

Working Together

Safe Voyage®

SMS BASICS

SMS Evolution

ART OF TOWING

New Captain, New Responsibilities

ASK THE TRAINER

SOLAS Training Manual

LESSONS LEARNED

Never Turn Your Back on a Tow

LEGAL BITTS

Maintenance & Cure

WHAT'S NEW

CEMS DVD

HEALTHY MARINER

Listen To Your Feet



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Letter from the Editors

Attitude is Everything

Such a simple word with such powerful results. How often have we sabotaged ourselves or others because of our attitude towards the event or person?



"If you don't like something, change it. If you can't change it, change your attitude."

~ Maya Angelou

When it comes to safety and working together your attitude can drive the outcome. If you see a task as burdensome, most likely it will be difficult to accomplishment. If you loath the person or people you are working with, then there will be little if any communication and teamwork. If you see the pigeon holes as a scary proposition and your ultimate demise, then chances are they will be much harder to climb.

By recognizing that your attitude is totally in your control, you can ultimately change your destiny.

How often do we pre-judge someone or something, never allowing the opportunity to see that person or experience anything other than how we decide to see it? This approach is limiting and keeps us on the same path without room for growth or change.

If you find your safety culture is "stuck" or isn't improving, then step back and re-evaluate your attitude towards it. How do you honestly view safety: Do you think SMS is BS? Do you think zero incidents are impossible? How do others feel in your organization, are they going through the paces because it is "required" of them or do they see the value in the "regulations" and realize these are risk control measures to protect them as a result of hard and painful lessons learned?

Over the past year, we had the privilege to work closely with a company that currently has one of the best safety records in the industry. But they weren't always the safest, in fact, what triggered their attitude change was an unfortunate incident that impacted their core belief on how a company should manage safety. Since then, they've changed their attitude about safety, accepted personal responsibility and provided the opportunity for all employees within their organization to effect change.

Next time you hear yourself grumbling, take a moment and pull yourself outside the box of discontent and think of 3 things you appreciate and notice how your attitude changes and your behavior toward the event transforms.

Enjoy and Safe Voyage,

Dean & Dione

The Art of Towing

New Captain, New Responsibilities

by Captain Jeff Slesinger

Owner - Delphi Maritime



I was recently assigned to accompany a new captain (let's call him J.T.) on his first trip in full command of a tug. Our voyage was to be from Seattle to Alaska, towing a large container barge. We would go up through the Inside Passage, make multiple stops throughout Southeast Alaska, and return to Seattle. My role was observer, advisor and mentor. J.T. had completed our training program and this voyage was his final demonstration of competency. The question was: is he ready to be pushed out of the training nest to fly on his own?

About half-way through the trip, I was in the pilothouse during the watch change between mate and captain. We had a moderate following sea on the quarter, occasionally surging ahead as the stern lifted and the tug slid down the face of a short sea. As J.T. came up the pilothouse stairs, he showed signs that he was physically and mentally exhausted. I had seen this before when a new captain realizes that he has grossly underestimated the amount of mental energy required of a master. The most common comment I get from new captains is "I never realized how much there is to think about!"

"I never realized how much there is to think about!"

J.T. was showing the signs of being overwhelmed with all the duties and responsibilities of being a master. Some of these duties are easily described—handling the tug, landing the barge—but some remain unspoken and must be experienced to appreciate. J.T.'s eyes looked outward scanning the pilothouse as he had done many times before as a mate— verifying the tug's position, checking the radar, VHF radios, engine rpm, steering pumps, engine room status and sea and swell. He was

also looking inward with the eyes of a captain, running through a myriad of details about what lay down the road—tides, currents, narrow channels, and docking the 320' barge in less than ideal weather conditions. However, the heaviest burden he was grappling with was a captain's nemesis—self-doubt.

When a mate becomes a captain he has already acquired many new practical skills—boat handling, navigation, crew management and leadership. But there is one skill that can be gained only through experience-- managing the feeling of irrefutable and undeniable accountability and responsibility for every detail that happens on a vessel from the time it leaves the dock until it returns. There is no training to prepare a person for the feeling that accompanies the realization that the tiniest of details—a missed alarm, a leaking steering ram, a broken strand on a tow wire, an ambiguous communication to a mate about routing—can unleash an error chain with serious and career-ending consequences. When that realization fully dawns and is mixed with a sense of unrelenting responsibility, it can be overwhelming. On a first trip as captain, the details requiring decisions just keep coming--ranging from the major to the relatively minor. One minute a captain

can be preoccupied with thoughts of barge stability and routing through a heavy seaway, and the next can be a question about what should be for dinner. The calls for decision-making don't let up; for a new captain it can seem like a tsunami that he can't stay ahead of.

After the watch change J.T. and I were up in the pilothouse alone occupied with our silent thoughts. The captain sat in the captain's chair with slumped shoulders and the thousand-yard stare out the wheelhouse window. I stood over toward the portside, watching the radar and glancing back at the barge. He turned to me and asked "Is it always like this? If it is I'm not sure this is for me." I told J.T. as I had told many before—yes it's always like this, but it gets better. The attention to detail, the myriad decisions, the responsibility that can't be shirked will always be there. What will change is the new captain's ability to manage these factors efficiently. There are three key traits that a captain needs to develop in order to manage the details and responsibility of his position without exhausting himself or missing critical details. He must become good at compartmentalization, prioritization and delegation.

