It may sound strange, but it is true that working at sea, even for six months, can benefit anyone, in any occupation, at any time of life. Life at sea has always offered unique risks on the one hand (such as criminalization and piracy today) while offering unique benefits on the other. With these benefits you can enrich yourself and all the jobs you will ever do.

First, there is your contact with nature, with the greatest force that nature has. To experience the strength of a wave, the calm of the sea, an incredible sunset or a wonderful daybreak, makes you think deeply and puts life and life’s issues in perspective.

Working on board, you follow a unique discipline: you wake, eat and sleep on a schedule; you do what you have to do, even if you don’t like it – it’s a kind of training that benefits any profession. You will also see how one man, the captain, holds so many different duties at once as to leave him breathless but, at the same time, is proud to do so. Last, but not least, you live in a small space with other people, maybe of different cultures and customs, who become part of each other’s lives – an experience that really opens your mind.

It is not easy work. This life demands a high spirit of sacrifice but forges you into a new person and makes you better in every aspect, as a human being and as a professional, if you have the will for it.

That is why I sincerely invite the young to follow the seaman’s life, to become officers or engineers on board, even for a short period. It is a privilege to be able to work at sea, to be part of a unique world that has no comparison on land and which relatively few people get to know. I loved this work very much and I love it still. It gives you good skills that not only help you find a good job on land but also help you in life; it is a wonderful experience and a wonderful profession.
COVER:

Even seasoned mariners say that navigating their ship’s paperwork burden is their biggest challenge today. For the Year of the Seafarer, this edition of Surveyor looks at some issues of importance to, and for, the shipboard community and those considering a sea career.

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The year was 1959. The *North Lord*, a three-island tanker, ballasted and bound for Galveston, Texas, to load cargo, slowly rounded the Rock of Gibraltar. From a bright azure sky, a brisk offshore breeze whipped up a cavalry of white horses and the plucky vessel – considered large at the time but a minnow by today’s standards – eased its way steadily and without fuss through the chop and over the swells.

For a young apprentice deck officer, graduated from the Aspropyrgos Merchant Marine Academy only one month before, this was a first sea voyage in a professional capacity and an experience that would not only stay forever in his memory but which would also shape and inform the rest of his long working life.

As you might have guessed, I was that apprentice and was only 19 years old. And although my working life today is generally played out against a background of crowded meeting rooms and busy airport lounges, I try to keep the recollections of my feelings on that day – the sounds, the smells, the sights – as fresh as I can. Indeed, in the sanctuary of my office at IMO Headquarters on Albert Embankment in London, there hangs a painting that I commissioned from the renowned marine artist Robert Lloyd, which depicts the scene exactly as I have described it. I take great pleasure in sharing it with my visitors and guests; and, in the rare quiet times, I often indulge in a moment or two of solitary reflection on happy times gone by – and of my mates at the time, some of whom have since met death in tragic accidents at sea and others who have passed away peacefully ashore.

I served as an apprentice, second and chief deck officer on merchant ships between 1959 and 1962, during which time I voyaged to both hemispheres, including crossing the North Atlantic 32 times. In 1962, I entered the Hellenic Coast Guard Academy from which I graduated in 1964. While in the Coast Guard, I spent most of my time in the Ministry of Mercantile Marine, which administers Greece’s maritime sector, working from a young lieutenant up to a senior commander, before moving on to attend IMO meetings as a representative of Greece (my first at the tender age of 26). And, between 1977 and 1979, I once again returned to the sharp end, taking up a position as Harbour Master of Corfu, with responsibility for the sea area surrounding that and all the nearby Greek islands from the safety, security and environmental protection points of view.

Looking back, I find it enormously instructive to chart the changes that have taken place in seafaring since I served my sea time. Culturally and socially, shipping today is a world apart from the industry that I knew. Looking forward, I think it is essential that those changes are acknowledged and understood if shipping is to strengthen and maintain its ability to recruit new people of the right calibre.

When I was at sea, the multi-national crew was the exception rather than the rule, although it was fairly common that a ship’s officers would come from one of the traditional shipping nations, while the crew might come from developing regions. In my home country, Greece, they would even come from the same island, with those coming from elsewhere being referred to as ‘the strangers’.

Before containers came to dominate general cargo shipping and large tankers started to use
offshore terminals, life for seafarers centered much more on time spent in port. A general cargo ship might call at ten or more European ports before setting off for say, the Far East. Each port call might last two or three days, perhaps even a week (or more in the case of bulk carriers), depending on the cargo to be loaded and the facilities available. And without regular, daily communication at sea via satellite, the port became the focus for receiving and sending mail, for contact with home and family, as well as with the company and its management and agents ashore. It was a challenging, exciting and slightly exotic life, in which individuality and an independent spirit were important elements.

Life for seafarers today is more pressurized in many ways. Nevertheless, a modern ship can be a technologically-advanced and highly comfortable workplace. Gone are the days of the old-fashioned ship’s wheel with its spokes and handles (except for decorative purposes). A modern ship is more likely to be controlled by a single joystick and a mouse-ball in the arm of the helmsman’s seat: the Chief Engineer will probably have clean hands and the calluses on his or her fingers will be from tapping a keyboard rather than wielding a spanner. The crew accommodations will be clean, light and airy; the food will be good; and, increasingly, crew members are readily able to exchange emails with their family at home via a satellite communications system. And, of course, television sets are all over the place to break news, show live football matches and advise on final scores.

There is no doubt that seafaring remains an exciting and rewarding career – a career that can take people almost anywhere, both in geographical terms and in terms of the sort of work they may find themselves doing. There are many dedicated professional seafarers who, having served their early years at sea, now hold positions as managers and superintendents in shipping companies, maritime pilots, vessel traffic service and rescue coordination center operators, advisers to Ministers and executives in shipping-related activities (such as insurance companies and classification societies, professors and teachers at maritime universities, academies and colleges), scattered throughout all parts of the industry – not to mention those ship Masters and engineers, who have become shipowners themselves.

To return to my personal tale, I am very proud of my maritime roots. I hail from Galaxidi, a small town, which was once a major maritime power in Greece during the era of tall ships. Now, there are only a few shipowners left there, but still many seafarers, captains and engineers. I personally come from a long line of seafarers and the fact that I started my career as a Merchant Navy officer has been of great assistance and inspiration to me in later life. Working at sea, first and placing my life, later on, at the service of shipping has been my wisest decision, an enviable piece of good fortune and an endless source of joy and satisfaction.

I have seen the sea; I can (or, at least, I think I can) understand what the sea can do to a ship; and I can understand the consequences of human error. To me, the sea means love to the degree of passion, respect and, yes, to an extent, fear – all three (love, respect and fear) being the elements I have taught my children to feel about the sea. And in this, the Year of the Seafarer, these may be the feelings I share with them.
In declaring 2010 the Year of the Seafarer, IMO has called attention to a very important truth about an important and often underrated industry. You don’t hear a lot of praise for shipping in the media but there are praiseworthy aspects to the seafaring life that are long overdue for attention.

Shipping plays a vital role in the development of civilization, not only through movement of goods and expansion of trade, but also through the social and economic movement of people. Most importantly, the ships themselves generate job opportunities through which people gain education and skills that change their lives and, in turn, benefit their families and their countries.

It would be untrue to say that life at sea doesn’t bring unique risks – one only has to search the internet on the word ‘piracy’, for example – but it would be equally untrue to say that it doesn’t offer commensurately unique benefits. My own career gives testimony that seafaring provides tools with which one can do wonderful things.

My career as a seafarer began in 1968, soon after graduating as a mechanical engineer. I did not start out with the idea of working at sea, but I thank God every day that I chose this path.

After listening to the late Pandit Jawaharlal Nehru encouraging young people to study engineering and join India’s industrial revolution, I joined the TKM engineering college of Kollam in 1963. Unfortunately, severe food shortages directed the country towards an agricultural revolution and the anticipated demand for engineers disappeared. By the time of my graduation, there were more than 60,000 unemployed engineers, any of whom would have considered himself lucky to get a lower division clerk’s job.

As my father was retiring that year and I had younger siblings to care for, for me there was no choice but to seek other opportunities. Chance brought me word that non-marine engineers were being recruited for sea jobs due to a heavy shortage of marine engineers. Further investigation revealed that some shipyards were giving one-year training to mechanical engineers from recognized universities and colleges. The Shipping Corporation of India took me on during my final year and assigned me to the Garden Reach Workshop as a trainee mechanical engineer.

After seven months of training, I was assigned to the cargo ship MV Vishva Sudha. The voyage from Calcutta to Madras was so harsh that I wished to...
resign before it even arrived at port. The Bay of Bengal was so boisterous that even veteran seamen became seasick. The second engineer under whom I labored was so inhuman that the Chief Engineer had to force him to relieve me after 24 hours of continuous work. One of the generator’s connecting rods came out during the watch – without injuries, fortunately – and then the main lube oil cooler seawater valve got stuck and the main engine had to be slowed down as the ship pushed through the rough weather.

But shining through all that turmoil was the power of people. The Chief Engineer on that vessel was a brilliant person. He persuaded me to continue on board. Neither can I forget a Malayalee purser and an oilman who encouraged me to stay on board. Thanks to them I continued our journey until we reached New York and had many more adventures until I quit the sea in 1977 as a Chief Engineer.

My passion for innovation and invention led me to work with one of the greatest ship designers, naval architects and marine engineers of the 20th century: the late Mr. George T.R. Campbell. I spent a short 22 years working with him. That was a truly great and life-changing experience. Today I wear his shoes. Since 1993, GTR Campbell (GTRC) Marine Consultants and I have been responsible for designing, managing and building more than 100 benchmark dry cargo ships and we continue to occupy a dominant position in international shipbuilding.

Shipbuilding is one of the heavy industries upon which many nations have raised their living standards – its importance in the transformation of Japan and Korea cannot be
understated. In the 1960s and 1970s, GTRC projects under Mr. Campbell provided great help to Japan’s postwar development and, since 1993, our projects have helped transform shipyards and the communities around them in China and in India.

