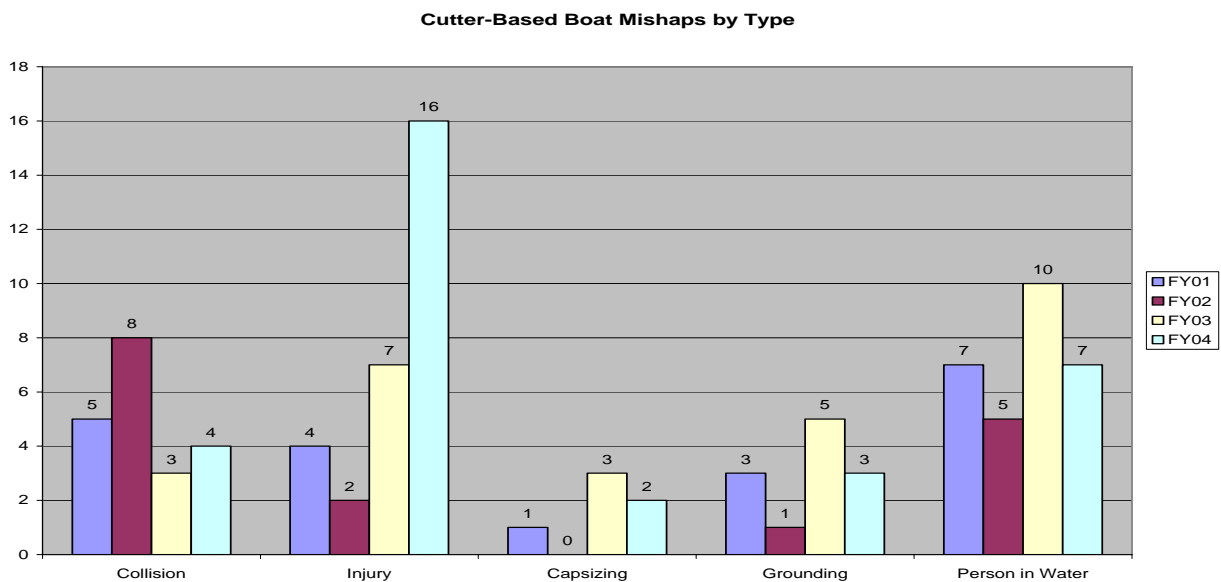
Cutter-based boat mishaps for non-MSB's saw an overall increase in FY04. MSB mishap rates decreased but still remained high. Much of the high rates for MSB's are an artifact of the low numbers--there were only three MSB mishaps in FY04—and the continued reduction in MSB hours since 2001

### GRAPH 4: Cutter-based Boat Mishaps per 100K Operating Hours



FY04 saw a large increase in the number of injuries reported in cutter-based small boat operations (Graph 5). Most injuries occurred during routine boarding operations and small boat retrieval. Other types of mishaps were generally reduced.

### GRAPH 5: Cutter-based Boat Mishaps by Boat Type





# SHORE-BASED

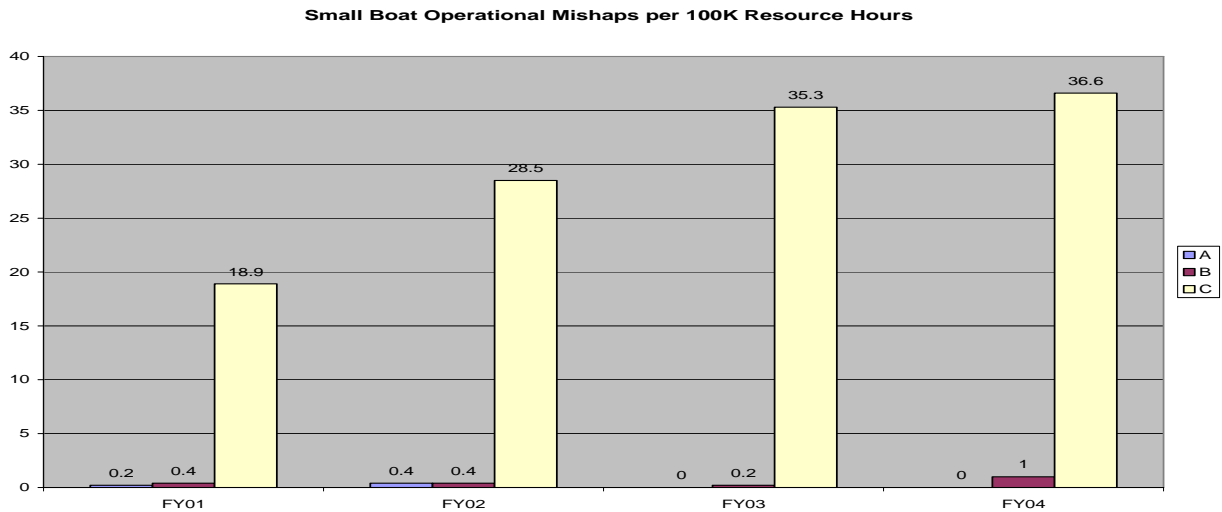


# BOATS

**Mishap Analysis:**

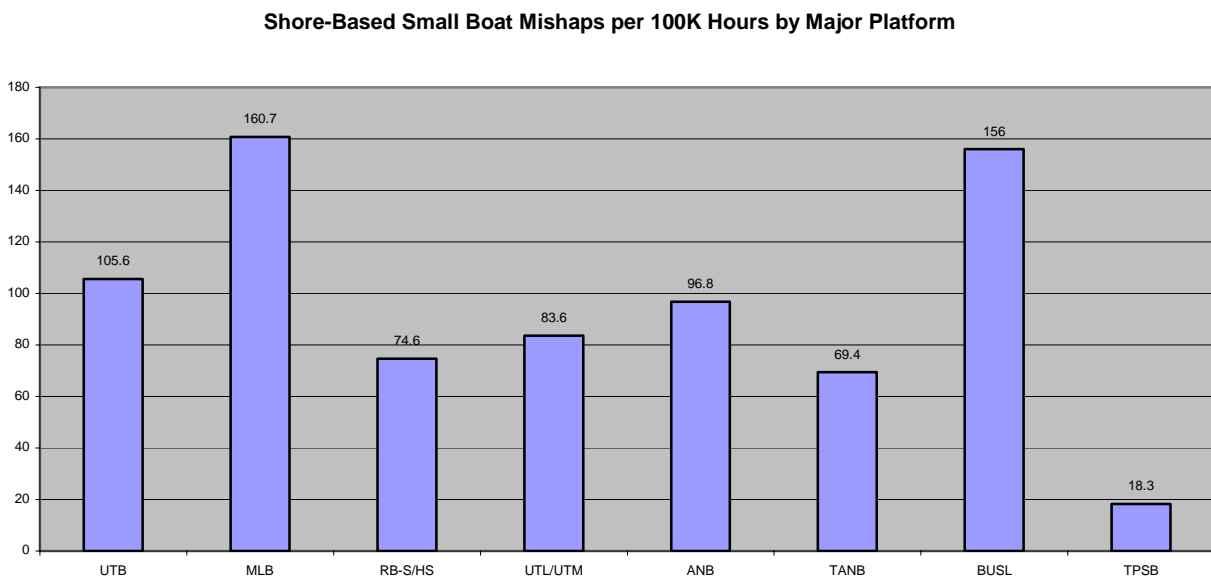
FY04 continued the trend of constant evolution and change to the missions and composition of the Coast Guard’s shore-based boat forces. Despite the many changes, for the second year in a row, the shore-based small boat fleet experienced no class A mishaps and there were only slight, but statistically insignificant increases in both B and C mishaps. (See Graph 6)

**GRAPH 6: Boat Mishaps per 100K Operating Hour**



The MLB had the highest mishap rate of all shore-based boats in FY04. (See Graph 7). However, many mishaps were minor boat damages resulting from routine surf operations. The BUSL also saw a relatively high mishap rate with most of these occurring during actual ATON operations.

