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Amendment 1, U.S. Constitution, Dec. 15, 1791

MANNING OF INSPECTED TOWING VESSELS: MARINERS RESPOND TO HOURS OF SERVICE ISSUES ON TOWING VESSELS

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INTRODUCTION

Ground rules: To keep our exchange of information structured and issue-oriented, as Editor I recognize that speaking out in this industry is often an invitation to “*blacklisting*” a mariner within the industry. Consequently, I identified each comment with a *unique mariner identification number in brackets*, for example, [78]. As Editor (and also a mariner), I added my comments identified by [59], added topic headings, and added *emphasis in bold italic type*, clarified some thoughts, cleaned up some grammar, but tried not to change the thoughts expressed in each individual comment.

During the President’s Day weekend 2009, Captain [154] from the Master of Towing Vessel Association (MTVA), a previously-existing affiliated association of towing vessel officers, asked for my opinion about ranking the 10 most important issues facing our mariners. “Work Hours” ranked near the top of our list. Suddenly, this issue assumed a life of its own, and I was snowed by over 30 e-mails containing a number of solid ideas. Some e-mails and calls were sent to me directly while others were replies to copies of my response to Captain [154].

With this background, I organized the key points and requested additional comments on two occasions. The last occasion followed our receipt of the Report of the Towing Safety Advisory Committee (TSAC) Subcommittee on Manning of Inspected Towing Vessels dated Aug. 9, 2013 that I shared with our mariners via e-mail.

In this report, I will share the responses with all of our mariners. In addition, I will submit them for posting in

the TSAC Docket #USCG-2013-0605 set aside for the Fall 2013 meeting where Task Statement #13-02, “Recommendations Regarding Manning of Inspected Towing Vessels” will be discussed by the full advisory committee.

I have no idea whether these comments will be discussed by TSAC. However, the Coast Guard purposely separated “manning issues” in 46 CFR Part 15 from the new Towing Vessel Inspection Regulations now being considered as a new Subchapter M. Comments closed on that rulemaking months ago, but that rulemaking project never solicited any input on Towing Vessel Manning. The Coast Guard only invited TSAC to comment on manning issues.

From the outset in 2004, our Association never believed that towing vessel manning should be considered separately from towing vessel inspection; nor do we believe that Congress ever intended for this to be the case. [59]

OVERWORKED TOWING VESSEL MASTERS

- With either the Master or Mate/Pilot standing watch on the vessel, and being the ONLY licensed officers on board that vessel, how do these officers perform vessel inspections and all other required company or legal requirements and NOT VIOLATE the 12-hours of work laws and regulations. It is impossible! They surely cannot leave the pilothouse and perform these inspections. So if they even perform one minute of work outside of their 12 hours of watchstanding they knowingly violate the law and the Coast Guard, TSAC, companies and mariners all know it. Yet the risk continues without any thought of taking corrective action. No one wants to see anyone hurt, but it will ONLY be when yet another bridge gets knocked down and a lawmaker’s or Coast Guard officer’s relative is riding across that bridge that some action finally will be taken to correct the situation. Sooner or later, the Coast Guard or Congress will wake up and realize that a two watch system is neither safe nor healthy. But, how many more accidents need take place before corrective action occurs? [195]
- Our Association received the following letter from an East Coast tugboat Master in Dec. 2005, shared it with our mariners, and passed it along to Congress on Feb. 9, 2006.⁽¹⁾ The letter **outlines the administrative tasks** he is responsible for on a 5-man tugboat. These tasks often force him to break the law and operate his vessel in a fatigued condition. Thankfully, this letter did not report an accident. [⁽¹⁾Excerpt from NMA Report #R-413, Rev. 1] [59]

Dear ■,

This is a list of the duties, drills, and meetings required by the Responsible Carrier Program (RCP) and by my employer as normal boat business.

We like many things about the American Waterways Operators’ Responsible Carrier Program (RCP). RCP has helped promote safety. However, as you can see, this has become more a safety maintenance system than a physical inspection system in design.

“As Captain, I do not appreciate the *shift of responsibility (SOR) from management to crew*. I do not think RCP should be used as a substitute or a model for a physical inspection of towing vessels for the following reason. ***The RCP does not take into account the time needed to conduct drills, hold meetings, and do the required paper work.*** The crew off-watch must participate on its own time in this additional work.

“As Captain, I am not left in a position to make the RCP a priority over my boat’s performance. The real world comes first! If there is not enough time in a hitch to complete the REC requirements they simply remain unfinished.

I have been pressured to complete documents with a “satisfactory” report when weather or other factors; prevented us from actually conducting drills or holding meetings. It forced me to work over the 12-hour work rule many times.

I say this in confidence. All the enclosed documents would no doubt be considered sensitive proprietary materials to AWO and others including my employer. However, I need to show them to you in hopes they help you understand the paperwork required by the RCP and will bring to light some of the hidden problems it causes for working mariners.”

Oh, yes not to mention five men, 24 hours per day, 365 day a year must operate and maintain a very active towing vessel. This includes engine and deck maintenance, shopping for food and boat supplies, carrying them back to the boat, traveling, and – of course – all the administrative work. Fatigue is a well documented danger. Fatigue must always be an important factor when operating heavy equipment. It is not only a danger when towing oil barges, dangerous chemicals, or liquefied gases such as chlorine and ammonia but also in other transportation

modes such as driving intercity buses, tractor-trailer trucks, railroad locomotives, or flying airplanes. Fatigue *grabs the headlines* when “passengers” or “innocent civilians” are involved.

Thank You. [Name redacted] [164].

