

Feedback is an instrumental piece of the prevention and response strategies. It can take several forms:

- Lessons learned report that is distributed to industry,
- Letter of Concern directed to a company regarding poor practices,
- Enforcement action such as Letters of Warning,
- Imposing controls on the operation of foreign and domestic vessels,
- Assessment of civil penalties or suspension; or
- Revocation of a merchant mariner's license or document

These mechanisms for feedback provide the Coast Guard and industry with the means of effectively preparing to avoid recurrence of safety or security related incidents in the future. Failure to provide this feedback would result in breakdown of both the prevention and response efforts.

## Vessels

### Foreign Vessels

In the Port State Control (PSC) program, a detention is an enforcement action (form of feedback) that is the direct result of a ship that is not in compliance with international safety conventions. Figure 7-1 shows the decline of IMO detentions and Letters of Deviation (LOD) for foreign vessels over the last 3 years, which is consistent with overall national trends. This shows a positive trend in reduced safety incidents in the recent past. The number of COTP orders has increased since 2000, however, largely as a result of increased security activities and associated vessel movement controls.

Figure 7-1

#### *Foreign Vessel Actions*

<i>Year</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>
IMO Detentions	7	5	2
Letters of Deviation	37	23	20
COTP orders	27	37	42

COTP orders were issued to vessels for reasons as varied as direction to a vessel to stay at anchorage to enable investigators to follow-up on a casualty incident; to remain in port until a vital system component

is repaired and tested satisfactorily, or to anchor in Port Angeles for a Priority 1 Port State Control Boarding. Overall trends remained very consistent from 2001 in terms of the percentages of boarding action compared to a boarding and/or movement control. Figures 7-2 through 7-5 show the relative breakdown of COTP orders and enforcement activities for foreign vessels in 2001 and 2002.

Figure 7-2<sup>2</sup>

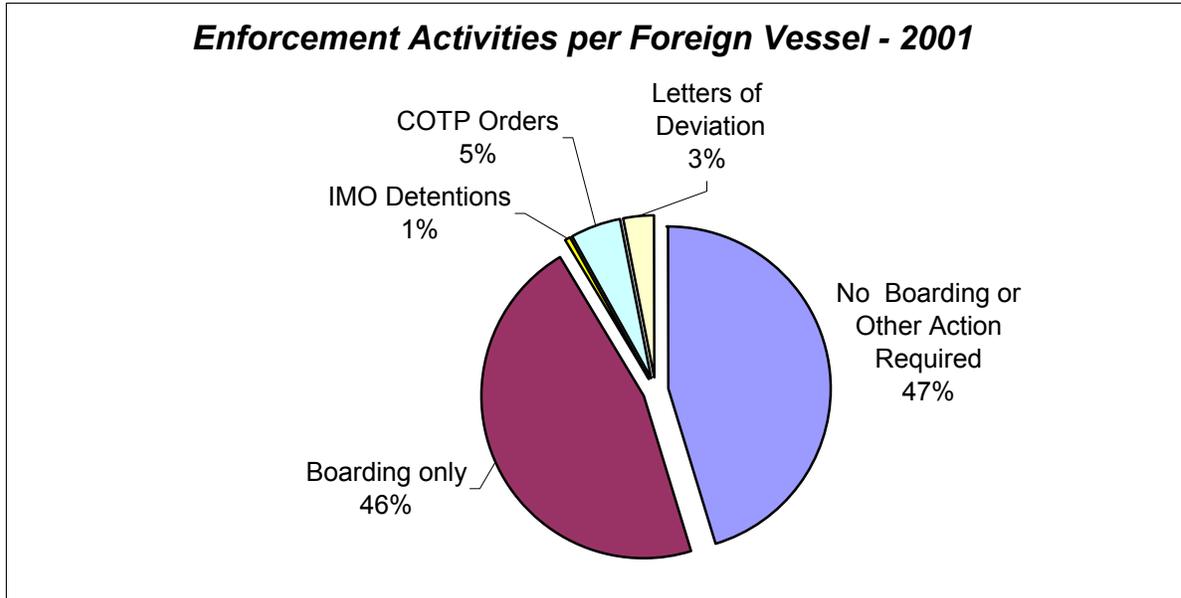
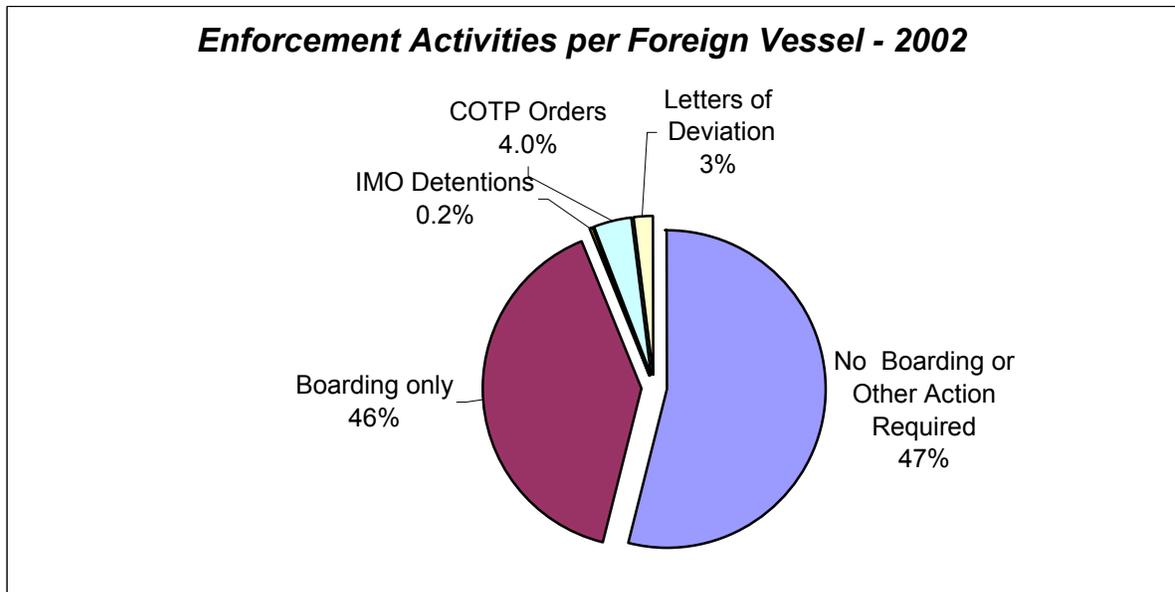


