ANALYSIS OF MAJOR CLAIMS

BY

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"Where does the money go?"
Progress in Loss Prevention

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In 1950 it cost US$8 to ship one ton of coal from the USA to Japan. Forty two years later (1992) it cost US$9 - just one dollar more. When one compares this with shore based industries, for instance the car industry, we see a somewhat different picture. In the UK in 1950 a small Ford car cost about £300. Forty two years later a similar car could be had for £6,000 - a twenty fold increase. An even greater increase can be found in the hotel industry where 42 years ago a room in the Savoy Hotel in London cost £4 per night - yet in 1992 £189 - forty seven times more.

While in the shipping industry some of this cost efficiency can be attributed to economies of scale i.e. the introduction of larger ships in the early seventies, it is clear that the contribution shipowners have made to the world's economy over the last 40 years is not inconsiderable - a fact unfortunately not often publicised.

One final comparison: I understand that the daily rate of hire of Claudia Schiffer is about US$ 10,000 a day. It is a bit disconcerting to find that today you can hire a Handysize bulk carrier for less!

Where is this leading? Today's shipowner, whilst supremely efficient in terms of his costs, is not well rewarded. At the same time shipowners are under closer and closer scrutiny over the quality of their operations and employment and environment issues in particular. However, after a casualty the world's media - and often the affected government as well - will treat the shipowner as if he is guilty of a crime and seek to levy the harshest penalties on him - and imprison his servants even where it is clear that they have been guilty of no more than a serious error of judgement.

To those in the P&I industry, greater and greater claimant expectations can be added to the the problems of unavoidable publicity. Well publicised damages payments, particularly in the United States, tend to fuel claimants' ambitions the world over. This is certainly one reason why over the last few years P&I claims have risen to a point at which the industry is now paying over US$2 billion a year to third party claimants

I am honoured to be talking to you today about the UK Club's Major Claims Analysis, which is our attempt to organise a large amount of data in a way which can be readily assimilated so that lessons from it can be learnt.

This talk will be in three sections. First, I will outline the background of our analysis, then bring you up to date with some of the findings. Finally I will tell you some of the lessons we are learning from it and the action we have taken.

(1) Background of the Analysis

The UK Club insures about 20% of the worlds blue water fleet. We also see a similar proportion of the claims and currently handle about 20,000 claims a year on behalf of our Members. The Major Claims Analysis was begun in 1987 - a year in which claims began to rise significantly. The statistics have continued to be taken ever year since then and we have published three sets of analysis of those statistics - the last one in 1993. A fresh analysis, drawing on a full 10 years of statistics, is currently being prepared and will be published this autumn. However for the purposes of our talk today, what I am giving is largely an update of the Major Claims Analysis published in 1993.

The analysis is based only on claims of over US$100,000. At the time these figures were taken these claims totalled nearly 3,000 in number and US$1.351 million in value. As table 1 will show these claims account for only 2% of our claims by number, but a massive 72% by value. Clearly, only a small reduction in the number of these claims would have a significant effect on the Club's outgoing's.

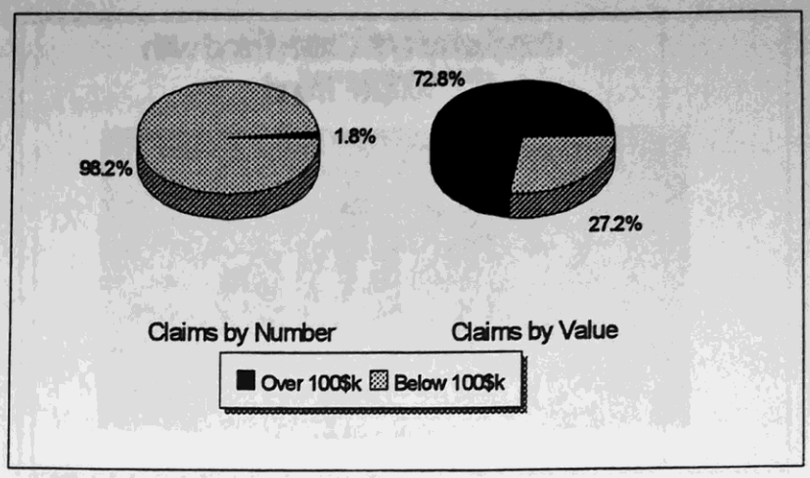

Table 1

The database of facts which we now have available allows our Members to compare their own performance against a Club norm. It also highlights exactly where the Club funds are going so that our Loss Prevention initiatives, whether undertaken by the Club or practices by the owners, can be focused and made more cost effective.

(2) Findings of the Analysis

If we look at all our large claims over the period (Table 2) you can see how our claims peaked in 1990, the year now known as the worst in P&I history. Whilst the trend appears to be falling after 1990, don't forget we are in a "long tail business" and the more recent years are not well developed.

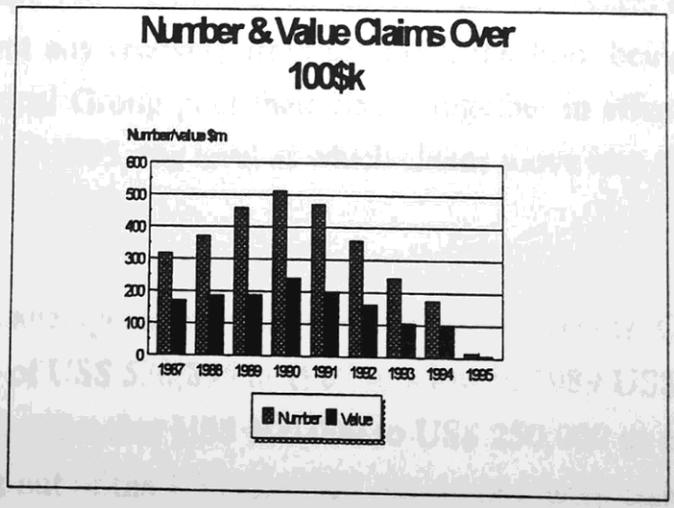

Table 2

However, if we compare the large claim trend with that of all claims above and below US$ 100,000 (Table 3) it does seem as if in recent years the large claims might proportionately be decreasing in number or at least not increasing as dramatically as they were in 1989.

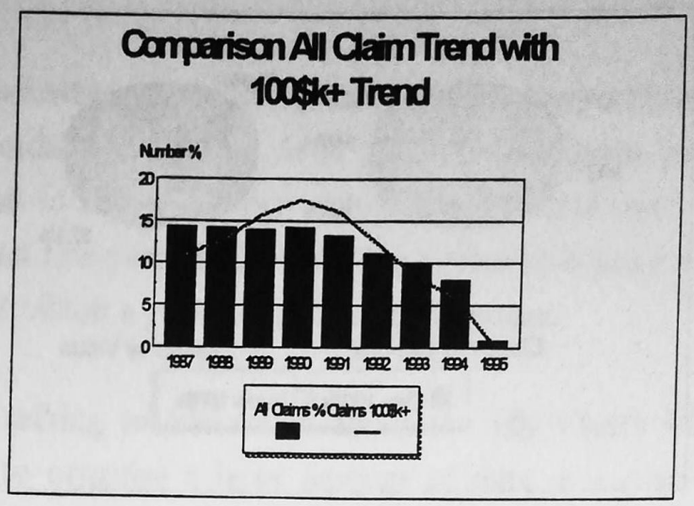

Table 3

The system we have devised for analysing our claims is quite flexible, allowing us to analyse them in many different ways i.e. by age, size, flag or type of ship etc. Today I would like to concentrate more on our types of claim. In Table 4 you will see the main types of claim which give rise for most concern. Cargo claims dominate, as one would expect, not really surprising bearing in mind this is the shipowner's reason for business. What is surprising however is the predominance of Personal Injury claims both in number and value. We hear a lot about pollution and its cost, however look how Personal Injury claims far exceed, in value, pollution claims. When you have a pollution it is usually financially serious as you can see by the average value, but in total, Personal Injury claims have cost the Association some 123$m more over the last 8 years.

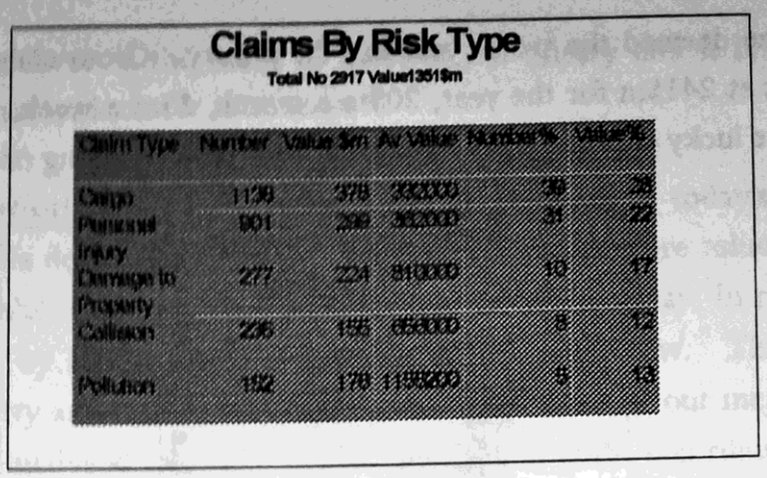

Table 4

Whilst cargo and Personal Injury dominate by number, it would be unwise not to mention Property damage claims. The high average value of these claims US$ 809,690 is ignored at the shipowner's peril, especially where dealing with State owned ports and/or property and where perhaps the legal systems are not as independent as one would hope.

