

SHIPS DON'T LEAVE SKIDMARKS

6/10/23

Dennis Nixon

Great pleasure to be back at URI, thank you for the opportunity to discuss some of the forensic highlights in my 48 years as a maritime attorney.

My definition of forensics for the purposes of this class is pretty simple: the application of scientific tools and methods to resolve questions related to civil and criminal law.

Maritime forensics adds the complexity of the marine environment to the equation. In addition, we often have to deal with international law, flags of convenience, and many languages when interviewing witnesses.

Most of my practical experience with evidence has to do with the two major oil spills in RI waters in 1989 and 1996, where I assisted in the prosecution of the cases and the subsequent passage of the RI Oil Spill Prevention Act.

First, a bit about oil in the marine environment. Unrefined crude oil has very different characteristics than refined products like gasoline or home heating oil. The more refined it is, the greater toxicity – but faster breakdown. If the water is very cold, crude oil can linger for decades. If warm like the Gulf of Mexico in the Deepwater Horizon well blowout, crude oil-eating

bacteria can substantially reduce the amount of oil washing ashore.

For many years, the disposal of oil at sea was not considered particularly harmful; tankers would rinse their tanks with salt water and pump the slop over the side when they got offshore; my first navigation text (written in the 1950s) explained how small vessels could limit the danger of breaking waves by constantly pouring a small amount of oil over the side of the vessel – deliberately creating an oil slick – because the higher viscosity of the oil held the severity of the waves down.

Over time, however, the vast increase in moving oil by tank vessels meant that the damage to the marine environment was becoming apparent to even the casual observer. In busy ports, it was hard to identify which vessel was responsible for creating a spill when so many vessels were leaking or deliberately spilling oil. The Clean Water Act of 1970, passed shortly after the first Earth Day celebration, changed all that, introducing civil fines and criminal penalties. But it was still difficult in many cases to meet the “beyond a reasonable doubt” standard required in criminal cases. The ability to enforce that law was enhanced by some work done by the US Coast Guard R&D Center in New London, in cooperation with some engineering faculty at URI. They pioneered the use of gas chromatography to perform a “fingerprint analysis” of the oil in the water that could be matched to a well or ship that did the discharging. That technique has helped solved many “mystery” oil spill cases. URI

Marine Affairs student was Coast Guard attorney who wrote his major paper on the use of this new test.

Ships kept getting bigger, but the liability system to encourage safety had fallen dangerously behind when the supertanker Exxon Valdez ran aground in Prince William Sound, Alaska, on March 24, 1989, after drifting out of a 10-mile-wide channel. It caused the worst oil spill in US history to that point (Later topped by the Deepwater Horizon oil rig blowout) in the Gulf of Mexico). The accident exposed gross negligence on the part of Exxon and the weakness of the existing legal system to fully compensate for damage to natural resources. Despite eyewitness testimony regarding excessive alcohol consumption in a bar near the port by the ship's captain, Joseph Hazelwood, he was only convicted of a lesser offense of negligent operation of a vessel. Why? Although a blood alcohol test was performed within hours of the incident by the Coast Guard, the remote location where they stayed did not have a refrigerator for the blood sample. So, the young lieutenant stored the sample on a window ledge outside his hotel room for the night. Any police officers see a problem here? The "chain of custody" for incriminating evidence was broken and there was no physical proof of intoxication. A subsequent article in the Journal of Criminal Law and Criminology argued that acoustic analysis of voice recordings Capt. Hazelwood made when he reported running aground clearly demonstrated intoxication, but analyses like that were not considered admissible evidence. So he ended up with probation and community service, and Exxon

went all the way to the US Supreme Court to dramatically reduce the punitive damages awarded by the jury.

By this time, it was abundantly clear that oil pollution law needed to be updated to address the greater damage large ships could cause. Congress quickly drafted a much tougher law, but industry opposition created a deadlock. Sound familiar? Okay, that's where Rhode Island comes into the story!!! Over a three-day period in June of 1989, three tankers in different parts of the country suffered a variety of casualties and created major spills in pristine waters. And as luck would have it, they occurred in the Congressional districts of some leading legislators, including the late, great Sen. John Chafee, the Chairman of the Senate Environment and Public Works Committee. Later known as the "tanker trilogy" weekend, it created overwhelming public sentiment to get the bill out of committee and make it the law of the land. One of the three tankers was the *World Prodigy*, a 532' ship operating under the Greek flag that inexplicably ran right into the well-marked Brenton Reef, just south of the Castle Hill Coast Guard station in Newport. The ship carried a cargo of about 8 million gallons of fuel oil it was scheduled to deliver to tank farms in Providence and Tiverton. It spilled about 300,000 gallons, covered about 50 square miles, and washed up on the shore. Remember that oil pollution is defined as simply "creating a visible sheen" on the water; they created a visible sheen over much of Narragansett Bay. The Mackerel Cove beach in Jamestown was closed for a year because it was directly downwind of the spill and absorbed the greatest amount of oil. Interestingly, the most

environmentally sensitive method to remediate the spill was to weekly traverse the beach with tractor and plow turning over the oily sand for bacteria to digest the residual oil.

