

International Maritime Legislation and Model Courses

Jan HORCK

World Maritime University
Box 500, 217 74 Malmö, Sweden
jh@wmu.se

ABSTRACT

The IMO model-courses are provided to help professors, lecturers, teachers and instructors to educate and train a future useful product from the MET institutions around the world. There is additional knowledge to pass on to future officers of the watch (OOW's) than the minimum requirements according to lawmakers. The industry has its need, the students have their wishes, the Maritime Administration its goals, and the maritime education and training (MET) institutions their challenges. The viewpoints of industry and students should be carefully taken into consideration when writing the curricula.

The model courses are subject to technology adaptation and new course curricula are written to accommodate new laws. A lot of work is also being put into the efforts to make the courses pedagogically correct. The question is: are these courses really used in the way IMO has intended? Are there any additional subjects that perhaps should be focused upon to make STCW 95 successful? Do the MET institutions have the funds to purchase the hardware and the software needed to conduct these courses? Many other questions come to mind. This paper, of course, will not have the answer to these questions and other questions related to the subject but will merely highlight a few problems in need of attention. MET institutions should have the foresight, be proactive and take initiatives to find cost benefit solutions for the users of their services. With this attitude STCW will be more successful. Governments must give their support to MET if it is a national desire to have a viable and efficient shipping industry.

A survey of MET institutions worldwide reveals widespread recognition of the model courses. Is further marketing needed? Is the EU MET harmonization initiative, for example, enough to make Academic Deans kick up the dust off the files on the shelves?

1. Introduction

Voices have been raised on the effectiveness and validity of the ISM Code. Is this the instrument that the industry is looking forward to seeing as the "safety-bible" in shipping? If this is not so, then we should hurry to invent something else, because something is apparently needed. The enforcement and vigilance that comes with the Code has and will straighten up the industry in a way that a technically substandard ship, sloppy ship onboard management, unqualified ship management and un-skilful crew will have difficulties to operate and survive on the green seas.

The last item, not less important, is the root to everything that has to do with safety and environment – the human being. What could be wrong is the mentality and attitude of crew but indeed also of the owners. The owners have a major influence in making the Code work.

The owners' and shippers' attitudes to safety can improve the situation. But shippers and owners need a working-tool for their interest in safety. The tool is again the human being and in this case it is the crew; ratings and officers. Skill and knowledge, of course, do not come from heaven. Education, and good education is needed. Where can one find high education standards? Perhaps at *national* MET institutions. These awoke from their noon napping with STCW 95. The MET institutions are normally operated as government identities with a high possibility of excellent performance. Or is self-tuition better?

The governments have to have a pro-shipping attitude and issue a clear shipping policy that cannot be misunderstood, in order to be trustworthy with MET. Misunderstandings from the politicians have been legion in the past but, with the elimination of the sentence “to the satisfaction of the Maritime Administration”, a more harmonised approach might be achieved. If this does not work the chances are great that the industry itself will take over the MET.

How do the MET institutions manage to pass on knowledge to have the students maintain a realistic and up to date safety standard? Is it old experienced ex-seafarers or new fresh seafarers that have thrown their anchor ashore and taken up teaching or is it the industry itself that has to carry the burden of training their future officers and ratings. Sperry Marine has opened a UK training centre at New Maiden in Surrey. Recently *Lloyd's List* wrote that Sperry has completed 200 courses in the last five years. At the same time the director promised that “...we are not trying to replace nautical schools” (Mayer, 2002). More industry suppliers will start education with their own specialists. The reason for this being that the equipment is too complicated for a MET teacher to manage. Today teachers have to manage too many subjects and at the cost of not always being capable to conduct all subject equally well. Principals need to save money because governments do not give them enough funds to keep a highly qualified staff. It is uplifting to read that it is an ex Master Mariner who will conduct the Sperry course and that it is the syllabus in model course 1.27 (ECDIS) that will be followed. But why not conduct the course at the premises of a MET institution? Officers need such training before setting foot on deck.