Many of our supervisors in GTRC are former seamen – supervision is but one of the many possibilities for careers after the sea. Because of our ability to keep machinery running, ex-marine engineers have long been the most desirable people for shoreside plant engineering positions, from hotels and hospitals to manufacturing facilities. Today’s seafarers become tomorrow’s superintendents, port captains, surveyors, ship managers, ship designers, financiers, businessmen, executives and even shipowners. The present Secretary-General of the IMO is an ex-seafarer.

So it bears repeating that seafaring offers a unique world of possibilities. To compare sea and shore jobs, I ask only this: where on shore can you find a $100-million dollar investment left for months at a time in the hands of only 20 people led by one captain and one Chief? This is an unlimited opportunity to quickly learn a variety of jobs, which amounts to separate careers on shore. I also ask, where else on earth would you find an honest job that brings you to an executive level in as little as seven years? Where at the age of 28 you can earn $10,000 per month, tax-free with fully-paid boarding and lodging?

But there is more. I can’t say a seagoing career makes one a better person, but ships do require a level of self-sufficiency and resourcefulness unmatched by shore careers. Out there in the elements, all alone against the worst that nature has to offer, we learn about ourselves and become personally stronger for the experience. This truth has been at the foundation of the romantic vision that society has historically had regarding life on board, ever since the first boy came back from the sea a man.

On the other side of the coin is another concern that clouds the minds of young people considering a sea career: seafarer criminalization.

Today’s regulatory climate has created incentive for some national authorities to hold crews responsible for maritime incidents even when they perform flawlessly. This has been going on for a decade but reached its shameful heights in the fairly recent case of the Hebei Spirit, when the ship’s officers were imprisoned for what amounted to carrying out their job. Captain Jasprit Chawla and Chief Officer Syam Chetan were held hostage in Korea for more than 500 days until they were freed by an international protest effort led by the Government of India’s Ministry of Shipping, the International Trade Federation and the ship manager organization Intermanager.

Locking captains and officers away like criminals, even when they stand by their ship until the last moment, sends a bad message about shipping. That said, the fact that the maritime community rallied around these officers delivers an encouraging counter-message that the seafarer is no longer alone.

With piracy, criminalization and an ever-expanding body of ever more complex regulation causing stress and strain aboard, there is quite a lot to cause second thoughts when a young person considers a seafaring career today. Still, one must not forget that in the old, traditional and ‘romantic’ days of shipping there was just as much to be concerned about.

Many maritime incidents can be traced to owners and charterers and others who did not respect the seafarer and did not fulfill their responsibilities to those on board or to society. But this isn’t a modern problem. Some of the oldest court transcripts known, dating from Ancient Athens, relate the prosecution of greedy shipowners who defrauded their insurers and abused the
people on board. Many of the basic human motivations making life at sea difficult today have existed ever since man first made a business of shipping and then enhanced profits by cutting corners.

Just over 130 years ago, conditions aboard ships were so bad that an Englishman named Samuel Plimsoll was moved to publish the world’s first work of photojournalism about the problem and, after a long battle with the shipping industry, brought the Plimsoll Mark or Load Line into existence. However, although the list of reprehensible acts in our industry is long, it involves but a tiny fraction of the ships that have gone to sea.

Altogether, with its paradoxes and perils, its faults and failures, its challenges, adventures and accomplishments, shipping is truly a unique industry. It is indeed captivating and romantic. It is indeed tiring and worrisome. It does indeed require constant vigilance and hard work. And, at the end of the day, it is a forge of human progress – for individuals, groups and the society they build.

I am an ordinary mechanical engineer whose life was transformed through the simple act of choosing a career at sea. It has been my fortune to enjoy a full spectrum of opportunities in this amazing industry: seaman, surveyor, superintendent, newbuilding supervisor, ship designer, advisor, president, CEO and shipowner. Perhaps my example is unique in its extent, but not in its message: a seafaring job can be a boxful of opportunities. It is how well one finds and uses those opportunities that counts.

Many dedicated professional seafarers, having served their early years at sea, now hold positions of management.
The ship simulator is emerging as one of the key training tools of the future.

The shipping boom of the past decade did some great things for the world fleet, particularly in bringing many new, technically advanced ships into service. It also accomplished a minor miracle for seafarers, inspiring among employers an aggressive auction for the services of capable crew between 2003 and 2008, in which accelerated promotions and pay raises of up to 25 percent became the norm. As the dust settled, however, industry discovered that the market frenzy had left at least one strange consequence in its wake: a generation of educated, talented seafarers that had advanced to ranks beyond their level of onboard experience and competence.

Recognizing this, leading shipowners and ship managers developed new ways to train, re-creating through educational methods the transfer of skills, experience and knowhow that traditionally came through years of slow advance through the ranks. Today, many companies have training programs in place that combine classroom and onboard instruction, often geared not only towards improving shipboard skills, but also towards preparing officers for a second career ashore with the company and, at the same time, improving the skills of the staff in their shore organization. Many firms have gone so far as to create their own in-house ‘mini-academies’, employing large teams of experienced teachers drawn from their senior seagoing staff to provide a coordinated program of instruction ashore and on the ships.

The key piece of equipment in all this is the ship simulator, a training tool with the allure of an arcade game and the seriousness of a laboratory. A full simulator uses a room made up like a ship’s bridge, fitted with authentic navigational equipment that is mounted, as it would be, in front of the panoramic windows. Outside the windows runs a believable life-size animation of what you would see on passage – anything from Sydney Harbor to the open ocean – while your bridge moves as it would were the voyage really happening. From the steady approach on an urban terminal to a rollicking joust with a North Atlantic storm, the motion system beneath the floor lets you know where you stand and how you’re doing.

Full simulators are generally found in maritime schools, but some companies have taken the lead in staff development by installing the systems in-house. In 2007, Maran Tankers Management, for example, built a dedicated training center near its headquarters in Athens, Greece to house full bridge, engine room and cargo control simulators. For the instructors, these systems and the educational programs to which they belong stand a world apart from what they experienced as cadets.

“In my time seafarers disliked training, because, when we were offered training, it would just be a boring guy standing in a room, giving a boring lecture as we sat there in chairs,” recalls Captain Costas Lazandreas, Vetting Officer with Maran Tankers Management and responsible for the operation of the company’s simulator. “Today, besides hands-on training on board, we have active training ashore in the simulators – there are still lectures, of course, but the students also actively participate in their training.

“The tradition in former times was that the senior officers would explain to you your duties, how you should behave, how to avoid collisions and so on – this was apart from the training you received in school, which was just from a book,” he explains. “As a junior officer, you expected senior officers to give you their feedback and to share their expertise and their knowledge, through which you tried to build up your own skills and knowledge. This still goes on, of course, but now with the invaluable assistance of machines that simulate the operation of your vessel.”

Participatory training seems particularly well-suited to a generation raised on interactive games and computer educational tools and for whom technology is part of life. They not only expect to find personal-use technology on board, they also expect to use it for self-improvement.

“In the old days, communication on board was minimal – we at sea didn’t have a
clue as to what was happening around the world,” Lazandreas recalls. “Today, modern communication equipment and the internet let the crew be in touch with life outside; more importantly, they have access to distance learning and so, while on board, they can take courses in shipping, they can study to enhance their training or they can cultivate some completely different interest – finance, husbandry, law, anything is possible.”

Raised in a world where computers are friends, today’s students typically respond very well to the simulator experience, he says. In the three years that he has been in charge of the simulator training, Lazandreas observes, student feedback reports and comments indicate that the systems have not only helped officers in real-life situations, they have also developed a fan base.

“The students respond very well to the simulator experience,” he says. “I read all the end-of-course assessments and the majority of those who attend our three-day courses state in their comments that they want to come back for more.”

One reason for the simulators’ effectiveness and popularity among the seafarers is that they are designed and programmed to simulate exactly the seakeeping and the maneuvering response of specific vessels in the Maran fleet. This is possible because the company, although operating a large fleet, has built most of its crude oil and gas carriers as sister ships, outfitted with identical machinery and navigational systems. So, from the controls point-of-view, the only difference between, say, certain aframax and suexmax tankers is their names. Thus the Astro Cassiopeia program, for example, represents not only the named ship but also the other suexmax vessels set up exactly like it.

“I can make my mistakes in the simulator and the instructor will correct me; I can ask the instructor to repeat the lesson, maybe make course corrections for the next 22 hours; but when I step out of the simulator building, I will have the feeling and the confirmation that I can handle the vessel, because I have gone through it. The difference – and the benefit – is that I have done the handling ashore.”

Maran installed its bridge simulator in 2007 and the engine room and cargo simulators in 2009. The systems operate independently at the moment, but the company has a future plan to link them up so as to provide real-time, full vessel simulation for whole-crew training exercises.

“The most difficult task for a captain is ship handling,” Lazandreas says, speaking from experience and from an appreciation of the tool that simulates it. “There are no brakes on a ship; in real life, you are not allowed mistakes – a slight error might mean ship damage, pollution at sea or life lost. In the simulator you have the opportunity to make mistakes, to try new tactics, to experiment without fear that you might collide with another vessel or hit the end of the jetty – the only thing that might happen is that the instructor asks what in the world you are doing. The great thing about it is that you have the freedom to test your stamina, to test your capabilities and to test your knowledge. In the past, these were things that only got tested in real life. Today, the simulator gives us the opportunity to train seafarers in advance to avoid problems in real life.”

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“When you graduate from our school you will be sailing aboard a vessel that, in a way, you already know. Say, for example, I am on duty and I suddenly have to alter course to avoid a collision. Having done so previously in a simulator makes it much easier to do in real life,” Lazandreas explains.
Few people today have a better view of the maritime labor pool than ship managers, whose range of services has evolved to offer shipowners everything from total vessel care to crew supply. In recent years, their decades of experience in staffing vessels have helped raise the profession to new prominence. Many traditional shipowners, who retain in-house technical and operations, have navigated the seafarer shortage problem by turning to ship managers for their crewing expertise.

At present, no ship management firm is larger than Monaco-based V.Ships. Founded in 1984, the company now supplies a variety of management services to over 1,000 vessels and is responsible for a roster of more than 27,000 mariners, principally from Russia, the Baltic States, the Philippines and India. According to V.Ships President Roberto Giorgi, seafarers are in an unusual situation today in that rapid promotion during the boom has produced an officer class that still needs mentoring.