My story: the spill occurred on a Friday afternoon in June in brilliant sunshine with unlimited visibility. I was returning from sailing at Block Island Race Week and received an urgent message to contact then RI Attorney General Jim O'Neill, who knew I had a background in admiralty law. He asked me to help since his staff had never handled an incident like this. I was officially "seconded" to the Attorney General's office and spent the rest of the summer and fall working on the case. I still have my letter of appointment as a "Special Assistant Attorney General" which did not have an expiration date!

I was assigned a very bright young attorney to help me by the name of Sheldon Whitehouse, later RI Attorney General, US Attorney, and now Senator!

While salvage crews were working with the ship's crew to keep the ship partially afloat, we had to address a preliminary legal issue: should the state seize the ship to insure the payment of damages? In admiralty law, you can actually sue a ship! After some deliberation, we decided it would be unwise to seize an asset that had a good chance of sinking – so we let the shipowner handle the salvage and removal of the ship. We waited until it was safely removed and towed to a New York drydock a week later before making our claim.

Next on the list was trying to figure out how a well-run ship, owned by a reputable company, staffed by Greek merchant mariners, could run right into a well-marked reef in broad daylight. My working assumption was that there had been some catastrophic failure of the ship's steering and/or propulsion system.

I was wrong. Here's what really happened, as revealed during interviews with all the crewmembers (after a Greek translator was located). You may not know that tankers must be loaded or unloaded very carefully, or structural damage to the ship can occur. The Chief Mate oversees the process and had worked out how the cargo would be unloaded in Providence and Tiverton. But just as the ship entered US waters, it received a message from the owners that part of the cargo had been purchased by another company in Boston so that the ship would have to make an additional stop. The Captain ordered the Mate to quickly come up with a new unloading plan. He did, and then presented it to the Captain in the chart room just off the bridge. The Captain, exhausted from sleep deprivation after a long voyage, went into a rage when he found the plan would not work. A screaming match developed in the chartroom. Meanwhile, the ship was still proceeding towards Newport at 15 knots. It was supposed to slow down to stop 3 miles from shore to pick up a harbor pilot to guide the ship up the bay, but they cruised past that point at 15 knots. Only the young sailor holding the wheel was looking forward, and he was terrified to interrupt the argument between the Captain and the Mate, so he remained frozen in place. In the Greek merchant marine,

officers speak to deckhands, deckhands do not speak to officers. Finally, the RI Pilot Boat rounded Newport neck and saw the ship headed right at the reef and began broadcasting a warning to them on Channel 16, the international hailing frequency. That abruptly ended the argument in the chartroom as the men tried without success to turn or stop the ship. (It can take miles to stop or turn a fully laden tanker).

After being charged with obvious violations of the Clean Water Act, both the Captain and Ballard Shipping, the owner pleaded guilty. The company was fined \$1 million and the Captain \$10,000. In addition, they paid cleanup costs, lost time for commercial fishermen, and even made a \$50,000 contribution to build a new playground in Jamestown since the children had no beach to visit for the summer. But all in all, the amounts paid were insignificant considering the environmental and economic damage that was done.

Within months, the impact of the World Prodigy and the two other spills the same weekend finally got Congress to act. They passed the Oil Pollution Act of 1990 which significantly changed the penalty structure and for the first time provided funds for damages to natural resources.

Ironically, just as RI was one of the last states to make use of the old Clean Water Act, it became the first to use the new law for a major oil spill in 1996. The North Cape oil spill occurred on January 19, 1996, when the tank barge North Cape and the tug Scandia grounded on Moonstone beach in South Kingstown

after the tug caught fire in a winter storm. An estimated 828,000 gallons of much-needed home heating oil was spilled. The owner of the tug and barge, Eklof Marine, said he was very sorry but that accidents happen on the ocean and this was just an unfortunate situation. Oil spread through a large area of Block Island sound, including Trustom Pond National Wildlife Refuge, resulting in the closure a 250 square mile area of the sound for fishing. This would be a significant test of the natural resource damage provisions of the new law. More than 2000 birds were killed, including the federally endangered piping plover. Although a precise count was not possible, most estimates were over a million lobsters washed up ashore in the weeks after the spill, and as many 10 million killed offshore. Every level of the food chain was affected.

The incident raised many questions, and I was called to the General Assembly to assist in the investigation and make recommendations to the state. There were many questions that were puzzling:

1. Why did the owner of the tug and barge send it east out of a safe harbor into the teeth of a winter gale?
2. Why did the engine catch on fire, and why was no effort made to fight it? Was the vessel seaworthy?
3. When the vessels lost propulsion, why was no effort made to anchor them before they hit the beach?

The answers to those questions were startling, and the final result produced a much more punishing verdict against the

owner and captain than we saw in the previous case. I had friends in the tug and barge industry, and they began calling me with hints on where to look to learn what really happened. They conveyed to me that Eklof Marine did not have a very good reputation for safety in the marine industry and that we should dig into the vessel's maintenance history.