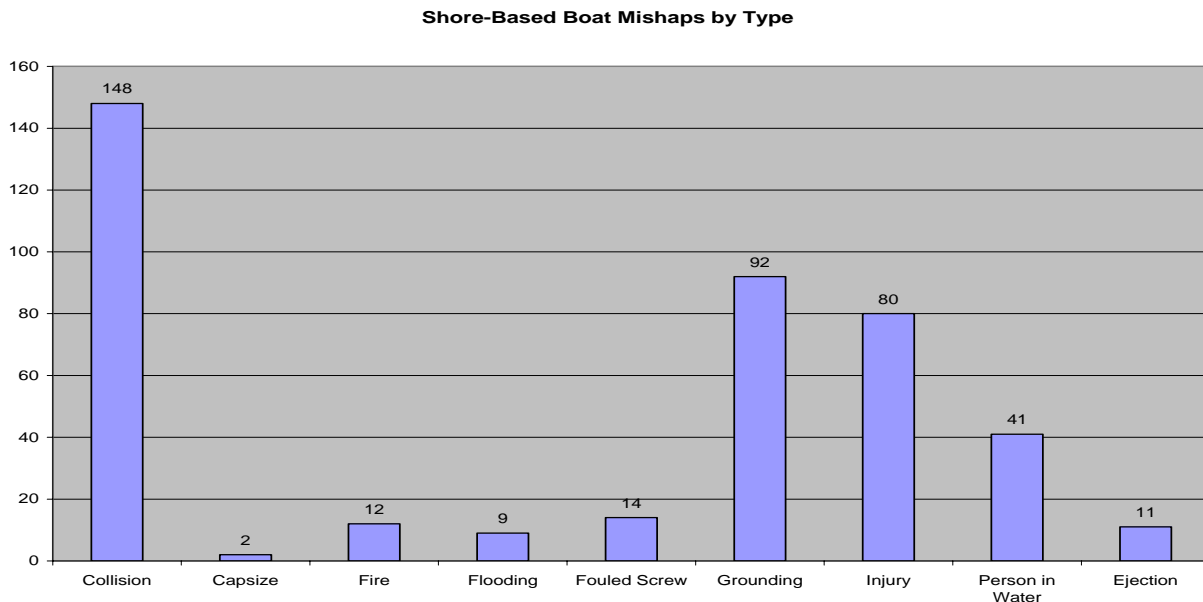
**GRAPH 7: Boat Mishap per 100K Operating Hours by Boat Type**



The majority of boat mishaps in FY04 were due to collisions and groundings. (See Graph 8) Many of the collisions occurred during boarding and towing evolutions when our boats are operating in very close proximity to other vessels. Many of the groundings occurred aboard non-standard UTL/UTM platforms which have been the selected platform for operating in shallow and shifting AORs.

E-MISHAP now allows ejections to be listed as a specific mishap type; emphasis has been placed upon this type of mishap given our newer, faster, high-performance boats such as the RB-S. Among all boat types, there were 11 ejections reported in FY04.

**GRAPH 8: Boat Mishaps by Mishap Type**



# Marine Safety



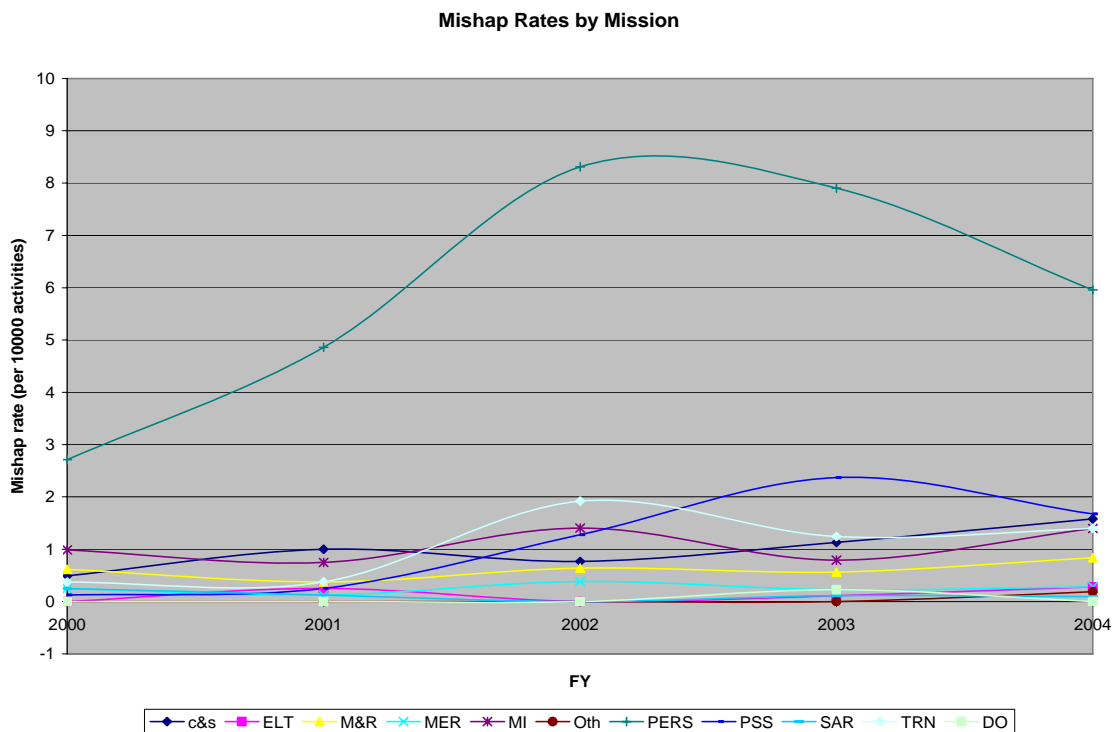
## Activities

## Mishap Analysis:

Mishap data over the past five years for marine safety activities comes from two independent systems: MISLE and E-MISHAP. Both of these databases were created around 2001 and became operational in FY 2002. Though the database managers have attempted to migrate previous data into the current format, there is no reliable means of validating data prior to FY 2002. Any conclusions based upon rate changes should be considered with this understanding.

Unlike the cutter and boat mishaps for which operating hour data is available, marine safety activities do not have longevity of mission data; thus to look at rates, use of a single specific activity is used to normalize the data. For example, in FY 2000 there were 81,150 specific activities reported for Marine Safety units; this was up to 107,409 in FY 2004. The largest number of mishaps in FY04 for Marine Safety units occurred during the PERSONal or “off-duty” times (See Graph 9). However, since MISLE does not track these, generation of a true rate is impossible. The rate shown uses the total number of activities as a surrogate to normalize the data. Regardless of the potential inaccuracy of this methodology, it tells us is that more mishaps occur as a result of sports related and motor vehicle (non-duty) related incidents and is an area that commands should focus their risk management efforts.

**Graph 9: Mishap Rate per 10,000 Marine Safety Activities by Mission Area**



When examining all of the missions reported via the e-MISHAP system, there are four which display an increasing trend over the past 5 years (See Graph 10). These are Port Safety and Security Operations (PSS), Training Related (TRN), Marine Inspection (MI), and Command and Support (C&S) as indicated on Graph 2: Mishap Rates by Select Missions.