Enclosures:

- Document #1 - Declaration of Security.
- Document #2 - Ballast Water Reporting Form. (This is a running log and daily reporting requirement.)
- Document #3 - Voyage Plan. (Required before each sailing.)
- Document #4 - Report due before each crew change. I consider this to be a shift in responsibility. (SOR)
- Document #5 - Request for money for food rations before each crew change. (SOR)
- Document #6 - Monthly tow wire report. (SOR)
- Document #7 - Daily billing log. (Not an “RCP” item).
- Document #8 - Company accident report. (Completed as needed. Not an RCP item.)
- Document #9 - Line inventory. (Due before each crew change. Not an RCP item).
- Document #10 - Release and indemnity agreement. Completed for each visitor,
- Document #11 - Radio Log. A running log record.
- Document #12 - New crewmember orientation checklist.
- Document #13 - Post orientation performance evaluation. (This report caused many problems.)
- Document #14 - New crewmember drug and alcohol policy.
- Document #15 - Repair request report. (SOR).
- Document #16 -Towing Investigation Report. Each incident.
- Document #17 - Reporting & Chemical Testing Requirement (Procedures).
- Document #18 - Parts Requisition. Weekly.
- Document #19 - Supply List Inventory & Requisition. Monthly (SOR)
- Document #20 - Overall Checklist for an Uninspected Towing Vessel. Due at Crew change.88 items. (SOR)
- Document #21 - Ice Report (Winter season only.)
- Document #22 - Safety Meeting Report. Weekly.(SOR).
- Document #23 - Fire & Boat Drill and Safety Meeting 23. Weekly. (SOR)
- Document #24 - A running trash log record book.
- Document #25 - Local Notice to Mariners. This requires the time to down load the document. It takes additional time to correct and update the charts.
- Document #26 - U.S. Army Corps of Engineers. Vessel Operations Report is a running log and reporting requirement.

Also include time I spend for:

- Daily Navigation Equipment & Communications Check.
- Weekly test of the general alarm system.
- Time to prepare minutes for weekly safety meeting and fire drill and then execute my plans.
- Weekly abandon ship drill.
- Weekly steering failure or loss-of-power drill.
- Bi-weekly man-overboard drill.
- Weekly test of emergency lighting and power.

BETTER UTILIZE EXPERIENCED PERSONNEL

Here is one possible solution to remedy some of the personnel shortages reported in the towing industry. Observers have noted the advancing age of merchant mariners with average experience being diluted by fewer and fewer entering the ranks. Mariners who have accumulated years of licensed experience are often forced into a premature retirement that they may not welcome because they no longer hold “active” Coast Guard licenses. For one reason or another, possibly for health or other reasons, they have chosen or been forced to have the Coast Guard renew their licenses “*for continuity purposes*” only. Consequently, they are no longer able to perform the *navigational duties* of a Master and/or Mate/Pilot. They go ashore and the industry loses the benefits of their years of service and the resulting experience.

Many of these former Masters and Mates/Pilots have the training and management skills that would allow them to handle some of the routine duties that often force watchstanders to violate the 12-hour rules. Without piloting the vessel, many of these individuals could:

- safely carry out the functions of Vessel Security Officer.
- correct vessel charts and publications.
- offer advice in building tow and fleeting operations.
- monitor the new NPDES General Permit requirements.
- conduct routine communications and correspondence with the “front office.”
- file accident reports promptly and properly.
- follow up on individual vessel maintenance issues.
- order supplies.
- sign off on repair work performed on the vessel by maintenance personnel and/or outside vendors.
- assist the crew in many ways such as by conducting in-house vessel inspections and audits.
- maintain vessel records required by a safety management system.
- conduct on-board training and drills including instruction in newly-installed equipment.
- stand watches when the vessel is not underway while other crewmembers rest.
- perform Designated Examiner (DE) tasks if previously qualified to do so.

These are many of the tasks these certificated officers performed by default in the past. They would be allowed to do everything except to pilot the vessel unless supervised by a fully-licensed officer. These senior retired officers could take the place of a “Roof Captain” (similar to a “Staff Captain” on large passenger vessels.)

Companies would make decisions to employ these individuals on a case-by-case basis. They would be expected to provide limited pay and benefits in return for limited light-duty, non-navigational but increasingly important peripheral services that otherwise would have to be performed by fully-licensed Masters, Mates/Pilots, and Engineers. Many of these mariners would be on Social Security and would be able to supplement their monthly checks to better provide for their families. Also many would be on Medicare, so the company would not incur additional insurance premiums. Utilizing these personnel for non-navigating duties could be on a case-by-case basis under “guidelines” such as found in a NVIC. While this would be an added expense for the companies, the advantages far outweigh the costs. You have the benefit of all that experience in emergencies. Pilots who are struggling could have a mentor to, not only expand their skill set, but relieve the anxiety and breed the confidence necessary to perform at a level that is safe and will result in the company making a profit. Add to that, they could act as a “posting pilot” whenever a Master or Mate/Pilot is assigned to operate in an area he is not familiar. *Under such a plan, everybody wins.* [91]

TEACH APPRENTICE MATES/STEERSMEN TO HANDLE ADDITIONAL DUTIES

In recent years, an increasing amount of paperwork and additional administrative duties are required aboard towing vessels. Very little about these collateral duties appears in the typical 10-day Apprentice Mate/Steersman course; nor is it covered by the current Towing Officers Assessment Record (TOAR) that represents “hands-on” experience afloat. Part of pilothouse training period *should* include training in how to manage the paperwork load as well as other “additional duties.” These duties include many of the duties listed above. An Apprentice Mate/Steersman needs to be entrusted with completing some of these duties by the officer(s) who instruct them. For example, standing watch while the vessel is not underway would allow the Master or Mate/Pilot to carry out their navigational duties more effectively when they did not have the opportunity to gain restful sleep for any reason on their previous off-duty rotation. After all, an 84-hour workweek expected of these fully-licensed officers is much longer than an average 40-hour work-week afloat. [91]