Propeller manufacturers conduct similar courses. It is, of course, in the industries' interest that their equipment is handled professionally and maintained according to instructions. The industry sees too many examples where crew have tried to repair and clean equipment not using the tools made for the repairing/cleaning. The crew needs to understand the importance of reading and following instructions. It is often not that easy.

The answer to the question how MET institutions manage to pass on knowledge comes clear from articles in the press and from recent researches (e.g. the EU METHAR study). Knowledge is mainly transferred:

- 1) by non-professional educators often using outdated training equipment, etc...
- 2) by people having no real shipping expertise, no pedagogic training and not knowing how to manage students.

Of course, there are no rules without exemptions. One should not generalize but this is very close to the truth in most MET institutions worldwide. It has also been realized by IMO. This must be one good reason why the IMO model-courses have been written – primarily to help the MET institutions to pass on relevant knowledge to future OOW's using the best pedagogic material and the most updated information in teaching. The material in these courses encompasses the minimum knowledge required to understand and apply most recommended IMO resolutions.

2. IMO Model Courses

Effectively the model-courses are meant to suggest and help professors, lecturers and instructors in their teaching. Normally teachers are inherently individualists. The ego is often built upon a strong belief in themselves. The courses have been written to cover the minimum competences in STCW 95. Therefore an independent authoritarian senior lecturer would never accept to be told how to do it in the classroom. Preferably the courses therefore should continue to be a helping tool and never be made mandatory.

For a long time the IMO recommendations (resolutions, codes etc.) have been subject to *interpretation* by the Maritime Administration in the ratifying countries. The ISM Code and the Revised STCW 78 (STCW 95) are good examples on how, more and more, we perhaps will see that the regulators tell us how to do and what to do. Specified instructions will more often be given to the servants set to ratify the instruments because we (read the industry) apparently are not capable of self-regulation. For this reason perhaps the model courses one day will be part of the convention. The author would suggest that Part B in the STCW 95, now a guideline, one day could be made mandatory (Horck, 1998). This of course *if it is believed* that regulations are the cure to minimize accidents at sea. In the revised IMDG Code one can note there are a lot more shall's (mandatory) than should's (recommended) but still some may's (optional). Regulators are taking the command. Another observation is that consideration has been given to training requirements with new tables *recommending* the training needs for shore personnel. This new training approach launched with the IMDG Code should be promulgated to other instruments as well. The specification of training need should more be formulated in codes, conventions etc. It is necessary in order to ensure that all concerned benefit from best practice principles when exercising the rules. If the regulators continue to add an appreciated requirement for training in new instruments from IMO the organisation should be obliged to make sure there are courses that the educators can consult in order to facilitate the implementation of such instruments. This work could be delegated to IMO's World Maritime University that has, as part of its mission, the endeavour to pass on knowledge and experience related to IMO recommendations. Any IAMU member could contribute and facilitate for teachers at MET institutions the best practice to forward rules and regulations.

Part B, in STCW 95, is a “mini model course” to guide both teachers and practitioners. The industry needs this kind of harmonised guide just to assure that the endproduct from the MET institutions is of the same calibre wherever in the world the students have been educated. The industry dare not, anymore, take the chance to have ships detained because of the crew not knowing their job or not possessing the required skills.

Often the woeful state of the modern seafarer's behaviour at sea, too many times in year 2003, shows a fundamental lack of awareness. Though, knowing things are improving – but we are in 2003!!!! The art of navigation and cargo handling and shiphandling appear to have a second priority in the art of transportation at sea. Where is the concern and seamanship of past generations of mariners? Well, it is realised that crew philandering between ships is a non-caring behaviour that does not belong in quality shipping. The STCW 95 Convention and the ISM Code could be a factor to “force” owners not to allow such behaviour. Crew will have to be committed, feel the value for what they do and believe in what they do.

The consequence of the two instruments would be to refocus on basic training. Perhaps the educators should take a closer look at the model courses and realise that these courses could make them better performers in the classroom. To quote Woodman (2002, October 8): “Modern seafarers are not aware of their lack of basic training”. In 2003, can it be worse? No wonder the industry has a bad reputation.