Collisions? Care should be taken here - don't forget that traditionally the Clubs only cover their Member for one fourth of the collision liabilities. The value here is a mixture of full liability and liability where three fourths has been paid by the owners' hull underwriter. The values quoted therefore do not necessarily reflect the true value of collision liabilities which will undoubtedly be a lot higher.

In all of the figures displayed you need to remember that the values quoted are gross values not taking into account any recovery from the Pool, the Pool being the system where all Clubs in the International Group pool their claims together in effectively a Club of Clubs. As from the 20 February 1995, the level at which claims move into the pooling arrangement of the Group was 5$m per claim.

What sort of figure on average does the association pay per claim? Over the 8 year period it has varied from a high of US$ 536,895 in 1987 to a low in 1989 US$ 411,949. Most of our claims however fall into a bracket US$ 100,000 to US$ 250,000 as can be seen in Table 5. You will also note that out of the 1,351$m paid out on our large claims, 549$m (40%) went on a small number of claims over 1.6$m (the old pool level in the late 80's). Usually these are the unpredictable claims, the ones that can happen to anyone, in fact the claims which P&I is all about. Those claims the shipowner cannot budget for, the once in a lifetime claim where a shipowner needs to feel the mutual strength of his Club behind him. Whilst on the subject of money it might be worth bringing to your attention that as earlier mentioned,

1990 has been deemed the worst year in P&I history. Gross claims figures for that year were running at 241$m for the year, 20$m a month, 5$m a week, 1$m for every working day (if you are lucky enough in the marine industry to be working only a 5 day week.)

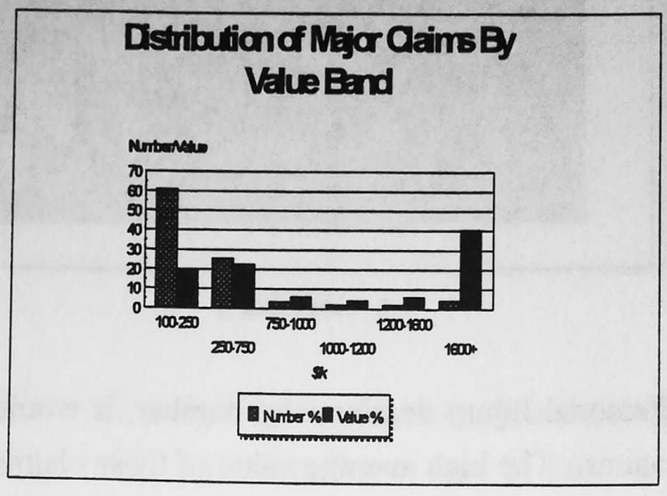

Table 5

What causes these claims ?

2000 years ago the Roman historian Livy wrote

> "To err is human, indeed it is the cause of most of our misery. Invariably though, it is to the gods that we look for remedy".

If Mr Livy had been working in the P&I industry in the late eighties he might have rephrased it slightly

"*Human Error* is the cause of most of our misery and it is to the *Clubs* that we look for *restitution.*"

None of us are perfect! If we analyse most of our problems in today's world I am sure ultimately it all boils down to human error/failing. I am therefore reluctant to produce a graph Table (6) which tends to imply most of our problems today, in respect of liability claims, are caused by human error and in particular ships crew. This graph was our attempt in 1987 to try and find out the main proximate causes of our major claims. These findings should be analysed carefully and in conjunction with contributory causes which vary from claim type to claim type. I shall discuss some of the contributory causes later when I discuss the types of claim in more detail.

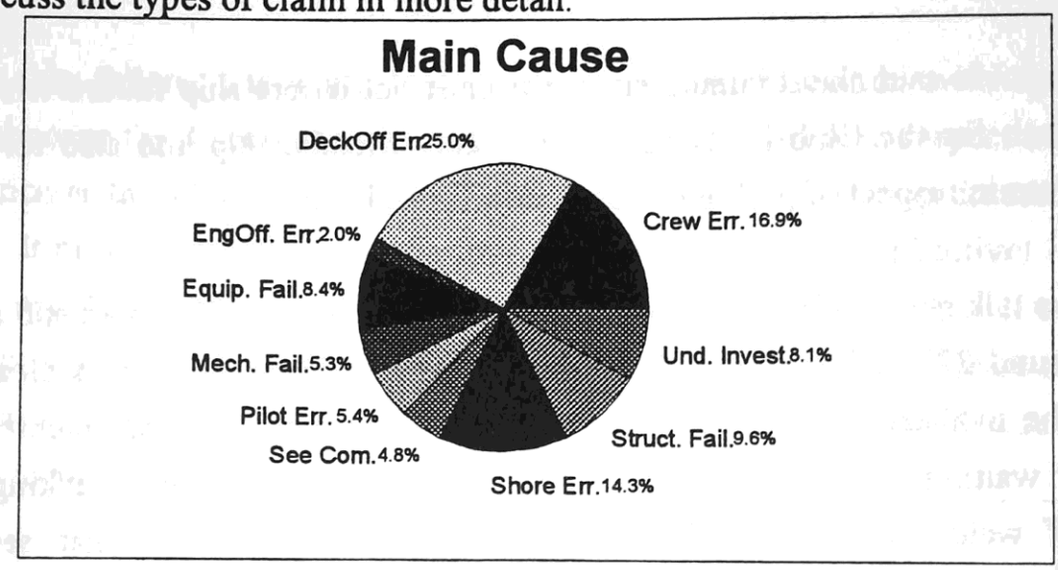

Table 6

For the purpose of this analysis the various categories of main cause refer to the immediate cause of the incident i.e. if steel work corroded through due to water retention because there was a lack of drainage facilities this would be classed as a structural failure rather than a human failure of the architect for bad design.

It is clear human error has and still is playing a major role in our Member's liability claims. It has since 1987 regularly accounted for some 60% of the main causes of our claims. If we look at what has been happening over the last 8 years in respect of human error alone in more detail in Table (7) you will see the human error trend follows closely that of the large claim number trend.

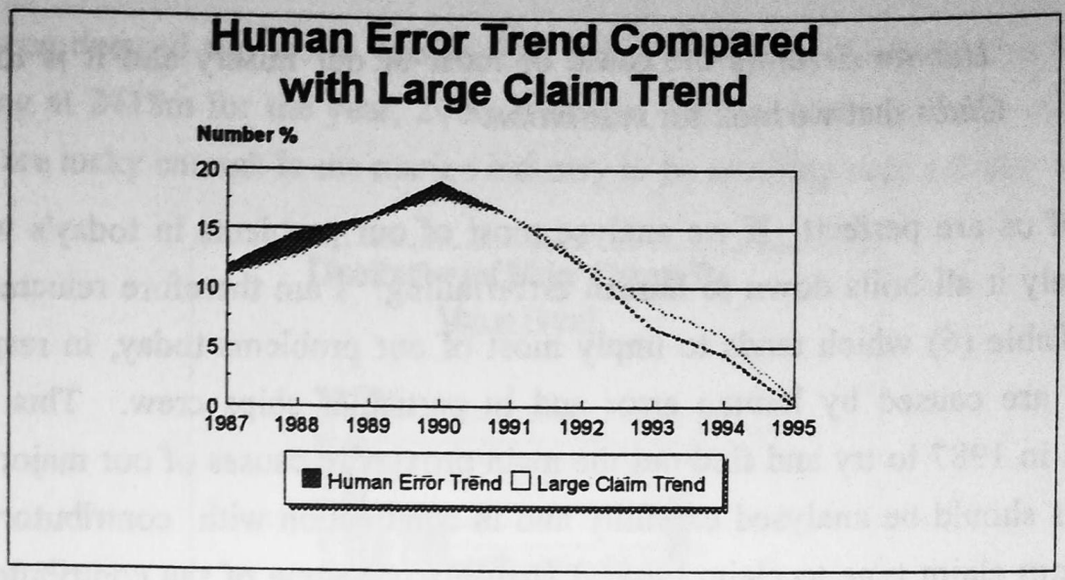

Table 7

Whilst a lot is said about human error, we must not ignore ship failure which is a major factor both for the Club in its quest for quality Membership and also for the Members themselves in respect of problems they face with claimants.

When we talk about ship failure here we are not talking generally about sub standard ships, with around 22% of our large claims having a ship failure input it is clearly a problem facing the industry as a whole. It is easy to spot the ship with no maintenance with an accident waiting to happen, perhaps not so easy to spot weld/stress/cracking with over 20 miles of weld seam on a VLCC. We have noticed this year what seems to be an improvement in the statistics in relation to ship failure claims Table (8). Whilst up until 1990 ship failure claims were rising in line with the general trend of large claims, they do seem to be dropping in number, comparatively 1991 onwards, with a more significant drop in 1992. The Club's Ship Inspection program instigated in 1989 has clearly had some effect here.

