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OPERATIONS I

Regulatory Train Wreck

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Abstract

The roles of the bodies that regulate the maritime and offshore energy industries have been changing in recent years. Functions that were once exclusively governmental are being ceded to private organizations who are being asked to regulate companies that are paying them to do so. Conflicts of interest are bound to arise. At the same time, governmental entities are imposing more costly and time consuming rules and requirements, but have less and less understanding of the effects and effectiveness of the new rules. Changes in the recruiting, training, and experience levels of USCG inspection personnel are discussed. Examples of good and bad regulatory action are offered. The conflict between industry viability and excessive governmental oversight needs to be examined and responded to by the marine and offshore industry. Some suggestions are offered for action by companies and trade associations.

Regulatory Train Wreck

The marine industry in the United States is being squeezed from all sides by increasingly costly regulation. The regulatory structure drives costs for training, retention, and upgrading of personnel to a critical extent. The regulators are the Coast Guard, the classification societies, and insurance underwriters. The lines between these regulatory functions have become blurred, to detriment of many parties in recent years. The marine insurance industry is very old and has its roots in pre-Revolutionary War England. They offered a service to mitigate risks to ship owners. In the 1840s, insurance rates were based on the assumption that one third of vessels would not complete their voyages. They became weary of paying claims for lost vessels and cargoes, so they created the classification societies. These societies were put in place to make sure ships were designed, built, and maintained to standards that would reduce the likelihood of a loss. They were creatures created by and for the insurers. Government also responded to heavy losses of ships by creating licensing programs and loadline legislation which was administered by inspection and regulatory agencies. Ship owners were overseen by both the classification societies on behalf of the insurers, and the government which is interested in orderly and safe commerce. The roles were fairly well defined. Time went on, and we have seen several changes in roles. The Coast Guard gave virtually complete inspection authority to ABS in the last decade. Today, USCG Certificate of Inspection renewals are often scheduled on the day of, or just after, the ABS annual renewal visit. The classification societies are now marketing specialist consultants in risk management, sometimes to ship owners. Insurers are taking a more active role in major projects due to the high costs of claims. Owners are dealing directly with the classification societies as advisors and approvers of their maintenance efforts. Many governments are completely deferring oversight functions to classification societies. Operators of training schools are looking for new business and influencing the regulatory process. The blurring of these functions has been driven by a series of events over a few decades.

Port security law and the creation of the USCG Captain of the Port were obvious necessities in World War II. Control of access and movements within ports, control of access to waterfront facilities, and clearances for personnel were critical wartime functions. After WWII, these functions were allowed to become rather dormant, and the COTP function became more of a hazmat and pollution monitoring and cleanup role under the Federal Waterways Pollution Control Act of 1973. The units capable of really doing port security work with armed teams and small craft were reserve units, not normally deployed. The marine inspection and licensing functions of the Coast Guard go back to before World War II. The old Bureau of Marine Inspection and Navigation had become so grossly corrupt that it was disestablished, a remarkable occurrence in government. The functions were passed legislatively to the Coast Guard. Strict rules were put in place to avoid even the appearance of corruption. That effort was successful, and remains so to this day. There have been remarkably few cases of USCG inspectors not doing their jobs in return for favors, and those who got caught doing something wrong were punished severely, often at courts martial. For decades, the Coast Guard drew a significant part of its officers, and most of the marine inspectors, from the ranks of licensed merchant marine officers. Under Public Law 219, these officers were offered commissions and regular, long term employment. They brought a great wealth of experience to the marine inspection function. They had served in many of the jobs that were now the subject of their work as

inspectors. They knew where to look, what was expected, and how to spot something being covered up. The core principle of regulators knowing a lot about what they are regulating was followed very well.

The M-types, as they came to be known, had their quirks, and there was a long standing culture clash internally in the Coast Guard. For many years, they wore civilian clothes and were hard to recognize as military personnel. The other side eventually prevailed and the marine safety guys went into uniform and started looking like the rest of the service.