The model courses are also used for self-studies. Crew that need to update their knowledge or prepare for mandatory courses and knowledge have a good help from the model courses in warming up their studies.

2.1 The use of IMO model courses

No surveys tell us how the courses are used and how much they have an impact on the teaching. A little survey was done the summer/autumn 2002 to establish if the institutions have the courses and if the courses are used, and what two courses could be considered most “popular”. Apparently the courses are available in most institutions. The usage of courses varies. Some say that the courses are followed strictly and others say the courses are only an assisting tool. 13% of the sample¹ clearly declares that they do not follow the model courses. With percentage of all answers the three most “popular” courses are:

1.20	Fire prevention and fire fighting	36%
7.01	Master and Chief Mate	29%
7.03	Officer in charge of a Navigational Watch	21%

To conduct model courses proper simulation and laboratory equipment etc is needed. Where can the MET institutions get the necessary funds to professionally run such courses? Answer: by being proactive and marketing mandatory courses to be conducted at the MET institutions. Owners will send their crew for training and the surplus of the course fee could be used to purchase teaching equipment.

To have the courses more used the model courses must be subject to constant update. If not there is an underlying risk when there is a total reliance on the courses. Today there is no *systematic* update of the courses. An exemption is the recently introduced course on the IMDG Code. If a promise could be given to update the courses every 2nd year perhaps the courses would be used more frequently. The IMDG Code will be subject to revision every 2nd year. At the end of 2002 it became known that IMO has asked IACS to update six IMO model

1- Sample size: 14 MET institutions worldwide

courses. Because of new measures the old courses have become out of date. It includes a “comprehensive review of almost 4000 pages of text, slides, illustrations and diagrams” (Grey, 2002).

The courses could be a method to harmonisation of education worldwide. Still, there must be room for a high degree of flexibility on how the subjects are passed on to the students. This issue should be 100% in the hands of professional educators and not, as in some cases, the National Maritime Administration.

Though it is sad to note that a number of Maritime Administrations have taken the view that the courses they approve must follow the IMO model courses. According to Lewarn (2002), the Norwegian Maritime Administration refused to recognize Australian GMDSS certificates because “the course was not long enough and was not aligned with the IMO model course”. The real issue must be competence and not course length.

The harmonisation of maritime education worldwide is important. An observation of articles in *Lloyd's List* regarding the implementation work in the Philippines to meet STCW standards shows that seminars were prioritised on the following two model courses (Almazan, 2002, March 6):

- 3.12 Assessment, examination and certification of seafarers
- 6.09 Training course for instructors

and logically seminars on the implementation of a standard management quality assurance system.

The harmonisation of education is important but the assessment is even more important. IMO has issued a model course for both, and that is model course 3.12. If the MET institutions study and follow this course perhaps there would be a more uniform and fairer way to assure owners that the seafarers available for a specific work position are properly qualified.

The IMO model courses are conceptually a good idea provided they are seen as a *guide* for teachers in order to build up and develop appropriate teaching and learning experiences.

To quote the aim as formulated in one of the courses:

“.... It should provide a useful introduction for those with limited teaching experience. For those who have been teaching for some time, the course may introduce some new approaches or serve as a reminder of techniques that have been forgotten”.

IMO, Model course 6.09

Why do we really need the model courses? We shall repeat: To assist the teachers in producing better cargohandlers, shipshandlers, surveyors, engineers etc. etc.; all in the good name of secure and safe shipping and clean oceans.

But more knowledge does not solve the problems if *fatigue* is explained as the reason for the high frequency of errors and accidents in the industry. Human error has another factor that perhaps

plays an even bigger role in explaining and being the reason for incidents and accidents; *the lack of proper communication* and *the lack of cultural awareness*.

It is a pity that the updated issues of some courses have been shortened. The *compendium* has been withdrawn. It provided a very useful part of the substantive input to the course. The exercises created an excellent support to the teacher.