MANNING CONSIDERATIONS AND THE TOWING VESSEL INSPECTION RULEMAKING AHEAD

First of all, let me point out in January 2002 the U.S. Supreme Court made the decision that OSHA had a right to inspect towing vessels in light of the lack of inspections being performed by the USCG. It was in the TSAC meeting, *prior to the Supreme Court's decision* where I stated "If the Supreme Court favors OSHA in allowing them to inspect uninspected towing vessels then the towing company officials will come crawling on their hands

and knees to the Coast Guard requesting that they make the inland towing vessels "inspected vessels." Well, after the Supreme Court decision, that is exactly what happened through TSAC. However, here we are in the summer of 2013, over thirteen years later and the industry is still talking about having inspected vessels. Is it a matter of let's take our time and do this correctly OR is it a matter of let's drag this out so we don't have to spend too much money? I believe it is the latter and not the former. [195]

- (Remember) the industry itself (AWO) went running to the Coast Guard when they actually thought they were about to be invaded by OSHA after the Supreme Court ruling in "Mallard Bay". [90]
- The "Mallard Bay" decision is available to review as NMA Report #R-300. [59]
- Mariner resistance to change is as big, or even a bigger problem, than the regulations themselves. [86]
- Decide the big issues first (and address the) small ones later, if possible. [84]
- Having (any) significant impact upon the USCG concerning (watches) *i.e.* 6/6, 8/8, 4/8, 12/12 or other issue is extremely difficult unless there is a **general consensus** among individuals and labor and as (if) possible the operating companies. In general terms such a consensus is difficult if not impossible to obtain even within one faction of the industry let alone across all elements. The government knows this and uses it against the entire industry to do what they think is best in the absence of any consensus. [84]
- Think that this may be the time to modify the law/regulations concerning manning violations. In the past any people who complained about manning violations had probably broken the same manning law themselves and was therefore more at risk than the employer who ordered it. However, proof against one is automatic proof against the other. [84]
- (Therefore), we must find a way that encourages complaints of violations to the regulators while not exposing operating personnel that are making the complaint to possible suspension and revocation proceedings. Maybe it is as simple as **offering immunity** to any individual who complains about non-compliance with "the 12-hour rule" or other manning issue.... It is a starting point for the dialogue. Whatever the answer it should be included in regulation and maybe law. [84]
- Changes in the law in 2010 provide new "whistleblower protections" that mariners should explore cautiously and with good legal advice. The issue is covered in NMA Report #R-210, Rev. 2. [59]
- Then there's the complete lack of enforcement by the Coast Guard. This is a political problem that no regulatory change will fix. [86]
- "Crew Endurance Management" (CEMS) doesn't do squat for you other than making you aware that you need to squeeze 7 hours of rest in a 5½-hour period. [83]
- Since the towing industry is attempting to become "inspected" what about the adequate rest for mariners on vessels, including inland towing vessels. There are many more towing vessels than there are blue water vessels, and they can carry just as hazardous a cargo as ocean going vessels. They are also a lot closer to bridges and cities that are highly populated. **Safety** of the environment, crew, vessel, cargo and the public **must** be the first option. [83]
- (At a past TSAC meeting somebody) ...stated that if their mariners are tired, they are allowed to tie up to a fleet, etc. to get adequate rest. My recommendation is that (the Coast Guard and the towing industry) consider this option once every two or three days (of allowing mariners on 24-hour boats) to catch up on (their) sleep. You would comply with the law and the Coast Guard would have (evidence) in your favor in that you are reducing fatigue and (reducing) the possibility of causing an incident. [83]
- Limiting "duration" of rotations in the two-watch system will serve as an appropriate stop-gap measure until regulators force our masters and employers into a different state of mind. [90]

- Any schedule you can imagine will still be the same 12 hours a day we are being paid to stand watch. We all know that horse-trading will be done, but constantly harping on the three-watch “pipe-dream” will only diminish the credibility of all concerned. The issue needs realistic and reachable goals. [85]
- One I would like to positively reinforce is that each and every one of us has our own 'body clock' and needs a slightly different sleep pattern. The responses all confirm this divergence of need. But there seems to be an 'aggravation' being felt by all, since no one has 'the magic bullet' answer to this. [87]
- I've tried the altered (CEMS) schedule and found it lacking. The Mate/Pilot will still be faced with *a more demanding schedule* than the Master. [85]
- Everyone also needs to remember that what the MTVA / NMA will be submitting a *package* of recommendations that are meant to positively reinforce each other for a greater effect than what each might have alone. [86]
- NMA encouraged *individual mariners* to read the Towing Vessel Inspection rulemaking package and submit their own *informed comments*. However, “Inspection” did not include “Manning” and mariners are still not being asked to comment on manning because the Coast Guard does not want to consider the existing manning problems at this time – or ever if they can avoid it. [59]
- Less noise and vibration equals better quality rest, which may make a less-than-ideal watch schedule more tolerable. Couple that with *placing a legal limitation on the number of consecutive days an individual can work* outside of a three-watch system (along with a minimum amount of off-time between hitches for body recharge) and we might just have improved things in a measurable way. [86]
- After two (or) three weeks, fatigue starts to set in! What about tripping on days off? If you run 35 or 40 barges on the Lower Mississippi River for 30 days and then go make a trip...pushing red flag barges, is that safe? I say no it is not! Travel time is a big issue with some of these companies – (sometimes) 12, 14 or more hours riding in a crew van and then getting on board and immediately expected to go on watch is unsafe. But who cares? Some companies are addressing travel in a positive manner! All said, there have been some...positive changes made out here although it took an apprentice steersman on the UTV Mel Oliver to bring about those changes! Sad isn't it! [80]
- Limiting total days worked per single rotation will by far best serve the working mariner and at the same time save the company's millions of dollars. Insurance related health care cost savings will benefit the company. Insurance premiums will drop due to large reduction in accidents both physical and navigational affecting both equipment and (waterways) infrastructure. [79]
- “*Tripping*” is fine if that is all you do for a living. Those, however, who work a full time job ... and then trip on their time off when the company expects them to rest is where the problem will eventually lie. It is NOT illegal to do so but ...if more and more accidents happen by those who trip part time, then the industry will look at this and possibly try to put a stop to it. That, of course, will cut off income to certain mariners who trip while they are supposed to be resting. Right now the Coast Guard investigators look at how much rest you have had in the past 24 to 48 hours. *Eventually they will wake up and start looking further back, since sleep deprivation is accumulative*. Do you know of any inland river towing companies that *do not allow* their employees to trip while on their days off? I am just wondering if some are possibly seeing the risk to their company. [83]
- One area of concern that I see is "*tripping*." It is understandable that mariners totally sailing as "trippers", working for one company and then another, moving cargo and their towing vessels from point A to B is fine. However, when a person works for a company and is employed, let's say 28 days on with 14 days off, it is expected that during those 14 days off that he is properly and adequately “recharging his battery” and catching up on the rest he so desperately needs. Yet many mariners take the expected time off to “trip” – that is sail for a different company to make a few extra bucks. Companies should pay mariners well enough and the Coast Guard should enforce that during their time off they are NOT “tripping.” All extra “tripping” when a mariner is fully employed just adds more fatigue on top of existing fatigue. When the mariner returns to work for his regular company he is worse off than when he left. This is uncalled for and can only be solved when the