A good captain must have the ability to always maintain a decision-making viewpoint with an eye towards what is best for the boat—safety of the crew, maintaining a fully functioning vessel and meeting the commercial purpose of the voyage. This means that he must be able to compartmentalize the factors influencing his decision-making. He must be able to identify and put aside his or his crew's personal agenda. He can't let personal factors cloud his focus on what's best for the boat and crew. For example, if the captain was hoping for a fast trip in order to make it home in time for his son's birthday he can't let that influence his routing decision. Risk factors to the tug, barge, crew, and success of the voyage must all outweigh the disappointment of a son or spouse. An unorthodox routing shortcut may be tempting in the context of meeting one's familial responsibility, but it violates a captain's obligation to his vessel, voyage and crew.

I already knew that J.T. had no problem with compartmentalization. Since he had been a deckhand he had always devoted his time and energy to meet the needs of the tug and voyage before his own. He approached his job as a professional and had a great eye for the details of his own job and that of others. He took pride in his work and was not bashful about prodding others to demonstrate the same level of dedication. And he was a perfectionist—hard on himself and barely tolerant of others when an oversight or mistake tainted the operation. As a mate, the details of his job remained within the scope of what one person could reasonably do. There was always the option of "I'll just do it myself". As a captain that isn't an option and at this point in the voyage he had come close to exhausting himself in trying to personally manage the incessant details of the voyage, his job and that of his crew. He needed to hone his prioritization skills.

Even on an uneventful voyage the amount of operational details requiring decisions are simply too much for one person to handle. A captain must be able to assess and prioritize those details so that he can personally



attend to the most important, and delegate and monitor the rest. J.T. was trying to continue what had worked so well for him as a mate—tend to every detail himself. But it was exhausting him. He had to learn to let go a bit—keep perfection as a goal, but not necessarily the standard; delegate the less important decisions to others and allow individuals to address problems and tasks with acceptable solutions that might be different than his own. It is quite appropriate for a captain to insist that his mate arrive at a sea buoy at a specific time prior to crossing a bar. But it may be a waste of precious energy to berate the deckhand for how he cleaned the crews' head and go into a long dissertation about "when I was a deckhand...." Let it go. Don't lower the standard but delegate it to the mate to deal with.

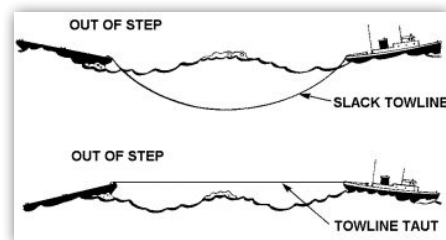


“awareness and a nimble mind are required to quickly assess, prioritize and act”

The order of priorities can shift day to day or moment to moment. A key element of being able to prioritize and delegate is a constant and active awareness of the tug's every mood—sounds, vibrations, motion in a seaway. This awareness and a nimble mind are required to quickly assess, prioritize and act.

J.T. and I had been discussing all this for several minutes. The deckhand on watch came up to the wheelhouse to report on his rounds. All looked well in the engine room. The conversation drifted off towards the upcoming hunting season—when it opened, the best place to go, etc. As the conversation became more relaxed a slightly larger sea began to overtake the tug. The stern lifted a little higher than usual, and it felt like the tug was gathering itself for a quicker run down the face of the wave.

My captain sense immediately picked up the potential for the tug to come up hard on the tow wire. I noticed J.T. had instantly picked up the change in the tug's motion as well. He was still chatting with the deckhand but had quickly shifted from talking to “pretend listening”. He got out of his chair swiftly and moved over to the engine controls, all the while responding to the deckhands chatter with “uh huh, uh huh”. His eyes were focused aft, looking at the tow wire; his body was tuned to the motion of the tug. I could tell that his mind had compartmentalized the conversation of hunting and discarded it as superfluous. He was now fully engaged in processing his options to deal with the expected surge of the tug and strain on the tow wire. As the tug gathered speed, sliding down the face of the steep sea, he pulled back on the throttles; the tug surged ahead, but with the reduced propeller thrust the strain on the tow wire increased only slightly and then relaxed. In a matter of seconds J.T. had demonstrated his ability to assess, compartmentalize, prioritize and act—all in the best interest of the tug, the crew and the voyage. This new captain will do just fine.



Captain Jeff Slesinger is owner of Delphi Maritime, L.L.C. a company that specializes in training tug masters and implementing safety programs in the towing industry.

SMS Evolution - A Goldfish Tale

by Dione Lee
President - QSE Solutions



Sometimes we just don't know what we don't know. Where this becomes problematic is when we make decisions based on not knowing, especially with safety. To illustrate this point, I would like to share my personal safety evolution with goldfish.



A couple of years ago our friends gave our children four goldfish, two each. I had goldfish growing up and thought the average lifespan

of a goldfish was a couple of months; you win one at the fair, take it home in its little bowl, feed it, and clean the bowl when the water got murky. Throw a cat in the mix and you were lucky if the fish survived a week. At that time, I wasn't mining for root cause or documenting "lessons learned", so I kept making the same mistakes over again - win fish, lose fish, win more fish, lose more fish.....easy come easy go. It was the accepted standard and practice that I knew.

Now, older and hopefully wiser, with access to more information, I was ready to provide a good home to these fish that we didn't plan for. The first step in the process was a visit to the pet store to purchase a bigger bowl for the fish. This was a bit overwhelming because of

all the options, but after speaking to a sales representative, we purchased a 2.5 gallon tank, some gravel, and a few plastic plants for aesthetics. Keep in mind that our purchasing decisions were based on the questions we asked.

After setting up this "mini aquarium", we placed the fish into it. Over the course of a few weeks we lost two of the fish. Not sure why, we blamed it on a perceived alpha fish that seemed to be bullying them and so chalked it up to survival of the fittest.