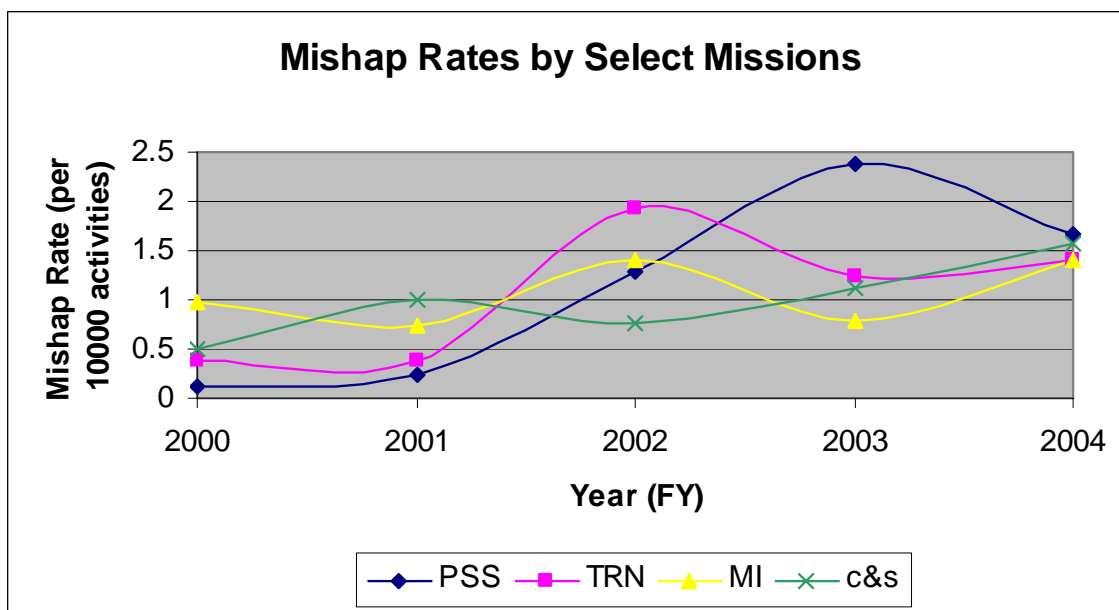
Port Safety and Security has showed the greatest increase over this time period with the greatest increase immediately following FY 2001. This appears to be directly related to the increase in PSS missions following the events of 9-11-2001. This is compounded by an increase in activities and change from traditional MS missions to more LE and security missions.

Training follows this same trend with a “spike” between 2001 and 2002, further emphasized by all training related mishaps in FY 2004 being directly associated with LE training. There were no training related mishaps associated with other “MS” missions.

Marine Inspections mishap rates have displayed a slow and steady increase over the 5 year period. The mishaps experienced in the past year are a combination of motor vehicle and mishaps during inspections of various platforms. Many of these mishaps will be explored for lessons learned in the next section of this report.

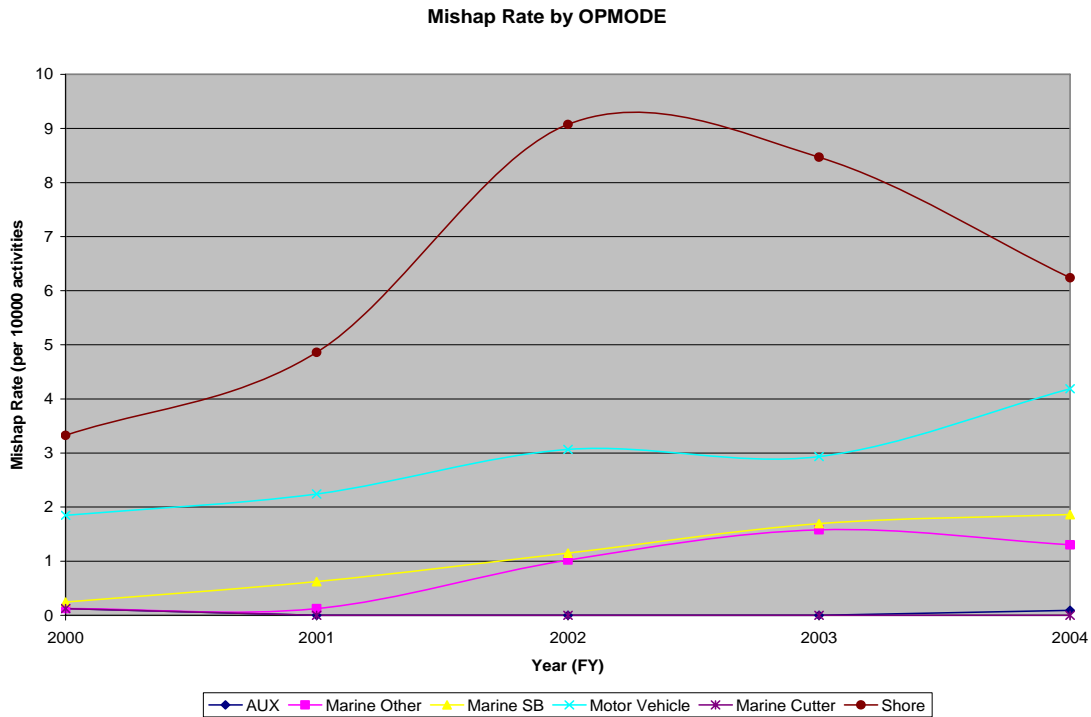
Command and Support mishaps have shown a slight increase over the past five years; however this may be artificially induced due to mis-reporting. A review of mishaps over the past several years indicate that many of command and support related mishaps were actually sports related or motor vehicle mishaps which may better be classified as personnel related missions, as previously noted.. Care in proper classification of mishaps is expected to help eliminate this upward trend in Command and Support mishaps.

**Graph 10: Mishap Rates per 10,000 Marine Safety Activities by Selected Mission Area**



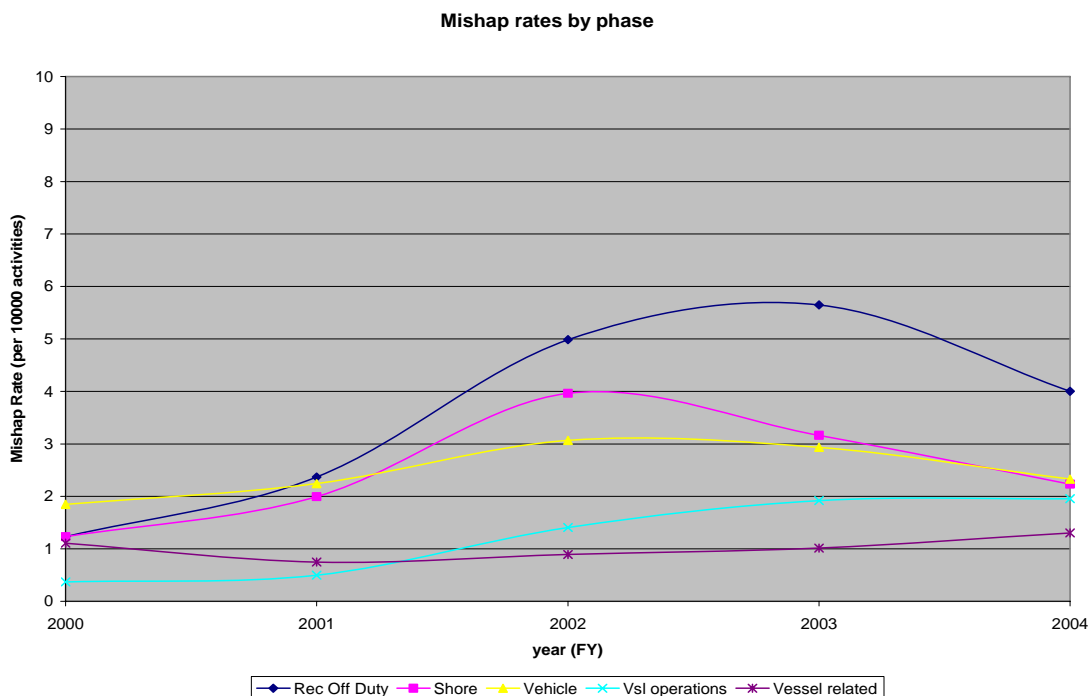
Analyzing mishaps by platform and/or mode of transportation indicates that mishaps related to motor vehicles, Small Boat, and other marine platforms (other than cutters or small boats) have been increasing over the past five years. (See Graph 11) This is countered by a marked decrease in “shore” related mishaps. This would be expected due to the increase in security missions and the increase in associated small boat or vessel operations.