industry, its mariners, and its regulators realize that it is worthwhile to pay a decent wage than to allow a mariner to work outside this full-time job and return to work, have an accident and let the company (or its insurance company) pay the bill. Avoiding coffee, bright lights, etc. as CEMS teaches mariners to do is not sufficient when the minimum of SEVEN hours of sleep is never achieved.

It is time for all concerned to realize, that 12 hours of work each day, 7 days a week, means that in 4 weeks a mariner on the inland rivers works 84 hours in one week and 336 hours in one 28 day period. Assuming Monday is the first day of employment, JOHN Q. PUBLIC works 40 hours in a 5 day period, resting on Saturday and Sunday and a total of 200 hours in a 28 day period having had 8 days of rest scattered in between. That's a **ratio of 1.68 days of work** by inland mariners to every 1 day of work by John Q. Public. Employers and mariners must understand that it would take John Q. Public, to work 336 hours, 8 hours per day a total of 42 days whereas our mariner does it in 28 "continuous" days – 14 days less than John Q. Public. And some wonder why there are fatigue-related accidents. COME ON! Give me a break! Wake up! You all know the cause. When will you take action to correct this multi-faceted problem? The Coast Guard, TSAC committee members, and towing companies should be ashamed of themselves. [195]

- **Overall noise levels, and ambient noise** makes for less “quality” sleep. Everyone's hours required for sleep are dependent on the individual vessel noise level. Six hours sleep on one vessel doesn't equal six hours sleep on another noisy, vibrating vessel....getting an **industry wide inspection for interior noise levels in quarters and galleys** as a start to get overall living conditions at least to an acceptable standard. [87]
- Read and study NMA Report #R-349, Protecting Mariners' Hearing, prepared in 2003 and you will see that the Coast Guard has done absolutely nothing to protect mariners' hearing. Compare this with comparable OSHA workplace standards. [59]
- So let's put that aside and shoot for inspection standards that will meet the needs of a quieter and more rest-friendly environment aboard and drop this issue of altered watches. [85]
- If we back off on the manning then the other improvements we seek (noise/vibration reduction, proper interior lighting, etc.) have a much better chance of making it through the regulatory mill. Like it or not, this is a political process, and **politics is the art of the compromise**. [86]
- The **industry** must accept that something needs to be done to change the sleep deprivation issue. One thing can be assured is that if one solution can be found, the Coast Guard won't be the agency to do it. The industry (US) will have to find it on our own. [87]
- Read and study NMA Reports #R-304 & R-305 to see how the Coast Guard treats its own personnel. [59]
- It doesn't make much sense to have people making rules for us that do not know anything about a tow boat or working in the conditions our mariners have to work. Exactly how many of the people making these (regulations) with the Coast Guard actually have (ever) worked on tow boats. [88]
- We also see this problem in the complaints about towing officer licensing regulations and the new “Medical NVIC” and the way the regulations are administered by the National Maritime Center. [59]
- The manning issues the industry is faced with **right now** are not going away....I hate to admit that it will take a "Mel Oliver" or two to get people's attention so we can make things a little better each time [85]

CHANGING THE WATCH SCHEDULE

- There would have to be a serious reworking of the schedule, such as changing the watch start times: **[Front watch 2100-0400 on, 0400-0900 off, 0900-1400 on, 1400-2100 off.]** Meal times would be unnaturally early or late requiring a short period of adjustment physically, but a **huge** one mentally. [85]

- Nowhere in the law does it state where or when the 24 hour period begins. Most companies look at it as starting when you get on the boat, some look at it when you leave home going to the boat and then ... others just don't worry about it. This needs to be clarified in writing and complied with. Also, if it could be better defined as to where the 24-hour period begins at midnight, just as everyone knows a new day starts then....
- I know that it's not as clear as you (and many others including myself) would like it to be, but it **does** cover us adequately if it is obeyed. Basically, you can pick any random time and date in the logbook and then go exactly 24 hours ahead or back. If within that (or any other) randomly chosen 24-hour period you've been on watch for more than 12 hours (except in an emergency) then you are in violation. [80]
- Rethink the Crew Endurance Management System (CEMS). When you work either the 8 & 4 or 7 & 5 system, the *Captain gets all the nighttime rest and does 95% of the steering in daylight hours with the pilot getting 95% of sleep during the day and drives mostly in dark hours.* We all know that most of the new pilots are the least experienced wheelmen there are now, and *not having experience and driving at night is a hazard.* Personally I feel that we should reevaluate the 12-hour rule and better define it, with the 24 hour clock starting at midnight, since that is when a new day starts. If they could redefine it and we could work an 8 & 8 schedule, we all would be better rested and work every other night. [80]
- It takes people to run a boat... We need more people to run boats safely. [92]

