It is presumptious to say the least for any shipowner to make an unqualified prediction as to what will happen in world trade when such a prediction is to cover a span of ten years and in many ways it is foolish for anyone to endeavour to encompass such a period of time as in the event of his prognostication proving to be correct this meeting will regard him as a Guru and in the event that it proves to be completely incorrect he will be regarded as somewhat of a fool.

To illustrate the volatility of the current market in which we find ourselves and one that in my opinion will continue for the next four or five years, there was a recent study made by a very well known firm of London shipping consultants for a substantial Government organization in Australia. This was quite an expensive piece of research with forecasts covering the next five years for the movement of one of the basic raw materials. It was completed in December, 1978, and by March this year was totally out of date. The reason it became out of date was of course the fantastic increase in the price of fuel oil which rendered all figures supplied roughly out by 100%. With this in mind I shall endeavour to paint with a broad brush my views for the eighties and endeavour to highlight the factors which could influence the market in the next ten years.

In this modern day and age there is a great belief in that wonderful machine called the computer and undoubtedly it has a tremendous application to many forms of industry. It is useful as a tool to the shipping industry but as a machine to assist you in calculating variables of the market. I personally do not believe it has a great value.

Shipping has always been a cyclical industry. It goes from peaks to troughs, there are always more troughs than there are peaks, and to illustrate this, in the last 41 years there have only been seven years of shipping 'boom' which illustrates the fact as far as tramp shippers are concerned, the Charterers have a far greater bite of the cherry than do the shipowners.

In the past twenty years the shipowners philosophy has been to build a ship, borrow the money to repay his capital investment over an eight year period, ideally sell the ship immediately prior to her second special survey, say in year nine, and then start the roundabout again, the profit on the investment being, in fact, the resale value of the vessel after year nine, it being anticipated that during that period the vessel would have at least had one or two years of very good trading, four years of indifferent trading and three years of breakeven trading.

The major difference between the fifties, sixties and seventies and that of the eighties is unfortunately that the amounts of money involved are far greater than they have ever been before. Therefore, a mistake made in building a ship in, say, 1980 and trading that ship until 1995 (fifteen years being the normal recognized life of a ship) is going to be an extremely costly business and unless the right ship is built the loss will be a substantial one.

During the seventies for the first time in living history it was formulated that a vessel was not a depreciating asset but an appreciating asset. Ships that were built in the mid sixties, take for example a 20,000 tonner which cost 2.8 million dollars was sold in the seventies for 3½ million dollars when they were ten years old. the value of money had depreciated but as far as the book value is concerned the owner had made a substantial profit on his investment when he came to sell the vessel and it is on this principle that 'Worldwide', now the largest private shipowner in the world, have based their business. It remains questionable however whether this theory will be applied to the 1980's. The principal reason that I do not consider it can be applied to the 1980's is the standard of ship being built today is in my opinion considerably inferior in terms of steel than those ships built in the 1960's and, in fact, the ships built at the end of the sixties and early seventies I think will be found trading in a further ten years time. In other words, they will be trading after the fifteen year period is reached in their life and after the very expensive fourth special survey. The principal reason for this is that they will still be very sound vessels, whereas many of the modern large units built in the last two years will be totally beyond their working life at the age of fifteen years and will only be fit for the scrapyard.

The statisticians consider that for the first five years of the eighties world seaborne movements of all dry bulk cargoes will increase by approximately 30% to a total of 1,385 million tons. At the end of this period the five major bulk cargoes are expected to account for about 65% of the total trade, or 907 million tons. The major cargoes referred to will be iron ore, coal, grain, bauxite and phosphate. Using this figure, the statistician who specializes in shipping figures then proceeds to work out the ton mile transportation requirement for all known vessels both in service and already ordered and from this figure, he tries to translate a trade forecast into the requirement for dry bulk shipping which will be required to carry this substantial increase.