**Graph 11: Mishaps per 10,000 Marine Safety Activities by Operating Mode**



By looking at mishaps by phase, it can be seen that work related vehicle mishaps have begun to decline, inferring that the rise in motor vehicle mishaps is primarily due to non-operational or personal incidents. Vessel operation mishap rates are increasing, likely reflecting the recent change in missions, increased optempo, and change in platforms. This will likely plateau or even decline in the future as new training takes hold and experience levels increase.

**Graph 12: Mishap Rates per 10,000 Marine Safety Activities by Phase**



In summary, the majority of marine-safety mishaps are non-work-related and additional emphasis must be placed upon personal risk management during recreational and driving activities. Our operational areas of greatest concern are small boat operations, LE (port security) activities, and Marine Inspections. Safety Officers and SOHCs are encouraged to focus training and risk management programs on these areas.

### **Case Studies:**

A closer look at operational mishaps often presents an opportunity for all CG members to benefit from an accident or near miss. This section of the annual report will explore some of these more informational mishaps. The unit and location will be omitted, however the lessons learned should be taken seriously to help prevent similar situations at your unit.

As noted in ALCOAST 053/05, proper use of gas detection equipment can be vital; the ALCOAST actually reflects several incidents. One of these occurred while a Marine Inspector conducted an Internal Structural Exam on a tank barge. The inspection was being conducted at one of the most reputable shipyards in the AOR and all competent person logs appeared to be in order. When the inspector entered the stern void to begin the inspection, the GasAlertMicro (4 gas meter) alarmed for high levels of Carbon Monoxide. The inspector immediately evacuated the space and called the other inspector (in one of the cargo tanks). A closer examination of the competent person history logs found that all exams had been conducted at the exact same time with the exact same results. When questioned, the shipyard's competent person admitted that their meter had been broken for a week and that he had neglected to inform the shipyard of the broken equipment. The key lessons from this incident (and the others associated with the ALCOAST) include proper use of the required equipment and following safe work practices. Confined Spaces really can contain dangerous and unseen hazards and it just may be the GasAlertClip or GasAlertMicros that you actually carry with you that saves your life or your buddy's life. As per COMDTNOTE 16000 dated 27 April 2002, the safe work practices for confined space entry policy for marine safety personnel includes the requirement to conduct audits of the shipyard competent persons. Such audits would have identified some of the problems encountered during the above incident. The final take-away is that a shipyard's history or reputation should never be relied upon. It only takes one person within the yard's staff to jeopardize your life.

The second incident of interest looks a member who reported to the local Hospital ER with severe back pain. The pain was determined to be a pulled muscle with the likely cause due to lifting and moving weights during a stability test on a small passenger vessel the day before. The member received 2-days SIQ and was prescribed pain medication and muscle relaxers. The lesson that can be used by all is that it is easy for us to get wrapped up in the tempo of operations. Waiting for "T" boat operators to move weights around often seems like a delay that we could alleviate. It is not our responsibility to move the weights and the time saved is not worth SIQ time.

The third incident involves an exterior dry dock exam where workers were pressure washing the hull with a chemical cleaning solution. Water from the pressure washing splashed onto an inspector's skin. When the inspector returned to the car he noticed a burning sensation on the back of his hand. He initially believed it to be sunburn; however, the next day he woke with blisters on his skin. The chemical burn continued to blister and eventually peeled within a couple of day. This incident provides a good lesson about complacency. While it could be easily assumed that pressure washing is a safe operation, the simple addition of chemical treatments could result in a very hazardous condition. In this case the inspector was lucky since



it was only his skin that was impacted and not his eyes where it could have caused permanent blindness. It's OK to have a shipyard stop an operation so that you can conduct an exam!

In a fourth incident, three members from a Pollution Response Team were exposed to toluene for approximately 5 seconds while conducting a follow up investigation to a chemical release incident that occurred the previous night at a chemical facility. A toluene tank, located inside a building on the facility overflowed and released the product to a nearby outfall. During the incident contractors along with local fire department personnel placed boom around the outfall. Coast Guard and contractor personnel were standing upwind from the outfall site, when a gust of wind blew back in the direction where all personnel were standing. All personnel left the area immediately. One member reported a slight headache and all members were evaluated by a nearby hospital and found to suffer no adverse effects from the incident. The lessons learned include the concept that conditions continually change and must be accounted for in a response environment. Although the members, as emphasized in Emergency Response (HAZWOPER) risk management training, took the recommended upwind approach, their close proximity to the hazard allowed changing conditions to potentially affect their health and safety.

### **Equipment:**

During this past year a significant amount of time, money, training, and attention has been paid to obtaining proper protective and detection equipment. Training Center Petaluma has developed an excellent repository (<http://cgweb.tcpet.uscg.mil/wmd>) for many of the items that the Marine safety program uses regularly.

One particular area of emphasis is upon the GasAlertClips. A number of units have reported "failures" and "technical difficulties"; however, a factory-level review of all "defective" meters has indicated that in almost cases, the meters have not been calibrated. Units are reminded that they must have a weekly reset in a fresh air environment.

### **Safety and Occupational Health Coordinator:**

Last year's report discussed a curriculum update. This has been completed and is currently being taught at Training Center Yorktown during a one week course that is available twice each year. As noted earlier in the report, the office of Safety and Environmental Health (CG-113) recognizes that the role of the Safety Coordinator is likely to change as the Coast Guard migrates to Sector alignment. As new roles and responsibilities are developed, the curriculum will be modified to reflect these changes.

# TEAM COORDINATION TRAINING (TCT)

FY 2004 was an extremely busy TCT year. In comparison to FY 2003, the total number of actively engaged TCT Facilitators jumped from 127 to 146 and the total number of students (Active Duty, Auxiliarists, and Reservists) receiving unit-level, exportable TCT increased from 8,225 to 9,215. The average cost per student remained the same as last year at \$14.11. The performance of TCT Facilitators, TCT District Administrators, TRACEN Petaluma Instructional Systems School staff, USCG Academy Command and Operations School staff, and the Training Quota Management Center (TQC) to provide this increased throughput was extraordinary.

The system for requesting training was modified near the end of FY 2004 to increase efficiency. Training is now requested through the District TCT Administrator, who ensures that the paperwork is complete and then forwards it to their MLC (kse). The MLC tracks facilitator quotas and funding for their Districts and forwards the requests to TQC for processing.