IT IS TIME TO EMPHASIZE SAFETY

- In this recession, manning and watchstanding are usually the first places to cut. This is the trend in all industries and a fact of life. It also throws safety to the winds!
- Aboard a towing vessel crewed by only two men, if a deckhand falls overboard the only other person aboard to come to his rescue is in the person in the wheelhouse steering the tug – and he cannot be in two places at the same time. Most fatalities in the towing industry result from falls overboard. In addition, should an emergency occur aboard the tug, such as a system failure, engine shutdown, or a fire in the galley, who responds when the “Deckineer” is off the tug landing a barge or handling lines on the dock?
- Any AWO member company operating a vessel with only two crewmen cannot safely respond to an emergency and should lose their RCP certification. Other AWO members that operate vessels 24 hours a day with a single crew on standby, or operate without engineers, or have deckhands or mates conducting security checks in engine rooms, or conducting other duties during rest periods have stepped below AWO minimum standards and the practice of good seamanship. AWO needs to require its members to practice in the field what they preach on their certifications and their Safety Management System documents. [130]
- Make it mandatory for companies to furnish some type of light that works and blinks at night when the deck crew is on the tow or outside. Some companies furnish this type of light, and some don't want to spend the money. We all know that if someone falls overboard, they more than likely panic or they may even be hurt, and with a light attached to the life jacket that has to be manually turned on, and the crewmember is hurt or unconscious, there is no way for them to manually turn on the light. ACR Electronics has a strobe light that is water activated and can be seen for up to 5 miles. I bought one for my life jacket as well as an EPIRB. [80]
- The Industry and the Coast Guard must address the number of men lost overboard from tows immediately. [59].
- Make it mandatory that all new deck crewmembers go thru a training course before they set foot on a boat. [80]

ENFORCING THE 12-HOUR RULE

- Some creative interpretations by local Coast Guard officials and some towing companies (including certain

AWO-member companies) count as “work hours” only those hours when a towing vessel is actually underway. Coast Guard policy letter G-MOC 04-00, Rev. 1, defines **work** as “any activity that is performed on behalf of a vessel, its crew, its cargo, or the vessel’s owner or operator. This includes standing watches, performing maintenance on the vessel or its appliances, unloading cargo, or performing administrative tasks, whether underway or at the dock.” We worked hard to obtain this policy statement from the Coast Guard over 10 years ago! We ask that the Coast Guard take the time to enforce it! [130].

- The policy statement referred to is Policy Letter G-MOC 04-00 Change 1. You will find it discussed in NMA Report #R-370, Rev. 4. [59]
- Say a Captain worked on a day-boat or (one that was) manned like a “Day-Boat” and was on 24 hour call. That means the crew lived on the boat. (Although the Captain) made sure he didn’t work over 12 hours, but he never worked a steady schedule. His hours would be scattered throughout the day. Would the Coast Guard look at the log and question if the boat was a 24 hour or a day boat? It could read like this, 2 hours on, 2 hours off. I see towing companies are starting to do this in order to eliminate one licensed wheelhouse position. [89]
- The U.S. federal regulations (with one exception) do not stipulate how your off-duty time may be broken up, just that you may not be on watch and/or work for *more than 12 hours in any consecutive 24 hour period*. So you could conceivably work a watch schedule of 1 hour-on / 1 hour-off forever and it would be perfectly legal. Under STCW '95, however, one of your rest periods must be of not less than 6 hours in duration. Unfortunately, this STCW requirement doesn’t apply to most towing vessels and certainly not to day boats working in a harbor or on a river. [86]
- Refer to NMA Report #R-370-H, 12-Hour Rule Violations: Harbor Tugs and The “One-Watch” System. [59]
- 46 CFR §15.1111(g) states “The Master shall *post watch schedules* where they are easily accessible. They must cover each affected member of the crew and must take into account the rest requirements of this section as well as port rotations and changes in the vessel’s itinerary.” While this may apply to operations under STCW, we encourage Congress to apply it to all towing operations and to require two full crews in vessels in 24-hour service...a fact of life in regulations that already cover small passenger vessels operating more than 12 hours in any 24-hour period. [130]
- The Coast Guard, *if they ever bothered to look at it at all*, would really only be looking at whether or not the boat was in service for more than 12 hours a day. If it were then two (2) licensed operators would be required. The term “*day boat*” is a slang term that does not exist in the regulations. As far as the Coast Guard is concerned, everything depends on the hours of service of the operators. It’s either 12 hours or less (what we call a day boat) or over 12 hours (requiring a master and a mate). *There presently is no legal limit on the hours that unlicensed seamen (deckhands, (tankermen) and unlicensed engineers* on towing vessels may be compelled to work by their employer or the vessel’s master. Congress just forgot them. [86]

In reality, it is virtually impossible to use a “day boat” that is busy with just one operator and not violate the maximum work hour regulations at some point, *nor is it particularly hard to prove*. Remember, you can pick out **any** time you like in the logbook and go backwards or forwards from it 24 hours. If within that or any other randomly chosen **consecutive 24-hour period** the operator has stood more than 12 hours of watch then a violation has occurred. *Despite what some companies say, the clock doesn’t start and stop when the vessel gets underway and ties up*. Any of the usual work related to the job (communications, planning, logistics, maintenance, administrative duties, etc.) counts towards the 12-hour limit. *Travel time, while not counted as work time, does count against your rest time. This also needs addressing in the new regulations*. [86]

Furthermore, 46 USC 8104(a) requires the following: An owner, charterer, managing operator, master, individual in charge, or other person having authority may permit an officer to take charge of the deck watch on a vessel when leaving or immediately after leaving port only if the officer has been off duty for at least 6 hours within the 12 hours immediately before the time of leaving. This would be impossible to comply with in the completely random work schedule one would expect to see on a “day boat” in 24-hour service with only one watch. It is my understanding...that this applies to a vessel whenever it gets underway, regardless of whether or not it is actually “leaving port” in the physical sense. [86]