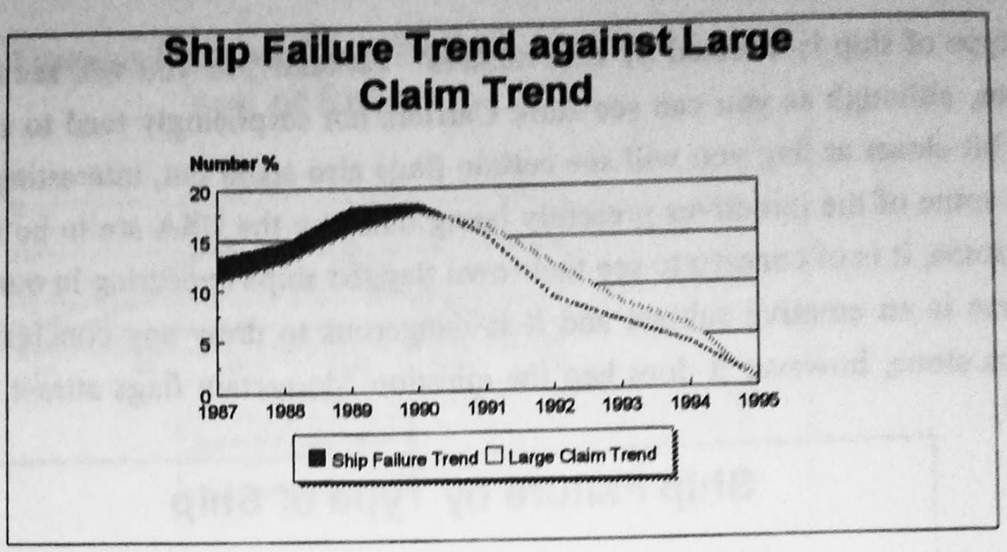

Table 8

Whilst on ship failure it is worth looking quickly at its correlation with age Table (9). Consistently over the 8 years the 10 to 14 year old ship stands out in respect of ship failure and in particular the 14 year old ship. Claims peak here and then drop dramatically at the age of 16. It may be the criteria of the third special survey is very effective! Prior to our analysis it was felt ships needed closer inspection after 15 years of age. It soon became clear this policy was not adequate and since 1988 any new entry of 10 years or older now has to be inspected prior to entry. Again, maybe this factor is bearing fruit as we see ship failure claims begin to reduce.

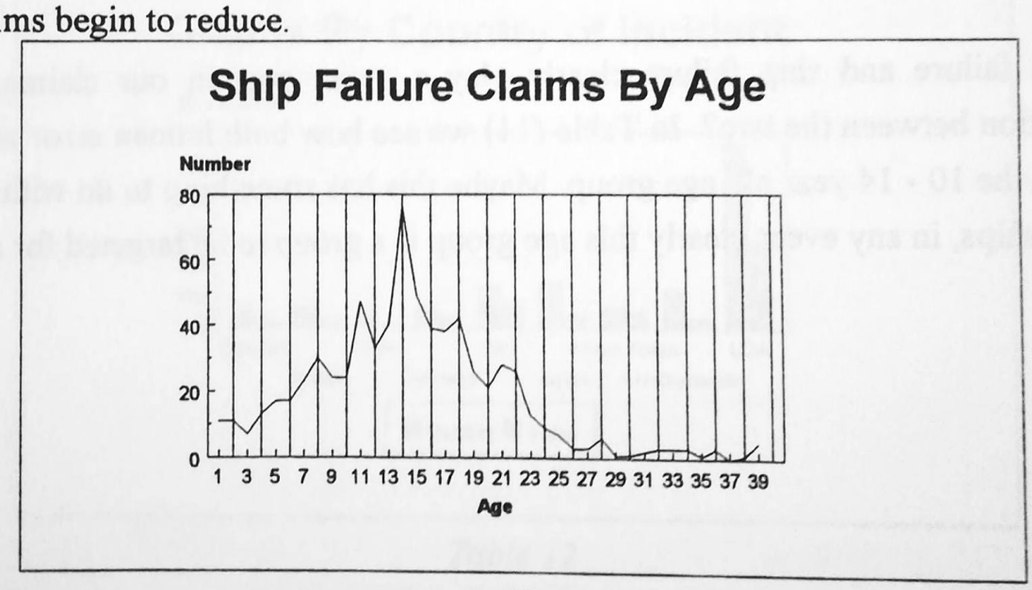

Table 9

If we look a bit closer at ship failure we see structural failure predominates. For the purpose of this analysis we include hatchcover failures in the structural failure category. Hatchcover leakage still remains a major problem accounting over the 8 years for 120 major cargo claims valued at over 32$m, highlighting the need for constant monitoring and regular maintenance.

What type of ship is affected by ship failures? Basically, as you will see from Table (10) all types, although as you can see Bulk Carriers not surprisingly tend to stand out. If we look a bit closer at flag you will see certain flags also stand out, interesting is the US flag. Whilst some of the initiatives presently being taken by the USA are to be welcomed and I repeat some, it is of concern to see their own flagged ships appearing in our statistics. Flag of course is an emotive subject and it is dangerous to draw any conclusions from these statistics alone, however it does beg the question "do certain flags attract certain types of owner".

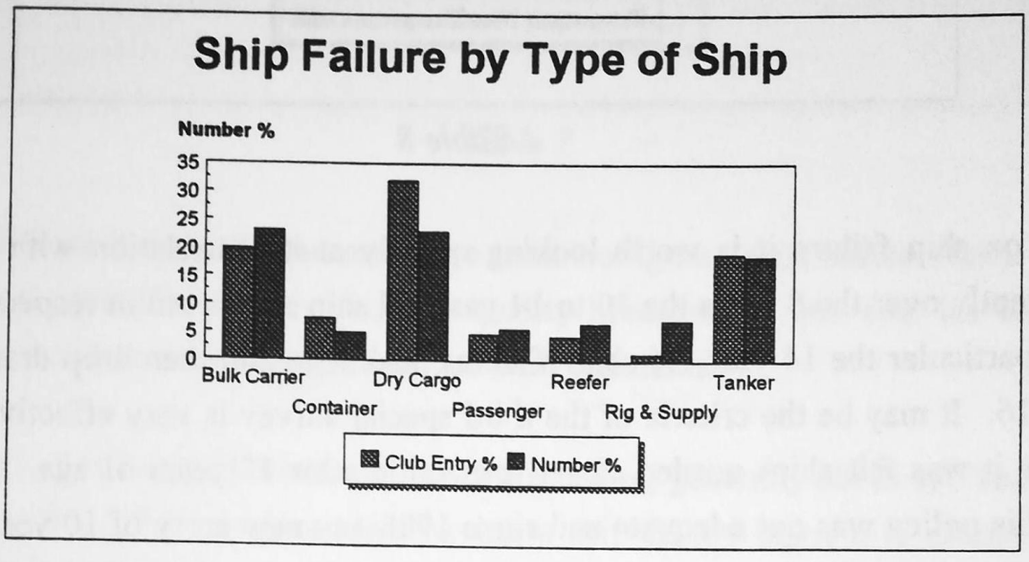

Table 10

Human failure and ship failure clearly play a major part in our claims. Is there any correlation between the two? In Table (11) we see how both human error and ship failure peak in the 10 - 14 year old age group. Maybe this has something to do with the morale on failing ships, in any event clearly this age group is a group to be targeted for action.

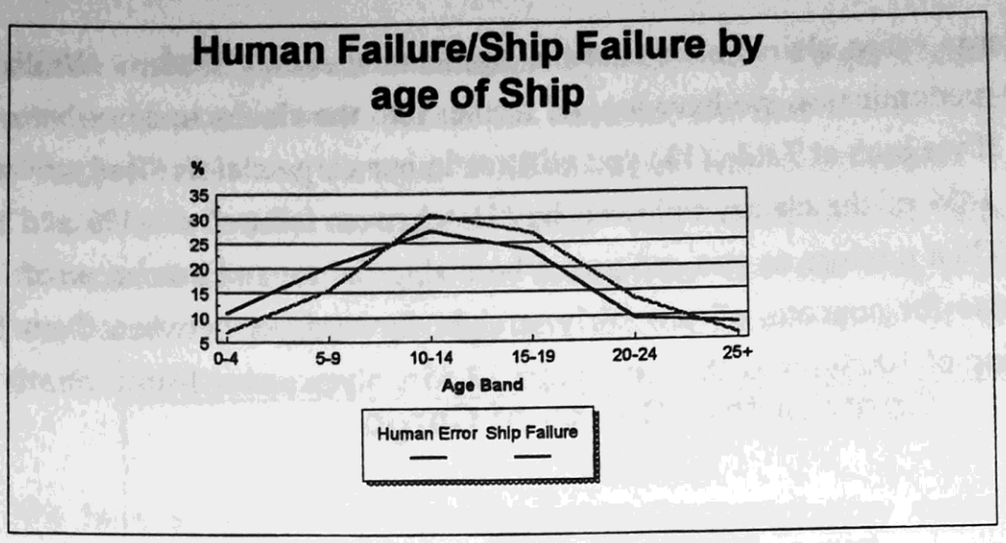

Table 11

Moving on from the cause of all our claims, where do they all occur? Are there any particular areas of the world that stand out? In Table (12) you will note the predominance of the USA - not surprising in a way - after all it is the world's largest economy. The analysis has certainly highlighted several problems in the USA and consequently we as managers now have our own offices in New York, Miami, Houston and San Francisco. What does give rise for concern however is Italy, showing more claims than the Netherlands or Belgium - perhaps the two largest importers of goods by sea into the EEC.