Figure 7-3



<sup>2</sup> A Letter of Deviation is an authorization from the Captain of the Port to temporarily deviate from the Navigation Safety Regulations in 46 CFR 164. A Captain of the Port (COTP) Order is the supervision and control of vessel movement authorized by 33 CFR 6. An International Maritime Organization (IMO) Detention is a vessel control executed under the authority of any of several international conventions including SOLAS, Load Line, and MARPOL. Boardings completed represent 100% of all targeted vessels.

Figure 7-4

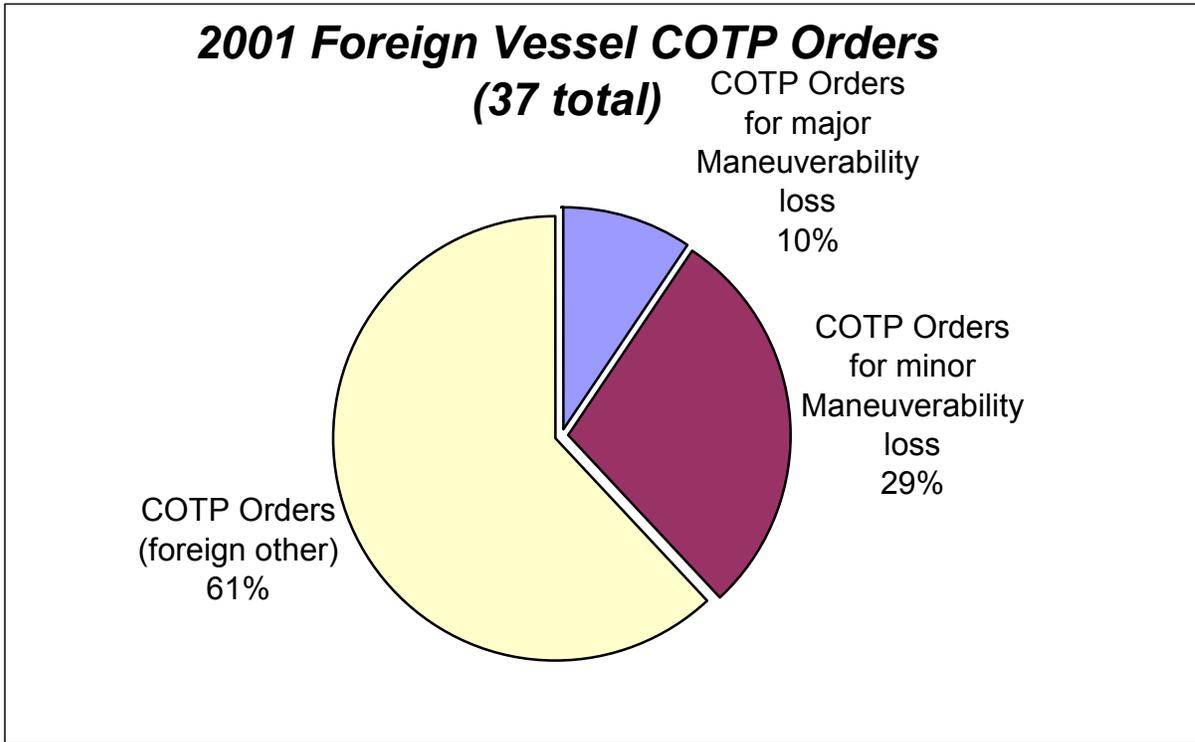
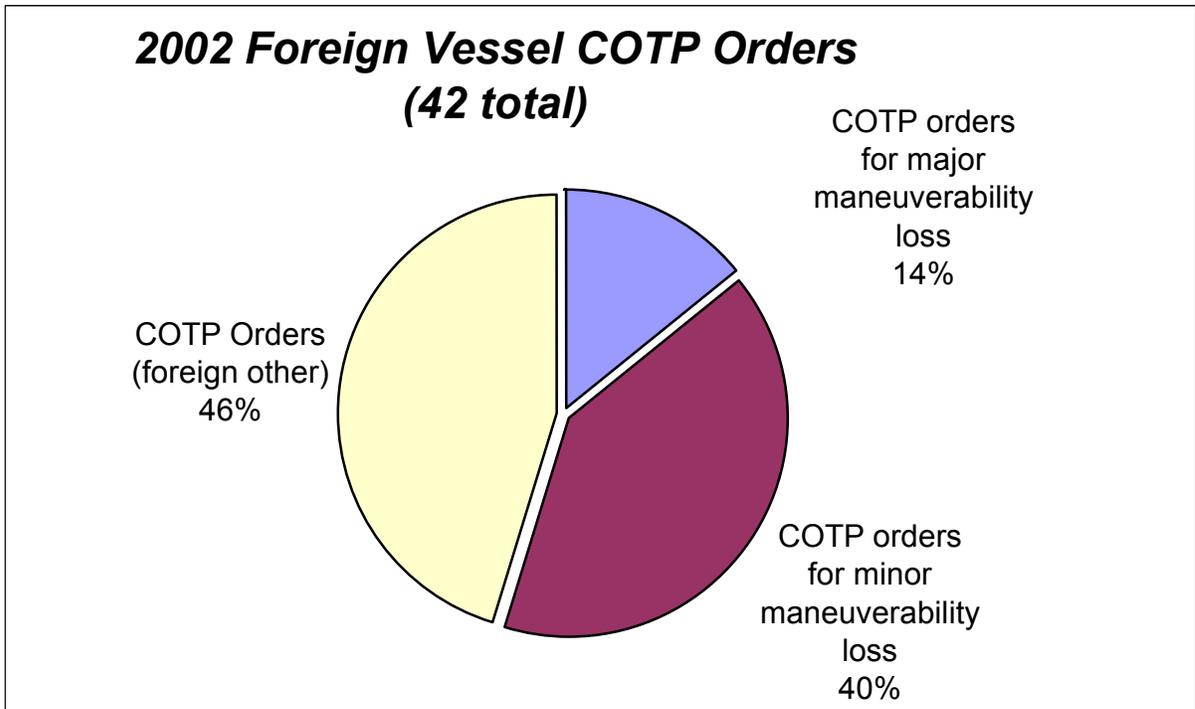


Figure 7-5



### **Domestic Inspected Vessels (other than fishing)**

The Domestic Vessel Inspection program focuses primarily on education to avoid vessel casualties, pollution occurrences and personnel accidents. The program emphasizes preventative efforts rather than reactive actions, although the latter does have its place when vessel casualties and accidents occur. Specially trained Vessel Inspectors oversee new vessel construction at every phase of the building process, ensuring U.S. flag vessels that operate commercially in the United States and overseas comply with domestic and international safety and construction requirements. Similarly, Inspectors also oversee the preparation and production of inflatable lifesaving apparatus to make certain that mariners and their passengers are accommodated safely in the event of a marine incident where the people aboard must abandon the vessel. The USCG goes an additional step by overseeing the construction of foreign flag cruise ships that will operate in U.S. waters at shipyards overseas. This extra level of oversight ensures that the millions of U.S. passengers who will eventually ride the enormous ships are in the best and safest of hands.