- Changes in the law in 2010 require Official Logbooks on all inspected vessels and require these logbooks to record all on-duty time for all mariners. I understand that the Coast Guard currently is preparing a policy to implement this change. [59]
- The return of the single crew “day-boat” is about as welcome as the return of polio to the towing industry’s approach to crew safety. Safety improvements brought to the towing industry in recent years by the Coast Guard, the American Waterways Operators, and the Towing Safety Advisory Committee are overshadowed by the return of the single-crew tug. I know first hand what risks a mariner is willing to take to put bread on the table. If it means the difference between a pay check some mariners will run into a hurricane. I am glad those days of the “day-boat” are gone along with the bells and jingles. However, the “day-boat” didn’t end because of safety concerns. It ended because it became too costly as a result of the damage and injury law suits that resulted. [130]
- To get anywhere with this would require having the Coast Guard decide that it was an issue that must be addressed. As I said, that is a political problem more than anything else. Unless someone with enough juice to make it the Coast Guard's priority decided to do so, nothing is likely to happen until an accident causing sufficient public outrage occurs. [86]

WATCH PREFERENCE: THE THREE-WATCH SYSTEM

- I don't believe that we're going to get that unless a timely fatigue-related accident with multiple civilian casualties just happens to land in our laps during the rulemaking period. I'd personally love to see the three-watch system implemented. But we'd be fools not to have a Plan B in the (likely) event that the quest for three-watches fails. [86]
- I think we all know the answer to many of the problems is three watches. Is there any way to hi-jack the "agenda" to this end? Short of our industry experiencing a high-profile, clearly fatigue-driven accident that is *thoroughly and truthfully investigated by the federal authorities*, I have no idea. [86]
- Unfortunately, there is no “agenda” to hijack. Manning is not on the table for discussion. [59]
- I will take advantage of the regulatory forum when the opportunity presents itself during this rulemaking process. I have every intention of making a very strong **written** case for the three-watch system being adopted for safety reasons by the towing and oilfield industries *when I submit my personal comments on the upcoming NPRM* for Towing Vessel inspections. *This will be a part of the permanent record in the docket and can be referred to as needed in the future.* But I know full well that the Coast Guard is going to disregard them as not being "within the scope" of the intended regulations. They will say that Congress directed them to bring towing vessels under inspection, not specifically to change the *manning standards*. In this they are correct. I've read the law myself. If Congress had intended to change the manning standards they could easily have directed the Coast Guard to do so, even using broad language. They did not do this. If that **was** their unstated intent, and it is instead contained in any of the conference reports that preceded the law's passage, then they'll have every opportunity to say so and demand that it be incorporated as the rulemaking unfolds. I have neither heard nor read anywhere that altering the manning and watches was part of the legislative or regulatory agendas, even though it should have been. Time will tell. Of course, to bring previously uninspected vessels under inspection without thoroughly reviewing the manning standards for their adequacy is absurd. Sometimes legislators and regulators do absurd things. C'est la vie.
- Read the letter from Rep. James Oberstar, Chairman, House Transportation and Infrastructure Committee, to Admiral Thomas Collins dated March 23, 2005 citing 46 U. S. Code §8101(a)(g), §8904(c) et al. This letter expresses clear intent to include manning in towing vessel inspection regulations. Letter is in Docket #USCG-2004-19977-129. [59]

I believe that if we really want to see the three-watch system become the legal standard aboard tugs and OSVs (on voyages of 600 nautical miles or less) then we're going to have to find someone in Congress to sponsor and push such legislation. For this to happen regrettably may require a spectacular accident that we can capitalize on to prove the point and get the political interest jump-started. This country has a long history of not attempting to fix a problem until the *body count* goes high enough to catch the public's interest

and generate outrage. I wait patiently for that time, if that's what it comes to.

What I do not intend to do is allow myself to become bogged down on this issue and allow it to distract me from getting the details right on all the many **other** inspection issues that we must get right the first time. I sincerely doubt that we'll be revisiting the new towing vessel inspection regulations again anytime within the next couple of decades. We've got to do everything in our power to make sure that we can live with whatever comes out in the final rule. [86]

- What I see is a willingness to let the opposition decide what the argument is. ***He who sets the agenda wins the prize.*** The object is not to decide how to accommodate the 12-hour rule, but how a Captain can meet that requirement and still fulfill the responsibilities required by the companies with regard to a safety management plan, the CEMS, and the requirements made mandatory by Homeland Security and the time required for the Captain to be the Vessel Security Officer. ***This is an argument the companies cannot win. If any of these requirements can only be accomplished by a navigation watchstander while off watch, in a 24 hour period when the vessel is underway, they are breaking existing law.*** The question then becomes how does management plan to solve this conundrum. The Coast Guard has already stretched the 12-hour rule by requiring Pilots and Captains to work more than 12 hours to participate in drills. They have given tacit approval for all of the above. Where do we draw the line? ***I have spoken to many in management and nobody has an answer, plus it makes them nervous as hell.*** [91]
- ***The answer isn't more law, it is enforcing the laws we have*** and making them apply to the whole crew, call watches and single engineer boats are inhumane. I have personally explained this to several Congressmen including James Oberstar, and Elijah Cummings at a USCG hearing. One of those Congressmen commented if a third world country would adapt a system like our call watch system on towboats, they would be cited for human rights violations. [91]

Watch Preference: 12 & 12

- Nobody showed a preference for this schedule that is widely used in the offshore oil industry.

