Certain Aspects of Ship Safety

During this presentation I will put forward to you certain points, which have occupied my mind and this of my colleagues and have been the subject of various discussions, in the area of Marine Safety.
Three subjects have been chosen for this presentation, each different from the other, but with the common relation of the Safety issue, so much highlighted these days, just to show the variety of fields in which a Consultant may find himself involved.

I.S.M. Code and the Human Factor

It is believed this Code is a very good tool, which should improve the shipping safety standards.
According to a published breakdown the development of its activities are split in ten items:

a. Documenting present activities
b. Identifying necessary documentation.
c. Educating personnel in the requirements of the system operation.
d. Drafting agreed procedures.
e. Formally issuing the documentation and encouraging constructive feedback from all the staff and crew.
f. Amending the document in line with comments received.
g. Amending the document in line with comments received.
h. .Implementing the system.
i. .Commencing internal audits.
j. Operating the system and the building up of records of its effective functioning.
k. Verifying readiness for third party assessment.

The above list shows that the system is based in a bureaucratic procedure and to a will to maintain it running.
Thus it is feared that, through time, it may lose its real purpose and goal, which is the improvement of the safety standards on board.
Ship and office documentation might be organised in an excellent way but real life work may result differently.

This reservation originates from experience where the undersigned has seen, for example, from classification record files, too many reports and documents, describing a ship's condition, repairs, and reports and documents, describing a ship's condition, repairs and maintenance standards, and in reality, when the ship was surveyed, she was found to differ appreciably from her described condition.
Another example is, when on board, on a Pre-Purchase Condition Survey, one sees, for example, the Chief Engineer's records to be excellent, a crew which is dressed with all its rank's insignia and formal disciplinary behaviour, but the ship's condition had, again, a lot to be desired.

These two simple examples lead to the conclusion that the human factor must embrace the idea of improved safety and environment protection. It is necessary that education, not only in the scholarly sense, but in its broad one and, in general, ethics be improved. The sensitivity on the subject of both ship operators and the seafarers must be aroused.

A lot is seen regarding stricter surveys by Classification Societies, Port Control, Underwriters, Charterers etc etc and still ship's safety has not been improved.
It is submitted that the reason is that the general human standards have not improved.

The above very broad subject is of course at present being studied by various competent bodies and, within the European Union, it is the subject of various research projects. Although the relevant policy wills should have been expressed and placed into practice by, at least, the European Countries, the practical results are being at present greatly delayed.

It is further felt that the implementation of the above wills should be the responsibility of the Governments, so that a total and broad view of the subject, be maintained.
State operated activities have their shortcomings, there is no doubt about it, but also the continuing delegation of responsibilities to private organisations, may result to their greater power control on the shipping activities and loss of the general overview of the issues involved and these are functions which, you will agree, are not desired.

Closing the subject and for the sake of history, which very few may remember in this city, over twenty years ago, sending the need of reducing ship accidents, our respected Ministry of Mercantile Marine formed a working group, which, after very serious work, presented recommendations for the improvement of on board safety, putting great emphasis in the need for new procedures to be followed both on board and in the offices, in the private sector as well as in the Ministry's organisation and on the human factor's upgrading through education, better living conditions etc etc.

It is a pity that such a good work, the forerunner of, between others, the I.S.M. Code and of what is being discussed in such an extent to-day, was forgotten in the drawers of bureaucracy.

Passenger ro - ro safety in Greece

There is a lot of discussion to-day regarding the ro-ro safety originating from problems which are characteristic in countries and seas which do not involve our area.
There is no doubt that the new rules formulated by I.M.O. will enhance those ships' survivability standards.
However, coming to practical problems, which pester our Ro-Ro fleet, one wonders why simple steps of improvement are not being taken by all concerned, which would improve not only its standards but would also ameliorate its image to third parties.
Because, as the saying goes, it is not sufficient that the wife of Ceaser is honest but she must appear to be one as well.
I do not intend to go into the details of the practical problems, which exist. I may only make reference to a round table conference, which was organised about sic years ago, by the Hellenic Institute of Marine Technology and to which a number of experts took part and the results of which were met with acceptance by the Representatives of the State and the respective Shipping and Industrial Community.

Certain indicative examples are given herebelow:

- The problem of prompt access to the lifeboats still exists, due to locked doors or divisions on the boat deck. One is fully aware of the problems which second hand ships face when they are required to be divided into first and second class passenger areas, but, however, the issue of safety should go before any other consideration.
- Old safety labels and other instructions to passengers and crew remain still displayed in languages, which a minority can only read (say danish or japanese) and confuse the clear reading of up-dated signs and notices.
- Vehicles are parked in the car deck in front and close to emergency control stations, fire stations and alarms, so that, in case of an emergency, those points will certainly become, in view of their inaccessibility, completely useless.
- Sprinkler head, although positioned as per specifications, practically may remain ineffective, at least a number of them, due to deakhead obstructions (as deep webs) or due to the height of certain lorries, which leave too small distance between the top of their cargo and the deckhead.