Another component of the Domestic Vessel Inspection program is to provide a safe environment during and following vessel casualties. This is evidenced by the implementation of controls placed on vessels when a vessel casualty occurs. The two principal ways that this is accomplished is through CG-835 forms and Vessel Transit Permits. The CG-835 is a control that addresses an issue with a commercial vessel, whether it is a crack in the hull of a vessel, a deficient number of lifejackets on board or anything in between. The Vessel Transit Permit is applied to deep draft vessels in instances where routine repairs and maintenance that could potentially impact the ability of the vessel to use its main engines. This control, implemented even in situations where the affected vessel is doing routine work, serves to circumvent accidents involving these vessels whose results can be markedly magnified by the sheer size of the vessel and volume of cargo. Movement controls issued in the form of LODs and COTP orders for domestic vessels are listed in Figure 7-6. This data indicates a continued positive trend of reduced navigation equipment problems typical of those requiring an LOD, and a 50% drop in the number of COTP orders from those issued in 2001, marking a welcome return to the number of COTP orders issued in 2000.

Figure 7-6

#### ***Domestic Vessel Enforcement Actions***

<i>Year</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>
Letters of Deviation	36	7	3
COTP orders	18	40	18

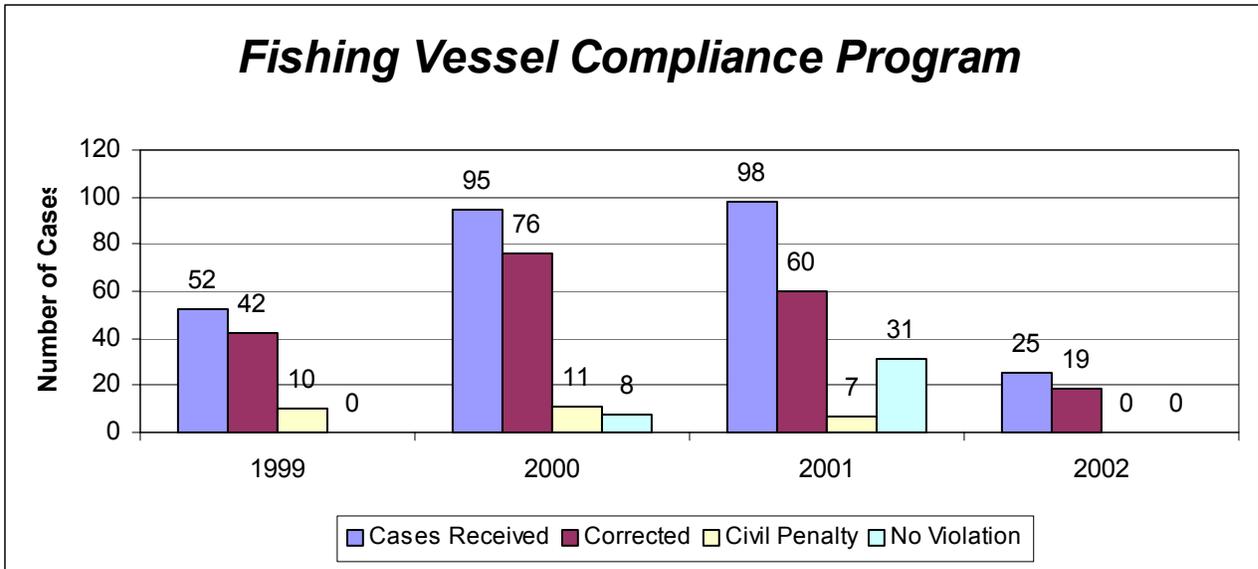
### **Fishing Vessels**

The Fishing Vessel Safety Branch also processes violation cases generated through Coast Guard law enforcement boardings at-sea. In the past, these cases were usually automatically submitted for civil penalty action. This method provided neither incentive for improved compliance, nor any feedback to the initial boarding officer on the result of his/her efforts.