WATCH PREFERENCES: 8 & 8

- I will work any watch except the straight 12-hour watch. That is just too long for anyone to stay in the wheelhouse, especially when the mate/pilot is stuck working from 0001 to 1200 hours...As far as the 8 & 8 watches, I personally like them. Yes, it can be hard at times for the body to adapt, but I usually only sleep 5 to 6 hours at a time anyway. Working the 8 & 8 still allows me to get the required sleep "MY" body needs to rejuvenate itself. [80]
- I've tried the new watch rotations and they are no better than 6 & 6 watches. I (believe) "rolling 8's" are even worse. [90]
- I am dead set against the so-called "rolling 8's" watch schedule. Standing that schedule is, to me, far worse than 6 & 6. Every 24 hours your body has to adjust to a wake-sleep cycle that is the exact opposite of what it was the day before. What the body craves is a rhythm, and even a relatively poor one (like 6 & 6) is preferable to one that reverses itself every 24 hours. That's not something that can be adapted to and ***it goes against all of the known scientific studies of the sleep needs of humans.*** I would much rather expend effort to get the manning standards changed or, failing that, getting the reluctant professional mariner community to make a bona fide attempt at trying out the alternative watch schedule of 7-5-5-7. [86]
- ***The rules and regulations do not permit the 8 on 8 off because in ONE day one mariner will work 16 hours and the other 8 hours.*** The next day the other mariner will work the 16 hours in the day and the other 8 hours.
- The 8 & 8 is illegal under existing law and regulation. End of story! [59]

WATCH PREFERENCES: CEMS 7-5-5-7

- No, 7-5-5-7 is not perfect, it doesn't address the early morning issues of just before dawn that causes so many Mate/Pilots to be sleepy in spite of their caffeine levels.
- You're going to have a hard time convincing me that a schedule that allows for the primary rest period to be one hour longer than it is now is any better than 6-6 watches. [86]

WATCH PREFERENCES: 6&6

- I would think that *the 14-14 day schedule is the most you should be faced with for a work rotation on 6 & 6*. Any longer creates the kind of weariness that makes us that much more vulnerable to fatigue related errors in judgment. For myself, I've been working 6 & 6 watches since the 80's, and I'm reasonably comfortable until the hitch runs past 14 days. [85]
- A Master or Mate/Pilot getting off of a 6-hour watch does NOT immediately “hit the sack” and go to sleep. Think about it. If there is no cook on board the vessel, he must prepare his own meal, clean up after eating, and then, possibly take a shower before finally crawling into bed. How much time does this take away from his sleep period of only SIX (6) hours maximum – probably 30 to 45 minutes. Even if there is a cook, it will still probably take 30 minutes before going to bed after eating and possibly taking a shower. Thus this mariner achieves NOT SIX (6) hours of sleep but probably only 5h 00 m to 5h 15m because he is usually awakened 15 minutes before going on watch again.
Now compare that sleep period with John Q. Public, who achieves 7h 00m sleep per night. You can easily see that CEMS will not improve his condition of fatigue and, more importantly, it will not reduce his fatigue but will leave this mariner prone to having an accident. [195]
- The 6 & 6 rotation in itself is not the issue for the professional mariner who has done it his entire life.... It's the duration in which these companies expect you to perform at that level... For myself I know I start down hill after 21 days... and I also know I would do better if I only worked 14 days at a time.....what really needs to be done is *put a stop to person coming out and working 30-90 hitches at a time as a stop gap measure....* Sure it would cost the companies a few dollars more for additional turnovers, but it's a damn site cheaper than trying to figure out how to crew the boat with three deck officers. [90]
- Note that the IMO and the International Transport Workers Federation have come out against the 6 x 6 watch and that can be fuel for the fire. If it is unacceptable internationally, why is the U.S. the only ones in favor of it. [83]
- While the international maritime industry looks at the safety of having a two-watch system of 6 on and 6 off, here we have the U.S. Coast Guard endorsing the 12-hour workday for inland mariners. At sea, such watches might be more plausible to contend with. When pushing untold tonnage and numbers of barges ahead of you, with land not that far away on either side, in shallow waters and, when heading down river with a following current, makes the situation very serious. The Coast Guard and inland river industry will not accept that "FATIGUE" is still a major cause of accidents on the rivers. It is a known fact that the human body and brain needs SEVEN (7) hours of continuous sleep in order to be fully rested. Sailing 6 hours on duty and then 6 hours off duty and working 12 hours per day for weeks on end, only builds up fatigue in the body and brain. This, in turn, leads towards a tendency to have an accident. The Crew Endurance Management System (CEMS) does not work – but seven hours of sleep does! That's plain and simple. No matter what anyone tells me about CEMS, I am convinced it will not work and no one can change my mind. Adequate REST is what is needed. [195]

BY COMPARISON – U.S. COAST GUARD WATCH STANDING

I am not all that familiar with the established protocols used in the private sector. *I have spent most of my underway watches in a three watch cycle on cutters and have little experience with a two watch cycle.* Only on

rare occasions, did we get underway for urgent SAR with only two watch standers (Qualified U/W OODs), so I'll stay away from these structured watches and the related issues as they pertain to labor agreements. ***In the Coast Guard, a two watch cycle was used only in emergencies***, under considerations outlined in the instruction I sent you. I do not believe I am sufficiently familiar with how they are being applied within your industry, or the impact they've had to make me qualified to address those issues in any depth.

I'll limit my input to the issue, which watch-standers/crews can control at the present time. There is no 9-5 option in maritime operations and fatigue is a factor in that it has to be monitored constantly when underway. During my career, I spent a good deal of time in New England waters and much of that underway time was during winter recovering disabled commercial fishing vessels out on the fishing grounds. We even had an occasional response to a towing vessel, where a towline had parted and we assisted in recovering the barge. Murphy's Law insured that a typical SAR case would come during inclement weather and insured it interrupted us in mid-sleep cycle. From a warm bed to underway in rough seas, was about a one hour transition, barely allowing a cup of coffee to have much effect.

On our patrol boat, I was the youngest of the three qualified watchstanders and grateful to be the only one not affected by motion sickness. After the 45 minute drive to the boat, I was wide awake and always preferred the first watch. It was a busy one during which, we got our initial "sitreps," made all our underway preps, established our initial communications and establish our regular "comms" schedule with the distressed vessel and began our plot. This along with numerous other activities, made that first watch, pass all that much quicker.

The skipper was a young man who was only mildly affected by motion sickness; could adjust rather quickly to rough sea conditions, and just needed a short period of rest in his rack when the pounding first started. That brief initial rest was all he needed in order to get through the physical transition. The chief, on the other hand, lived with a seasick bag nearby constantly at the ready, especially whenever we were heading out in gale-force weather. On the cases where there was no letup in the sea-state, he would suffer through the entire mission, but to his credit, always pulled his own weight.