Between 2003 and 2008, seafarer wages rose by 20 to 25 percent, compelling capable individuals to change ships frequently and move up in rank with abnormal speed. “People who jumped ship quickly from one type to another may not have enough experience with the ship types they have served on, or in the trades in which they have worked,” says Giorgi. “At the same time, they spent less time than traditionally needed as a first or second officer before becoming Chief or Master, which means we now have a labor pool that, while highly talented, is also light on experience.”
As a result, he says, many maritime companies have had to redevelop their training philosophies, supplementing traditional methodologies with new approaches better suited to preparing this unique generation of mariners for the future. These new approaches include the development of what are, effectively, in-house academies complete with bridge and engine simulators and large staffs of expert instructors drawn from senior staff.

The most important area that needs development, he says, is compliance. “For all trades, but particularly for high-risk work, accidents happen when people don’t follow procedure,” he says. “What we as an industry must focus on is developing a culture of compliance among the seafarers – training them so that they develop the habit of applying rules and regulations, of implementing established procedures and processes. Compliance decreases the risk of accidents and keeps everyone safer.”

Training Adapts

Compliance thinking is a product of training, he says and the two must advance hand-in-hand. This means that the major task before ship managers and shipowners is to determine, first, what training is needed to be sure their seafarers comply with all regulations and, second, what training is needed to upgrade their abilities and enhance their performance.

Many companies are beginning to supplement their traditional purely ashore and purely onboard training efforts with hybrid ship-and-shore programs. Most of the larger shipowners and managers, says Giorgi, are putting great emphasis on curricula that combine onshore classes with onboard instruction, particularly when it comes to vessels at the top tier of sophistication, such as chemical, LNG and LPG carriers.

Most large shipowners and managers are building up their recruitment and training capabilities, either in-house or in partnership with an established facility. Some do both, like V.Ships, which supports schools and academies in each of its main recruitment countries with equipment, materials and personnel. The practice benefits the bottom line as well as the organization: “Working with different schools and academies, and supplementing these with a very large staff of onboard trainers, we are able to customize the type of training according to the ship, the trade and, in certain cases, the client,” Giorgi says.

“There are different kinds of training to enhance seafarer preparation and the performance of specific tasks – for example, cargo handling skills on parcel tankers or navigational skills in particular coastal trades,” he explains. “Combined training is especially important for tanker vessels, which are under intense pressure to gain the acceptance of their charterers, the oil majors. It is vital to be sure the crew of a tanker is trained properly in passing vetting inspections, for example – this too is part of the compliance culture – because one way that charterers evaluate the quality of a ship is by observing how well the crew follow procedure and implement safety and quality systems.”

Supporting the Future Seafarer

As Chairman of Intermanager, the ship manager trade association, Giorgi has begun trying to promote a novel concept of seafarer support, one aspect of which focuses on the need for cadets. While there is no shortage of cadets, he says, there is a severe shortage of cadet berths in the merchant fleet. This links to a second item, the larger issue of onboard habitability.

“There is a shortage of cadet berths, not because owners have refused to have them, but because ship design has tended towards reduced spaces on board in recent years. Many modern ships not only lack space for cadets,
they also lack sufficient recreational and living space for the crews – it is one very negative aspect of the industry today,” he observes.

Thus the idea to develop an incentive for shipowners to order not only cadet berths for their ships, but also health and welfare areas for the crew – like a gymnasium, or public spaces in which the people on board can step away from work and cultivate their personal interests. Suggested incentives include a discount on a vessel’s tonnage tax and a break in its ship registration or port fees, in recognition of having installed spaces dedicated not to profit but to crew welfare.

“If we can get the trade associations to speak on the issue with one voice, we may create enough interest to get something done about it,” Giorgi says.

The seafarer health and welfare concerns expressed in the amended Standards of Training, Certification and Watchkeeping (STCW) Convention and the ILO Maritime Labour Convention, already focusing industry attention on human factors engineering and designing for habitability, may make the wedge that gets the job done. After all, from one point-of-view, yesterday’s extras are tomorrow’s practical necessities in that they reflect the lifestyle expectations of the generation the industry is trying hard to attract.

“If we want to attract today’s young people to a sea career, to be part of our industry, we must change our approach to what we offer; for example, we must give them free email access,” Giorgi says.

None of these services comes for free, he admits, but adds, that only means the cost of doing business is going up – as are complaints about the same. “If we want to attract people to our industry, the thing is not to come out cheap,” he says forcefully. “The business is getting more expensive, yes, but, there is also a definite shortage of officers. Owners may not see it because all their ships are sailing. But I can tell you that, where we once could offer five Masters for each job, we now have five offers for each Master. Although we fill all positions, it is a struggle. So, if we as an industry want to sustain our growth, we need to spend money and make positive efforts to attract people to stay at sea.”

And yet, despite all the above, when asked if he would recommend a sea career to anyone he cared about, his answer is yes. “My daughter has already worked at sea; she has two embarkations – it is a great experience,” he says. “If I had a son who expressed interest in a sea career, I would say to him, if you want to work with a company like V.Ships, yes, go to sea, because you have a future there.”

Onboard training exercises are supplemented with onshore classroom instruction.
The corporatization of the maritime world appears to have produced another noiseless revolution. During the past five years, a number of relatively large maritime companies have transitioned from having virtually no human resources (HR) department – or perhaps a lone personnel manager – to having professional HR staff in senior management.

“It’s rare now to find a shipping company of any size without a proper HR department, or to find a large one without a proper compensation and benefits staff as well,” says Phil Parry, Chairman and co-founder of Britain’s Spinnaker recruitment agency. “It is a very welcome step forward; professional HR managers bring with them process and policy, and a formalized benchmarking of compensation that unifies employment contracts and benefits across the business,” he says.

This wave of change began in the ripples of corporate transparency when remuneration policies were formalized and opened to scrutiny, even as demand for technical staff outstripped supply. In the resulting competition for good staff, many companies made massive changes to their recruitment and retention strategies which, says Parry, led inevitably to the professionalization of their HR functions.

As proof of that professionalization, Parry points to the growing popularity of the Maritime HR Forum, an industry benchmarking association founded by Spinnaker some five years ago. Its membership, currently 37 charterers, shipowners and ship managers, share data and meet regularly to shed light on the maritime HR scene. A survey at the group’s last annual meeting revealed that many of its members have begun merging their land- and sea-oriented HR staffs.

“Many maritime organizations are starting to recognize that bringing shoreside HR practices into the seagoing sphere, particularly those surrounding compensation and benefits, will address some of the skills shortage and crew recruitment/retention issues that the industry is now experiencing,” Parry says. “An added benefit is that it enables shore-based HR executives to develop understanding of the talents and types of individuals they have in their company at sea, and that in turn enables them to do career planning and career development with those people when it comes time to bring them ashore.”

It isn’t as if maritime companies are only now seeing their seafarers as having competencies that are useful to the organization, says Parry. It is merely the first time that they have the HR capability to fully make use of their potential.

“Now that shore-based HR is sophisticated, the companies are starting to realize that they have in-house HR competencies that can be applied across into their crewing functions, thereby enjoying the same HR benefits at sea that they’ve only recently started enjoying ashore,” he says.

One company feeling the benefits of the HR revolution is leading ship manager V.Ships. “To reach out to our seafarers we have changed our human resources strategy completely,” says V.Ships President Roberto Giorgi. “We now promote the concept of a lifetime career, in way of making sure the seafarer understands that he has the potential for a natural career progression with us; and that anything is possible for him, from becoming an officer on board to becoming president of the company.

“To achieve this we combined our human resources departments – instead of considering HR as two different departments, we have one common department that thinks about HR issues both ashore and on board. We took this idea a step further and have done the same for training our onboard talent. With a combined training strategy, we can approach the crew members who we believe have potential to become, say, a superintendent or a managing director, we can train them on board and we can thus try to prepare them to become leaders on the ship today and leaders in the office tomorrow.”
Seafarer Education & Training: Progress & Challenge

Observations from Captain Rod Short, Executive Secretary of the Global Maritime Education and Training Association and a delegate to the 2010 STCW conference in Manila, on some of the progress made and challenges ahead in readying the next generation of maritime professionals.

Participation in the Diplomatic Conference in Manila to adopt the amendments to the International Convention on Standards of Training, Certification and Watchkeeping (STCW) for Seafarers was an enjoyable experience. As expected, the conference proceeded smoothly and finished on a good constructive note. Consensus was reached despite significant differences over minimum rest periods and medical fitness. One came away with the feeling that this conclusion of about five years of work on revising the STCW Convention had gone as well as could be expected.

With strong motivation to modernize, celestial navigation requirements were reduced and electronic navigation requirements increased, with concern being expressed about the need for a much greater effort to ensure that watchkeepers are competent with e-navigation. Tanker operations’ training is to be brought up-to-date. Engineering competencies moved more towards plant and systems operation, implying a significant rethink about how engineers are trained. Able seafarer requirements for deck and engine have been shifted from ILO regulation to STCW. Electro-tech is now mandatory with cross-over between marine engineering and electro-technology.

There is more emphasis on leadership and management, particularly at the management level and significant strengthening of assessment, with nearly all competencies requiring demonstration and the essential use of training record books. Continuing competency is required.

The 2010: Year of the Seafarer Forum, organized by the International Federation of Ship Masters’ Associations (IFSMA), NewsLink/Face of Shipping, the Global Maritime Education and Training Association (GlobalMET), the Nautical Institute and relevant Filipino interests, was a big success. It focused on Filipino seafarers and was very well attended – around 600, of which about half would have been serving seafarers or cadets. The Forum was opened by the IMO Secretary-General Efthimios E. Mitropoulos and the keynote speaker was Neil Ferrer, Chairman of the Maritime Safety Committee. Other speakers were senior people who had participated in the Diplomatic Conference. It ended on a high note, with many questions from Filipino seafarers addressed to the senior shipping industry people present and requests for more fora addressing such issues.

This is all well and good. To have an international Convention that recognizes recent developments is a big step ahead, but how well will the provisions of the Convention be implemented? In some cases well, in others – too many others – poorly, if current practice is anything to go by.