The other part of the regulatory group in the Coast Guard was enlisted personnel and warrant officers, who are selected from the enlisted ranks based on experience and high performance. These people were rotated between Coast Guard ships and stations and the marine inspection and Captain of the Port offices. They were sailors and marine engineers who could also make very good assessments of the condition of vessels and the competency of crews because they had done a lot of similar work on the cutters. An EMD or Cat diesel engine is the same regardless of the color of the hull, and a qualified navigator can check charts and pubs, so this group was also very competent regulators.

Some changes were instituted at the highest levels of the Coast Guard which resulted in a severe reduction in the number of merchant marine officers being brought on to active duty. This pool of expertise, which had nourished the marine inspector group for decades, was inexorably drained. At the same time, the number of people available to rotate into marine safety jobs from ships went down, because the number of ships went down. From the end of the war until the early 1970s, the Coast Guard expended a large portion of its budget and personnel operating the Ocean Weather Stations. These ships were on station for weather reporting, air traffic assistance in reporting and navigation, oceanographic sampling, and search and rescue. For some time, the Coast Guard was the world's fifth largest navy due to the number of ships required to maintain continuous presence at the ocean stations. The demise of the ocean station program resulted in a smaller number of ships were pressed into a higher operational tempo due to maritime drug and alien interdiction, and the advent of the 200 mile Economic Zone created by the Magnuson Act of 1976. A seismic shift occurred within the operations part of the service. It reverted to its historical role as a federal maritime law enforcement agency, which is a lot different from the search and rescue role. The law enforcement role had been nearly dormant since World War II, but it became the major driver of operations again. During the late 1970s, there was also a significant loss of experienced personnel. The abysmal post-Vietnam treatment of servicemen, combined with pay raises that were not even close to the inflation rate created a climate where many opted to leave the service. Retention and recruitment suffered for several years and did not recover until the mid 80s. These factors caused a decline in the level of experience and expertise of the typical inspector in the field.

Most of the enlisted people doing field inspections today are from the Marine Science Technician rating or MST. They attend several schools, but their sea going experience is limited and usually occurs before they go to MST school. They do not, generally, have the navigation or engineering background to do thorough inspections. These are the people who are doing Port State Control visits on ships today. They have their checklists, but they are not well equipped to make judgments on the overall operation and safety of ships. They are being forced to rely on classification society paperwork and certificates. There are some good companies out there who run their ships well, but there are also too many operators who try not to do anything except maintain appearances for certificate renewals once a year. There is a tremendous difference between having a manual and having an effective system.

At the Coast Guard's middle and upper management level, there are several in-depth training programs for people in the marine safety program. These specialists are trained in marine engineering and naval architecture at the best schools in the country, and represent a significant pool of expertise, but they are typically not out in the field doing port state and COI renewal inspections.

Several significant regulatory improvements were implemented in recent decades. One was the adoption of COLREGS and rewriting the US inland rules into a coherent variant of COLREGS. The previous century had seen the development of local schemes that did not make sense anymore. Has anyone ever found a use for a truncated double frustum of a cone since it disappeared from the license test?

The advent of cheap, reliable VHF-FM radios in the 1970s led to the passage of the Bridge to Bridge Radiotelephone Act which significantly improved operational safety. Licensing had developed over many

decades into a hodgepodge system, and experienced mariners were unable to work in other locales due to archaic rules. During the 1980s, a well reasoned simplification of licenses was put into effect. The new structure recognized appropriate experience on vessels and allowed people to upgrade licenses in an orderly manner. The system worked well and people became accustomed to meeting those requirements. The US flag fleet operated with a good overall safety record, which is the intent of the whole system. The Exxon Valdez disaster of 1989 produced the Oil Pollution Act of 1990, known as OPA 90. Some legislation that was already in the legislative mill was pushed ahead and put together with some items that responded to the Valdez problem and OPA 90 was the result. Cross approvals were also put in place so SOLAS approved safety gear was accepted in the US, which had many benefits.