In May 1999 the branch launched a Compliance Program that offered operators cited for non-compliance with vessel equipment regulations an incentive to correct the violations in a timely manner. In this program, if the violations are promptly corrected, then the case is dismissed. If the operator chooses not to use the Compliance Program, then the case is forwarded to the Coast Guard Hearing Officer for final adjudication. The options available to the Hearing Officer include

issuance of a Letter of Warning or assessment of a civil penalty. The failure to have achieved compliance after being cited is often grounds for assessment of stiffer civil penalty. Once the case is complete, the boarding officer and boarding unit are provided feedback on the outcome and any comments on the case. This program has contributed to the increased participation in dockside exams. Dockside Examiners attend the vessel to ensure that the violation has been corrected. At that time, the operator is offered the opportunity to receive a voluntary Dockside Exam. Figure 7-7 shows of the number of enforcement cases received, number of vessels correcting the violation and number of cases submitted for civil penalty:

Figure 7-7



Prior to 1999, nearly all of the enforcement cases received were sent to the Coast Guard Hearing Officer for adjudication. This program has reduced the number of cases submitted to the Hearing Officer by 88%, substantially reducing their workload.

## Port Safety and Security

### Container and Hazardous Material Inspections

The purpose of the container and hazardous materials inspection program is to prevent hazardous materials accidents by identifying non-compliance with the packaged hazardous materials shipping regulations, ensure the adequate structural integrity of shipping containers, and deter the use of shipping containers for the illegal importation of contraband.

In the Container Inspection program, a hold placed on a container or shipment is an enforcement action (form of feedback) that is the direct result of a container or shipment that is not in compliance with domestic or international safety regulations. Deficiencies on shipments often include improper labeling, marking, packaging, stowage, and segregation. In these cases, the shippers, freight forwarders and facilities are notified of the actions taken and why. Containers are often placed on hold due to structural

deficiencies, including cracked welds, excessive dents, inadequate seals around the doors, and improper CSC plate. The shippers, facilities and freight forwarders are also notified of these actions.

Typically, the containers are required to be removed from service or transported to a local repair facility prior to being loaded on a vessel; however, top stow only provisions are sometimes appropriate and authorized.

Based partly on feedback from industry and a need to expedite our operations, we created a specific e-mail address for resolving these issues directly. When a container is placed on hold and subsequently repaired, the facility may send pictures of the repairs to that e-mail address where USCG inspectors can view and clear the container. This is not always appropriate due to the nature of repairs, but has been used successfully this year and will continue to be used in 2003.

## **Investigations**

### **Personnel Investigations**

The Coast Guard's enforcement approach for use of illegal drugs by mariners focuses on efforts to encourage their rehabilitation so that they may return to work. This approach is outlined in the case of Michael Sweeney in Commandant's Decision on Appeal #2535. Of the twenty-five drug-related cases processed in 2002, twenty-one were resolved through settlement agreements with the mariner. The other four mariners surrendered their credentials in lieu of a hearing. In 2002, four mariners successfully completed their rehabilitation and had their credentials returned to them, a small decrease from 2001.

The investigators have employed a strategy similar to the "Sweeney Cure" in taking enforcement actions for misconduct, negligence, and violations of law. Figure 7-8 illustrates the distribution of personnel enforcement actions taken in 2002. The largest group of non-drug related incident investigations involve negligent vessels operations (i.e. groundings/allisions) and violations of the navigation rules (Rules of the Road). In offering settlement agreements to involved mariners, the investigator identifies behaviors on the part of the mariner that resulted in the casualty or violation, and then outlines a strategy designed to address the cause. For example, in the case of a towing vessel that violated several navigation and Vessel Traffic Service (VTS) regulations, the mariner admitted to being unaware of the regulations regarding use of designated traffic lanes. The settlement agreement for him included a 1-month outright suspension of his license along with a requirement to attend the VTS Puget Sound sponsored one day VTS familiarization training seminar in lieu of a second month of suspension. The operator reported that his own assessment of events, as well as the VTS course, had shown him new ways to operate vessels.

Letters of Warning are also an effective tool for giving notice to mariner's and marine operators that their behavior or actions are not acceptable. As an official enforcement action, the warning becomes part of their record and can be used in future Coast Guard actions. Letters of Warning nearly tripled from 2001 to 2002.