One afternoon while I working at the General Assembly, I was asked by then US Attorney Sheldon Whitehouse to stop by his office that evening for a few questions regarding the case. I assumed we would have a quick discussion and I would soon be on my way home. When I arrived, I was surprised to be shown into his large conference room where there already about a dozen serious, fit-looking men wearing dark suits. Sure looked like the FBI to me, but Sheldon just referred to them as his "associates."

Their question to me, was if I oversaw the investigation, where would I go to get the best information? I quickly responded that I would love to hear what the tug captain and company owner were saying to each other in private conversations because the rumors I was hearing from my industry sources were very different than the stories they were telling at press conferences: "a fine vessel and crew, bad weather, tragic consequences. We're real sorry, but stuff happens. No crime here."

A different story emerged after the wiretaps were approved and installed. After weeks of listening in, a criminal information was filed, and this became both a civil and a criminal case under

federal law. Quick summary of the wiretap conversations: company owner urges the captain to stick with the story that everything was fine in an attempt to avoid criminal negligence charges; captain stating, “I can’t keep lying for the company, you know that vessel was a disaster waiting to happen and you should not have ordered us to sail in those conditions.”

The following facts emerged:

1. There was a shortage of home heating oil in Providence after weeks of very cold and windy weather and anyone risking a delivery would receive a handsome price premium.
2. The vessel’s electrical system was suspect ever since the vessel capsized in Portland Harbor a few years earlier and received only a cursory overhaul.
3. A milk crate of oily rags was stored in the engine room, adjacent to a clothes dryer that ran continuously because of a broken switch.
4. Unlike most vessels of its type, the Scandia did not have an automatic fire suppression system that could have stopped the fire. The previous year, they had an engine room fire at the dock in New Haven and could only put it out after borrowing equipment from the New Haven Fire Department.
5. Despite telling Coast Guard inspectors that they drilled with their deck mounted fire hydrant and hose weekly, they found *during* the fire that the threads on the hydrant did not match those on the hose.

6. The anchor of the Scandia was too small to hold both the tugboat and the barge off the beach; when several crewmembers were able to get on board the North Cape, they found it did have an anchor, but no windlass to lower it over the side. It had been removed for maintenance weeks earlier and apparently its role as a key safety device was not appreciated.

All those factors together made it very clear that in admiralty law, the Scandia – North Cape flotilla was “unseaworthy” – not fit for its intended purpose. Both the captain and company owner were charged criminally, and when all the evidence above emerged both pleaded guilty under the terms of the recently enacted Oil Pollution Act of 1990. The criminal charges resulted in a \$9.5 million fine. Under the new law, emphasis was placed on compensating the public for losses resulting from an oil spill. Projects included restocking wildlife populations (including lobster) and enhanced habitat protection even outside the impacted area if it helped an endangered species survive. That effort went on for over a decade, and the total project cost was \$117 million.

There were other local impacts as well. Rhode Islanders were stunned to learn that there was no federal regulation requiring a working anchor system aboard large barges like the North Cape. As I pointed out in a General Assembly hearing on the subject: “The official Rhode Island State Seal is an illustration of a ship’s anchor with the word “Hope” underneath. We must do more than hope that all commercial vessels entering our waters

have a working anchor system.” They passed such a law later that session, and happily repealed it several years later when the Coast Guard finally adopted rules doing the same thing for all commercial vessels in US waters.

I remain proud of URI’s overwhelming support for the countless cleanup, research, and outreach tasks undertaken by so many of our departments and colleges. It was a “full-court press” to do the right thing as we dealt with an environmental tragedy caused by a criminally negligent company, working through complex new regulations designed to support natural resource restoration.

One of the most poignant moments in my career came when then US Attorney Sheldon Whitehouse asked me to attend the sentencing hearing in the ornate federal courthouse in Providence, far from the salt marsh at Trustom Pond where the oil washed up. The judge asked the vessel captain to answer one question he had avoided answering during all the previous inquiries: “Why, considering the forecast for the dangerous storm and state of your vessels did you still try to sail from New Jersey to Providence?” He answered, with great emotion and regret, “I thought I was so good I could just outrace the storm.” It was a decision that cost him his career and nearly his life, caused enormous damage to our local marine environment and one I am sure he would regret for the rest of his life.

We haven’t had a major spill in RI waters since then. Perhaps we’re just lucky, but perhaps the new liability scheme, the new

regulatory requirements, and the respect our marine environment deserves will work together to provide some respite before we can make the transition to renewable energy our new reality.

Questions here?

Other areas?

- My most interesting case as legal advisor for research vessel fleet – Indian Ocean Buoy
- Why I banned both swim calls and alcohol in the research vessel fleet
- Investigating the loss of the Titan submersible; should they have been allowed to continue?
- Florida and California have encountered a crisis in property insurance, a data-driven business. We have insurance for unforeseeable losses, but today they are entirely predictable. Should we all pay for the bad choices others have made?