Over a six month period of time we started getting emotionally attached to the two remaining fish and felt pretty confident as fish owners. We were being meticulous with our tank maintenance and feeding practices when all of a sudden, one of the fish started swimming upside down. At first we thought we had an acrobatic or "special fish", but then we found out that this wasn't a good sign and the fish ended up dying.

We went back to the pet store, explained our situation and returned with a new fish. Initially, the pet store refused to provide a warranty with the fish because I gave them too much information about our previous fish fatalities and didn't purchase the water filter they recommended - we just weren't ready for the complexity of electrical cords and believed the latest fish event was a result of the food(flakes versus pellets) based on internet research.

Fast forward another eighteen months and we

are engaged even more with our aquatic family members finding their smacking at the top of the waterline an endearing trait, unaware at the time that they were gasping for oxygen. In moments of reciprocal affection, our daughter decided to feed the fish more than the normal amount of food. This caused the water to get dirtier faster throwing off the maintenance schedule. As a result, the water didn't get changed in time and another fish died.

After four fish fatalities, painful lessons learned, wisdom from experience and renewed commitment as fish owners to keep our fish alive, we were in a position to **ask better questions**, and address the entire system for promoting and ensuring overall fish wellness and longevity. As a result of our root cause investigation, and an honest evaluation of our past performance, we came up with the following corrective actions: a bigger tank; a filtration system; not deviating from the amount of feed, and using a water conditioner.



Looking back, I didn't want to listen to the customer service representative telling me we needed these things, because I had made up my mind that she was just trying to sell me more than what we needed. The cost/benefit wasn't there because I didn't know what I didn't know. As fish owners we evolved over time. Are we perfect? No, but we certainly are better than we were.

For most domestic workboat companies, a fully functioning SMS is a relatively new concept and can be perceived as overwhelming or conversely a "check the box" program. In

moving forward with your SMS, I recommend you get advice from someone you trust, who has a successful system in place and is committed to the process.

Implementing an SMS that is sustainable takes resources, both human and capital. If we would have consulted with someone who owned healthy and long living fish, our decision making process would have been different and we probably would have gone for the filter and larger tank earlier in the process.

With that said, fish ownership was thrust upon us. We did not pursue it. Similar with workboat companies being "required" to have an SMS. It is hard to make the leap and be fully committed to the results if what you are doing is perceived as something you have to do versus something you want to do.

My experience and evolution with fish has given me a deeper appreciation, understanding and empathy for our clients' needs to not push them past where they are ready to go. At the same time, we work to ensure they have the basic knowledge of an SMS, with the continual improvement processes and control measures in place to help mitigate their risk while supporting them in their safety management system evolution, which is the core of a well functioning SMS.

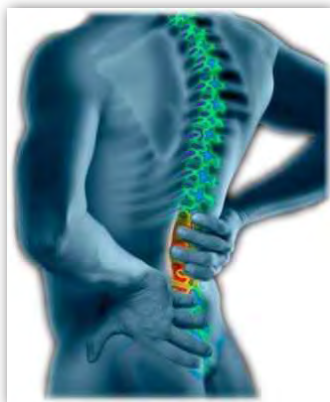
Dione has 25 years experience working with the maritime industry, partnering with individuals and organizations to implement quality, safety, environmental and competency management systems. She has developed and fine tuned a unique approach for bringing positive and sustainable change within organizational operating environments. To learn more visit us at www.qsesolutions.com.

Employers' Obligation for Maintenance and Cure May Be Expanded

by David Russo
Partner - Sterling & Clack



Mariners and their employers are well-acquainted with the maritime law remedies of maintenance and cure. These are the ancient remedies afforded to seamen who are injured, or who become ill, while in the service of a vessel. Maintenance is the daily stipend that the employer pays to the seaman for room and board while the seaman is ashore recuperating. The daily rate of the stipend is often set by union contract. Cure is the obligation of the employer to pay reasonable medical expenses until the seaman has reached “maximum cure,” which is the point at which no further improvement in the seaman’s medical condition is reasonably expected. These remedies are a part of the employment relationship between the seaman and the vessel owner. There is no requirement that the employer have been at fault in order for these obligations to be owed to the seaman.



One of the limitations on this no fault remedy is that cure is owed only for curative treatment; that is treatment which is reasonably designed to improve the seaman’s medical condition. Cure is not owed for treatment that is only palliative, i.e., that is only used to relieve pain. The rationale is that the employer is obligated to do what is reasonable to help the seaman get well. Beyond that, this no fault obligation ceases. Maintenance is payable only so long as cure is being provided. To protect the seaman, any contradiction in the facts or the medical opinions as to whether treatment is curative or whether the seaman has reached maximum cure is to be resolved in favor of the seaman. This has been the long-standing balance struck for this maritime remedy.

A recent decision threatens to destabilize this careful balance. In the case of *Ronert Haney v. Miller’s Launch, Inc.*, 2011 AMC 1931, the Federal District Court for the Eastern District of New York decided that employers should be required to pay for palliative treatment. The Court relied on the medical profession’s increasing emphasis on pain management as the reason for expanding the employer’s obligation to pay medical expenses. Even in doing so, the Court acknowledged that pain is subjective and incapable of being objectively evaluated. That may just be a nicer way of saying that it will be very difficult for employers to object to paying for recommended palliative care without risking the charge that they are unreasonably refusing to pay cure. With the benefit of the doubt going to the seaman, this problem is enhanced.