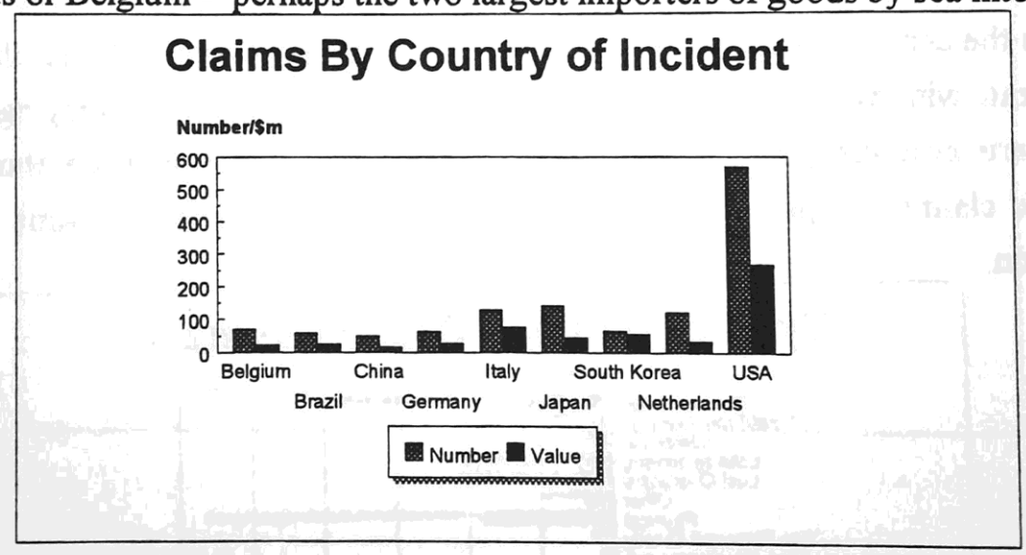

Table 12

Cargo Claims - (Sample size 1138 claims totalling 378$m representing 39% of the total number of major claims and 28% of their total value.)

Over the 8 years large cargo claims have cost the Association some 378$m. Whilst we know human error predominates, we have looked further into the claims to see what other causes contribute. If we look at Table (13) you will see in our cargo claims "Bad stowage" accounts for some 14% of the claims followed by "Hatchcover failure" at 11% and then "Bad handling" at 7% a mixture as you can see of both ship failure and human error. All three causes give rise for concern, all are fairly straight forward yet between them they account for a draining of 100$m over the last 8 years 12.5$m a year, over 1$m a month.

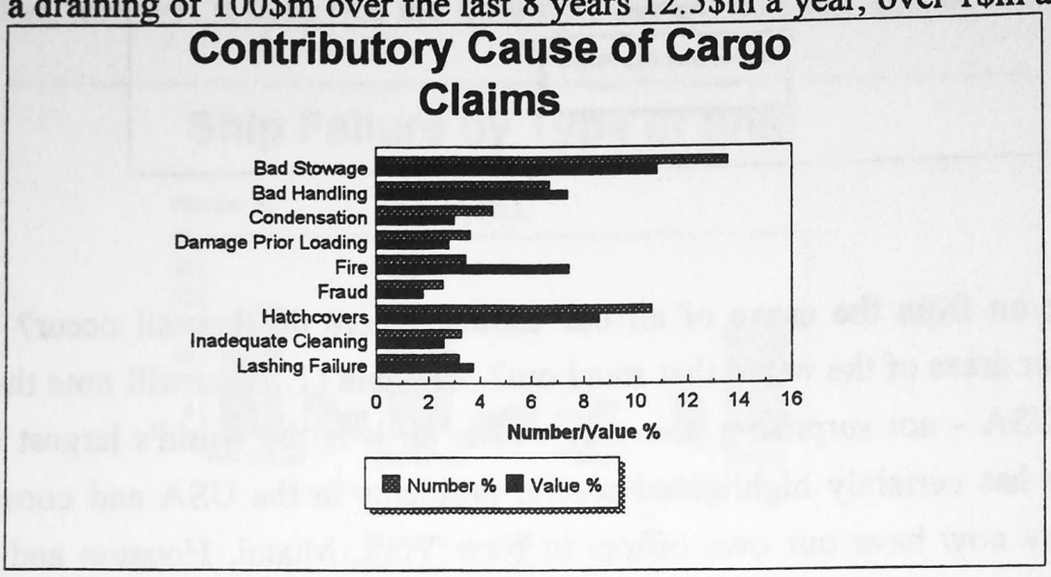

Table 13

What is the actual damage done to the cargo? In Table (14) you will see physical damage stands out with wet damage, contamination and shortage. It is worrying that shortage claims are now creeping up into the large claim bracket, experience shows that many shortage claims are pure paper losses, that they feature as large claims is a worrying escalation.

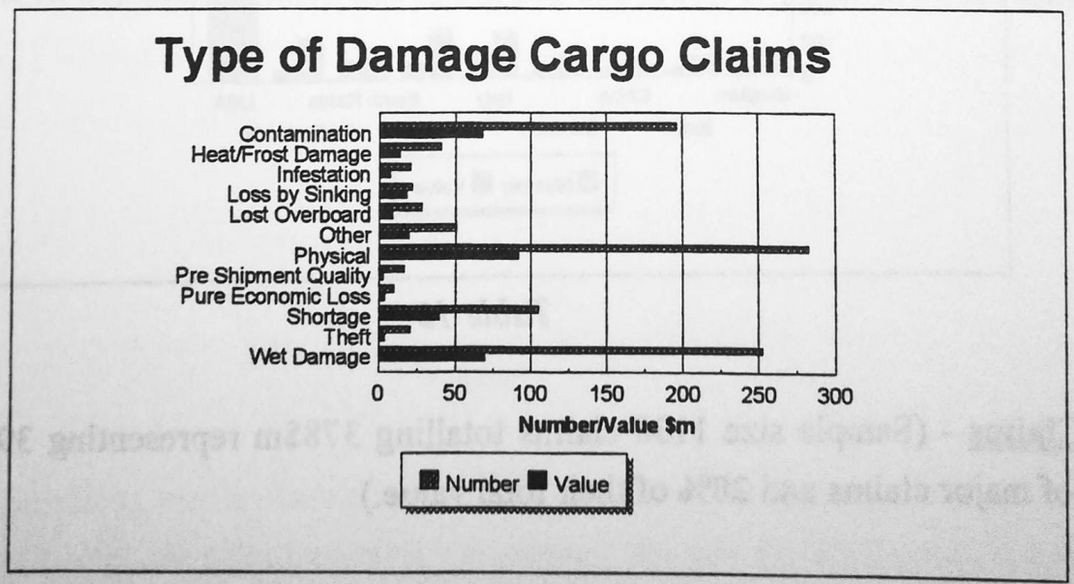

Table 14

When we look at the actual damages by commodity we get a more detailed view of where our problems lie, with "Steel" for instance, we face mainly wet and physical damage, "Bagged bulk":- wet damage, "Bulk chemical" and "Oil products":- contamination whereas "Crude oil" mainly shortage. "Reefer" and "Containerised cargoes" mainly physically damaged and "General cargo" an even spread between wet, physical, shortage and lost overboard. "Dry bulk" perhaps the most common type of commodity damaged is predominantly damaged by water followed by contamination and physical damage.

We have spoken about the main cause, the contributory cause and what the damage actually was, perhaps we should find out what the actual commodities are themselves. In Table (15) you will see "Dry bulk" not surprisingly stands out accounting for 170 claims valued at 69$m. If we analyse "Dry bulk" further we see Grain dominates followed by Soyabean then Ore. After "Dry bulk" we find "Container" and "Steel product" claims, "Container" claims appearing to be on the increase. "Reefer" and "Oil products" and "Crude oil" should not be ignored, all causing a significant drain on the Association's funds.

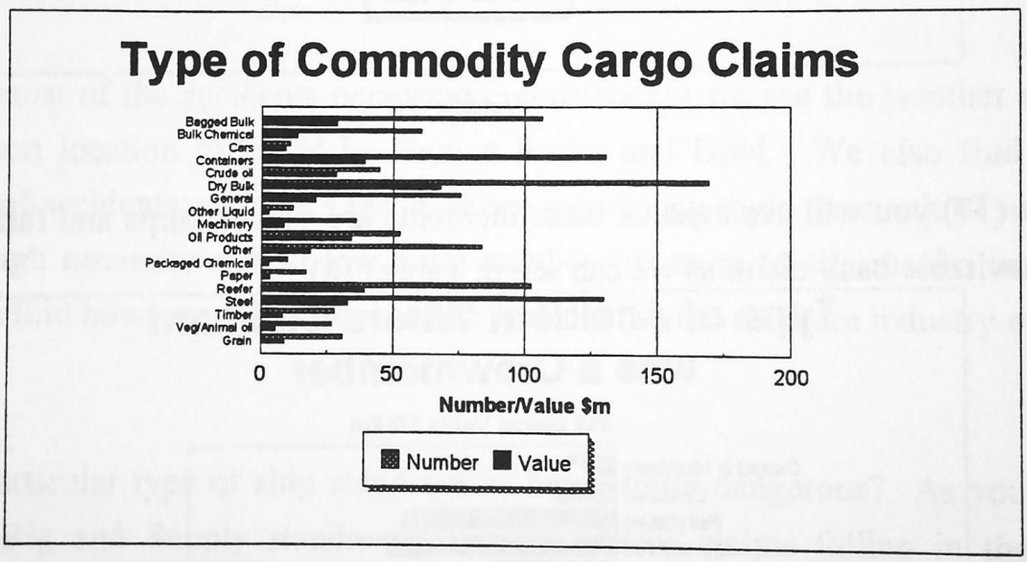

Table 15

Personal Injury (Sample size 901 claims totalling 299$m representing 31% of the total number of major claims and 22% of their total value.)