3. Additional Model Courses to Effectively Shape ISM and STCW

A main goal for all teaching is to change a student's attitude. So it should also be in MET and apparently it is very urgent. The IMO model courses might be the practical solution for a more salubrious attitude.

Accidents reveal and studies show that the industry is not tackling complex work-situations correctly. Hansen (2002) states that model courses could stop the negative trend and should therefore also be written and formulated on:

- 1) How to *collaborate*, cooperate both onboard and ashore
- 2) How to find *expertise* and ask the right questions
- 3) Changing mentality to be more *helpful* and realize the benefits of assisting colleagues
- 4) Learning how to work together in *teamwork* efforts

The culture of collaboration is fundamental in industrial management today. It has repeatedly been the theme in IMO World Maritime Day speeches. What has been done to promote cooperation since the Secretary General of IMO last had a speech on this subject?

Collaboration comprise *communication*. Do we know how to communicate? Can we make ourselves understood? A major factor to make the new safety culture effective is to foster open communication at all levels. Let me therefore deviate from the major subject of this paper and try to emphasise this previously neglected and now enhanced phenomenon.

There are many activities that have to be covered by legislation, but there are also many activities in one's work that is not covered by the legislators. If it is considered important that the legislators tell us what and how to do then it is high time that they also guide us on how to communicate and work in a multicultural environment. There are strong reasons for this issue to be thoroughly looked into.

3.1 Communication and Cultural Awareness

It has evidently become important to be able to communicate and be quickly understood both ashore and onboard. It becomes even more important in emergency situations (crisis and crowd management). One should not forget the multicultural and multilingual presence in the boardrooms of shipping companies and in the lecture halls of MET institutions. The language challenge and the cultural challenge suddenly have become hot issues in different maritime scenarios. This problem should be a challenge to all of us. Within a year, a few studies have

been presented on mixed crewing with its advantages and disadvantages. Findings are mixed up.

The Seafarers' International Research Centre (SIRC) released, last year, a report "Transnational Seafarer Communities". The researchers have testimonies that there are only benefits with mixed crew (Kahveci, 2001). A team with a Swedish ethnologist has made a voyage on a Wallenius PCC and has reported on life onboard with a mixed crew (du Rietz, 2001). Generally they encountered doubts with a mixed crew. The Philippine National Polytechnic (Fairplay, 2002, June 6) has published a report "Mixed National Crews: The Filipino Seafarers' Experience". This report lists a few problems like: language, communication, work cultures, behaviour, racial stereotyping etc. Horck (2001) has made a study on how the students at WMU can formulate a consensus decision. It appears not to be friction free. In summary, evidently there are different opinions on the effectiveness of exotic crewing and the cooperation between people of different backgrounds, language and culture.

Lloyd's List reports that the new demands are required to ensure seafarers on foreign ships coming to US waters have to be more proficient in the English language. Demands have been put to Congress. The problem is getting worse. It also says that the emergence of mixed nationality bridge crews has added a new dimension to this problem (Glass, 1997). A language barrier has become a safety risk. Perhaps one should go back to procedures as in the 60's when the pilots in the Panama Canal brought with them their own helmsmen so as not to risk any gaps in the order line. The same was the situation in the Kiel Canal where the German pilots had a native speaking German as helmsman.

Sydsvenska Dagbladet reported after the first fire accident in the tunnel between Sweden and Denmark that the direct contact between the rescue teams and the communication on radio should be avoided (Sundberg, 2002). It shows how difficult it is also for two neighbouring countries to understand each other. In this case, it was considered better if all possible procedures and events could be written and thought about in advance (using checklists) in order to minimise misunderstandings in the wake of direct communication and.

Sydsvenska Dagbladet (2002, 26 May) also reports that a ship went aground in the Sound because the Danish pilots gave draught information to a ship's Captain believing he was heading for the Great Belt. The Captain was actually heading for the Sound and therefore went aground just before the bridge. The above situations are typical examples of lack of communication.