The so-called White List of countries assessed to be properly implementing the revised STCW Convention entitles other Parties to the STCW Convention to accept, in principle, that certificates issued by or on behalf of the parties on the list are in compliance with the Convention. Although the Convention sets out minimum competency requirements for all seafarers, implementation varies from country to country.

Given the variety of levels of competence within the panel of competent persons to assess competence training in academies, together with strong local political and other pressures, this is not surprising. Despite these arrangements for oversight there is still too much noncompliance with STCW, some of it willful.
Underlying the discussion at the Manila Diplomatic Conference was real concern about ensuring adequate provision of competent people to man the global fleet, even though, with the agreed Manila Amendments there was substantial updating of the Convention. Despite some very good recruitment efforts, the shortage of competent persons continues, with growing difficulty in attracting potentially competent people to take up seafaring as a career, for a number of reasons.

A seafaring career has a lot to offer: early promotion and responsibility; good income; international travel; and interesting, worthwhile work that contributes to the global economy. But it also carries a high social cost in requiring seafarers to be away from home and family for long periods, living aboard a vehicle, with all the attendant disadvantages of motion, vibration, isolation and invasion of privacy by officiﬁduals. Although it is now the ‘internet generation’ that needs to be attracted to undertake seafaring careers, very few ships have internet access on board, especially for non-management level seafarers. A lot could be done in this respect, but provision lags seriously behind need.

On the positive side, though, as expressed strongly at the 2010: Year of the Seafarer Forum, few careers provide opportunities for rapid promotion to command levels, in which it is not uncommon for a 30-year-old to be responsible for a ship and cargo worth many millions of dollars – and in some cases, over a billion dollars – as well as the lives on board. And, remarkably, this is not a plant or other facility or business in a city building or in an industrial estate, but a large vehicle moving through trafﬁc and weather with the potential for extremely serious consequences, should there be an accident.

Another strongly expressed concern was for the difficulties of recruiting and retaining competent people to teach in maritime academies. In many places there is no shortage of young people wanting to embark on a seafaring career, but the educational facilities and teaching resources needed to cope with their needs are not available.

In addition, in many places maritime education and training needs improved status to attract higher calibre staff. Too frequently, staff are part-time employees, elderly or out of touch with modern industry and student needs. Too often, their training in teaching and assessment is rudimentary or nonexistent. Too many view it as a means to earn, rather than as a vocation. And, of course, wages are low in comparison to what can be earned at sea. There needs
to be much greater recognition of maritime education and training and the provision of resources for academies. Also, staff salaries need to be substantially improved. At present it appears that much of the industry considers training a cost rather than an investment in the future operation of an efficient, safe, clean, secure global industry.

Also lacking are sufficient training berths aboard ship to accommodate the numbers needed to ensure adequate provision of competence. In this respect it is heartening that one of the Conference Resolutions recognizes that insufficient accommodation on board ships for trainees constitutes a significant impediment to properly training them and subsequently retraining them at sea, thus adding to the shortage. The Resolution goes on to urge shipowners, ship managers and shipping companies to provide suitable accommodation for trainees on board their ships both existing and new. But will sufficient accommodation be provided?

A heartening development is the investment by some major companies in providing their own training and there are very good examples now established in the Philippines, India and other countries. Some of these academies are linked with the provision of seagoing training berths. In addition, there is considerable investment by some maritime unions in providing effective education and training.

To conclude on a positive note, with respect to a young person considering a career at sea, perhaps for the first 15 years or so: seafaring is a career that has many advantages, some of which have been mentioned, and it is part of one of the most critical industries of all, one that transports some 90 percent of international trade and upon which the global economy is fundamentally dependent. If the ships stop sailing…?

Seafaring is also a career that increasingly offers very fulfilling, worthwhile employment in other sectors of the overall maritime industry, as humankind looks more to the sea for the realization of resources in a responsible manner. It is a career that will become even more important as time goes on and the work even more worthwhile.
Declaring 2010 the Year of the Seafarer was one of the positive responses by the maritime industry, which, coupled with the Go to Sea campaign launched by IMO, the ILO and various industry groups, was aimed at raising the profile of the sector and highlighting shipping as a viable career – long term either at sea or ashore – for young people considering their professional future.

When this campaign was launched in 2008, there were reports of a coming shortfall of some 34,000 officers, with the figures expected to more than double by 2012. While this figure has since been revised, there is no debate on a future shortage of manpower for the industry.

So, how does shipping compete with sectors such as finance and legal which are perceived to offer better rewards? This was one of the challenges faced by the Bahamas Maritime Authority which has a statutory requirement to offer maritime opportunities for Bahamians. One solution, achieved through collaboration with shipowners and other stakeholders, was establishment of the Bahamas Maritime Cadet Corps and the Bahamas Ship Owners Association/Bahamas Maritime Authority scholarship.

The Cadet Corps is aimed at introducing young persons to the sea while they are still in high school, coupling academic studies with time on ships to give the students a realistic experience of life at sea. To date, over 300 students have successfully completed the program and progressed to studies at maritime institutions in the United States and Canada.

Many other countries and industry groups are working to attract young persons to the maritime sector, but it is the provision of sea berths by shipowners that enables them to gain the more important shipboard experience and be exposed to the practical aspects of this exciting industry.

Further evidence of the industry’s efforts for the well-being of seafarers is the development and adoption of guidelines on fair treatment of seafarers in the event of a maritime accident. This takes into consideration the potential number of different jurisdictions that may be involved in an investigation of a maritime accident and aims to recognize the special category of the seafarer as a worker who should not be unduly delayed or detained nor discriminated or retaliated against as a result of or during the course of the investigation.

The problems of seafarers who undertake actions and measures to avoid or reduce a maritime incident may not seem newsworthy to the general public, but we, as an industry, must continue to herald, through all available means, positive actions taken by seafarers. We must continue to press for acceptance of the international guidelines on the treatment of seafarers following a maritime accident and work at the international level to address piracy.
From Ship to Shore to a World of Opportunity

Today's job market offers seafarers many good prospects for a second career ashore.

While the pace and pressures of modern maritime business have managed to push, squeeze and hurry much of the old fun and romance out of the seafaring life, the law of supply and demand has partly compensated for the theft by developing many new and promising chances for rewarding shoreside careers for seafarers. When today's men and women mariners hang up their uniforms, they will find a better range of solid career opportunities ashore than their predecessors ever knew, in a number of active markets hungry for their special skills and abilities, say leading recruiters.

“There's been a definite, positive mindset shift in the maritime industry regarding seafarer employment,” says Phil Parry, Chairman of the Essex, England-based Spinnaker recruitment agency, which he co-founded in 1997. “For decades, seagoing staff tended to be seen as a transient working population; for the past five years, the industry has started trying to entice them to become permanent staff. Where the general feeling 30 years ago was that it wasn't quite right to train people up for a career aboard ships and then lose them to some shore-based business, the industry today recognizes that the second career ashore is a valid option for seafarers and one that can be used as a promotional tool to draw young recruits into a seagoing career.”

In the classic career path ashore, an ex-officer would go to work for a shipowner, ship manager or oil major as a superintendent, marine or technical or in some other aspect of fleet operations and management. From there he would advance to an executive position, such as fleet manager, operations manager, ship manager and so on. While this remains a very promising path with increasingly attractive salaries, many other technical and management opportunities have opened for ex-mariners throughout the industry's vast support structure.

Engineering consultancies, classification societies, vetting inspectors, marine underwriters, P&I clubs and equipment manufacturers are just some of those businesses expressing a crying need for capable, experienced staff that know ships. For those with superior English-language skills there are also roles that, while rarely read about, also make interesting careers — that of admiralty manager in a law firm, for example, which has its own micro career path through evidence gathering, statement taking, casualty investigation and case handling.

Whatever the sector, supply-and-demand pressures have made ex-mariners hot properties on the job search scene, says Parry. “Not enough people are coming into sea careers at the recruitment level and this is beginning to have an impact on the supply of shore-based staff — the seafarer shortage has become evident not in ships being held up for lack of sailors, but in a rise in salaries at sea and ashore,” he explains. “During the boom, superintendents, marine surveyors, port captains, quay way managers and technical staff in general saw an impressive rise in salary, just as ship's officers did. While it is an unarguable fact that Chief Engineers and Master mariners are in greatest demand, as supply gets ever tighter a better range of options is opening for chief officers, second engineers and so on down the ranks.
We have recruited in 36 countries and one thing that’s very evident nowadays is that demand is global and has, as a result, led to a surprisingly uniform salary market around the world. That includes the United States, whose maritime peculiarities usually set it apart in such matters. In fact, seafarers are in high demand for technical and management positions across the Americas. Recruiters in the US say that South America is very hot with opportunity from its growing offshore energy sectors but also note that even the US, despite its uniquely limited number of seafarer berths, presents a promising and active maritime job market.

“We’re seeing opportunities open up in engineering and surveying but also in the traditional shoreside roles for deck officers: vessel operations, chartering, commercial activities and so on,” says Craig Johnson, President of the Americas division of the Faststream recruitment agency. Founded in 1999 in Southampton, England, Faststream opened its US offices in 2006. “Our clients include classification societies, oil majors, shipowners and operators, equipment manufacturers – today there are opportunities in just about every field that has to do with ships, from building, scrapping and operating to the environmental, health and safety and spill cleanup sides,” he says.

The small size of the US merchant fleet means limited opportunity for the country’s maritime academy graduates to find berths, while those that do find it can take a long time to advance through the ranks of a good company. This should not be a source of discouragement, says Johnson, because employers recognize the situation. “For the most part, if you’ve had one raise in grade, up to second mate or second engineer, you have been through a critical link to where you have a decision-making capacity on board – that is one thing most employers look for,” he says.

One characteristic the US market shares with all others is its hunger for engineers – an LNG cargo engineer is gold to a gasification or liquefaction facility anywhere in the world. Less specialized engineers find themselves wooed by vessel operators, charterers and inspectors, he said, who above all need people with an understanding of ships and how they run. Another global truism is that power plants love marine engineers.

“I have seen many people transfer from ships to power plants ashore,” says Mick Tansey, Faststream’s Engineering Recruitment Specialist. “The power plants find them attractive because they have already operated machinery similar to what the plants have installed and, by virtue of their sea career, have a proven ability to think on their feet and solve problems.”