Unfortunately, in a well meaning effort to harmonize US practices with IMO and international practices the Convention on Standards of Training, Certification, and Watchkeeping was adopted. The 1978 version was not too onerous, and most of it was already covered by normal training that most US mariners had. Not too big a problem. But then along came the 1995 version, which is source of many problems and we haven't seen the last of them. Our European counterparts, on whose system STCW 95 is based, are in countries where training courses are often paid for by either government or the employer in response to government directives. Everyone has to attend courses upon courses, with incessant refreshers. The system is designed with strong input from the people who run the schools, so the predictable result is an excess of training requirements. That is the environment from which STCW 95 came. The next problem with STCW 95 is that it is absolutely unintelligible. I co-authored the first OPA 90 plan that was ever accepted, hold an unlimited master's license, three degrees and have been around the marine business for 37 years. But, I cannot understand what the manual for STCW 95 says to do. It is written in UN bureaucratese by a committee of 160 nations, most of whom do not have any shipping or coastline. It is the worst manual ever written.

After finding the manual monumentally confusing, we poor, ignorant mariners turn to the Coast Guard for guidance, hoping for clarification. It only gets worse. The REC that I visited was using a USCG Headquarters provided software program to determine what the STCW certificate should say. The personnel in the office had no idea what the logic of the program was, they just typed in the boxes and it spit out "the answer."

For example: my license is for Master of steam and motor vessels of any gross tons upon oceans, first class pilot for several routes in lower Chesapeake Bay, Offshore Installation Manager of floating mobile offshore drilling units underway and on location, Barge Supervisor, Master of Auxiliary Sail Vessels under 200 gross tons (domestic) and under 500 tons (ITC), Commercial Assistance Towing, and Radar Observer, Unlimited.

The software spit out an STCW certificate that said I could not operate auxiliary sail vessels over two hundred gross tons after the expiration of my radar certificate. The person at the REC could not explain this result, and I frankly didn't care to even try to understand such loopy logic. I finally convinced him to put in only the master, unlimited and radar items and the software produced a certificate that would allow me to go back to work.

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I already held a master's license, and it cost about \$20000 and eight weeks of my time to get The training requirements of STCW 95 are very expensive and time consuming. I the collection of certificates required for STCW 95. Of the eight weeks, six were in courses that I could have walked into and instructed myself with no preparation time required. Most of the instructors were significantly less qualified and experienced than I was at the time. One week (first aid) was good refresher of material I had been trained on before. The advanced medical course was the only one in which I learned anything new. That is a pretty poor use of that much money and time. *This excessive cost is being inflicted on every mariner today.*

There are a lot of very fine seagoing officers who came up through the hawsepipe. These people are a significant part of our industry. One of the very bad side effects of STCW 95 is that it makes it exceedingly difficult for sailor to get a license. If he/she is supporting a family, it is almost impossible. A lot of talent will be lost from the industry if the only way to get a license is through the maritime academies. This problem also affects ex-military personnel. They have a lot of the requisite skills and training, but the service schools are usually not on the USCG approved course list, even though the curriculum may be nearly identical. Veterans have a lot to offer the industry, but STCW 95 is locking them out.

This training time and cost hurdle is also placed in the path of a second mate who wants to upgrade his license to chief officer. I know of several sharp young officers who have elected not to upgrade because of the expense, and often the lack of a significant pay boost at the next level does not make it worthwhile. Some employers are getting away with not paying for upgrades for their people, but that condition will not last forever as the supply of qualified senior level people ages and they retire or go to other industries.

Like all large organizations, the Coast Guard with around 40,000 people has its competing camps. In management parlance this is called stove piping, where the groups do not talk to each other effectively, which reduces the overall effectiveness of the organization. The operations types don't understand or fully utilize the body of knowledge that the M-types have, and vice versa. Attempts to overcome this are not met warmly by either camp. All of us poor, benighted mariners had to get GMDSS licenses. That was a fiasco in and of itself. The requirement was imposed on us by the Coast Guard as part of STCW 95 and