## FY-2004 TCT STATISTICS

- Total number of students receiving TCT Resident Training:

69 TCT-Group Operations (Course Code 500687)  
64 TCT-Cutter Operations (Course Code 500686)  
31 TCT-Facilitator Training (Course Code 500688)

164 Total

- Total number of students receiving Exportable, TCT Unit-Level Training (Course Code 500834) (as recorded in Direct Access):

9215

- Total number of active district TCT Facilitators: (does not include LANT/PAC AREA Training Team instructors):

147

- Exportable, TCT unit level training program average cost per student / quota:

\$ 14.11

# TCT CONTACTS

In accordance with Team Coordination Training (TCT), COMDTINST 1541.1, all requests for exportable, TCT-unit level training (500834) shall be forwarded to the cognizant District TCT Administrator and coordinated through the appropriate Auxiliary division captains for Auxiliary TCT. Current District TCT Administrators (and work phone numbers) are listed below for reference:

D1 (osr):	CDR Reginald Needham	(508) 799-1789
D5 (oax):	CWO David Lukasik	(757) 398-6509
D7 (osr):	CWO Robert Flynn	(305) 415-7053
D8 (oax):	CWO Joseph Temple	(504) 589-2972
D9 (cc):	LTJG Christopher Pasciuto	(216) 902-6117
D11 (osr):	CPO Jay Thomas	(510) 437-5366
D13 (cc):	LT Cassee Cunningham	(206) 220-7004
	Assistant: Jeanette Wells	(253) 891-0620
D14 (osr):	LCDR Jeff Janszen	(808) 541-2312
D17 (oan)	MCPO David Coffman	(907) 463-2266

Other helpful information:

- COMDT TCT Program Manager:  
LT Tom Olenchok: [tolenchok@comdt.uscg.mil](mailto:tolenchok@comdt.uscg.mil) (202) 267-2969 or  
1-800-842-8740, Ext. 7-2969
- Afloat & Marine Safety Division (CG-1134) / TCT / ORM web site:  
<http://www.uscg.mil/hq/G-W/g-wk/wks/wks4/index.htm>
- Office of Boat Forces (G-OCS) Boat Forces Newsletter web site:  
<http://cgweb.comdt.uscg.mil/g-ocs/g-ocs/newsletter.htm>
- Training Quota Management Center (TQC) web site:  
<http://www.uscg.mil/hq/tqc>
- Coast Guard Institute (CGI) web site:  
<http://www.uscg.mil/hq/cgi/>

# CLASS A AND B CUTTER & BOAT OPERATIONAL MISHAP SUMMARY

The table below summarizes E-mishap data for Cutter & Boat Class A and B operational mishaps over the last four fiscal years.

date	class	narrative
10/1/2000	B	CG 212522 (RHI) patrol with 3 POB. Break-in coxswain requested to take helm for return trip; after coxswain change, coxswain removed kill switch to shift to break-in. Break-in coxswain increased speed and began hard turn, and all three crewmembers were ejected. CG 212522 was running in circles around 3 PIW. Three PIW were not wearing pyro jackets and two of three fired a total of six 9 MM rounds as signal for help and were picked up by Good Sam. Florida fish and wildlife conservation boat (FWC) then arrived on scene and one CG member was transferred to FWC boat to attempt to stop runaway CG 212522. After second attempt to stop CG 212522 (still running in circles), CG 212522 hit wake, causing CG 212522 to change direction and travel straight ahead at high rate of speed. FWC boat and CG 212522 then collided and CG member embarked on FWC boat was ejected. While in water, it appears he was run over by CG RHI and struck in head by skeg or prop. Member retrieved from water by FWC Boat, transferred to ashore medical care and then airlifted to trauma hospital in Miami (see MY 012215Z OCT 00). Member was released from hospital 5 OCT 00 and overall prognosis is good. Remaining two members undergoing physical exams.
11/25/2000	A	STORIS was prosecuting a suspected incursion at pos 60-50`n, 178-32`w. MSB aft davit arm snapped as small boat and boarding team (9 personnel) were lowered over the side. Small boat capsized while boat lowering crew made efforts to control the boat. All personnel on board the small boat went into the water. Capsized small boat remained tethered to ship by the forward falls. Man overboard bill was set. STORIS brought dead in water maneuvering only to keep small boat from impacting PIW and fouling rescue attempts alongside. STORIS deployed two rescue swimmers to assist. All personnel were brought safely on board and treated for hypothermia. One crewmember treated for back injuries. Small boat was then cut free from the ship. STORIS attempted to grapnel boat and roll (to dewater) and hoist boat on deck with crane, attempts were unsuccessful. Due to snow showers and fog, STORIS began to lose visual contact with the small boat. STORIS opted to sink small boat vice leaving it as a hazard to navigation. Expended 80 rounds 5.56 fm m-16, and 300 rounds fm .50 cal into hull of MSB.
1/10/2001	B	During a go-fast pursuit in 4-6 ft seas, the DPB regularly took water over the bow and the stern while DIW. This is normal and heavy bilge pumps have been installed to handle the frequent surges of green water. After pursuing the go-fast for nearly 4 hours, the vessel was stopped. The DPB was tasked with recovering numerous bales in the water. After off loading contraband to TAMPA, the crew started experiencing electrical surges throughout the crew compartment of the DPB. The crew attempted to return to USNS PERSISTENT. After 5 minutes of transit the electronics shorted out completely. The pumps were unable to keep up with the incoming water. The coxn attempted to maneuver the vessel into the most favorable seas to minimize flooding. Soon the engine compartment flooded with enough water to reach the engine air intakes and stall the engine. The stern sank below the waterline. TAMPA lowered their MSB with damage control equipment and placed dewatering pump onboard. TAMPA came alongside to create a lee and pass more dewatering equipment. Once water was removed, USNS came along side and raised the DPB out of water and cradled the boat.

date	class	narrative
2/10/2001	B	While crossing the bar, vessels stern was lifted 20 degrees by a swell causing both generators and MDE's to stall, and steering to fail. Vessel then struck the jetty, causing damage to the bow and forward areas.
3/23/2001	A	23 march 2001 at 1941 CG-214341, a nonstandard foam collar boat (FCB) was underway from STA NIAGARA to conduct a law enforcement mission in the Niagara River for the purpose of interdicting illegal migrants. A three-person boat crew/armed law enforcement team and one break-in crew member were on board the vessel. Immediately upon departure, the coxswain of the boat deviated from the patrol plan and took the vessel north into Lake Ontario to familiarize the break-in crew member with this portion of the stations area of operation. The boat experienced steep, four-foot waves from the north shortly after entering Lake Ontario. On scene winds were reported from the northwest at 10 knots, the air temperature was 37 degrees and the water temperature was 36 degrees. The coxswain successfully navigated the boat approximately 1,000 to 1,500 yards north of buoy no. 3 (about 3,000 to 3,500 yards north of the mouth of the Niagara River) in Lake Ontario, turned the vessel around and proceeded back south in the direction of the Niagara River. At some time shortly before 2000 and on the return trip south, approximately 50 yards north of buoy no. 3, the coxswain overtook a wave, surfed down the front of that wave and buried the bow of CG-214341 in the backside of another wave. The vessel then slowly rolled over to starboard and all four crew members safely abandoned the vessel without injury. The vessel missed its first communications check at 2001. Rescue efforts were initially hampered by the coxswain's decision to proceed north into Lake Ontario without advising STA NIAGARA of his deviation from his previous float plan. The Wilson, NY fire department boat crew recovered all four crewmen at 0027 Saturday, 24 March 2001. Two of the crewmen were in cardiac arrest when recovered and subsequently died despite the heroic and professional efforts of local EMS personnel to re-warm and resuscitate them. The other two crewmen recovered and returned to duty.
11/1/2001	A	Unit conducting ATON operations at Mantua Creek Anchorage Buoy A (LLNR 3390) with the assistance of Philadelphia Marine Police Divers. Unit had scheduled operations with Marine Police Divers to recover sunken hull. Marine Police Divers have been used in the past for similar operations. WILLIAM TATE small boat arrived on scene with Police Divers to on sunken buoy hull. Initial dive attempts delayed due to strong currents. Recommended dive ops near slack water. Diver deployed from small boat with tag/comms line to attach retrieving line to sunken hull. Unit maintained position approximately 50 feet from dive position. Diver was underwater for approximately 20 minutes when the dive supervisor lost communications with the diver and stated that he might be tangled in the tag/comms line. A second Philadelphia Police Diver suited-up and immediately entered the water to assist. The second diver brought the first diver to the surface in 2 minutes. The stricken diver was brought alongside the cutter and lifted to the buoy deck. EMT and PA (AUX) commenced CPR. Unit transferred diver to local EMS at Fort Mifflin where he was pronounced dead.
11/14/2001	B	VSL completed SAR case involving capsized vsl with 1 PIW. PIW was taken to station and VSL returned to scene to conduct salvage ops. CG47250 had capsized vsl rigged for stern tow. 22 crew attempted to assist in righting by passing grapnel hook. 22 STBD aft section dipped in and filled with water when strain was applied. 22 became unstable and capsized.
1/12/2002	A	On 12 JAN 02, at 2005 hrs, UTL CG 242513 got underway out of STA Miami Beach with a crew of two (BM2 as coxswain and MK3 as engineer), to conduct RBS in Biscayne Bay. UTL CG 242513 transited through the MacArthur Causeway and proceeded north and west around Star Island, paralleling the shoreline of Hibiscus Island. Crew saw no vessels of note in the vicinity of Hibiscus Island, the coxswain decided to reverse course to the east along the northern shore of Hibiscus Island and subsequently south around the end of Hibiscus Island, toward the Mac Arthur Causeway. Estimated speed was 30-35 knots. The coxswain realized he was in a Manatee Zone and began throttling back on both engines. At the same time, they saw a silhouette of a dark object in their path. The coxswain took evasive action, turning the