Horck (2002) wrote the following, further to underline the need to act, on this issue:

One could ask oneself if the above really is a problem or if it is a self-made problem to find reasons and excuses for accidents and incidents at sea. Has the discussion become a cover-up for technology and other aids introduced onboard ship - aids that have made the work situation on the bridge and in control rooms almost impossible to grasp for "normal" human beings. To change the already far-gone introduction of high technology innovations in shipping is probably more controversial and expensive than to blame the human being that is working in an ever-inhuman environment. Perhaps it would be wiser to attack the hardware (machines) instead of the software (human brain) in order to remedy the reason for accidents where the so-called human factor is to be blamed. Perhaps the explanation for many accidents at sea is to be found in the pure lack of communication and lack of understanding behaviourism. If this is so, then of course we must put an emphasis on this in MET. A

better/new program should be introduced on: understanding people, modern leadership, English language and cultural differences.

A future problem is scarcity of nationals going to sea and this creates a possible negative impact of having to recruit foreigners to work in the head office of shipping companies. If it is realised that non-nationals occupy decision-making positions in a company, these decisions have to be taken in a multicultural environment. The challenge is already a fact with the increasing number of shipping alliances. Certain pooling constellations had to be broken because of the adverse impact of not being able to come to quick decisions and the psychological fact that many people have problems in accepting company protocols. Misunderstandings could be a serious risk in achieving a quality operation/management. This plays a vital role in achieving what is defined as quality shipping. We cannot have quality shipping without a quality crew that is able to work together and communicate without hindrance. In the past the alternatives for such shipping companies have been either to close their sheer shipping activities or, if financially strong, purchase (take-over) the other shipping company and keep the hegemony by building a new corporate culture. Pooling requires cultural compatibility between the members. An example of a broken pooling arrangement is the famous take-over that the Danish container giant Maersk Line did when buying another giant Sealand.

Intercultural education is a relatively new field. Education is needed both in order to understand how people react in a group in general and how it is done in multicultural and multilingual group-settings. Future officers at sea should be given time in the curricula to discuss these phenomena. In addition they should be trained to be aware of their own stress reactions and the handling of these to manage decisions in a group and to make better group decisions. To know the theories in group-decision-making under stress should be included in the education of all decision makers.

Misunderstandings are a great threat to safety in the shipping industry. This is a hazard that today should be considered with greater efforts. Too many seafarers do not master the English language. Accidents have happened, in proportional consequences, because of language difficulties. More emphasis should be put on pronunciation in the English language courses. Exercises on how to be distinct in pronunciation are evidently needed. Sadly, there are no statistics where we can see if an accident is really caused by cultural behaviour and/or lack of communication. It is not backwards to say that merchant mariners in general should take lessons from the navy on how to behave on the bridge. A clear order/repeat policy perhaps has got lost on the modern merchant bridge with the introduction of high tech instruments. The vocabulary has now been adopted with IMO's SMCP². We still need verbal communication. Both IMO and ILO are shifting the emphasis onto people. Therefore communication should be underlined as well. Breaking cultural barriers in giving respect, realising the benefits and teamwork in mixed groups would give flexibility, pleasure and profit.

Some institutions have already realized the need to educate people working in a multicultural and multilingual mixture. In Financial Times Matthews (2002) wrote on "MBA for Europe's managers" where it is reported that three European Universities have made joint efforts on crossculturalisation and are convinced that MBA-graduates need an advanced understanding of European business contexts, language skills and practical international experience. The future business leaders must understand Europe, both culturally and commercially, and must also be able to realise the needs of such knowledge. MET institutions should also aim at this. Many seafarers later might join the office of a shipping company and be involved in the business on a more academic and intercultural level than they have been during port visits and onboard. The industry needs cosmopolitan managers who can both negotiate and manage people from different cultures. Crosscultural understanding is needed to avoid getting stereotypes. The stereotypes that we see in others are usually wrong and are highly dangerous to good communication. To get this perception proper education is needed.