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In the past, an unreasonable failure to pay maintenance and cure would subject the employer to paying the seaman's attorney's fees for enforcing the obligation. However, since the U.S. Supreme

Court's decision in *Atlantic Sounding v. Townsend* in 2009, the employer may also be subject to punitive damages for the wrongful failure to pay maintenance and cure. So the employer's risk in not paying for recommended palliative care would be much greater, if the Court's reasoning in *Haney* were to be widely adopted. Hopefully, other courts will reject *Haney* and maintain the proper balance of remedies that has long been struck in this area of maritime law.

David Russo is a partner at Sterling & Clack, a San Francisco maritime law firm (www.sc-law.us). He can be reached at drusso@sc-law.us.

Performance Appraisals

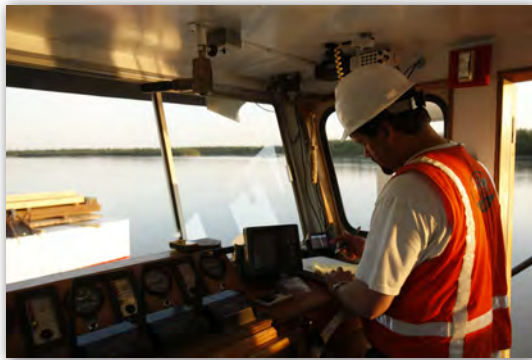
by Barbara Stallone
Partner–HR Umbrella



Performance appraisals without clear objectives are a recipe for disagreement, argument and poor morale.

Have you ever tried to drive somewhere without proper directions? This almost always turns out to be a frustrating experience. Sure, if you stop and ask enough people you may eventually reach your target destination, but think of all the wasted energy, time, and resources needed to accomplish your goal.

Let's take this concept and move it to the realm of managing a business. Does it make sense to expect your employees to reach a goal or strategic objective without providing them a road map of where they are headed? This is the reason clear and detailed employee performance objectives play a crucial role in helping companies perform to their business plan and achieve their strategic goals. Performance objectives establish how your business plan will be achieved. Performance objectives also play a major role in defining the end results expected through your staff's hard work and dedication.



Performance objectives are a necessity in setting clear goals for employees. They also challenge staff members to achieve maximum results to promote business growth and make continuous improvements to meet the challenges and changing demands of the marketplace.

Performance objectives must be clear and guide action. What specifically is to be achieved? Not just what actions are to be performed, but what results are to be achieved through these actions? Keeping objectives simple ensures they are clear and specific. This also reduces the chance for disputes or confusion come performance appraisal time. Complex objectives should be broken into sub-objectives. This allows individuals to focus their efforts and guides them in marshaling the resources necessary to achieve results.

Measurable

How will you know how well an objective has been achieved? Although it may not be readily apparent, every object can be measured. Some objectives can be measured quantitatively; others must be measured qualitatively. What data will be used to measure/track what is achieved and is that data available to provide ongoing feedback on how the employee is doing? Measurements are subject to change and should be reviewed periodically.

Accountable

Accountability for performance objectives must be crystal clear and must specifically state who is accountable. The more detail the better. A clear definition of what he or she is specifically accountable for will help reduce confusion come performance appraisal time. Defining accountability will ensure a sense of urgency and purpose on the part of the employee.

Realistic

For an objective to be meaningful, it must be realistic and reasonable. A well written performance objective focuses on the goals and objectives required to meet the objective. In highly efficient organizations, performance objectives ultimately link back to the company's overall strategy and business plan. Objectives should challenge employees towards continuous improvement, but should not be unrealistic or unattainable.

Time Based

An achievable time frame must be set for reaching the objective's goals. Consider assigning specific target dates not only for the performance objective itself, but also each lesser milestone linking the entire goal. Remember to be specific towards achieving results and guide action in a results oriented ways towards the objective.

Strategically Linked

Every performance objective must always be linked to the overall business plan and over-arching strategy of the organization. Well thought out performance objectives create a link between the direction of each individual employee which also align upstream through departments and divisions to unify the goals of the entire organization.

Barbara Stallone is a partner in The Human Resource Umbrella; an Anchorage based Human Resource Consulting Company. If you have questions you would like answered in future columns, she may be contacted at Barbara@HRUmbrella.com or 907-727-2111. The Human Resource Umbrella, LLC is a member of AGC.

The Maritime Industry gets further Recognition – Thank you Gregg Trunnell

On February 16, 2012, Marléna Sessions, CEO, Workforce Development Council of Seattle-King County, Seattle, WA addressed the US Senate Committee on Health Education Labor & Pensions in a subcommittee hearing on Workforce Needs at the Regional Level: Innovative Public and Private Partnerships, which included the maritime industry. This evolution from a small, yet cohesive and tight grassroots' seed to a seedling popping its head out of the ground was in large part planted by Gregg Trunnell, Director of Business Development for MITAGS-PMI. Yes, the seed was conceptualized, watered and nurtured by the efforts of hard working skill panel members, but it would not have been realized without the foresight and leadership that Mr. Trunnell has provided since 2005. We personally want to thank him for his efforts and acknowledge his ongoing and tireless contribution to our industry for helping to ensure qualified and competent personnel today and for years to come. Thanks, Gregg!