Personal injury claims over US$ 100,000 in value have cost some 299$m over the last 8 years averaging 37$m a year over 3$m a month. A substantial amount of money by anyone's standards.

What is happening? Who is being hurt? How? and where? Large numbers of cargo claims are explainable, large numbers of human injuries are not. In Table (16) you will see it is not the litigious US passenger which necessarily give rise for concern, it is our crew members! 575 large claims over the last 8 years, nearly 2 major claims a week.

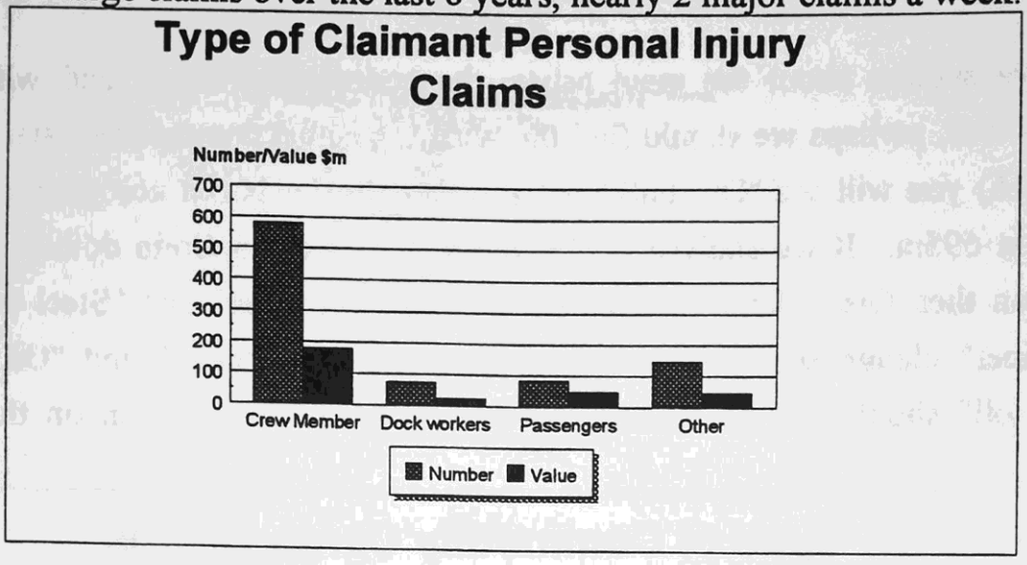

Table 16

In Table (17) you will see most of these incidents are simple "slips and falls" which result in the inevitable back claim as we can see in Table (18).

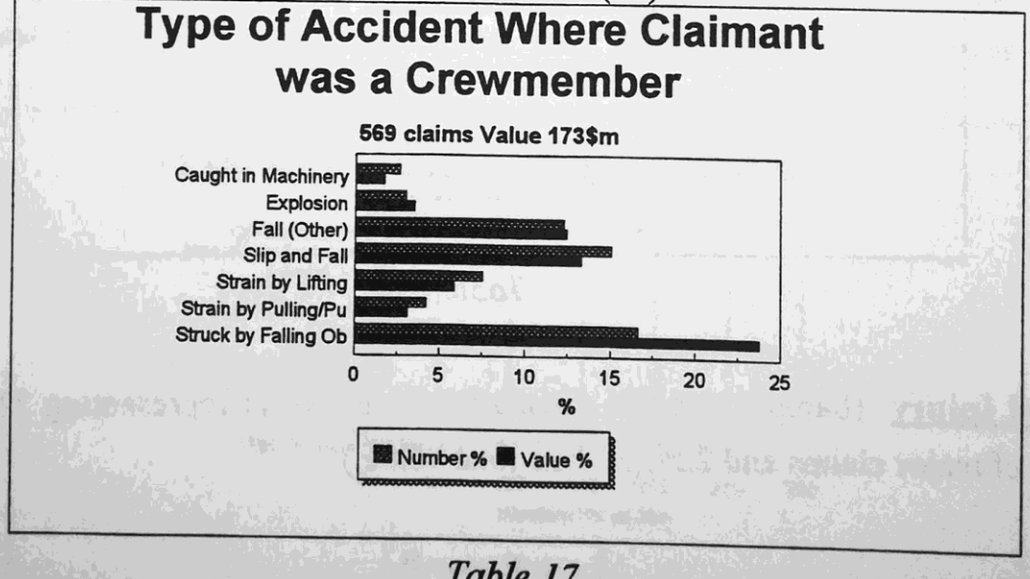

Table 17

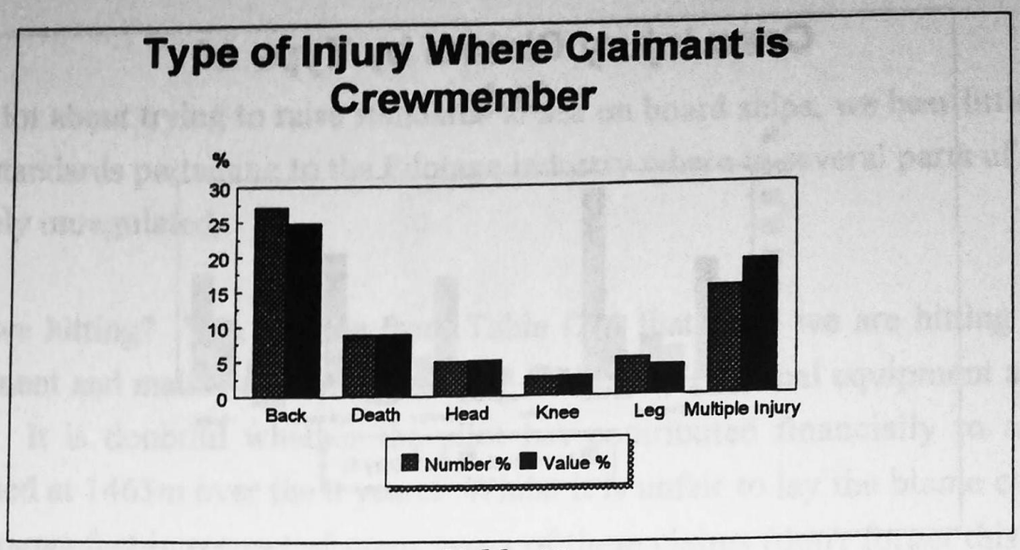

Table 18

These claims are costly and it is hard for the shipowner to avoid liability, ensuring proper footwear is worn and rigorous attention to ensuring an absence of oil and grease from the decks, if such injuries are to be avoided is essential. The second major category is as you can see "Struck by flying object" the use of hard hats is paramount, a simple remedy - for a simple problem.

Where are most of the accidents occurring? consistently we see the weather deck as the most common location followed by Engine Room and Hold. We also find with crew injury a lot of accidents occur as a result of one man trying to do the work of two, whether this is through necessity due to low crew numbers or more to the macho image, is not clear, we do find however, the latter is more prevalent in the offshore industry especially in the USA.

Does any particular type of ship stand out as being more dangerous? As you can see in Table (19) Rig and Supply stands out, many of these claims falling in the USA. A combination of high numbers of this type of vessel in this area and the litigious nature of that society, make it an area and a part of the industry which is closely monitored.

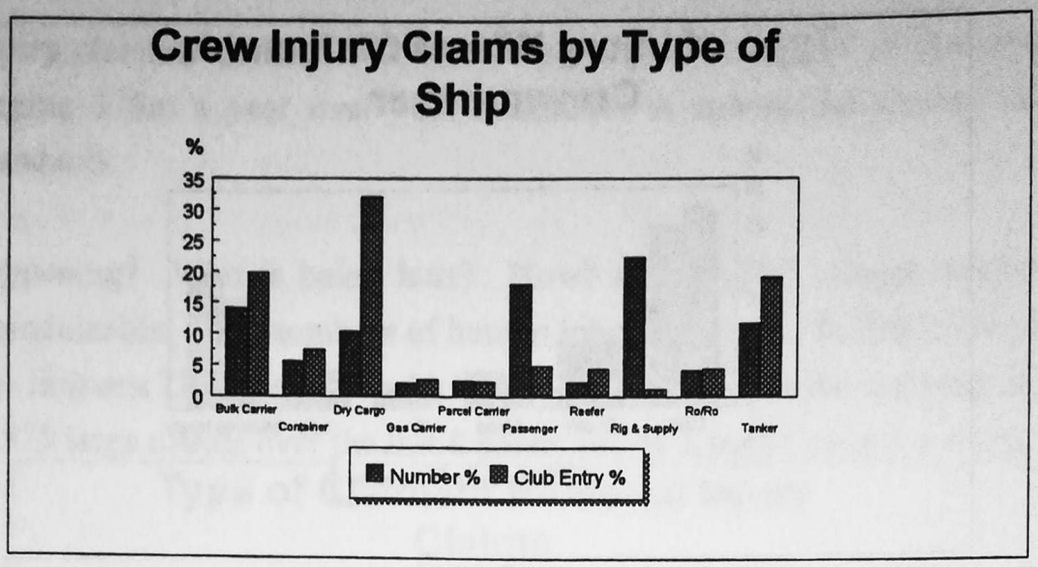

Table 19

Property Claims (Sample size 277 claims totalling 224$m representing 10% of the total number of major claims and 17% of their total value.)