date	class	narrative
		<p>steering wheel hard to port (to the lock position) and applying starboard throttle. The UTL CG 242513 made broadside contact with the vessel. Immediately after contact and clearing the stern of the contacted vessel the crew was involuntarily ejected over the starboard side of UTL CG 242513. They were aware UTL CG 242513 was still operating and the engines had not cut off. The crew heard a second impact (UTL CG 242513 struck its bow on the silhouetted vessel's starboard amidships). No passengers or crew of the vessel were ejected during either strike. The UTL CG 242513 continued to run, and turn in counter-clockwise circles. UTL CG 242513 edged closer to the shore of Palm Island, (lying parallel and to the South of Hibiscus Island) and struck a privately owned vessel two times, docked behind the owner's home. UTL CG 242513 then continued to circle and work it's way north two houses, finally becoming trapped in pilings, and the engines secured by Miami Marine Patrol or FWCC. During the time UTL CG 242513 was an unmanned runaway, the crew was making their way to shore on Palm Island where they were recovered with the assistance of shore side residents. The crew had to abandoned their life vests, in order to avoid UTL CG 242513 hitting them and to be able to swim. The vessel struck by UTL CG 242513 continued underway to nearby Monument Island, where it was beached and the passengers offloaded. The captain checked for watertight integrity and called for assistance. Local police authorities and CG AUX assisted with the passenger checks and evacuation from the island to another vessel. Nine passengers were brought to the station; three were taken to the local emergency room and released after treatment of minor injuries. The crew was evaluated and treated for minor injuries at a local hospital, then released the same day. The coxswain turned over his weapon and belt to another CG member prior to departing for the emergency room. The weapon belt had a synthetic loop with a plastic keeper, to which the coxswain had attached the metal clip of the kill switch lanyard cord. The plastic keeper on the synthetic loop was broken. The UTL CG 242513 was recovered and hauled by trailer to STA Miami Beach. The collided vessel returned, under it's own power, to its mooring. The privately owned vessel was not moved.</p>
1/18/2002	A	<p>CG-242512 U/W conducting night time law enforcement operations in search of illegal gill net fishing boats. CG-242512 observed a net boat hauling gill net onboard. Subj net boat spotted CG-242512 and fled away heading north across a known shallow bar, in the direction of a local fish house. CG-242512 proceeded north bound in the ICW with the intent to meet or wait for the net boat just outside the local fish house. Shortly after coming up on plane, CG-242512 struck Sarasota Bay Daybeacon 25, splitting a 4ft x 2ft section of the port bow. Unit OIC and XPO arrived on scene w/ CG-242512 in private boat and provided escort to boat ramp. MK3's forehead struck t-top stanchion and experienced a headache with slight dizziness. SN also experienced a small lump on his head. Both members were taken in gov vehicle for screening at local hospital.</p>
1/23/2002	B	<p>Vessel was underway transiting offshore conducting training. SN was standing next to Cox'n chair with right hand on hand rail over cox'n chair. The vessel took a roll to Port and the member's hand slid down the rail and was cut by near-by wire bracket. SN immediately instructed cox'n to stop the boat and that he was hurt. The Engineer administered first aid while the vessel RTB. Upon arrival member was taken to the local hospital by station personnel. It was determined that member tendon on middle finger was severed between first and second joints, beyond the capabilities of that hospital to repair. Member was seen by specialist the following day and underwent surgery. Specialist was successful in rejoining the tendon but it was too early to tell if member will regain full use of finger.</p>
2/11/2002	B	<p>While underway for surf training at south beach, MLB 47266 encountered a 16ft break at the end of a series causing the MLB to roll 360 degrees to starboard and righted facing the opposite direction. Upon righting, the MLB was struck by a smaller break off of the stern pushing it towards the beach. The MLB was able to return to station under own power on one engine, and by using the emergency backup panel. Injuries: 6 members were injured during the incident with all receiving 5 days of lost work. Injuries included - ligaments torn in knee, sprains, strains, deep bruising, mild hypothermia, &amp; lacerations. Property damage was extensive including: port reduction gear seized,</p>