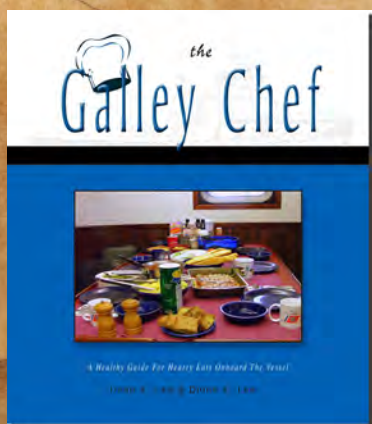
Skill Panel Timeline and Milestones

- 2005 Applied for first Industry Skill Panels Grant / Grant Awarded
- 2005 Skill Panel Members convene, Russ Johnson from Dunlap Towing Company, Chairman
- 2006 Comprehensive CEMS approach developed for the Pacific Northwest Tug and Barge Companies
- 2006 USCG Approval of an apprentice mate program
- 2007 Impact Study of STCW 1995 Amendments and 2001 USCG Towing Licensing Regulations on the US Pacific Northwest Marine Towing Industry Workforce
- 2007 Captain Jeff Slesinger, on behalf of the Skill Panel testified before the Subcommittee on Coast Guard and Maritime Transportation Committee on Transportation and Infrastructure United States House of Representatives
- 2007 Launched www.workontugs.com
- 2008 Leveraged success of the tug and barge skill panel to seek funding for a “maritime cluster grant”
- 2009 Awarded grant through the Workforce Development Council of Seattle King County (WDC)
- 2009 First skill panel to include all sectors of the maritime industry to convene toward a common goal
- 2010 Published a *Maritime Workforce Advisory Council Operating Plan*
- 2011 WDC of Seattle King County includes Maritime as one of its three focus sectors
- 2011 Maritime Careers is featured on the WDC’s “Map Your Career” website: <http://www.mapyourcareer.org/maritime/maritime-careers.html>
- 2011 Chris Peterson from Crowley, current Skill Panel Chairman elected to WDC Board
- 2012 Organizing efforts towards an engineering apprenticeship program to pave the way for existing and future mariners

COOKBOOK FOR MARINERS

Cooks from various workboats share their favorite recipes, including premier Chef Chris Starkenburg

The Galley Chef - *"A Healthy Guide for Hearty Eats Onboard the Vessel"*



"..... I browsed through the cookbook tonight, and there are some great ideas/information. The recipes also provide substitutes (for those with allergies, etc), cooking ideas, enhance by a pinch of this and pinch of that, and great serving suggestions... this is a great opportunity to eat well & live happy by ordering!" - *Janice Lorena Krukoff, resident Dutch Harbor, AK*

"This Book helped me through a very stressful first week and with the quality of meals that I was able to prepare, it made for a very happy crew."
- *Curtis Garrison, Cook/Deckhand*

"First and foremost... I am blown away. The Galley Chef has tremendous benefit and value ... should be placed on every workboat."
- *Gregg Trunnell - Director, Pacific Maritime Institute*

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Listen to Your Feet

By Cynthia Wold



The mariner's body is an essential tool of his or her trade. The longevity of a professional mariner's career depends in part on how you maintain and use that tool. In the last issue of *Safe Voyage* we discussed how important it is to gain an understanding of how the body's natural mechanical advantage is created through the structure, alignment and the natural levers that lie within our muscular-skeletal structure. A first step in gaining that understanding is learning to appreciate the function of your feet.

On my last tour of a tugboat I noticed that there was quite a variety of surfaces to walk on and work on. There were objects to step over or around--cleats on the deck, lines and tools laid out to work; there were doors with high sills to step over, and steep ladders inside and out to climb up and down. Mariners rely on their feet to navigate the deck and serve as the body's work platform. How much awareness of your feet do you have when you're working? How sure are you on your feet? How aware are you of the movement in your feet when you walk? Do your toes assist you while walking? When standing, can you feel where your feet contact the surface you're standing on? This kind of awareness can be like an additional instrument of information that can help you use your body more effectively, both on and off the vessel.

I've been doing body work professionally for a long time and have had to use physical strength and my body's mechanical advantage in my work. I have had and recovered from various types of injuries and have helped others recover as well. Along the way, I've learned how to use my structure well in order to make my body last. Many clients have come to me with the same goal. They may be Aikido students, learning how to move and position their body in relation to an attacker, or clients with chronic pain and stiffness in one body part or another. My work with clients usually leads to a discussion of the kinetic chain and the role of the feet. The kinetic chain consists of three components—the nervous system, muscular system and skeletal system—working together to manipulate human motion. The feet are the beginning of the kinetic chain and influence posture, balance and the alignment of the body's structure.

The feet are a phenomenal design of bone, connective tissue, nerves, joints and arches. You have twenty-six bones and over seven thousand nerves in your feet. Your feet provide sensory cues as to the type of surface you're on; they provide signals via your nervous system to the muscles required to keep your balance and perform tasks, and they provide the foundation for better posture and better functionality. They are your primary contact with the ground, and they function as the starting point of a chain of peripheral nervous system signals that are processed by your central nervous system and then signal specific muscles to contract in order to move your limbs and accomplish the task at hand. When you pull on a line your hands are your point of contact with the line, but your feet are where the task begins. So if you have shoulder pain from pulling on a line the answer may start at your feet—how they are positioned, how your weight is balanced, and how your feet are dictating which muscles must engage to put a pulling force on the line.

Sensory Cues

As a biped, you have only two points of contact as you stand or move—your feet. Besides supporting your body the multiple nerves in your feet instantaneously transfer vital information through the peripheral nervous system to the central nervous system—all critical to getting your body to move.