implementation of the Global Maritime Distress and Safety System itself. But the part of the Coast Guard that actually buys, maintains, and operates radios isn't part of the marine safety group. They are still installing Digital Selective Calling equipped radios at Coast Guard units today, and won't be finished until 2007. The effort to upgrade shore radio facilities is really driven by a lawsuit over a missed distress call that resulted in multiple deaths, not by GMDSS. Seven years after I had to get a GMDSS license at the cost of over \$2000 and two weeks of time, the people who are supposed to respond to it are not equipped to do so. This bureaucratic reality has come home to roost with terrible effect in the licensing branches. Until the 1980s, there was a license branch in most ports where there was a marine safety office. They were staffed on a rotating basis by career military people who rotated into these jobs as part of a normal career progression for marine safety specialists. There were some permanent civilian clerical people, but the head of the licensing office was an active duty officer, who was accountable for the performance of the office, and whose boss had probably had experience as a licensing officer. This system worked pretty well, and the service provided was efficient, and professional. It was possible to do many transactions over the counter on a walk in basis. Then, someone decided to "improve" the system. The port licensing offices were consolidated into Regional Examination Centers (REC). That made it a lot more difficult and expensive for mariners to get to the offices. The increased workload was not adequately staffed into the remaining centers, since this was supposed to be an efficiency gain. The staff was also changed to a mostly government civilian composition with a few rotating military people, at lower levels. The implementation of this change is a case study in government incompetence. Whoever wrote the position descriptions for these REC jobs needs to be taken out behind the barn and horsewhipped. Remember that core principle of having in depth knowledge of a business that you are regulating? It would have been very easy to require that people applying for these positions have some seagoing background, and for some of them to have been licensed at some point. There plenty of mariners who would take a GS 11 or 12 position ashore with government benefits. Most of the civilian staff at RECs today has no marine experience at all. The head of the Baltimore REC is a former police officer. The end result is that mariners have to pay fees in the hundreds of dollars to do renewals that used to be at no charge, while being treated as an annoyance, at best, by people who have no understanding of what mariners do. Most RECs won't even take cash, even though a Federal Reserve Note says on its face "Legal tender for All Debts Public and Private." Mariners have to travel a long way to do this required business. Most of the people you wind up dealing with know a lot less about the marine business and licensing than you do. Some of them are outright rude, some border on belligerent towards mariners. Transactions that used to be done over the counter are now taking four months or more. The best you can hope for is to deal with one of the petty officers because they are the most competent and professional people working in the RECs.

Unfortunately, these RECs are the direct point of contact for most mariners with the Coast Guard. It doesn't have to be this way. It just requires some management oversight at the top level, but no one involved in the high level budget and personnel battles has any incentive for fixing this mess. Most of the marine safety types today don't have enough recent sea time to obtain or upgrade a license, so the program managers running this fiasco will never try to go through the process they are supposed to be managing. It is no longer part of a normal career progression for a marine safety specialist to work in a licensing capacity. Civilian positions in the federal government are not a lifetime entitlement of the person warming the chair. They can be filled with better people, but it will take some top level effort to make it happen. The impetus for the solution to this mess will have to come from disgusted mariners writing their congressmen after every visit or call to an REC.

And then, 9/11 happened. The ripples from that event are still wending their way around the marine transportation world. A lot of things got looked at that had not been examined for a long time. One of the items that did not stand scrutiny was the issuance of mariner's documents. In the 1990s, there was a long overdue upgrade of the system to make 5 year renewals a standard. The new document actually fitted in your wallet, unlike the old one, but the quality of the picture and fingerprint were so poor that it was not a very effective identification document. Recent versions are much better. That WWII era authority to control ship movements was dusted off and now there are entry reporting requirements and ships being detained and inspected prior to entry to US waters and much more stringent requirements for access to port facilities. Crews of many foreign flag vessels are not being allowed to go ashore. Cruise ships and LNG carriers are of particular interest due to their attractiveness as targets for terrorist attacks. Naval vessels transit with moving security zones around them now. This is really a resurrection of an old regulatory

authority that had lain dormant for decades. The information technology changed, but the legal authority and basic techniques of surveillance and control have not. Today, there are a lot more patrols being conducted on our waterways.