The Ecole Nationales de la Marine Marchande (ENMM) in Marseilles has taken a new, innovative approach to maritime training. New programmes to accommodate the industry and the legislators have been introduced. In addition, the doors are now open for foreign students also. They have

2 - SMCP: Standard Marine Communication Phrases, adopted in 2001

considered it high time to enhance its specialisations in terms of maritime training at an international level. If they have not thought about it then it is high time also to give professors, lecturers and instructors a few lectures in cultural awareness.

The Telegraph (2002, June) reported that the UK Department of Trade and Industry (DTI) is encouraging the dissemination of a partnership culture throughout the shipping industry. The idea is to move "...away from traditional confrontational relationships to a new way of working together".

Key features in the ISM Code are: reporting and communication. Shipping companies' civil servants, with no seagoing background, might not understand the seafarers. Seafarers don't understand each other and civil servants don't understand each other because of a dim cultural curtain that separates them. There is a gap not only because of the bad English but also in the meaning of what is said. Because of cultural differences and lack of cultural awareness misunderstandings appear. An objective of the Code is that an assurance of communication should be achieved and thereby misunderstandings reduced. The cure of further misunderstandings is education in cultural awareness.

The model courses that take up this subject, to some extent, are: 1.21 (Personal safety and social responsibilities), 1.22 (Ship simulator and bridge teamwork), 1.29 (Proficiency in passenger safety, cargo safety, hull integrity, crisis management and human behaviour training on passenger and ro/ro passenger ships) and 5.04 (Human resource management).

The model courses contain a proposal of lecture hours in relevant subjects (see **Table 1**):

Table 1: Lecture hours

Model course	Subject	Hours
1.21	Human relationships	2.00
1.21	Understand orders and be understood in relation to shipboard duties	3.00
1.29	Human behaviour and responses	1.00
1.29	Establish and maintain effective communication	0.75

Because of an earlier hierarchical leadership system, these issues were not much emphasised in the past. Therefore a separate model course should be written on cultural awareness and communication skills. The globalisation of the industry will demand this knowledge to be acknowledged by shore and sea staff.

3.2 Ports

Other areas covered by IMO are the ports, port approaches and anchorages. There is no model course on how one should perform in such areas. Seafarers, with good seamanship in the blood, know but lecturers with very little experience or no experience at all certainly need guidance. STCW should perhaps require MET lecturers to have certain sea time to keep their licence also as teachers. This approach to have up to date seafarers as lecturers requires the industry to be cooperative. And why should they not be because they are the users of the

endproduct of the MET institutions. It is in their interest to see and take part in what is happening behind the walls of the premises of education and training.

Most accidents happen in ports or in the vicinity of ports. The P&I Clubs pay enormous amounts to cover for accidents in ports. There are no model courses on port issues. There was one course on port logistics (5.04) but that was withdrawn from the list because it was not really an IMO issue. But certainly there are activities within a port's premises that are connected with IMO.

3.3 Inspections

INTERTANKO wants to have an IMO model course for the training of port state control inspectors. It is understandable because there is a wide range of disharmony in the executions of PSC inspections. The industry wishes to have a harmonised approach (read standardisation) in the vigilance of rules. With harmonisation comes less subjective interpretation that perhaps is based on misconception of the situation.

Flag state inspections are covered with a range of courses:

- 3.02 Small craft
- 3.03 Machinery installations
- 3.04 Electrical Installations
- 3.05 Fire appliances and provisions
- 3.06 Life saving appliances and arrangements
- 3.08 Navigational aids and equipment

National surveyors normally learn their job the hard way i.e. follow a more experienced surveyor in his work. IMO should develop model courses for post operational levels to a higher degree. Without proper "policing" of mandatory rules and regulations there is no reason in having such regulatory framework. The "police" in this argument should be the surveyors (flagstate and portstate). To learn the hard way is apparently not cost effective. Some model courses (about 32%) cover surveyor's work and the rest are related to general education i.e. the STCW. Courses should be developed on how to, for example, check ships stability drawings and many other how to do activities being a surveyor's responsibility. Here there is a wide gap between what the legislators have produced and what IMO has produced in the form of model courses.