Separate from settlement agreements and Letters of Warning, Letters of Concern have proven to be another avenue to address of risky behavior by mariners and marine operators without taking official enforcement action. The letter provides a forum in which they are encouraged to identify methods to improve their own operations and performances.

Figure 7-8

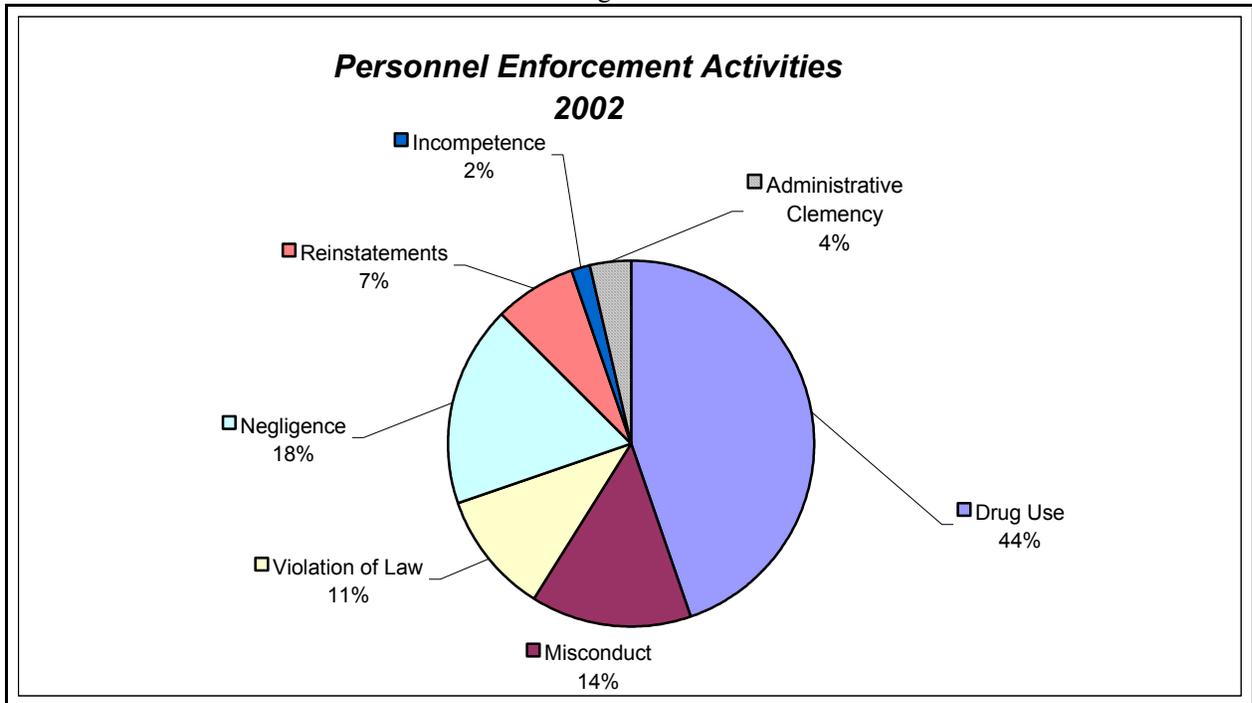


Figure 7-9

**Disposition of Enforcement Activities**

<i>Disposition</i>	<i>2001</i>	<i>2002</i>
Hearings	4	1
Civil Penalty Referrals	6	16
Settlement Agreements	16	28
Letters of Warning	13	37
Verbal Admonitions	1	0
Voluntary Deposits	0	0
Voluntary Surrenders	4	5
Forwarded for Other Enforcement	2	1
Administrative Clemencies	3	2
Credentials Returned	6	4
Letters of Concern	7	17

Marine Violation Investigations

In cases where violators are not holders of Merchant Marine Credentials, enforcement options are limited to Letters of Warning and civil penalties. Both of these options have been used, sometimes in conjunction with a Letter of Concern, which provided an avenue for dialogue on process improvement. Civil penalty referrals nearly tripled in 2002.

## **High Profile Casualties**

The following sampling of results of marine casualty investigations shows how the MSO provides feedback to the entire system, operators, mariners and regulators. Casualty investigations may prompt recommendations to USCG Headquarters for regulatory or policy changes that may help prevent casualties. The impact of the results of an investigation on risk mitigation is revealed in a review of a few high profile casualty investigations. The following abstracts of past cases provide some, but not necessarily all, of the actions that resulted from a particular casualty.