date	class	narrative
		throttles broken off on port and starboard throttle control heads, armrests and back on port & stbd helmsman chairs are bent, magnetic compass missing housing, helm unit broken, port forward window broken in, windshield wiper bent, blue light inoperable, search light inoperable, bent radar antenna pedestal mounting bracket, 3` crack under buoyancy chamber, overhang above port fwd window bent upward, d-ring between jump seats bent, port life ring holder bent, open bridge port console hand hold bent, port tow railhorn post stanchion has 3` crack at base, insulation in steering house water saturated, port MDE, & electronics.
3/22/2002	B	Mbr attempted to open watertight hydraulic door while it was nearly closed by activating the safety strip. Mbr s right index finger tip was entrapped between hydraulic door and door frame, causing the amputation. Mbr was medivaced via OPBAT HH-60 to Jackson Memorial hospital in Miami.
10/2/2002	B	Mbr was transiting ladder into fwd sewage Rm. Mbr did not secure the WTH properly upon opening it. Mbr lost footing on the ladder. As member fell, mbr grabbed hatch with left hand and knife edge with right hand. Mbr was rushed to ISC Alameda clinic with finger on ice and then immediately transferred to specialist hospital in San Francisco for emergency surgery. Doctors were unable to reattach the finger. Doctors placed pins trough fractured fingers and provided member with soft cast on right forearm and hand.
11/14/2002	B	While transiting engine room to aft berthing, GM2 noticed lube oil spraying from Nr1 MDE. GM2 notified MKC and EOW on mess deck, and MKC informed the bridge. At 0414I OOD set main space fire doctrine. Upon entering space MKC and FA observed approx 20 gals of lube oil in bilge and on deck plates, and lube oil using portable AFFF extinguishers. Attempts were made to secure both MDE's using local, bridge, and flying bridge stops and all emergency pull stops. Nr2 MDE secured, but Nr1 continued to run. FA discovered fires coming fm lagging around flowerpot and under outboard guillotine on Nr1 MDE. Fires were reported to bridge and extinguished by FA using portable AFFF extinguisher. All fuel supply valves to Nr1 MDE were secure and all remote fuel supply valves leading to engine room were closed causing Nr1 SSDG to secure. Nr1 MDE continued to run at 600 rpms fm lube oil burning in cylinders which allowed lube oil to continue to leak and make contact with hot machinery resulting in thick grey smoke engulfing the ship. Plastic were placed over air intakes of Nr1 MDE which still failed to secure the engine. With no SSDG online and AFFF portable extinguishers expended, engine room was evacuated. Attempts were made to start both the P-250 and P6—both failed to start. The P250 started, but seized after a short period as the 20ft suction hose was unable to remain in the water due to heavy rolls of the ship . Approx. 35 mins after main space fire doctrine was set, NR1 MDE seized and secured. Once engine secured, smoke dissipated. EM1 reentered engine room opening local supply valves to Nr2 SSDG restoring power to ship. When fire pumps were energized, first two-man fire team entered the space and was able to get four cansisters of AFFF into engine room reflash. CGC SITKINAK arrived on scene before main space fire doctrine was secured, two hours and 36 mins after it had been set. Commercial tug relieved SITKINACK inside key west harbor and docked orig at GRU Key West. Upon investigation at pier, discovered Nr16 cylinder exhaust valve fell and punctured piston causing crank case explosion.
1/16/2003	A	While conducting routine ice channel grooming operations, the number 1 blade of the starboard propeller broke off the hub. Blade was not recovered. Vessel was operating in ahead propulsion with all three turbines on-line, widening the existing channel and breaking larger ice plates when unusual ship vibrations were suddenly felt. Conn immediately came to all stop and EOW reported low CPP oil level alarm on the starboard CPP system and emergency stopped the no. 1 main gas turbine. Diver later visually confirmed suspected blade loss.
8/10/2003	B	Visibility was varying between 20 and 250 yards, winds were blowing 15-20 knots, and seas 2-4 feet out of the south. MLB was responding to a vessel that hit a rock in thick fog and was dragging anchor onto a ledge. The MLB found the vessel hard aground and was evaluating the proper course of action to assist people on the vessel. Coxswain was using a lobster pot buoy for reference to ensure he was in safe water while evaluating the scene. Coxswain called the vessel via VHF radio and lost sight of

date	class	narrative
		his visual references, did not take into account set and drift, and ran aground on the ledge. Coxswain made 2 attempts to get off of the ledge without success. Crew immediately set anchor but it completely failed to hold. MLB was pushed further up on the ledge where it came to rest on an even keel.
10/8/2003	B	<p>On October 23, 2003. CG 41462 was lit off for engine trials; after being lit off the pressure of both engines was reading around 90 PSI approximately . The engines were allowed to idle for approximately 20 minutes and the pressure dropped to around 65 to 70 PSI. This was still above the 45 to 65 PSI normal operating parameters, the engines were secured, both lube oil filters were then replaced. The engines were then restarted, the pressure continued to be high. The crew of CG41462 then proceeded to get underway for the trials, with the exception of the high oil pressure readings the engines ran fine, shortly thereafter a noise was detected from the starboard engine (S/N 48800058). CG 41462 then returned to STA Belle Isle to pick up one of the Station MK's, and then got underway again. Approximately 10 to 15 minutes later, a metallic noise was emitting from the starboard engine. The engine was secured and the 41462 proceeded back to STA Belle Isle for troubleshooting. After returning, an inspection on the starboard engine commenced and 3 broken push rods were found on the inboard side of the engine. Due to the similar high oil pressure indications on the port engine (S/N 48800022), it was decided to have both engines replaced by engines from CG 41479. These engine numbers are (S/N 48800042) starboard engine and (S/N 48800132) port engine. Upon reading through the history of the CG 41462, the boat was scheduled to be removed from the active list in late 2002 early 2003. The 41462 was in storage outdoors at the Toledo Beach Marina in Lasalle, MI., for approximately 12 months and subjected to the weather and elements without proper winterization care taken. The starboard engine (S/N 48800058) was installed on August 1, 2000, shortly after its installation there were several casualties to the engine: April 30, 2001 fuel leak repair; June 15, 2001 oil and exhaust leak; December 3, 2001 replaced rear main seal; March 14, 2002 replaced o-rings on raw water pump, and exhaust manifold leak; April 9 to 11, 2002 rear main seal replaced</p>
12/18/2003	B	<p>The 47301 with a crew of 5 were returning from offshore. They had responded to a request from PAFB to provide a surface safety platform for AF swimmer ops. They were not required to actually do anything but stand by, so they conducted some training while O/S, before RTB. The crew had just completed a MOB drill in the vicinity of Entrance LB 4 and knew they had good water for miles in all directions when they started their inbound transit back to Port Canaveral. Buoy 6 is exactly 1 NM from buoy 4. As the crewman (BM3 qualified, FN break-in) were securing the deck, the Cox'n (BM2) conducted a drill debrief with the B/I cox'n (BM3 qualified on NSB's). The BM2 then conducted a drill debrief with the crewmen and engineer (MK2) aft leaving only the BM3 looking forward while driving (stbd helm station). The BM3 requested to bring the speed up while BM2 was conducting the crew debrief and rcv'd the okay to do so. Their pos'n was approximately 500-800 yds NW of LB 4. The BM3 had set a waypoint to LB 13 and planned to cut across the buoy line back into port. The BM2 completed his crew drill debrief and returned fwd with the BM3 while the two crewmen remained on the aft deck and the engineer was by ladder facing aft talking with them. When the cox'n returned fwd he noticed the engine rpm's were not sync'd and instructed the B/I to correct it. The BM3 had noted a red flashing buoy several hundred yards ahead and thought he had plenty of time to correct the engine sync problem before maneuvering. The BM3 had difficulty syncing and the BM2 then proceeded to explain how to complete the sync. Both sets of eyes were on the throttle control. The BM2 saw the buoy. He yelled "look out!" and grabbed the wheel and turned hard to port. The first contact was on the stbd bow under the first pair of bits, and resulted in a through hull breach directly below the bits, and two 4" fore and aft "knife blade" cuts. The rub rail was also damaged. The boat heeled over in response to the helm, exposing the underbody. Second contact was under reduction gear space at frame 6 and caused a dent 2 foot by three foot by 1 1/2 inches deep. Third contact was at the strut and sheared 20 of the 24 bolts holding the strut assembly to the hull and severely bent the strut. There was a small amount of water seeping through these sheared bolts (the</p>