When we look at the main cause of our property claims we see a somewhat different picture to that seen overall. You will see in Table (20) a large pilot error involvement. It is somewhat strange with ships costing anywhere up to 120$m, that an owner, be it the shipowner himself or his financiers allow a man they might have never met, having no idea of his skill, expertise or background come on board their asset and effectively navigate it through perhaps the most dangerous part of the voyage and on top of that "**WITH NO RESPONSIBILITY**".

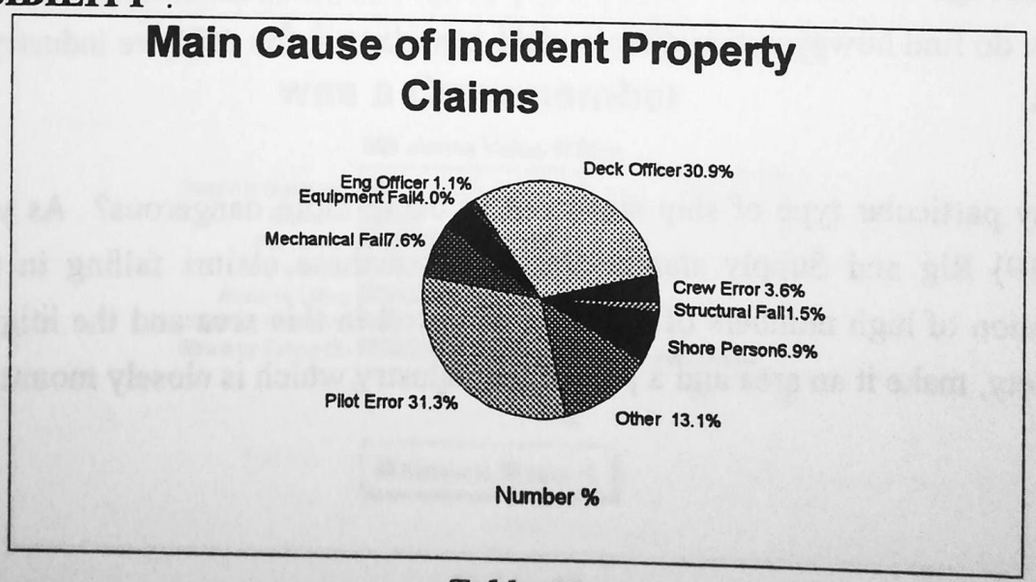

Table 20

We hear a lot about trying to raise standards at sea on board ships, we hear little or nothing about the standards pertaining to the Pilotage industry where in several parts of the world it is effectively unregulated.

What are we hitting? You can see from Table (21) that what we are hitting is basically port equipment and mainly on arrival. Berths, Dolphins, Terminal equipment and Locks in that order. It is doubtful whether the pilot has contributed financially to any of these claims valued at 146$m over the 8 years! Whilst it is unfair to lay the blame completely at any one persons feet in respect of many types of these claims (don't forget this is probably the most dangerous part of any voyage manoeuvring in confined/congested waters) isn't it somewhat strange that the pilot contributes nothing even in cases where he actually works for the authority who actually owns the property he/the master/ship has damaged.

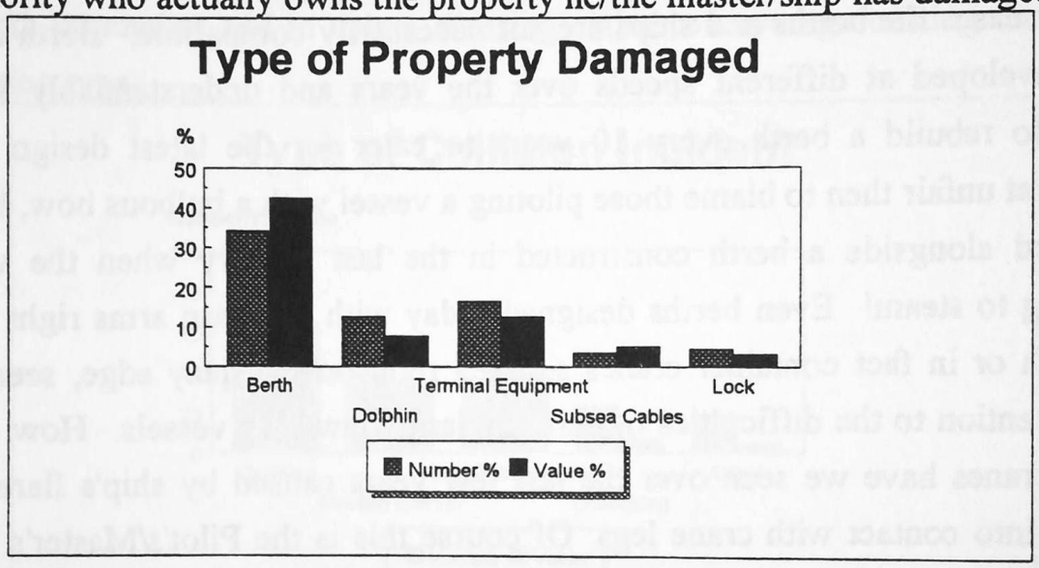

Table 21

Who causes most of the damage? The slow unwieldy VLCCs? Not really, in Table (22) you will note it is split equally between Tankers and Bulk carriers and it is not the VLCCs causing the problem more the smaller 10,000 - 30,000 grt tankers. When it comes to money however, the tankers do seem to cause larger claims, on average some 3 times higher in fact, something to do maybe with the high cost of tank terminal equipment/berth construction.

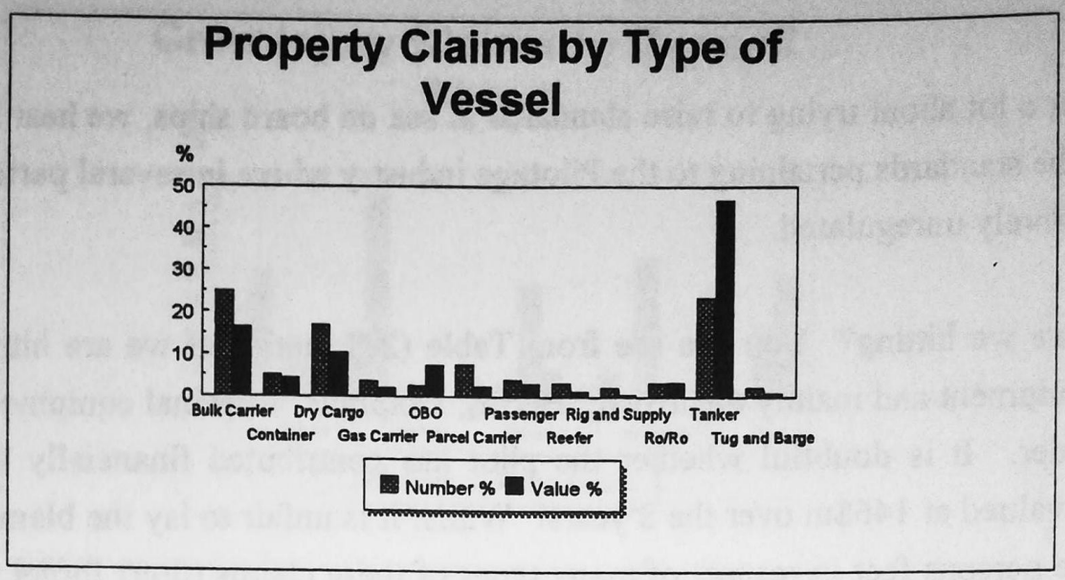

Table 22

It would not be fair to concentrate solely on human error in this type of claim. We do find in many cases the berths and ships are not necessarily compatible. Berth and ship design have developed at different speeds over the years and understandably so. You cannot expect to rebuild a berth every 10 years to cater for the latest design of ship. It is somewhat unfair then to blame those piloting a vessel with a bulbous bow, large flare, high freeboard alongside a berth constructed in the last century when the world was just changing to steam! Even berths designed today with chicksan arms right on the edge of the berth or in fact container cranes situated right on the quay edge, seem to have paid scant attention to the difficulties of berthing large unwieldy vessels. How many damaged gantry cranes have we seen over the last few years caused by ship's flare/superstructure coming into contact with crane legs. Of course this is the Pilot's/Master's fault! With, a force 5, on to the berth, gusting, they really should take more care!!!! I mention this purely to emphasis statistics must always be put in context, there are wider issues and just to blame those conning the vessels at the time of these serious incidents would be wrong.

Collision (Sample size 236 claims totalling 155$m representing 8% of the total number of major claims and 12% of their total value.)

In the late eighties we were witnessing about two large collisions claims a month, this rose sharply in 1990 to around 5 a month, this has since dropped back slowly to in 1994 (an undeveloped year) around one a month (we would however expect to know of a collision quite early on so these figures will probably be fairly accurate). Where do most of these accidents occur? Table (23) you will see most in coastal waters with our vessel underway at proper speed. Crossing incidents in coastal waters account for 50% of the claims costing a massive 70% by value.