With this as background I want to explain, why all in all, we were able to mitigate much of the situation's discomfort, making underway in the toughest times more tolerable and routine operations even pleasant, although we had very limited options. Like any other vessels in our fleet, ***our instructions held us to very structured and tight watch keeping standards and rigid military conning/bridge protocols, but as a small crew of close friends, we were very aware of each others indicators of fatigue and willing to be flexible***, especially on long cases in extreme weather.

As I mentioned, I was always glad to take the first watch, which gave the skipper time to adjust and by the time he was good to go, and had had his first watch under his belt, the chief was about as good as he was going to get in rough weather.

But it was also common that none of our normal rest cycles, ever seemed to align with the watch rotation schedule and, as time progressed, fatigue would take a toll on each of us. For the three of us, it was not uncommon to offer to break the normal rotation, since the watchstander on duty would be feeling extremely tired and one of us that was not on watch, usually had about all the rest they were going to get, so why not jump in and give them a chance to rest at that moment when they were likely to actually get some sleep. (This was) not a traditional approach, but one born of practicality in a demanding environment and ***possible only due to the personal trusts and friendships that existed within that crew***. I can say honestly, no one ever abused this option of flexibility, not even the Chief who suffered the most in rough seas. It even served me and the skipper on the rare occasion when he felt the need to leave the dock with only seven of the ten crew members and two OODs, due to the urgency of the case.

I realize this is no end all solution, but for those with the disposition/inclination to employ the same flexibility in their two/three watch schedules, it might bring some measure of immediate relief, while seeking a long-term resolution. [94]

- Many employers discourage close friends or members of the same family from working together on boats. One side effect is that developing the same "personal trusts and friendships" as expressed above often must start from scratch on almost every voyage. However, merchant mariners deeply appreciate the success and dedication demonstrated in the Coast Guard's SAR activities. Yet, the SAR mission is separate and distinct from the Coast Guard's "Marine Safety" mission and must be evaluated separately. [59]

'EXHAUSTED SAILORS WORKING 98 HOUR WEEKS' [93]

[Source: By Caroline Gammell, 12:02AM GMT 19 Feb 2009]

Exhausted sailors working 98 hour weeks are regularly falling asleep at the helm, turning their ships into

"unguided missiles" which could cause a major disaster off the UK coast, an independent watchdog warns.

The Marine Accident Investigation Branch (MAIB) said it was only a matter of time before a "catastrophic accident" took place in UK waters. It called on the Government to take immediate action to ensure that ships were properly manned.

In its latest report, the MAIB cited the example of the cargo vessel ANTARI which ran aground on the Antrim coast in Northern Ireland in June last year. The officer of the watch, who was alone on duty, fell asleep for three hours and was only woken when the 88-metre vessel, carrying 2,360 tons of scrap, had beached itself. Nearly three quarters of the hull was damaged and dented, while the grounding had punctured the bottom of the ship.

The MAIB discovered that the officer had been working six hours on, six hours off for the previous three and a half months. He had fallen asleep in the wheelhouse almost as soon as he had taken over the watch shortly after midnight on a warm June 29 in calm seas.

Stephen Meyer, chief inspector of the MAIB, said the unrelenting shift patterns were "as close to slavery that we have in the UK". He said: "People are working 98-hour weeks, week after week and they do not have a single night's sleep in that time. "They never get more than five hours and the cumulative effect is enormous."

Mr Meyer said most of the recent accidents where a vessel had gone aground had not caused serious pollution or injury. "But it is only a matter of time until an unmanned ship traveling three hours across a main shipping channel – like an unguided missile – hits an oil tanker or a passenger ship and we are going to have a catastrophic accident."

The MAIB said recommendations it made five years ago to try and prevent such incidents had been largely ignored. During that time, it has investigated nine other groundings, where in six of the cases the officer on the watch fell asleep.

Mr Meyer called on the Government to put pressure on the International Maritime Organization to review the issue of fatigue and manning on board ships as a matter of urgency. He said the Department of Transport and the Maritime and Coastguard Agency must increase inspections on ships believed to be undermanned to prevent a tragedy in UK waters.

In January 2007, the container ship NAPOLI grounded off the coast of Devon got into trouble because it was being sailed too fast, was overloaded and had a fundamental design flaw.

WHAT ABOUT THE FUTURE?

Strangely missing from this discussion is the current state of the economy and mention of the future employment prospects for our mariners. The housing "bubble," distorted gasoline and diesel prices, the end of the market for large, fuel guzzling cars, the stock market's nosedive, millions of lost jobs, the health care crisis, and scandals involving billions upon billions of dollars finally brought this great country to its knees. We have lived beyond our means, become lazy and developed bad habits. To say that we were brought down by our own "Greed" as a society is not far off course.

If "Greed" is becoming socially unacceptable, a move to *share* what employment opportunities remains to our mariners will grow in popularity. If there is less work out there, there will be a greater effort to share the work there is among more mariners. Tours of 21 days on and 7 days off may become 14 and 14. Wages that rose because of personnel shortages may ease as more personnel become available – if Coast Guard bungling and ill-advised personnel policies don't continue to discourage applicants and chase them away. Jobs have not started to vanish wholesale as in other parts of the economy, but if and when they do, *there will be serious problems for those who live beyond their means.*

Many mariners are "wearing out" and can no longer count on passing tough new physical exams crammed down mariners' throats by the Coast Guard's "Medical NVIC." Remember how you paid your dues by years of standing the two-watch system which is an 84-hour work week – over *twice* the normal "factory" work week! You can consider that the equivalent of holding two "full-time" jobs. Even a three-watch system is a 56 hour work week – the full-time work of 1½ men. You probably worked hard for all those years on a boat that probably never even had a full crew – one engineer, or maybe none, when two were needed to run a 24-hour boat. If the economy continues to tank, the time will come with pressure to "*share* the opportunity to work." [59]