Power plants represent a wide-open opportunity, he says, because they are all over the country. In fact, there are power plants all over most countries, not just in electrical power generation facilities, but also in places that one doesn’t always think about, such as chemical process plants, refineries, mines, cement factories, hospitals, hotels and universities.

With such widespread respect for marine engineers, Tansey advises young people in the US to take a degree from a maritime academy despite the low probability of working at sea. “You can go anywhere with a maritime academy engineering degree. Engineering is a good road to go down because you learn skills that you can transfer in and out of the industry,” he says.

Altogether, the recruiters indicate that capable seafarers will have good prospects for a second career ashore for some years to come.

“Even during the recent downturn, there was a huge demand for mariners and engineers from within the ship management and related industries,” notes Parry. “It slowed down a bit for a while but it didn’t stop and now it’s as healthy as ever. Today, shipowners and managers will tell you that what they need most are technical superintendents. My advice to seafarers is to get your Chief’s or your Master mariner’s ticket and your experience, if you can and as young as you can, you will be in demand.”

“Our basic message is that seafarers have a world of opportunity out there today,” says Tansey. “There is good reason for a young person, in the US, or anywhere, to get a degree from a maritime academy and work at sea. And if you can get your Chief’s or Master’s license, you will have a great many options open to you in life.”
Once, the Captain’s Log was the only documentary evidence of what took place on board during a voyage. Now, ships must carry a lot more paper testimony, to satisfy a growing body of legislation and controls that demand documentary evidence of due diligence regarding safety and anti-pollution mandates. Just to take command today, a tanker captain needs to carry over 30 different certificates, while his ship, to be deemed acceptable at its destination, might have to present inspectors with over 200 documents relating to the vessel and its operation, all filled out during the trip. While tankers have the most heard-about administrative burden, a paper tsunami has been flooding the bridge on most vessels around the world for a dozen years.

“The overall administrative burden on the industry is reaching alarming levels,” says Captain Peter Bond, General Manager of Interorient Navigation. “The simple fact is that the more time that is spent on administrative matters, the less remains to do the practical job of running a vessel. There has been, in effect, an impact on overall ship safety from too much paperwork, with seafarers engaged in administrative duties being a known factor in a number of maritime casualties. I know of one flag State investigation report of a tanker that grounded, in part, because the Master was preoccupied in his cabin doing paperwork. In another tanker grounding, the Danish Maritime Authority report noted that the officer on watch had left the bridge to attend to paperwork.”

Port arrival and departure documentation is one part of the pile. A standard list of documents required on arrival can consist of eight declarations in 25 pieces: five copies of the General Declaration; four copies each of the Cargo Declaration, Ship’s Stores Declaration, Crew List and Passenger List; two of the Crew Effects Declaration; and one each of the Dangerous Goods Manifest and the Maritime Declaration of Health. The actual number of documents depends on the place visited – to be accepted at Chittagong, for example, requires 56 documents; at Guayaquil, 75. These requirements are governed by the perhaps ironically named Convention on the Facilitation of International Maritime Traffic.

Another part of the paper tsunami has its source in industry’s application of the International Safety Management (ISM) Code, which has been mandatory for most ships since 1998 as part of the Safety of Life at Sea (SOLAS) Convention. The stress there is on the word ‘application’, since the size of a company’s ISM document pile is, in many ways, the company’s own work product.

The ISM Code requires companies to develop a safety management system (SMS), a set of descriptions about everything the company does and the procedures and practices employed to do so. Companies and their individual ships demonstrate adherence to the SMS through documentation, principally checklists, that are verified for correctness as part of the audit process for issuance to the company of a Document of Compliance and to the ships a Safety Management Certificate.

The idea, of course, was to institutionalize safety procedures. Since its implementation, however, crews in all trades have complained about a deluge of ISM-related forms and checklists devouring precious time that ought to be spent attending to the needs of the ship. What went wrong, say ISM supporters, is that many companies saw the SMS through the lens of paperwork, while the Code’s framers saw it through the lens of goal-based rule-making.

“ISM is not paperwork,” says Captain Hemant Juneja, Director of Safety, Environmental and Security Certification (SESC) for ABS. ISM debuted during his 25 years at sea and, once he had hung up his uniform, became the focus of his second career ashore. “ISM means getting things done in a safe and secure manner. Paperwork is a consequence of that.
The purpose of the procedures and related checklists is to eliminate oversight errors, to get the process right – first time every time – and to provide accountability. Besides this, there are other reasons why we will never have a paper-free environment in our industry – criminalization of seafarers, shipowner liabilities, flag and port State demands and classification requirements are some of them – but remember, paperwork is not unique to shipping. Every industry today demands a certain amount of records be kept to demonstrate due diligence should things go wrong,” he explains.

PILING UP A PAPER MOUNTAIN

“With the advent of ISM, there was a noticeable reduction in incidents at sea, because the ISM Code truly caused the industry to raise its level of attention towards safety and life on board. At the same time, however, it created a bureaucracy,” says Captain Emmanuele Marrone, Fleet Manager for the Giuseppe Bottiglieri Shipping Company. “Today that bureaucracy and the onboard administrative work that supports it, have spun out of control in ways that the creators of the ISM Code never foresaw,” he says.

An ardent ISM supporter, Marrone has been known his whole career as a serious proponent of safety on board. While captain of the bulk carrier Maria Bottiglieri in the 1990s, carrying coal and grain from North Europe up the Mississippi River, he received an award from the US Coast Guard for dedication to safety on board, with the crew commended for superior safety practices. It is in defense of safety that he raises the concern that the onboard paperwork burden is in conflict with the ISM Code and, thereby, with safety on board.

“If ISM was intended to formalize SOLAS, we should have done that,” he says. “Instead we've found ourselves in a world where paperwork is a distraction. It should support safety, not undermine it. We need to be realistic about the paperwork involved in safety and make it fit the bill.”

“ISM should have been a formalization of SOLAS, many of us were already doing as ISM requires,” says Marrone. “ISM should have been a formalization of that, but it took a bad direction. Today, the people on board are drowning in checklists – the paper is interfering with the operation of the ship. We have to remember that safety on board is the highest imperative and that nothing must ever subtract from it,” he says. “This means that individual companies today need to work to resize their SMS and their checklists, but also that the industry must work to resize its rules and regulations.”

The word from ISM gurus is that the paperwork problem started with a misunderstanding of what ISM stood for.
at the time the Code was introduced. As a practical matter, safety management was not a new thing when ISM came along. In the past, most shipping companies kept their own manuals, procedures and guidelines and many were already living up to the ISM spirit, though in an informal way. As formal requirements, however, the ISM Code and then the ISO 9000 quality standard, the 14001 environmental standard, the 18000 occupational health standard – the suite of HSQE certifications – took the industry by surprise.

“When ISM was new, many shipping companies did not write up their own manuals but instead bought off-the-shelf safety management systems from consultants,” says Juneja. “All they really knew was that they needed that certificate to do business, so many went overboard with their manuals in order to be sure of obtaining it – the tendency was to do far more than what was necessary, out of fear of doing too little.”

**HAS THE PAPER TSUNAMI PEAKED?**

“The industry’s understanding of safety management systems matures, we are seeing shipping companies consolidate their procedures into more concise, more practical documents, using shorter checklists, flowcharts and other means of reducing paperwork,” says Juneja.

“Previously, a typical SMS could easily be a bookshelf full of manuals about how a vessel is to be operated,” Juneja recalls. “Today we see them consolidating to half that size – it’s still a lot, but it is getting better. There is a definite move towards rationalization of records, including use of information technology, such as electronic checklists, to capture much of the needed data. So, I do not believe there will be any increase in paperwork as we move ahead; in fact, we should find the onboard paperwork burden starting to go on the way down.”

Last year, Interorient Navigation decided to run an informal, one-month study of six sister ships – handysize product tankers in international trades – to develop a more concrete idea about the administrative burden on board. In presenting the results to a tanker operations conference, Bond noted that the total average daily time spent by all officers on administrative duties comes to 19 hours, 31 minutes:

- **For the Chief Engineer and Chief Officer**, 3 hours, 50 minutes each day working on the planned maintenance system (not actually performing any maintenance);

- **For the Master**, 3 hours, 35 minutes each day on such items as port papers, cargo papers, technical reporting and accounting;

- **For the Navigation Officer**, 3 hours, 20 minutes each day on duties including voyage planning and maintenance of charts and nautical publications (besides normal watchkeeping duties);

- **For the Chief Officer**, 3 hours, 50 minutes each day, with 2 hours, 06 minutes on cargo planning, stability, ballast water management, records of hours of work and rest etc. plus another 1 hour, 44 minutes on the planned maintenance system;

- **For the Chief Engineer**, 3 hours, 10 minutes each day, with 1 hour and 04 minutes on such tasks as preparing purchase orders, managers’ and charterers’ reporting requirements, records of hours of work and rest etc. and 2 hours, 06 minutes on the planned maintenance system;

- **For the Lower Officers**, 3 hours, 46 minutes combined time on duties including safety, medical and communications officer roles.

The results do not claim to be typical, but nonetheless underscore the importance of putting solid numbers on the paperwork problem. If they are not atypical, if such a big chunk of every work day on board is indeed thus consumed, it is small wonder that people close to the ships fear their administrative burden to be at hazardous levels.
“Interorient carries two cadets on most vessels, who no doubt assist with the paperwork while learning,” says Bond, but he adds that does not mean the company is convinced an administrative officer on the bridge would solve the paperwork problem. “In my personal opinion, the solution to the problem is not to place more persons on board merely for administrative duties, much as that may be welcomed by many,” he says – the problem has deeper roots on which to focus attention.

“As an industry we are finding ourselves producing ever more records just to satisfy inspectors,” Bond says. “We do need to find alternative ways of demonstrating that we run our vessels to the highest standards, ones that do not call for copious records as proof. As individual companies we have to re-examine our internal systems and procedures and ask serious questions about what we have done. Do we really need all those checklists? Is all the data that is sent to the office actually used? Can we not improve our reporting forms?”