There is now a requirement for Automated Identification System hardware on ships over 300 gross tons. This is a thing that appeals to bureaucrats and techno geeks, but really doesn't do anything significant. Large vessels have huge paper trails. Shipping agents can tell you where they have been and where they are going. All that has happened with AIS is the electronics industry got a windfall because they suddenly had a forced market for expensive black boxes, and the price of doing business went up for everyone. Is this a net gain? I remain unconvinced. I never seized a load of dope on a vessel over 300 tons. Most fishing boats are under 200 tons, as are most tugs. They can carry significant quantities of illegal immigrants, explosives, or whatever vile things we are trying to keep from entering the country, but they are not being looked at by all this new technology.

Huge amounts of money have been spent on the new security regulations and plans and training to implement them, but to what end? Ship crews are not armed, so they cannot resist an attack. What should you do, get your approved security plan out of the safe and throw it at the bad guys? A security manual in a safe and a badge system will not fend off an aggressor, and we should not pretend it will.

There is a certain level of regulation that is necessary to maintain safe operation of our marine transportation system. When that level is exceeded, it just adds to the aggravation of the people in the industry, drives up costs, stifles innovation, and eventually drives companies and people out of the business. Regulators want to regulate, that's what they do. The problem is a cyclical one, but we are at a heavy regulation point now, and our industry needs to make its voice heard. The industry, through trade associations, owners, classification societies, and their congressional representatives, needs to get the excessive regulation brought back to a reasonable level. This will not be an easy task. The regulatory world has been in turmoil since 9/11, but it is time now to go back and revisit issues and get some reason put back into the system. Many regulatory systems have provisions for periodic reviews, and notices of proposed rulemaking appear in the Federal Register fairly often. The owners and operators need to pay attention to these regulatory opportunities for comment and review. They need to be especially vocal about costs and crew training during mariner's off time. There was a lot of Ready !Fire! Aim! action going on after 9/11. Government agencies felt they had to do something, anything, to create the appearance of taking action. It is now time to step back and look at effects, costs, measurable results, unforeseen problems, and alternate ways of doing business. One size does not fit all. An LNG carrier that transits the Straits of Malacca or Hormuz has very different security concerns than a gulf coast supply boat or pollution control vessel in a port. Realistic cost benefit analysis needs to be applied to increased school and administrative requirements. The cost analysis requirements in notices of proposed rulemaking are too often far off the mark. They do not accurately reflect the travel, tuition, and lost income costs of course attendance. The new requirements may make some people feel good, but do they really do anything besides increase paperwork and inflict training requirements and costs on mariners?

There several self regulation systems in existence and some of them have worked well. Certification of dynamic positioning operators has been done internally by the offshore marine industry for decades, with good results. Self regulation with appropriate spot checks and audits may be the best way to achieve the appropriate level of regulation in some areas. However, some companies and parts of the industry are incapable of self regulation, and we need to be clear and honest about that inability.

The overall objective of the regulatory system is to insure that safe, reliable vessels are operated by qualified crews. The question must be asked every time a new requirement is brought up, "will this make operations safer, and how do you justify that contention?" Immediately after that, the question of cost and time needs to be asked, too.

What should we all do? Start writing letters to the Commanding Officer of the USCG Marine Safety Office you deal with, the Chief of Marine Safety of the USCG District you are in (his boss), and the Assistant Commandant for Marine Safety in Washington, D.C. (their big boss), with a copy to your

Congressman, and to The Honorable Walter Jones of North Carolina, Chairman of the House Coast Guard and Merchant Marine Committee. Companies and trade associations need to assign staff to watch the Federal Register, Notices to Mariners, and every other source of information on what is going on in the governmental part of the regulatory world. When Notices of Proposed Rulemaking (NPRM) are published, they offer a way to make comments and a time frame to do so. This is a critical point where input from the parties that will be affected by the proposed rules or changes can make their voices heard. Speak now or forever hold your peace doesn't just apply to weddings. The industry must become more proactive because the regulators are becoming more distant from the entities and people they regulate and recent trends in regulation do not bode well for mariners.