- Refrigerated cargo lorries keep their engines running while the car space forced ventilation is stopped.

The above very few but indicative examples show that a lot must be done and that, mainly the operators and the seagoing personnel, must develop a sense of responsibility, which appears, at times to be lacking.

With reference to the subject of the first chapter of this presentation the undersigned wonders, if the I.S.M. Code, on points as the examples raised here above, will improve the situation.

However not to be one sided only and place the blame only to our courtyard I may state that, last month, being in Denmark and Sweden, I noted that at least certain ferries, still leave their berthing dock with their car embarkation doors wide open.

Concluding it may be noted, that although the present issue is the passenger ro-ros, however the cargo account for most of the total losses amongst ro-ro ships, with collision being the main cause; this is in spite of the fact that ro-ro cargo ships account for only a third of all ro-ros. The serious casualty incidence for ro-ro cargo ships is significantly higher than for other ships types, being about double the value for tankers and ro-ro passenger ferries.

Marine Casualties Investigation

Marine casualties unfortunately do occur.
To improve the situation requires the best possible knowledge of the particulars of the casualty, the conditions under which it took place, the equipment which possibly failed, the involvement of the human element, the losses suffered, the damage which was inflict to the environment, the means and method applied to provide assistance etc etc.

It is well known that adequate information on casualties is often not available or, whenever available, it cannot always be considered as accurate or complete. This is due to various limitations of national and international departments, which are assigned to do this job.

In addition varying standards of recording and non uniformity of terminology confuse the presentation of casualty reports, when and if these become available.

A to-day studies are being made on the development of a Mediterranean Regional Traffic Management and Information System, the necessity of collecting and recording information on the casualties incurring in the area in question, is of paramount importance.

In view of the above the application of certain standards on the collection of information and data, the method of inquiry, the reporting format, the use of common terminology etc are necessary.

First it must be determined what is a casualty, its type and magnitude.
The various Organisations and Authorities use different definitions, which may sometimes lead to a confusion, instead of common understanding.

When a casualty occurs the following are usually the parties which may be involved or they may require and collect information and/or subsequently make available such information:
(a) Search and Rescue Authorities.
(b) Port and Government Authorities.
(c) Underwriters.
(d) P + I Clubs.
(e) Classification Societies.
(f) Cargo operators. and of course
(g) Owners.

Leaving for the moment (a) and (b) out, the remaining parties may be viewed with varied reluctancy as to the quality of the information they may retain and/or may make available. In fact their information may not be available at all or it may be subject to commercial considerations.

Regarding (a) & (b), these parties should, in theory, be free of the misgivings of the other parties quoted. Unfortunately this does not appear to be the case either.

Government Authorities are subject to national legislation, to political issues and national prestige and thus, from country to country, the procedures followed and the quality of information available varies tremendously, not to say that such information may even not be disclosed at all.

It is interesting to note that foreign ships sailing within a S.A.R. area of another state may avoid, in many cases, to report their casualty, even in conditions of distress. Thus quite a number of accidents remain totally unreported, with the exception of course of the cases where such reporting is mandatory.

The proper casualty data, which may be accumulated over the years, may be very useful for various purposes, such as:

- to determine the level of performance of the ship's crew and through this to deduce possible ameliorations in education and training.
- to establish if conditions and procedures on board need to be changed.
- to implement maintenance procedures of hull, machinery and equipment.
- to improve design characteristics of ships and their equipment.
- to ameliorate land lights and signals, marking of coastlines, underwater obstructions etc.
- to monitor the traffic of the ships' movements in areas which present a high casualty rate.

Remaining at this latter point, the importance of correct casualty data cannot but be stressed sufficiently. Furthermore, the standardisation of terms and certain minimum procedures and information to be includes in a casualty report should also be emphasised.

The unification of casualty reporting will greatly facilitate concerted action between Government Authorities and other Organisations involved.

Having discussed the above, I wish to formulate the following proposals regarding casualty data gathering procedures, which could be applicable to all in general.
(a) Casualties should be reported by all ships to Official Authorities of either the flag or coastal state. For specific areas, like coastal areas or enclosed seas ad passages, the reporting should be made mandatory towards the coastal state.
(b) The terminology to be used for determining the type and magnitude of casualties should be agreed upon and made uniform as far as possible.
(c) The method of inquiry should cover at least certain predetermined targets; the use of expert surveyors will thus be required. Of course for complicated cases special considerations will apply.
(d) The method of summary reporting should contain at least certain minimum information, expressed in internationally agreed terms and format. These reports should be made available in public and they should appear within a specified maximum period of time after the occurance of the related accident, even if only with preliminary information.
(e) Nearly-missed accidents should also be reported as per paragraph (a).

The implications of such a proposal are fully realised by the undersigned specially regarding items (c), (d) & (e) above. However it is believed that an effort must be made towards the direction proposed and a satisfactory solution agreed by all those concerned, as described in the beginning of this paper.