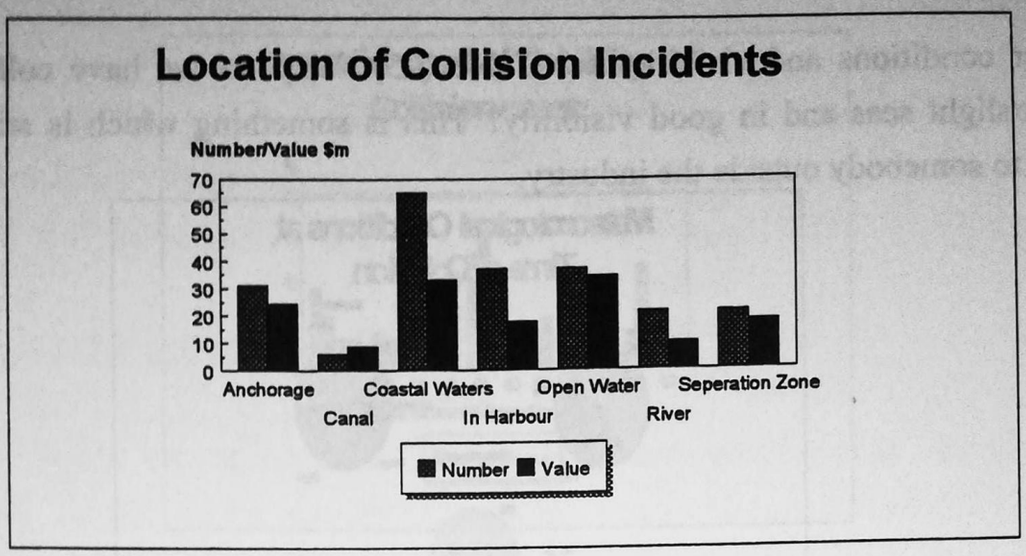

Table 23

If we look at all collisions Table (24) we again see the predominance of the crossing situation both in number and in value, crossing claims on average costing more than any other collision type.

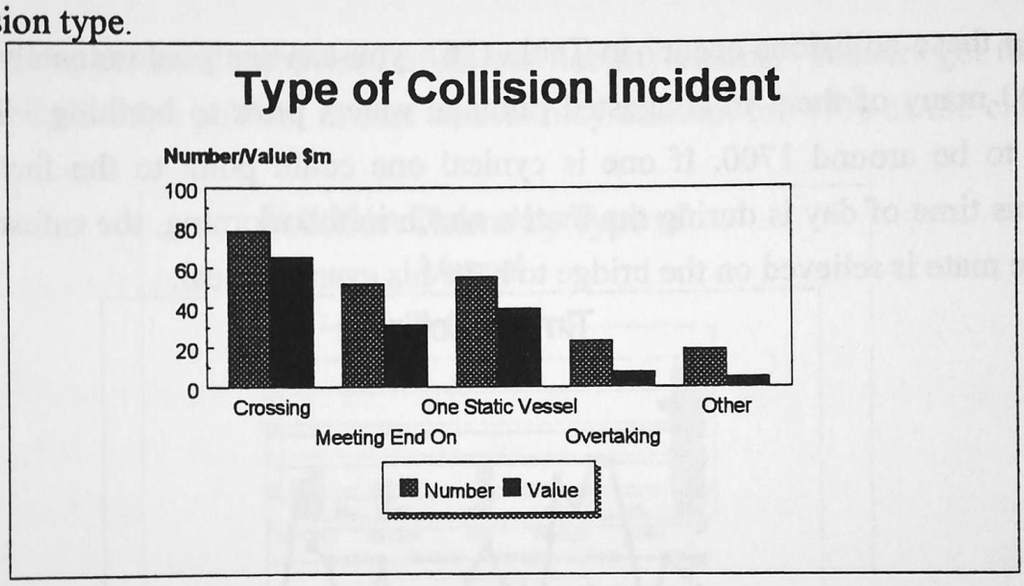

Table 24

What is more worrying from the table is the occurrence of colliding with vessels which are static. Tankers predominate here causing problems when berthing and approaching anchorage.

Weather conditions and visibility see Table (25). Why do we have collisions in good weather/slight seas and in good visibility? This is something which is still very hard to explain to somebody outside the industry.

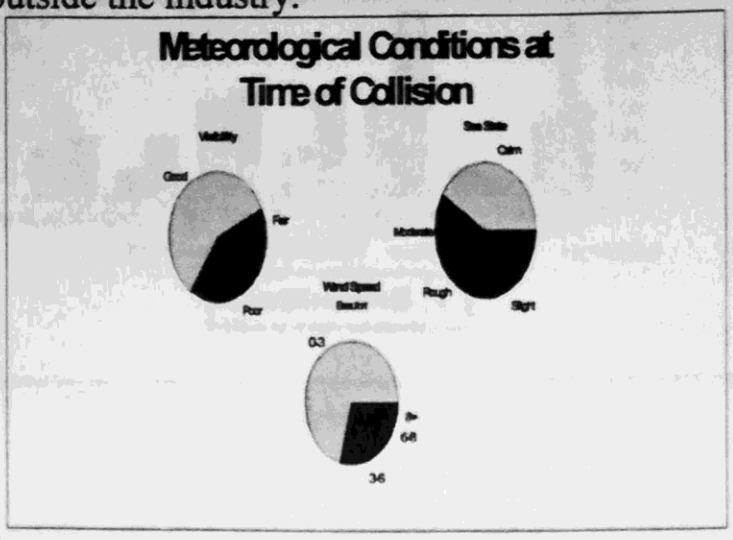

Table 25

When do these collisions occur? In Table (26) you can see predominately between 0500 and 0800 many of them in congested pilotage waters prior to berthing. The safest time appears to be around 1700. If one is cynical one could point to the fact that the most dangerous time of day is during the mate's watch in the morning, the safest at dinner time when the mate is relieved on the bridge to have his evening meal.

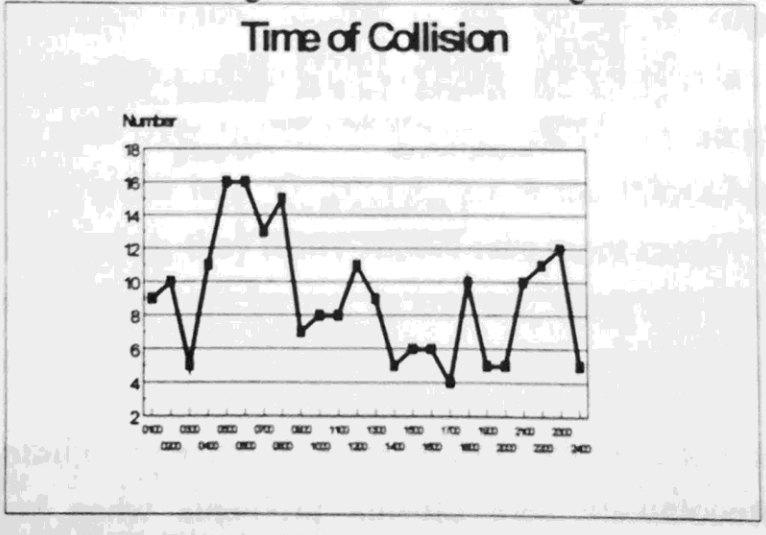

Table 26

If there is anything to learn from our analysis of collision claims it is from this next graph table (27) where you can clearly see that in 91% of the cases no one party was held fully responsible. In fact as you can see the most common settlement appears to be 50/50 - food for thought? The moral of this story is nobody wins in a collision case no matter how adamant the Master is that he is fully in the right.

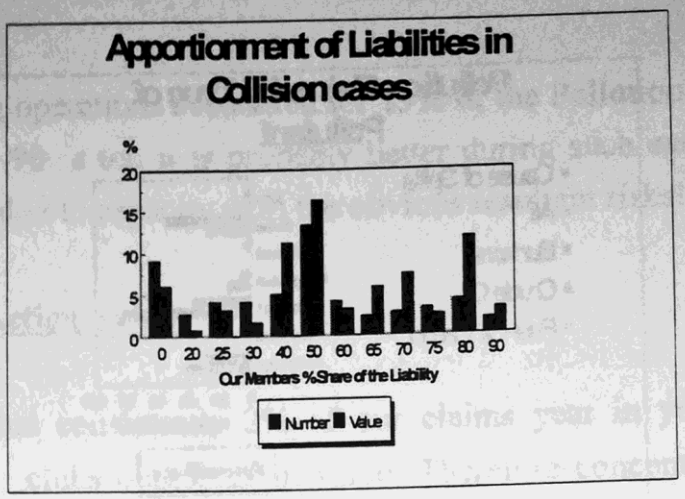

Table 27

Pollution (Sample size 152 claims totalling 176$m representing 5% of the total number of major claims and 13% of their total value.)

Finally pollution, the most publicised of all our liability claims. Tankers get the press but as you can see all ships pollute, in fact tankers only account for 47% of the claims Table (28).