Steps Towards a Solution

ISM paperwork is, of course, just one parcel in a ship’s administrative burden. In fact, no discussion about paperwork winds up before some commentary is made on those who check it and their fellow vessel inspectors – rightly so, as the inspection epidemic is a major tributary to the paper tsunami with flag States, Port State Controls, oil majors, internal audits, external audits, pre-arrival and departure vessel inspections and port formalities all having their share. Tanker captains in particular say that, in major ports at least, the ship is boarded by inspectors as soon as the gangway drops creating risky distractions during critical cargo operations, with senior officers having to deal with documents instead of directing the crew handling the cargo. While addressing such third-party hazards might take a global-level effort, there is plenty that companies can do on the local level.

Ultimately, one can best control what is under one’s own roof. Today many companies are grasping the nettle and redoing their safety management systems with an eye to streamlined procedures and reduced paperwork. The first cut is easy: eliminate duplicate records and simplify checklists which is one tactic being applied at the Giuseppe Bottiglieri Shipping Company.

“With all the checklists and documents, our tankers have 164 forms to fill out before entering port,” says Marrone. “We have seen the problem and are starting to reduce, consolidate and condense our processes and procedures. For example, when a Master does a lifeboat drill, the same data about it is written into four different books: the ship’s log, the Master’s deck log, the ISM procedures form and the SOLAS training manual. This is unnecessary; to satisfy ISM you only have to write it down once,” he says.

“ISM accomplished great things, but there has been such an exaggeration of its paperwork that it is in danger of losing direction,” he explains. “Safety must not lose its direction; it must be promoted and practiced but in an effective manner that raises the efficacy of the crew. Reducing the paperwork burden on the Master and senior officers will give them much more time in which they can train and instruct the people on board in how to best maintain and operate the ship and, thereby, to prevent accidents to the ship, to the shore and to this wonderful sea that is all around us.”

Ships must now carry more paper testimony than simply the Captain’s Log to comply with regulations and requirements.
In June this year, at its Diplomatic Conference on the Standards of Training, Certification and Watchkeeping (STCW) Convention in Manila, the International Maritime Organization (IMO) adopted a series of new provisions detailing hours of rest for watchkeeping officers and ratings. IMO Secretary-General Efthimios Mitropoulos called it a new text on fitness-for-duty that will create better conditions for seafarers to be adequately rested before they undertake their onboard duties. Noting that fatigue has been found to be a contributory factor to accidents at sea and that ensuring seafarer rest will play an important role in casualty prevention, he said “I am particularly pleased that the new STCW requirements on this delicate issue are consistent with the corresponding provisions of ILO’s Maritime Labour Convention, 2006 which I hope will come into force soon.”

Known as the Manila Amendments to the STCW Convention, the provisions mandate that anyone assigned duty as officer-in-charge of a watch or as a rating forming part of a watch, and those whose work involves designated safety, prevention of pollution and security duties, shall have a rest period of not less than ten hours in any 24-hour period and not less than 77 hours in any seven-day period. These hours of rest may be divided into no more than two periods, one of which shall be at least six hours in length, with the intervals between consecutive periods of rest not exceeding 14 hours.

Nothing, however, is to impair the right of the Master to require a seafarer to perform any hours of work necessary for the immediate safety of the ship, persons on board or cargo, or for the purpose of giving assistance to other ships or person in distress at sea.

In order to ensure continued safe operation at sea, the conference agreed with proposals from the International Shipping Federation (ISF) to allow certain exceptions from the rest period requirements. Under the exception clause, fewer hours of rest are allowed as long as: total rest is not less than 70 hours in any seven-day period and that the ‘exceptional arrangement’ does not extend beyond two consecutive weeks; the intervals between two periods of exceptions shall not be less than twice the duration of the exception.

Under the exceptions, hours of rest may be divided into no more than three periods, one of which shall be at least six hours and neither of the other two shall be less than one hour in length; intervals between consecutive periods of rest shall not exceed 14 hours; and exceptions shall not extend beyond two 24-hour periods in any seven-day period.

Ensuring compliance with these instructions is the responsibility of a company’s safety management system (SMS). Apart from the new level of specificity, one could argue that hours of work and rest and the issue of fatigue on board always were a matter for the SMS to control. There are a series of implicit telescoping expectations starting at the very beginning of the ISM Code, where companies are informed that important issues, even if not mentioned by name in the Code, cannot be ignored when developing a company’s safety management system.
1.2.3 The Safety Management System should ensure:

1. compliance with mandatory rules and regulations;
2. that applicable codes, guidelines and standards recommended by the Organization, Administration, classification societies and maritime industry organizations are taken into account.

So, although the subject of fatigue is not specifically treated in the ISM Code, it is clear that a well-developed safety management system should address this issue by referencing, and requiring compliance with, at least the relevant instruments that directly address it. Two such instruments, which have been around for a long time, are IMO Resolution A.772(18) and MSC Circular 1014.

At its 18th session in November 1993, the IMO Assembly adopted resolution A.772(18), Fatigue Factors in Manning and Safety. The resolution recognizes that there is no universally accepted definition of fatigue but draws the attention of all parties involved in ship operations to the factors which can contribute to fatigue. Section 4.1.1 notes:

The prevention of fatigue in the areas of scheduling of shipboard work and rest periods, Manning levels, watchkeeping practices and assignment of duties could largely be accomplished by sensible shore-based management and onboard management techniques. It is also recognized that Administrations have an equally important role to play with respect to legislation leading to acceptance, implementation and enforcement in those areas covered by international conventions. Guidelines and provisions should take into account the relationships between work and rest periods to ensure adequate rest.

A decade ago, the IMO Marine Safety Committee issued MSC Circular 1014, Guidance on Fatigue Mitigation and Management to “inform each party that has a direct impact on vessel safety (naval architects, owners/operators, Masters, officers, ratings, training institutions, etc.) of the nature of fatigue, its causes, preventive measures and countermeasures.”

Section 4 of Circular 1014 couldn’t be clearer on the matter, stating that “the most powerful means of relieving fatigue is to get proper sleep and to rest when appropriate.” Besides offering guidance in how to recognize fatigue in yourself and others, the document repeats four times, in each section addressing different roles on board:

“Fatigue may be caused and/or made worse by one or a combination of things:

Lack of sleep
Only sleep can maintain or restore your performance level. When you do not get enough sleep, fatigue will set in and your alertness will be impaired.

Poor quality of sleep
Fatigue may be caused by poor quality of sleep. This occurs when you are unable to sleep without interruptions or you are unable to fall asleep when your body tells you to.

Insufficient rest time between work periods
Apart from sleep, rest (taking a break) between work periods can contribute to restoring your performance levels. Insufficient rest periods or postponing assigned rest times (to finish the job early) can cause fatigue.

Poor quality of rest
Disturbances while resting such as being woken up unexpectedly while on call (during port operations) or unpredictable work hours (when arriving in port) can cause fatigue.

“The day may not be very far off when compliance with the requirements relating to periods of work and rest that are normally embedded in a company’s SMS, become a vital source of evidence in any litigation following an incident at sea,” says Captain Hemant Juneja, ABS Director of Safety, Environmental and Security Certification. “Lawyers will dig furiously into a company’s work hour records for the slightest indication of a possible fatigue situation on board or the lack of a company’s due diligence in living up to its responsibilities towards its seafarers,” he cautions.
Outfitting for a Better Life On Board

“Quality of life on board and its connection to human error is a very important issue for both the maritime and offshore industries,” says Kevin McSweeney, Manager of the ABS Safety and Human Factors Group. “If cabins are too noisy or vibrate too much, if the living quarters don’t provide a good life outside of work, the people on board won’t get the rest they need; if they don’t get proper rest, they’re going to become fatigued; under prolonged fatigue, they will not be as sharp on the bridge, as attentive to procedures or as vigilant in the control room – with a resulting impact on vessel performance and safety,” he explains.

“In moving towards improved levels of habitability, industry is starting to provide more appropriate environments that crew members need to properly perform the tasks for which the spaces are intended and to safely operate the vessel. The goal is to provide an environment that is conducive to good task performance by being free from such environmental stresses as uncomfortable levels of noise or vibration that don’t allow people to communicate properly.”

Such matters are the province of human factors engineering (HFE), the industrial science that deals with the workplace’s effect on workers. The discipline only began to penetrate the global maritime consciousness during the 1990s. About a decade ago, classification societies issued the first vessel habitability design Guides, specifically addressing those aspects of spaces on board that affect the physical and mental well-being of the crews. These days, an increasing number of companies are voluntarily applying habitability criteria in the design of new vessels for both the shipping and offshore energy sectors.

It helps, of course, that the amended Standards of Training Certification and Watchkeeping (STCW) Convention and the new ILO Maritime Labour Convention – which appears all but assured of entering into force by 2012 – makes considering the matter unavoidable, but it is nonetheless heartening for seafarers and their advocates that their industries are not merely accepting the habitability concept but embracing it with understanding.

Better Life, Better Performance On Board

ABS issued its Guide for Crew Habitability on Ships in 2001, following it the next year with its Guide for offshore installations and in 2008 with one for offshore support vessels. Each Guide addresses the five aspects of onboard habitability, which break down into two major categories: vessel accommodations – where crew members work, rest, recreate and dine; and the ambient environment in its various spaces, which subdivides into the four topics of indoor climate, lighting, noise and whole-body vibration. Compliance with the ABS Guides results in the optional HAB or HAB+ class notations. While they address the same issues, the HAB+ level calls out more stringent vibration and indoor climate criteria with the aim of increasing crew comfort.

Based on numerous studies establishing the effects of noise upon communication, hearing loss, sleep and mental acuity, the ABS HAB criteria were aimed at improving performance, enhancing comfort and facilitating communication, says McSweeney, for which reason the noise criteria for the
HAB and the HAB+ notations are the same – and are more conservative than the hearing conservation levels specified by most existing legislation.

“The IMO Guide on noise is geared towards hearing conservation, while the HAB Guides are geared towards task performance,” says McSweeney. “That’s why you see a difference between our criteria for noise on the bridge, which call for a noise level of 55 dB, and the IMO Guide, which calls for 65 dB,” he explains.

Surprisingly, although habitability criteria represent a fairly new concept for the maritime world, early adopters are finding the goals readily achievable. McSweeney and his team have so far found that companies are experiencing little challenge in complying with many of the requirements. Italian offshore construction giant Saipem, for example, has applied classification habitability notations to its vessels since the first Guides for habitability on ships became available.