4. Conclusion

Poverty is certainly the reason for accidents that we have in the industry! One could even extend it to say that it does not matter how much we train as long as we do not give respect and the necessary attention to maritime safety also on a national level. This is then a serious matter for the politicians. It is a matter of assigning the necessary funds to MET and others involved in shipping. Assigning funds to develop model courses would be a nice international contribution to safety. Media have a low profile in reporting and discussing the IMO model courses. Not

much is written about them. What is not talked about, be it good or bad, usually is of no interest. Perhaps it is coming. The Netherlands has submitted a paper to IMO and it can be found in MSC 75/INF.12 "Role of the Human Element". In this document there are a number of points for thought. The paragraph indicated "k" calls for action on the need to examine communication strategies. To this one should add cultural awareness.

Mediation is becoming more and more the way to solve disputes. Mediation is built upon conversations and therefore it is also important that people understand each other from a cultural viewpoint. The same comes at hand during negotiations between business partners and similar situations.

As long as the industry has the world as a manning market for transporting goods over the seas then a higher level of educational harmonisation is needed. The owners must have an assurance that the endproduct from the MET institutions have the knowledge and skill to stand a port state control. The model courses are a step towards harmonisation. If this cannot be achieved then the maritime industry should follow the example of the air industry where the OOW's in most cases are nationals of the airline.

We repair systems instead of changing peoples' attitudes. Courses are needed in cultural awareness and good communication. Attending courses must be seen as more cost effective than many technical gadgets.

REFERENCES

- 1- Almazan, A. (2002, March 6). Philippines in new pledge on white list: Estrada vow to manning sector. *Lloyd's List*.
- 2- du Rietz, P. & Ljunggren, M. (2001). *Isolde av Singapore*. Stockholm: Sjöhistoriska museet
- 3- Fairplay. (2002, June 6). Mixed crewing OK, says study. *Fairplay*, 345 (6177), 30.
- 4- Glass, J. (1997, May 17). Congress hears safety warning over foreign-flag language deficiencies: Language difficulties in communications with foreign-flag vessels are reported to have been causing major problem for US authority. *Lloyd's List*.
- 5- Grey, M. & Stares, J. (2002, December 19). IACS to update courses for training institutes. *Lloyd's List*.
- 6- Hand, M. (2002, October 3). Probe blames safety failure for Heng San explosion. *Lloyd's List*.
- 7- Hansen, M. (2002, August 8). Turning the lone star into a real team player. *Lloyd's List*.
- 8- Horck, J. (1998). STCW 95: Part B: uniform application & compliance? *BIMCO Bulletin*, 93, 4, 25-32.
- 9- Horck, J. (2001). *Group-decision-making in a multicultural and multilingual context. Application: Shipping industry*. Malmö: Malmö University, School of teacher education.
- 10- Horck, J. (2002,). *Aspects of decision making in a multicultural shipping environment*. Paper presented at the 3rd General Assembly of The International Association of Maritime Universities. Rockport, Maine, USA.
- 11- Kaveci, E., Lane, T. & Sampson, H. (2001). *Transnational Seafarer Communities*. Cardiff: Cardiff University, Seafarers International Research Centre.
- 12- Lewarn, B. (2002, September). *Safe training – Does the system defeat competence*. Paper presented at the 3rd General Assembly of The International Association of Maritime Universities. Rockport, Maine, USA.
- 13- Matthews, V. (2002, March 29). MBA for Europe's managers. *Financial Times*.
- 14- Mayer, C. (2002, April 10). Sperry opens UK training centre. *Lloyd's List*.
- 15- Sundberg, U. (2002, March 11). Sjabbel vid tillbud i Sundstunneln. *Sydsvenska Dagbladet*.

- 16- Sydsvenska Dagbladet. (2002, May 26). Språkmiss bakom grundstötning. *Sydsvenska Dagbladet*.
- 17- Telegraph (2002, June). Government award for partnership project. *Numast Newsletter*.
- 18- Woodman, R. (2002, October 8). Modern seafarers are not aware of their lack of basic training. *Lloyd's List*. ©2003 Jan Horck