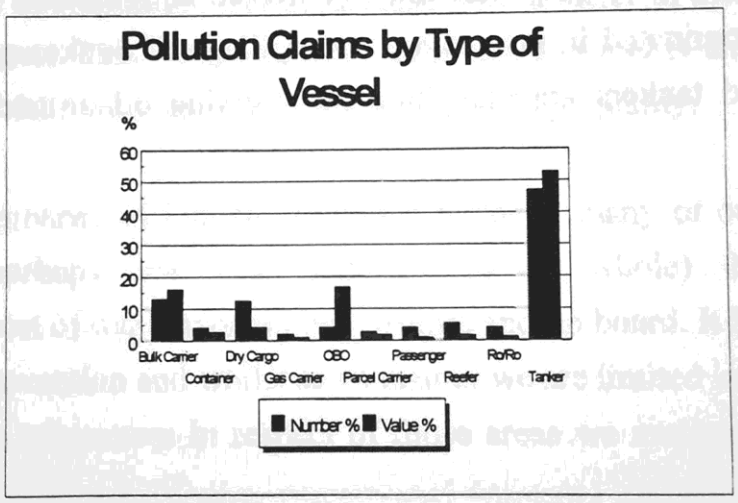

Table 28

What is the pollutant? Again the world's press would have us believe it is crude oil. This is not the case as you can see in Table (29) bunkers clearly predominate by number of claims with bulk carriers, dry cargo ships having twice as many incidents as tankers. Bunker oil spills from our records peaked in the years 1990, 1991 and 1992, since then we have seen these claims drop from around 11 claims a year to 3 in 1993 and 2 in 1994 we must not forget however 1993 and 1994 are still undeveloped (although by the nature of the claim we would probably know of such claims quite early on). Spillage of bunkers has cost over the 8 year period some 28$m, from 53 incidents. 17 of these bunker oil spills were for spillages of less than 1 ton, these have accounted for outgoings in total of 5$m an average of nearly US$ 300,000 an incident.

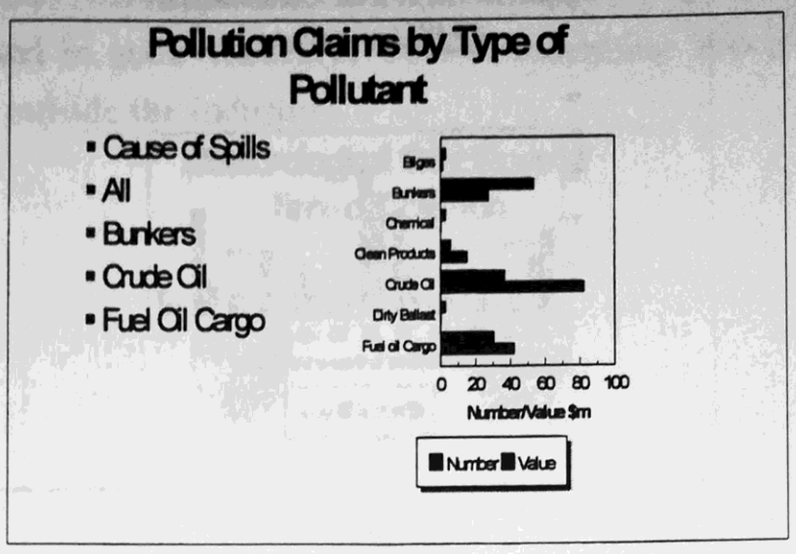

Table 29

From what type of incident did these pollution claims occur? In Table (30) you will note that bunker oil spills do not always occur from bunkering operations. Groundings accounted for 17% of the spills, of these groundings the major pollutant spilled was bunkers 54%, crude oil cargo only accounted for 12% with a further 12% being fuel oil cargo. Whilst numbers are low and must be treated with caution it is interesting that dry cargo ships predominated in groundings and spillage of bunker oil, highlighting the fact that single hulled tankers are one thing but carrying oil around in double bottoms is certainly another.

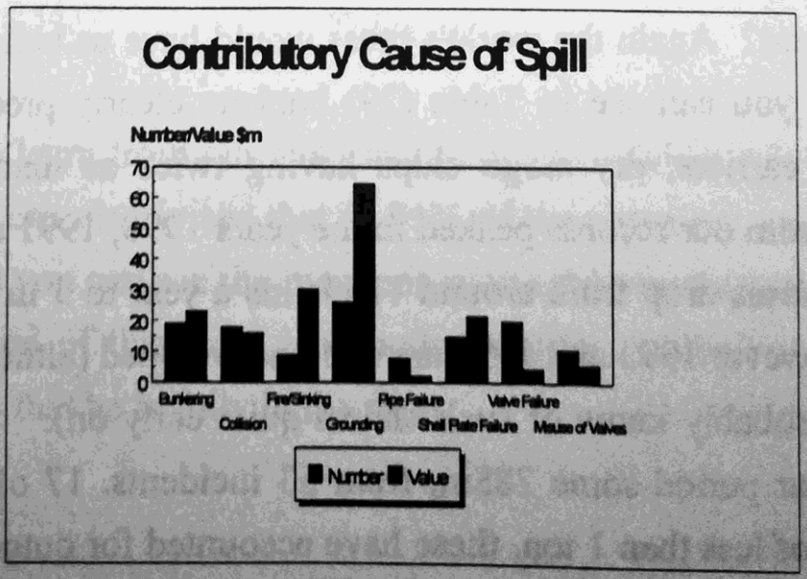

Table 30

Spills from Bunkering operations accounted for 13% of the Pollution claims, at a purchase price of around US$ 90 a ton it is probably better during such exercises to leave some behind rather than bunker to capacity with the obvious resultant risks!

(3) <u>Lessons Learnt/Action Taken</u>

1. We have learnt that consistently 2% of our claims year in year out account for a massive 72% of the clubs outgoings in value. Therefore concentrating on these small number of large claims will have a large effect in value terms. To this end a team of our most experienced claims handlers now oversee and help with all claims over 100000 USD.

2. In highlighting the ship failure problems in the 10 to 14 year old age band, the club has reviewed its policy of inspecting all ships over 15 years of age prior to entry. Since the analysis it is now policy to inspect all ships over 10 years of age.

3. The high number of shipfailure claims has also been a factor in the development of our ship inspection program. This was instigated in the late 80's and is aimed at ensuring that members share their risks with members of comparable high quality.

4. The high predominance of human error as a factor in many of our major claims has taught us that perhaps we (the industry as a whole) has neglected the quality/training/support of our personnel both ashore and on board. It has certainly focused our minds in Loss Prevention and whilst as an insurer we are limited in what we can do, we can heighten peoples awareness in respect of those areas we are heavily involved in i.e. Liability Claims.

The Club over the last few years has done this by investing heavily in a programme of "awareness" aimed mainly at those at the sharp end who we feel are probably best placed to have the most effect i.e. those on board ship. The club now produces on a regular basis "Loss Prevention News " highlighting current claims problems from all around the world. Also produced is a similar newsletter "Carefully to Carry" highlighting more specifically technical advice on the carriage of cargoes, this complimenting the more substantial "Carefully to Carry" books already well known to the industry.

The club has also embarked on an exercise of producing videos, again aimed mainly at the ship to increase peoples awareness of the problems facing the industry in respect of liability

claims. "COUNTING THE COST" explaining the main types of liability claims and how much they cost the industry. "TAKING CARE" concentrating on Personal Injury claims and "CARGO MATTERS" a series of videos concentrating on the commercial problems facing today's shipmaster in caring for his cargo.

The Club is also at the moment in the process, with the Nautical Institute, of producing publications under the theme "Commercial Awareness "These are aimed at Junior and Senior Officers on board. We sometimes forget that with the all the discussions on Safety and with all the regulations now facing the shipowner, that shipping is a "commercial venture" and that the seafarer plays a major role in making this venture a successful one.

To introduce this project the Club published a small book in April 1995 titled "The Development of Maritime Commercial Practice" outlining the origins of marine trade and emphasising the important role the seafarer has played over the years and how much we rely on him to ensure our cargoes are delivered sound. The second book "Watchkeeping Safety and Cargo Management in Port" for junior officers was published in October 1995 with the third book "Commercial Management for Shipmasters" published in December 1996. We feel sure these books have a lot to offer and being written by former serving Masters are authoritive.

With human error we must not forget the input of shore error and also that of pilot error. With shore error we have the problems of "Bad Stowage" and "Bad Handling", clearly here we need to focus our attention on loading practices throughout the world and perhaps the contractual relationships between shipowner/charterer/stevedore. Are the contractual relationships now so involved that nobody really knows who is responsible for safe stowage until the lawyers have had their day in court ?? Are we asking too much of our Masters now. On some trades the master will not see the charter party until the voyage has finished, on others he will take instructions from sub/sub charterers he has never heard of, let alone met.

With pilot error, statistics show the large input in respect of damage to third party property like berths etc. This has given rise for concern and is now a subject being looked into by the International Group, not an easy question but one which surely needs addressing on a worldwide basis.

6. The predominance of the USA has also been highlighted by the analysis. The dominance of Personal Injury claims, Houston/New Orleans as ports, and Rig and Supply

vessels/Passenger ships. This has warranted a closer look at how we do business in the US. As managers of the club we now have our own claims handling offices in New York, Miami, and San Francisco. Emphasising the importance we place on these areas.

Conclusion

I started by saying that P&I claims cost the industry over US$2 billion a year. An analysis like the one I have just outlined is essential if we are to pinpoint the areas in which our funds are being spent. It helps to outline trends so that steps can be taken on the basis of lessons learnt. If one of the advantages of mutuality is the sharing of risks, the sharing of information about those risks is a necessary corollary.