“People deserve to have a good work environment, to sustain the human side of the business they are in, to provide them a certain level of comfort and to care for their health. In addition, a healthy vessel performs better,” says Emmanuel Huot, Project Manager for the company’s FDS 2 construction project at Samsung Heavy Industries in Korea. The logic for choosing the HAB notation for its latest J-Lay pipelaying vessel is simple, he says: it makes for a better vessel.

“In addition to the differences it makes on board, the HAB notation brings two side-effect benefits for the company,” he says. “An immediate benefit to pursuing a class notation is that there is no getting around the specification, and that’s a good help both for the owner and the builder for getting the ship built the way we want; the other benefit is that a class notation instantly demonstrates what exactly you did to build a better vessel. This in turn gives us an easier way to show the market and our clients that we have built a vessel that is above the common standard of the day and that we are taking care of the people on board.”

HFE Benefits Everyone

The Saipem team has been working closely with Samsung Heavy Industries to achieve these goals. For the most part, designing for habitability produces some minor increases in up-front outfitting costs but delivers significant benefits down the line, says Huot.

“In general, I would say that taking the habitability class notation does not require anything extremely high-tech; it just requires you to be careful in your design, where you put your equipment and how you build the vessel,” Huot explains, illustrating his point with the company’s recent experience with the vessel’s ventilation system. “There are ventilation fans all over the ship. Some of them go through vent rooms – in which case you just have to isolate the room – but some are on deck.
near working zones. All we had to do was pass this information to the vendor, through the shipyard and, with relatively low added efforts, were able to provide the vessel with low-noise fans,” he says.

“The way technology has advanced, it is much easier to increase the level of comfort on board today than even ten years ago. For example, the paneling used in the accommodations is probably better today than ever and, at the same time, Samsung supplied fully-assembled cabins which together helps reduce the noise transmitted from one living space to another. Altogether, technology has evolved to a point where classification can be more demanding, the suppliers can handle that demand and the shipowner can, therefore, get a higher-quality vessel. Ultimately, by applying for this class notation you establish a certain level of quality from the start of the project; you require that a certain level of engineering will be done to achieve that quality; and, in the end, you get a better product.”

Widespread adoption of habitability design could even go a long way towards addressing the maritime industry’s looming personnel problem. A survey done by Shiptalk Recruitment in 2008 found vessel habitability to be one of the more important issues in crewmember recruitment and retention, part of a suite of lifestyle expectations common among young people today that includes access to a gym, internet and communications and the availability of distance learning and professional development courses on DVD.

“The industry is making good progress with habitability, but, as a safety and human factors engineer, I, personally, would like to see things going a few steps further,” adds McSweeney. “These are the first of many forward steps I foresee us taking in the next few years with respect to the mariner. There has been a lot of advance in hull design, in propulsion systems, in structures and in vessel efficiency; now we need to focus on the people who live on board and operate the vessels.”
The ABS Guide for Compliance with the ILO Maritime Labour Convention, 2006 Title 3 Requirements was developed to help vessel owners and operators understand and fulfill the basic structural requirements described in Title 3 of the Maritime Labour Convention (MLC) – accommodation, recreational facilities, food and catering. Vessels satisfying the criteria specified in the Guide will be awarded the optional class notation of MLC-ACCOM. The Convention is expected to enter into force in 2012.

Derived from the latest information on human factors, ergonomics, and safety practices and principles, the criteria in the Guide reflect ABS’ understanding of the accommodations and ambient environment requirements that are expected to be implemented under the new Convention.

“MLC-ACCOM is a voluntary class notation that was created to help shipowners build new vessels so as to meet the structural accommodations requirements of the MLC during the run-up to the ratification of the Convention,” says Captain Hemant Juneja, head of ABS’ Safety, Environmental and Security Certification (SESC) department. “In other words, if I am a proactive shipowner who wants to build a vessel today that meets the future MLC Title 3 accommodations requirements, I would ask for the ABS MLC-ACCOM notation. It is not a statutory certification, nor does it pretend to be; it is a class notation whose criteria, we believe, help shipowners fulfill the intent of the Convention by addressing the hardware issues that will be part of it.”

Once the MLC is in force, there will be no need to take the MLC–ACCOM notation, since it will then be mandatory for all newbuild vessels to comply with the MLC requirements, he says. As a statutory certification, ABS will provide auditing and verification services much as is done today with, for example, the ISM Code. But even when the Convention enters into force the notation will not disappear, since vessels built with the notation will continue to hold it, he adds. “We created the MLC-ACCOM notation, knowing that it will have a pretty short shelf life, as a way to help those in the industry who wish to build a ‘ship of the future’ today,” he says.
FROM THE FRONT LINES:
Designing for Habitability

This year, the Science and Technology Corporation for the Development of Naval, Maritime and Riverine Industries in Colombia (Cotecmar) celebrates ten years of vessel construction and repair from its two shipyard facilities on the Bay of Cartagena, located 180 miles from the Panama Canal in the Caribbean Sea.

A partnership between the Colombian Navy and three of the country’s top universities – Universidad Nacional, Universidad del Norte and Universidad Tecnológica de Bolívar – Cotecmar was formed in July 2000. The core of the organization is the former Technical Department of the Naval Shipyard in Cartagena, which has been active in ship design and construction for the Colombian Navy since 1997, with a specialization in developing vessels to serve those regions of the country that can only be accessed by river.

Two years ago, Cotecmar initiated a research program in Human-Centered Ship Design, the aim of which was to develop a vessel characterized by improved operability, maintainability and habitability. From the start, this work in Ergonomics and Human Factors was directed towards assessing its Riverine Patrol Supply Vessel (RPSV), one of the main products developed by Cotecmar – according to the three main design aspects of physical environment, materials handling and mental workload, with the goal of improving conditions for the personnel on board.

“We began with a thorough literature review in 2008, and found out that the most practical, yet reliable and valid method to assess the vessel’s physical environment was the ABS Guide for Crew Habitability on Ships, despite that this Guide is intended for commercial vessels and our case study is a military vessel,” says Angela Lossa, Chief of Cotecmar’s Engineering department, Shipbuilding Direction. “Small adaptations were made to apply the Guide in a successful way, and by 2009 the physical environment had been assessed in terms of noise, lighting and temperature according to the Habitability Guide.”

The assessment consisted of preparing all the information required as if the HAB notation from ABS were to be requested for the RPSV, in order to determine if the crew was exposed to ergonomic risk, says Lossa. With this in mind, the spaces in the layout of the RPSV were classified and a test plan developed for each aspect to be assessed, taking into consideration: the measurement locations; the procedure for data acquisition and the
Cotecmar’s RPSV project is currently being applied in the development of an overall measure of ergonomic risk on vessels.

“Nowadays designers are paying more attention to the human being from the very early stages of product development,” says Lossa, explaining why habitability guides are more needed today than, say, ten years ago when the first ones were developed. The focus on habitability, she says, is mostly due to a newly emerging aspect of competition, which is based not only on attracting passengers, but also on attracting and retaining quality, competent crew members. A key factor in meeting these goals is having vessels that offer high-quality conditions of habitability and comfort.

“Years ago, the emphasis was placed on technology and systems related to the performance of the ship itself but, after realizing that the majority of accidents occur due to human error, things started to change,” she explains. “Different aspects such as light, color, vibration, noise, temperature and layout of the space, among others, play an important role in crew performance. To properly assess these conditions the industry needs to use habitability Guides, now more than ever.”

The RPSV project was Cotecmar’s first experience applying habitability criteria in a research project which, says Lossa, the company found to be an effective means towards its goal of measuring ergonomic risk (as defined by the research team). “However, as a by-product, the use of the ABS Guide helped us to identify design aspects needing improvement,” she says. “As a result, the habitability standard of the RPSV, a vessel already recognized for having a high level of comfort, was increased.

“The methodology followed proved to be efficient and reliable for the assessment of the three different aspects of the physical environment reviewed,” and that the work is currently being applied in the development of an overall measure of ergonomic risk (OMER) tool to be used during the early stages of design. Concluding her presentation, she said, “In this sense, it constitutes a decision support tool during the design process and one that strengthens the design process by incorporating human factors engineering and ergonomics criteria from the beginning.”
The Flag, the Seafarer & the MLC

One leading flag Administration sees the Maritime Labour Convention as a long-awaited formalization of best practices and existing seafarer protections.

The consolidated Maritime Labour Convention (MLC) seems to have a great many friends in all corners of the maritime world. Approved by the tripartite conference of the ILO four years ago, the Convention needs 30 signatories representing at least 30 percent of the world fleet to enter into force. As this issue went to press, the MLC had been ratified by ten nations representing 45 percent of the world fleet — much of that weight coming from Panama, Liberia, the Marshall Islands and the Bahamas, the four leading flag States.

With management, labor and regulators on its side, there is a general optimism that the Convention will not only improve conditions for the world’s seafarers, but will also be absorbed by industry with relatively minor effort and enter into force on schedule in 2012. Among its big supporters is the Liberian International Ship and Corporate Registry (LISCR), the US-owned and operated company based in Vienna, Virginia that administers the Republic of Liberia’s Ship Registry. Established in 1948, Liberia is the second largest ship registry in the world. Over 3,350 vessels fly its flag, totaling more than 106 million gross tons and representing some 11 percent of the world oceangoing fleet.

Regarding seafarer issues, LISCR Chief Operating Officer Scott Bergeron says the introduction of the MLC will be analogous to that of the ISM Code in that, for the most part, the Convention merely formalizes many of the systems, procedures and agreements that quality shipowners already have in place relative to seafarer concerns.

Among the benefits Bergeron believes will come is a better connection between the people at sea and their management ashore. “We expect the MLC to bring a new level of openness and communication that will help eliminate many of the frustrations and insecurities that seafarers have with their shipowners, managers and crewing agents, particularly because everything between them will be transparent, open and, ultimately, audited,” he says.

“The MLC may challenge crewing agents in that it demands a bit more formality and transparency with regards to working conditions but it doesn’t represent a major, fundamental shift,” says Bergeron. “What it does do is put a little more order to some of the best practices that currently exist.”