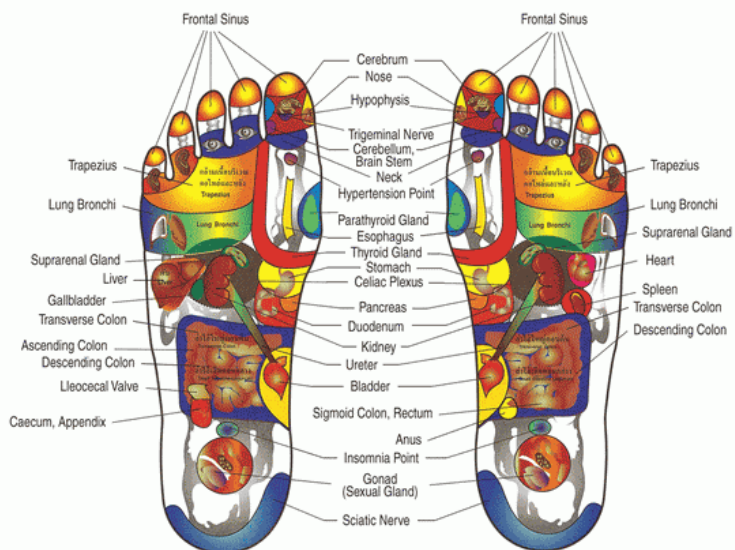
When I come to work in the morning I have to go up sixteen stairs. If this occurs before my morning coffee it feels like a slog—my legs and body feel heavy and my body moves as if it were on autopilot. My feet are transferring critical information such as the depth of the stair step and how far my foot should step in. The pressure on different parts of my feet indicate how my weight is distributed as it transfers from leg to leg. My feet prepare my body for determining how much power is going to be required to hoist myself up those steps, which joints to stabilize and which muscles I will have to use to hold my posture and keep my balance.

Our central nervous system processes the information from the peripheral nervous system and delivers a sequence of signals back through the peripheral nervous system that direct muscles to contract and joints to move to produce the required body movement. As I move up the stairs there is a continuous process of sense, signal and movement that makes each step unique and successful. However it is not just my feet moving. My body must be poised to move with my feet. This is where posture plays an important role.

Posture is what helps keep your structural integrity when your body is static or in motion. We're essentially a stack of bones from the feet up held together with connective tissue, tendons and muscles. There is a natural stacking that is meant to align our bones so as to maximize function and reduce stress. Each time my foot touches the stair and senses the distribution of weight, it is also giving feedback to my central nervous system about my balance and what muscles are required to keep my body over my feet and not topple forward or back.

Thankfully, I don't have to be fully awake for my body to function this way. I can walk up the stairs in a pre-caffeine fog. That's the beauty of the nervous system—it does its work without conscious effort. However, I may be more prone to injury if don't consciously listen to my feet but allow myself to compromise my posture due to fatigue.

Left to its own devices, the body instinctively wants to protect itself. If I have good posture and skeletal alignment my body will rely on the more powerful muscles to keep my balance and keep my legs moving up



the stairs. If I have poor posture my body will still send signals out to keep my balance but it may have to rely on smaller muscles and even connective tissue to attempt to keep my skeletal structure stacked over my feet. This is where I may be prone to injury.

If I force myself to wake-up and consciously listen to the information transmitted by my feet I can make adjustments in my body to make this task safer and less prone to injury. If I am aware of the sensations in my feet, and their relationship to my body position and movement, I can consciously realign my posture to an optimal position. If I sense that the outside of my foot is bearing most of my weight and that my ankle feels like it's trying to pull the rest of my body over it, I can consciously change my posture and the position of my feet so that my body stacks up over my feet in a better position.

Practice

The ability to listen to the feet and transform the information they convey into more efficient and safer body motion takes practice. The first practice is one of awareness—heightening one's sensitivity to the sensations in the feet and the implications all these sensations have for the rest of the body. In fact, you can do exercises that will activate a conscious and sensory connection between your central nervous system and your limbs and body. This can be as simple as removing your shoes, massaging your feet, then putting your feet back on the floor and standing up. Chances are you may notice the pressure difference between one foot and the other, which parts of your feet are contacting the floor and whether your toes are splaying out or curling under in an attempt to grip the floor. This type of awareness is an important beginning of learning to listen and interpret the sensations in your feet.

The second practice is to develop a kinesthetic understanding of how foot position is the root of good posture. Your foot position is the starting point of connecting your body to the ground and adjusting to the effects of gravity. Your feet begin a sequence of skeletal connections that run from one body part to the next, all the way up to the head. As noted we are a stack of bones. An awareness of “how we stack up” is the first step toward good posture. A beginning exercise is to stand on your feet and become aware of the next part of the stack which are your ankles. Can you continue the awareness up your leg to the knees, then up the thighs to your hips? From there try to shift your attention to your spine. Use your imagination to feel the stack of bones that is your spine with your head stacked on top; shift your awareness to feel your chest and imagine your shoulders and arms hanging like a shirt on a hanger. This is one type of exercise to begin the practice of an increased ability to connect your conscious mind/central nervous system to any given part of your body. As you become more adept at this and engage in more advanced practice, you can evaluate and adjust at any time for better postural alignment, regardless of whether your body is static or in motion.

These beginning static exercises may seem irrelevant to the tasks you might perform with cold hands, stiff muscles on pitching decks in awkward positions. But mariners are not unique in the call to perform tasks in a dynamic environment in awkward positions. Whether you're a mariner, martial artist, dancer, cook, waiter, construction worker, or other—all use their body as a tool. Keeping it safe and injury-free starts with the practice of listening to the feet.

Cynthia Wold, LMT, specializes in massage therapy, Pilates method instruction, and educational programs to help clients with body mechanics, posture and movement.