date	class	narrative
		bolts were still in place, but wobbled freely). The prop shaft was yanked from the red gear at the shaft spacer (the spacer is still connected to the prop shaft, all bolts broke free (and took the threads with them.) The prop shaft moved approx 8" aft. The output shaft of the reduction gear was pulled out of the reduction gear housing approximately 6" and has 2 inches of play in all directions. The engine was secured immediately, and the crew completed all casualty control measures. Coxswain informed station of accident and proceeded back to station on unaffected engine. LB 6 was verified to still be watching properly.
5/20/2004	B	Vessel returning from routine MarSec patrol. Upon entry to channel to Bayboro Harbor coxswain cut into harbor before the channel and hit the seawall adjacent to Albert Whitted airport. After hitting seawall vessel slid up onto embankment.
5/22/2004	B	While attempting to move 5NI buoy into position for gripping, crewmember used foot to slide buoy. Crewmember at the tail of the buoy was not yet in proper position to execute move. When buoy tail rolled unexpectedly, member's finger was crushed between buoy bail and A-frame. Member was evacuated via Station small boat to local boat launch where EMS was standing by. Injury resulted in medical amputation of approximately 1 and a quarter inches of fourth finger on left hand due to severe fracture. MISHAP occurred at 1430, unit was not notified of the extent of the injuries until 1950. Winds and Sea state were calm.
7/18/2004	B	Thunderstorms with Scattered Showers, Seas 2-4ft, Wind 217 degrees at about 15 kts, Visibility reduced occasionally by rainsqualls. On 17 July 2004 at approximately 2200Q the properly outfitted and manned MLB 47244, departed CG Station Hatteras Inlet for a Search and Rescue Case off the Old Light House Site at Cape Hatteras NC. The SAR Case involved a possible person in the water wearing an orange lifejacket. While enroute to the search area, the voyage was mostly uneventful with the exception of a minor leak from an exhaust coupling. The leak caused water to drip onto the bilge alarm sensor thus energizing the bilge alarm. The Boat Engineer tightened the fitting and the MLB continued on its mission. Prior to arriving on scene, Gru Cape Hatteras passed the coordinates for a PS and the crew entered them into the GPS. At approximately 2330Q the MLB arrived at the CSP. The O/S Weather: Thunderstorms with Scattered Showers, Seas 2-4ft, Wind 217 degrees at about 15 kts, Visibility reduced occasionally by rainsqualls. Just prior to beginning their first leg of their search, the MLB 47244 launched one MK127A1 Parachute Flare to illuminate the area. At approximately 2335Q after negative sightings, the Coxswain posted lookouts on the Port and STBD side and the MLB commenced the PS. The Search Speed was set at 12kts however when rain showers were present the Coxswain reduced the speed to about 8kts. At approximately 0327Q after making the turn to a cross-leg, the MLB 47244 rode up on one of the narrow jetties in the immediate area. The Coxswain mustered the crew on the Open Steering Station and shortly thereafter realized the MLB was stuck on the jetty with the bow hanging over one side and the stern hanging over the other. The waves along the jetty pushed the bow of the MLB down into the water and forced the MLB into a knockdown while partially on the jetty. With breaking waves all around them, no control over the fate of the MLB, and the propellers striking the jetty; the Coxswain instructed the crew to disembark swim to safety. At approximately 0334Q, after ensuring everyone was away from the MLB, the Coxswain heard the engines running at a high rate of speed and was again concerned about their safety. The Coxswain, timing the waves, swam back and re-boarded the MLB 47244. Once aboard he secured both engines, instructed the crew to swim to shore and he re-entered the water as well. At approximately 0340Q the Coxswain reached the shore and observed the MLB 47244 sitting upright on the beach. The distance was about 200 yds. Upon meeting up with the other crewmembers, the Coxswain instructed two of his crewmembers to go and report the situation to Gru Cape Hatteras Operation Center and also to the OIC. Shortly thereafter the Coxswain and the Boat Engineer boarded the MLB 47244 and then set the anchor up on the beach. At about 0415Q Group Personnel and the OIC arrived on scene. The MLB's power was secured and the crew was taken back to the Station for showers and clothing. Later the Group Engineering Officer and the Station EPO went aboard to assess the damage. No hull breaches were apparent and additional inspections provided the same results. At approximately

date	class	narrative
		1330Q a light sheen around the Starboard side of the MLB was present and it is believed that a breach may be present in the fuel tank. There was approximately 250 gallons of diesel fuel aboard and the tanks has been capped. As of 1630Q 18 July 04 the MLB 47244 remains on the beach and plans are in place to extract it via water on the High Tide at approximately 0930Q 19 July 2004.
7/20/2004	A	<p>On 20 July 2004 at approximately 1820Q STA was contacted by Southampton police department reporting two people in the water off Tiana Beach (40-49.82n, 072-30.73w, approximately 1.5 miles west of Shinnecock Inlet). 220523 launched with 3 POB. WX at time of mishap: visibility unlimited, seas 3-6 ft, wind 220 degrees at 10 kts. 220523 commenced search along shoreline and lookout spotted PIW waving in their direction. The BM3 coxswain proceeded to the PIW to realize that the individual was sitting on a surfboard and was not in distress. As the coxswain maneuvered away from the surfer, he was caught by a wave on his port beam. At 1842Q, STA rcvd a call of an overturned vessel, and at 1850Q, Suffolk County helo reported that the overturned vessel was 220523. 220523 had been pushed over to starboard by the first wave, immediately hit by another wave, and then corkscrewed over onto its starboard side approximately 400 yards off shore. The starboard side lookout (SN) fell overboard, followed by the BM3 coxswain. The coxswain's kill switch cut the engines as the boat continued to capsize and throw the port lookout (MK3) into the water. The SN and BM3 thought the MK3 was under the capsized boat and swam towards it to assist him. As they swam closer, the MK3 popped up out of the water. The MK3 activated his P-Epirb and the S shot off three MK79 flares. The boat crew then proceeded to swim to shore. Approximately 50 yards from shore, the boat crew was met by good samaritans who assisted them the last 50 yards from the water. The MK3 and the BM3 were taken to Southampton hospital, thoroughly examined, and released. The SN was taken back to the station. 220523 was righted and loaded onto a trailer by the Hampton Bays fire department. 220523 was then taken to the station and later transported to GRU Moriches for further investigation.</p>

## What are the Mishap Descriptions?

### Common Mishap Discrepancies

#### *Misclassification of Mishaps*

The table to the right outlines the mishap classification criteria. Probably the most frequent misclassifications involve groundings and personnel injuries. All groundings, no matter how minor are Class C mishaps. Likewise, any mishap in which an individual is placed on more than 30 days of limited duty or is determined to be Not Fit For Duty (NFFD) or sick in quarters for one or more days is a Class C mishap.

#### *Failure to include the cost of property damage*

Mishaps have an economic impact on the service: Parts, commercial repairs, even the value of Coast Guard man-hours that could be spent doing other important work. We need to do a better job of capturing these costs.

#### *Failure to capture lessons learned from Near-Misses*

Some of the best lessons learned come from those that did not happen. HIPO's range from those events in which nothing short of divine intervention would have prevented a mishap from occurring to ones in which ORM or strong team skills broke the error chain. Please ensure that sharing HIPOs with the field is the norm.

Mishap Severity	Description
Class A	<p>Cost of reportable property damage is \$1,000,000 or greater.</p> <p>Vessel is missing or abandoned, recovery is impossible or impractical, vessel cannot be repaired economically.</p> <p>An injury or occupational illness results in a fatality or permanent total disability.</p>
Class B	<p>Cost of reportable property damage is \$200,000 or more, but less than \$1,000,000.</p> <p>Injury/Illness results in permanent partial disability.</p> <p>Three or more people are inpatient hospitalized.</p> <p>For small boats 30 feet in length or greater, damage is \$50,000 or more.</p> <p>For small boats less than 30 feet in length, damage is equal to, or greater than, half of the replacement cost of the boat.</p>
Class C	<p>Cost of property damage is \$20,000 or more, but less than \$200,000.</p> <p>Non-fatal injury/illness results in any loss of time from work beyond the day or shift on which it occurred, or more than 30 days of limited duty.</p> <p>A person falls overboard accidentally.</p> <p><b>Any grounding, capsizing, rollover, or knockdown greater than 90 degrees from an even keel that does not meet higher criteria.</b></p>
Class D	<p>Cost of property is between \$1,000 and \$20,000.</p> <p>Non-fatal injury/illness does not meet criteria of a Class C.</p> <p>Any firearm discharge, or electrical shock occurs that does not meet the criteria of a higher classification</p> <p>HIPO: Near mishaps, lessons learned events, or other events with a High POtential for injury or damage.</p>

# 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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