“For the leading shipowners and managers, the MLC won’t cause a lot of change from the seafarer’s point-of-view — the good owners typically treat their crews well on board, uphold their protections and take care of their social benefits,” he explains. “Most of the larger ship managers already provide what the MLC requires, or already have in place a labor agreement that addresses the provisions. That isn’t always the case in some of the developing labor countries, however; and that’s where the structure and formality of the MLC will make a difference.”

New Protections

There are provisions in the MLC that do not already exist in organized form and which make a compelling case for the Convention’s swift ratification, he says. Chief among them is establishment of a formal complaint process that gives seafarers a tiered system of issue resolution. The MLC provides onboard procedures in Section 5.1.5 for complaints alleging noncompliance with the Convention, stating that every seafarer has the right to file complaints with the Master, shipowner or competent authority.

“Some companies have so-called whistle-blower protections in their management systems but the practice doesn’t exist formally and is not widespread,” says Bergeron. What often happens now, he says, is that a seafarer will lodge a complaint with a Port State Control (PSC) officer or a union representative who has come on board, the matter
Ships traveling to US ports are subject to many inspections. "Problems shouldn't have to wait to be addressed until the PSC or union representatives come on board. Problems on board should be resolved on board, if possible," he says.

"As any employer knows, it's best to handle employee/employer complaints at the lowest level – that's why you empower your managers," he adds. "Under the MLC we can have a system on board the ship similar to what exists ashore. If there's a problem it can be dealt with first at the bo'sun level, then the chief mate level and then, if no solution can be found, they can take it to the Master. If the Master can't resolve the problem – or is part of the problem – then the company can deal with it through people ashore. If that doesn't work, then the flag State steps in. The flag is responsible to try to get to the bottom of the problem," he explains. "That process does not currently exist but it should and it shall. It benefits everyone to have a structured complaint process in place."

This aspect of the MLC is spurring a few changes around the Liberian Registry's office. Today the company is growing its staff by adding people focused on labor issues who, Bergeron says, can put themselves in the seafarer's shoes and help independently arbitrate their disputes.

### The MLC & Minimum Safe Manning

Perhaps the biggest question about the onboard impact of the MLC concerns its consequences regarding current concepts of minimum safe manning. The maritime industry and its regulators worked a long time trying to ascertain the lowest number of people required to safely operate a vessel but a rising number of seafarer complaints of fatigue on the bridge – such as the reports filed with the online Fatigue Forum run by the renowned Nautical Institute (NI) – indicates the numbers arrived at are probably not correct for all ships in all trades.

"Fatigue on board ships exists, leads to accidents and incidents and, left unchecked, will create an environment where the retention of qualified crews will be increasingly difficult," NI explains in the Forum's preface. "Due to a culture where there can be a general disrespect for regulations (not to be confused with the compliance culture) and a 'can do' attitude of seafarers, it is difficult to gauge the extent of the problem because work/rest hour logs do not reflect a problem. However, anecdotal evidence constantly reported to the Nautical Institute indicates that fatigue and manning levels are of major concern to mariners."

One of the most common allegations is that overwork on ships is masked by a form of double bookkeeping, in which two work logs are kept – an accurate one for the seafarer's overtime payment, often in cash and a special one for the inspectors. The extent of the practice is unknown; what is certain is that, with time, it will become more difficult to get away with such dangerous deceptions as flag States develop their document analysis and detection skills.
"At the end of the day, as much as seafarers may complain, and rightfully so, they're not going to be doing work that they aren't paid for – no employee today would," says Bergeron. "So, if what's happening is that a ship is engaged in some kind of double-bookkeeping, its overtime sheets will be one piece of evidence that can expose it. That's why one of the controls that this Administration is putting together is to compare safety and procedure reporting with overtime sheets," says Bergeron. Still in development, this detection process will involve a review of all relevant data sets – comparing, for example, pay slips, work hour logs and overtime reports with various financial information pertaining to the vessel -- to ensure transparency in the ship's reporting.

The future may see technology take a role in work hour verification as well. "There should be a more automated system in place to record hours of work; ID card technology, for example, lends itself to a modern time card concept," says Bergeron. "I'm not advocating punch clocks aboard ship but I do believe there has to be an efficient means to track when people are working and when they are not; and, that such means can be made to tie in with the ship's payroll system, as it does ashore, which would save a lot of computation time. However it works out, we will see in the future more attention focused on hours of rest and the requisite uninterrupted rest periods," he says.

The MLC, Hours of Work & Fatigue

One part of the fatigue problem, says Bergeron, is the administrative burden placed on the ship today. "The Master is now responsible for an endless number of checklists and, in port, more and more people want to board the vessel to see for themselves how the ship's being run. The situation has reached a point where a full-time onboard administrator is needed just to handle the paperwork."

Several farsighted tanker owners are already doing just that, but the wider implication is that something, somewhere was wrong in the industry's long-term drive to reduce crew size. To illustrate the issue, Bergeron raises the example of a chemical tanker doing a four-berth rotation in a major port like Houston or Rotterdam: a six- or eight-hour approach to the terminal is followed by a series of complex, labor-intensive, high-alert loading or discharge operations with hazardous cargoes, themselves followed by a long passage out to sea, often through populated or environmentally sensitive areas. During the several days that all this takes, the relevant authorities, from coastal State to pilot, expect the ship Master to be always ready and available but without wondering how he does it.

"Is the industry expecting too much of its Masters?" Bergeron asks. "The Master has
the overriding authority, the vessel is his responsibility, yet the industry seems satisfied that he can do everything expected on relatively few hours’ sleep in a 48- or 72-hour period. Something has to give,” he says. “I do believe that this situation is being recognized and I can see crew levels being adjusted for certain trades where this level of risk can no longer be accepted.”

While the Maritime Labour Convention does have many supporters, there will still be those who do not like its consequences and will try to continue business as usual. Back in the 1870s, when Samuel Plimsoll harangued the English Parliament for a load line to be painted on ships so they would no longer be loaded to the gunwales, many counter-arguments ran on the theme that new rules were unneeded – there already being enough regulation on shipping – and would change little, since good owners would continue their good practices and bad owners would find ways to continue theirs. While it may be argued that no regulation has ever been built so solidly that a sufficiently motivated person couldn’t sneak around it, proponents of the MLC believe it strong enough to exhaust the creativity of all but the most determined scofflaws.

One such element of strength is a unique provision in the MLC called ‘no more favorable treatment,’ which states that ships flying the flag of countries not ratifying the Convention will still be held accountable to its provisions when they enter the port of a signatory nation. “The ‘no more favorable treatment’ concept was designed to target the bottom tier of operators and make things more difficult for them,” says Bergeron. “I’m not going to say that the MLC will force suspect flags and operators to change their behavior completely but it will force them to make adjustments. The holes in the net are getting smaller.”
Seafarer Rights, Recruitment and Retention

Douglas Stevenson, Center for Seafarers’ Rights, Seamen’s Church Institute

There are impressive laws protecting seafarers – their rights to medical care, for example, are superior to those of modern land workers. Unfortunately, they do not always have access to these rights.

Seafarers have had a wide range of legal protections for centuries. Ancient maritime codes accorded seafarers’ numerous rights that are still with us today. Typically, these codes guaranteed that ships’ crews would be paid their wages and repatriated to their homes at the end of their voyage. They also required that ships’ crews be provided decent lodging and sustenance (by the standards of the day) – as in the medieval Barcelona Code, which required that seafarers be provided bread every evening, meat three times a week and wine twice a day. Many of the seafarers’ rights contained in the Maritime Labour Convention (2006), in fact, have their origins in the ancient maritime codes.

It is important to note that the ancient seafarers’ protections were not created by enlightened lawmakers for charitable or human-rights reasons. They were created by early maritime enterprises and early courts, in recognition that maritime commerce depended on protecting the people who moved the goods and that it was in everyone’s best interest that their rights were guaranteed. Those motivations are as relevant today as they were then.

Although seafarers’ conditions are generally good today, there are still plenty of issues to keep us busy at the Center for Seafarers’ Rights. Day-to-day, we deal with cases of seafarers who have been abandoned, who haven’t been paid their wages, who have been refused medical care, who haven’t been allowed shore leave. To some these are small social issues, but to the victims they are pretty big. It makes me proud that we take on these cases and defend these individuals who seem so easily forgotten.

Seafarers face particular perils, endure substantial physical hardships, put up with strict discipline and suffer lonesome separations. They have special lives and work and they need special laws to protect them. These special protections may cost maritime employers more than what land-based employers might pay but these costs are necessary for recruiting and retaining good people. Today’s globalized economy is critically dependent upon merchant shipping, and merchant shipping relies on skilled and responsible seafarers.

Looming seafarer shortages have prompted the International Maritime Organization to proclaim 2010 as the Year of the Seafarer, to pay tribute to seafarers for their unique contribution to society and to take “immediate and effective action to forestall a situation from developing in which ships are not manned with sufficient skilled personnel.”

Part of the seafarer shortage lies in the perception of seafarers’ problems. Statistically, the risk of getting nabbed by a pirate is pretty low, as is the actual risk of being unfairly accused of a crime; but the perception that you could be kidnapped, or that by going to sea you could be prosecuted for something that wouldn’t be a crime on shore, are factors deterring good people from going to sea. Another part of the problem lies in issues the industry is trying to address – like the paperwork burden, excessive hours of work and minimum manning.

So, I am under no illusions that if the industry simply protects seafarers’ rights, all its recruiting and retention problems will disappear; but the industry’s response to seafarers’ rights issues sends a very strong message, to mariners and to prospective mariners, about how it values its shipboard personnel.

Most shipping companies do a good job of taking care of their crews but the few bad guys are having a greatly disproportionate negative effect, tainting the whole industry with their brush. The problem that has let this happen is our failure as an industry and our failure, as the general public, to recognize the value and contributions seafarers make to our lives and to our businesses. If we did, we would treat them much differently and, thereby, attract more people to this vital line of work.
“To insure safety at sea, the best that science can devise and that naval organization can provide must be regarded only as an aid, and never as a substitute for good seamanship, self-reliance, and sense of ultimate responsibility which are the first requisites in a seaman…”

Admiral Chester W. Nimitz
1885-1966