Chicken Fried Steak

Courtesy of Chris W. Starkenburg - The Galley Chef

Serves: 6-8

12	4-5 ounce cube steaks	1	Tablespoon Johnny's Seasoning Salt
3-4	cups good vegetable oil	1	Tablespoon granulated garlic
	Seasoned Flour:	1	Tablespoon onion powder
2	cups flour	1	Tablespoon cracked black pepper
1	cup corn starch	1	teaspoon chili powder
1	cup Yellow corn meal	1	Tablespoon dried parsley, rubbed between hands

1. Mix all dried ingredients in a large bowl.
2. Dredge cube steaks with the Seasoned Flour and lightly press to ensure a good even coat.
3. In a large skillet add 3 cups of vegetable oil and bring the heat up to medium high. (If possible use cast iron skillet, it provides more even heat.)
4. Carefully place one cube steak at a time into the skillet; place the steak into the pan away from you to avoid getting splattered with hot oil. Only add one steak at a time, otherwise you will lose the heat in the oil and the steak will not turn out crispy. You may only get three cube steaks in the pan at a time.
5. Cook equal time on each side until golden brown, about 4-5 minutes per side.
6. Remove from skillet and place on foiled baking sheet until you have all the steaks cooked.
7. Then place in preheated 325°F oven and cook for another 15 minutes.



SOLAS Training Manual

by Captain Jill Russell



I've recently been hired as Captain of a US flag SOLAS passenger vessel that is in an extensive refurbishment period. We will be getting underway in the spring of 2012, but in the meantime, we are spending a lot of time fixing vessel systems, painting bilges, and writing all the documents that SOLAS vessels require: ISM SMS, SAR Plan, SOPEP, etc. One particular document that I've been putting a lot of time into is the SOLAS Training Manual.

SOLAS Part I, Ch. III, Regulation 35 and SOLAS Part I, Ch. II-2, Regulation 15 stipulate that a training manual be provided that contains instructions in life-saving appliances and fire-fighting precautions and procedures.

However, it isn't just SOLAS vessels that could benefit from an onboard Training Manual. If done correctly, an onboard Training Manual can be used for the development of drills, topics for Safety Meetings, and, of course, as a reference manual for officers and crew alike.

There can be a tendency while writing training manuals to cram as much into the manual as possible. My recommendation is to resist those temptations. A 250 page tome, packed tightly with 12 point font, is not going to tempt a crewmember to dip into it while taking a break and sipping a cup of coffee. However, a shorter version, with plenty of photos taken on company vessels, will not only draw the reader in, but will do a better job of imparting the knowledge contained therein.



Let's look at the development of one topic that is required by SOLAS, and that you might want to put into your Training Manual (Ch. II-2, Reg. 15, 2.3.4.3): meanings of the ship's alarms.

1. Develop learning objectives so you, as the author, have a clear understanding of the scope of the topic. Resist the temptation to make this section larger or broader in scope. You will have the opportunity to go further into depth in later sections. Remember, keep it short, relevant and to the point!

For example: "After reading this section, the crewmember will be able to list the 3 different signals of the general alarm bell and what each represents."

2. Develop opening section.
 - **Gain Attention:** "Imagine you are sleeping in your bunk in the middle of the night. You wake up to the general alarm bell sounding 3 prolonged rings. Should you grab your lifejacket and go to the liferaft? Should you run to the gear locker and don the firefighting outfit? Or has someone gone overboard?"

- **Provide Motivation:** “You will not have time to check the station bill in the middle of night. You need to not only respond immediately to an emergency, but you need to respond correctly to whatever that emergency is.”
3. Develop main section.
- **Present Topic:** “There are 3 different signals of the general alarm bell: (1) Fire / General Emergency: continuous sounding of the general alarm for not less than 10 seconds; (2) Man Overboard: 3 prolonged rings of the general alarm, supplemented on the ship’s whistle; (3) Abandon Ship: more than 6 short rings followed by 1 prolonged ring of the general alarm bell.”
 - **Follow text with graphic to help the learning process:**

Fire / General Emergency		-----
Man Overboard		----- -----
Abandon Ship		----- -----

4. Develop closing section.
- **Challenge the Reader to Think.** “Can you imagine a scenario in which the abandon ship signal is given without hearing the Fire / General Emergency signal first?”
 - **Transition the Topic.** “Each emergency, and associated response, will be covered in further detail later in this manual.”
 - **Tie up Loose Ends.** “Imagine again that you are sleeping in your bunk and you hear 3 prolonged rings on the general alarm bell. Now you know that a person has fallen overboard and you need to go to your MOB station. It is each crewmember’s responsibility to thoroughly understand their duties for each emergency. If you are not sure exactly what your response is supposed to be, ask the Chief Mate immediately.”

By following these simple guidelines, you can develop relevant training manuals that don’t end up just becoming a place mat on the galley table. Rather, you will have a document that you can use to draw topics for safety meetings and refer to for crew familiarizations. And if you make the training manual interesting enough, you might even catch the crew using it for reference!

Captain Jill Russell has over 20 years experience in the maritime industry and is considered an expert in training and training techniques that work both ashore and onboard.

Never Turn Your Back on a Tow

By Peter Squicciarini

Master Mariner, USCG Atlantic Area
Towing Vessel Marine Safety Specialist



This marine casualty is a story where lessons were learned at the highest cost and paid for with one crew member's life. A tug was lost at sea and the Mate went down with the boat in 2,000 fathoms of ocean. It involves an apparently seaworthy tug, experienced crew, and a very unusual tow.



The tug had picked up about 1800 feet of floating dredge pipe in the Bahamas. She was heading toward the island of Hispaniola. It began as a dredge equipment tow, but not a strictly “standard” looking tow. Let’s now call a “standard tow” a barge or barges on the wire or hawser, alongside, or pushing ahead on the knees. There are no definitions for what might be called a “non-standard tow”, but it could be an unwieldy tow such as a crane barge in high winds, a deck barge the shape of a brick with no rake or skegs, an oil rig, or a drydock. The most curious one I’ve seen was a complete set of new bridge spans on a barge headed for the bridge worksite.