### Extreme List of Moored Container Vessel

While moored at Terminal 5 in Seattle, a 660-foot foreign flagged container ship rapidly developed a 27-degree list during ballast operations. Fortunately, there were no injuries; however, there was several hundred thousand dollars of damage to the vessel and adjacent terminal cranes. A thorough investigation of operations occurring on board just prior to the incident along with a review of the vessel's Safety Management System (SMS) revealed fatigue on the part of the Chief Mate as contributing factor in the incident. The fatigue had a deleterious effect on his judgment and problem solving ability as he monitored the vessel's stability during cargo and ballast operations. However, the primary cause of the incident was a lack of company policies and procedures for 1) monitoring crew fatigue, 2) providing adequate training on shipboard equipment, and 3) establishing written instructions for ballast operations. After being righted, the vessel was held in port for three days while the company made improvements to the vessel's SMS.

### Tanker and Towing Vessel Collision

While transiting in confined waters, an escort tug crossed the bow of an oil tanker, which resulted in a collision of the two vessels. Only minor injuries were sustained aboard the tug when it rolled nearly 60 degrees before righting and passing down the side of the tanker. The tanker sustained minor structural damage. The investigation uncovered an undisclosed medical condition of the tug operator, which may have contributed to him blacking out or losing mental awareness. Additionally, procedural concerns were raised regarding the pre-escort conference, which eventually lead to a recommendation for the development of a Puget Sound Harbor Safety Committee standard of care. The tug operator was pursued for negligence and incompetence charges, and eventually elected to voluntarily surrender his credentials.

### Repeated Allisions by Towing Vessel

A review of bridge allisions revealed that a specific tug operating on a fixed route was continually alliding with bridges along that route. During conversations with the bridges administrator, she expressed concern that the vessel may not be adequately powered and/or designed for the route, which travels along a narrow channel and experiences strong crosswinds. Agreeing with the assessment, the Coast Guard issued a Letter of Concern to the operating company asking what they intended to do to prevent future incidents. In response, the company agreed with the evaluation of the situation and was in the process of increasing the vessel's horsepower and enlarging the rudders to provide for better handling.

## Cruise Ship and Towing Vessel Collision

Despite making passing arrangements and fully disclosing their intentions to one another, a cruise ship and tug with barge collided in open water under conditions of good visibility. The operator of the towing vessel was determined to have acted negligently when he left the bridge unattended for approximately seven minutes to see to an engineering alarm, while the cruise ship pilot was found to have used poor judgment in too drastically slowing the vessel's speed in the traffic lanes to conduct sea trials. The tug operator served a two-month suspension of his license, and the pilot, acting under the authority of his State license, was verbally admonished.

## **Vessel Traffic Service Incident Reports**

Incident Reports may be submitted for any event the VTS Watch Supervisor deems noteworthy. These may include collisions, groundings, allisions, law enforcement, pollution, waterway restrictions, vessel casualty, anchorage administration, near misses, VTS/Captain of the Port Intervention, search and rescue. Incident reports are used for documentation and trend analysis to see if there are improvements required to reduce risk. If the initial inquiry into the incident reveals unresolved VTS-specific operational issues, an Incident Review Board may be convened to more fully evaluate VTS policies, procedures and performance as relates to the incident. Incident Reports provided the impetus for such improvements as the U.S. Coast Guard/U.S. Navy Submarine Surface Operation Symposium, Operation Northern Make Way, the Recreational Boaters Guide, the Turn Point Standard of Care, and the installation of the radar at Pier 69.

VTS Puget Sound maintains a database that documents the history of violations for any specific vessel. This provides information to help the Coast Guard determine appropriate actions following a violation. Letters of Education and other forms of feedback to operators found in violation of VTS regulations have facilitated future compliance without the necessity of referring the violation for further investigation and possible enforcement action.

## **Security Assessments**

Security assessments have been ongoing throughout the Puget Sound area over the last year providing critical feedback to the vessel and facility owners/operators to enhance their respective security posture. Any shortfalls that were identified, addressed to the extent possible by the facility or vessel, and where appropriate rolled into TSA Grant Proposals. As a result of this assessment and feedback process, individual organizations and port areas within Puget Sound received over 13 million dollars of federal grant funding to improve security efforts.

The onset of the MTSA will also provide for additional security assessments to be completed in the development of the Area Maritime Security Plan. These assessments and related mitigation strategies will continue to build on the already existing safety and security net in place locally.