The weather was being cooperative. It was reasonably calm and clear. The voyage was proceeding uneventful, though the tow needed some close watching. The 1800 feet of dredge pipe had been welded water-tight so it would float and tow in a horizontal position. The boat had about 1800 feet of wire out attached to a 75 foot bridle and shock line arrangement. At the stern end of the pipe was a small platform with a retrieval line and buoy.

Five days into the tow the tug suddenly and unexpectedly was dragged aft to the point she was making sternway. The pipe was sinking. Water was being shipped onboard and was down flooding into the engine room. The crew acted quickly to begin cutting the towline, but before they severed the wire the tow parted at the pipe-end rigging. As the tug rolled one crew member was thrown down and broke his leg. The dredge pipe had sunk and pitched into the vertical position with approximately 20 feet of pipe rising above the surface where the platform floated with the retrieval line and buoy. It became the world’s deepest spar buoy. Clearly, this now became a radically “non-standard tow”.

At this point the Master called the customer to report the event, condition of the tow, and seek technical guidance on proceeding with the pipe which was now in the vertical position. The customer replied that the vertical dredge pipe tow, despite its below-water length of nearly 1800 feet, could be resumed in this new configuration, albeit slowly and carefully.

The tow was slow going but progressing for about the next 36 hours. In the early morning hours of the Mate's watch, the tug suddenly and unexpectedly listed dangerously to starboard with water beginning to come aboard. As they had trained, the crew quickly mustered in the wheelhouse as the Mate was sending a MAYDAY call. Life saving equipment was prepared and donned in the event they had to abandon ship. All of this had transpired in about 7 minutes from the first sign of trouble.

In just a few more minutes abandon ship was ordered. The tug was now nearly on her beam-ends. It was imperative to get out of the wheelhouse or go down with the boat. Because of the extreme list the port weather door couldn't be pushed upward and opened. A wheelhouse window was opened and the crew climbed out onto the portside of the hull.



The EPIRB was deployed. The life raft was successfully launched and all but the Mate boarded it. The Mate was last seen walking aft on the hull seemingly unwilling to jump overboard and swim the short distance to the raft. His body has not been recovered and he is presumed lost with the boat in 2,000 fathoms. The Coast Guard rescued the remaining crew members from the raft later in the day.

Commonly we hear that safety rules and regulations are “written in blood” and lessons are just re-learned. In this story it was the Mate's blood. Nothing new was learned. There was no ground breaking discovery that towing is a complex and dangerous business, even for seasoned professionals.

Unusual tows as I describe being “non-standard” increase the inherent risk of commercial marine towing. These types of tows must be carefully planned and monitored each step of the way, from dock to dock. Special gear and added skill and proficiency may be needed. Know your's, and your boat's limitations. As the Regulations and your Underwriters say, your boat must be “suitable for the intended voyage”. Each voyage and each tow are different. Skilled professionals recognize this and plan for it. The voyage may even be too risky to proceed in some situations. This is where the Master's judgment is paramount.

It has been suggested that the floating dredge pipe gradually flooded from pipe weld failures such as cracks and pinholes. Once buoyancy was lost at the pipe end without the float platform, it sank to the vertical position. In the first instance this event dragged the boat astern. In the last incident the tug was “tripped” onto its starboard side as the sunken and vertical pipe yawed unexpectedly.

Be prepared to quickly sever the wire or hawser if the tow becomes dangerously uncontrolled. In the first event the crew was attempting to cut the wire as 1800 feet of dredge pipe filled with water, sank, and nearly dragged the boat under. Had the bridle end itself not parted before the tow could be cut this may have very well happened.

By the nature of unusual tows crew must be very prudent that the unwieldy rigs don't pose an unacceptable risk for potentially down flooding the boat. This may destroy your stability and buoyancy and ultimately capsize or sink the boat.



Use a Safety Management System that addresses “non-standard” tows. Well developed and implemented Safety Management Systems are devised to address additional risks through proper procedures and planning; details that might prevent a capsizing or sinking depend on the boat, the tow, the weather, the crew, and much more. By addressing these things first, before you get into an emergency situation, you will reduce risk and may just save the boat, crew, and your life.

Your survival and safety gear must be complete, in compliance, and in working and reliable order. In this case the life jackets, lift raft, and EPIRB were ready to go. Had they not been satisfactory the consequences for this crew might have been even more deadly.

It has been said something to the effect that training makes the last 60 seconds of a crisis (emergency) count. In this accident it appears the crew knew what to do (get to the wheelhouse and prepare survival gear) and how to do it (don the gear, call a Mayday, launch the EPIRB and raft). Training pays off. When the crisis hits it is too late to grumble that you should have paid closer attention during training.

On a personal note, this tragedy had a face to it and hit home hard. I had previously sailed with this Mate who was lost. He was a good mariner and a good man. He will be missed.

Sail Safe!

“This article is based on U.S. Coast Guard reporting and is intended to bring safety issues to the attention of the reader. It is not intended to judge or reach conclusions regarding the ability or capacity of any person, living or dead, or any boat or piece of equipment.”

Peter Squicciarini is the Coast Guard's Atlantic Area Uninspected Towing Vessel Marine Safety Specialist and a Licensed Master Mariner. He can be contacted at peter.d.squicciarini@uscg.mil

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Pacific Northwest Tug and Barge Companies

As part of a skill panel project, tools were developed by the member companies to streamline the CEMS implementation process for the tug and barge industry on the Pacific Northwest coast. An awareness workbook is available to download at no charge. Visit <http://www.qsepublishing.com/books2.htm>

For other tools developed by the skill panel to support the safety and wellness of the tug and barge crew, please email us: office@qsesolutions.com