This type of statistical reporting is found in any number of shipping periodicals. Not unnaturally these periodicals are devoured by shipowners and owners' brokers the world over and there has been in recent years a tendency for over ordering a specific type of ship based upon statistical information pushing such ships as being the frontrunner

in any expansion of an owners' fleet and unfortunately this tendency amongst shipowners to follow each other rather like sheep has inevitably led to a decline in their fortunes and at the same time been of substantial advantage to charterers.

To use an old colonial expression "The Antipodes" is basically a charterers' market. The exports of Australia and New Zealand are fundamentally essential to the economy of both countries. Neither country has a fleet of any substantial size, primarily due to the extremely expensive cost of operating under the Australian and New Zealand flag. This is entirely due, of course, to the expensive crewing in the case of New Zealand in comparison with other countries, and in Australia's case the rewards of trading coastwise have unfortunately enabled unions in that country to create a cost structure in the operation of ships which makes these ships uncompetitive, except in the major container trades, with the rest of the world.

Thus, the charterers in Australia and New Zealand are primarily dependent upon foreign tonnage to transport their goods. Over the last decade they have been blessed, apart from seven months of 1970, and the years of 1973 and 1974, with extremely low freight rates which enabled them to sell their goods without really bothering to worry about the transportation cost. The transportation cost in the eighties will, I believe, be a most decisive factor in the ability to sell one's raw material and confining our attention to Australia and New Zealand with the current rise in freight rates that have been triggered by the oil crisis, the price of newbuildings will inevitably rise. to this the enormous demand for coal which is now spreading through the Western World and indeed to some communist countries which Australia, as a major supplier of this commodity, is well placed to take advantage, it becomes an evidence that orderly marketing will for the next ten years be an essential ingredient to the successful mining operation and continued growth in the exports of commodities such as coal, iron ore, bauxite, etc.

It is my belief that no longer can the charterer in this part of the world look towards running their business on a "by guess and by God" nature when it comes to freight rates. In order to establish orderly marketing, long term contracts must be entered into. It is advisable for charterers to enter into these on a cost and freight basis whereby they control the shipping. This means that they will have to undertake substantial contracts of affreightment with foreign shipowners and in order that they are not taken advantage of they must perforce learn considerably more about the shipowning operation and the economics of building and operating tonnage in order that they are not in any way taken advantage of and, at the same time, allow the shipowner a reasonable

return on his money, say 12%-15%.

It is, of course, not true to say that this type of marketing has not been practised in this part of the world before. There are within Australia and New Zealand some very professional merchants who have applied these principles for some years, notably BHP springs to BHP have an established fleet of their own to carry their own They use the operating costs of this fleet to set the raw materials. base rates that they are prepared to pay to other Australian flag shipowners, such as the Australian National Line, Howard Smith, etc., who carry BHP iron ore from their mines in Newcastle and Port Kembla. They know to the last penny what it costs to run their own ships and their charter rates to others wishing to carry their goods are confined precisely to those figures. Similarly the British Phosphate Commissioners have for years operated certain ships on a bareboat basis and, in fact, up to five years ago owned their own ships. This gave them an insight into what freight rates should be paid for the transportation of phosphate from Christmas, Nauru and Ocean Islands to Australia and New Zealand. With the advent of Christmas Island becoming an Australian possession and treated as part of the Australian coastline within the terms of the Australian Shipping Act, it immediately behave the Phosphate Commissioners to bareboat charter tonnage with their own Australian crews on board in order that they had a standpoint with which to repulse other Australian companies with Australian flag tonnage who wished to participate in the carriage of phosphate from Christmas Island to Australia and in operating tonnage of their own they had the perfect counter argument to exorbitant rates that could be demanded by indigenous Australian owners and if they had not had this experience they would have been faced with no effective argument to counter such proposals.

It is in this vein therefore that I foresee the first major change in the eighties, the substantial shippers of raw materials to the rest of the world must take a greater interest in their transportation costs and must employ specialist staff which, if not available in Australia and New Ieland, must be obtained from overseas as it is essential that a thorough analysis of shippowning costs be at their fingertips in order that they can look forward to orderly marketing with an uninterrupted cash flow from the export of their produce which has been lacking in many aspects of the economies of both countries hitherto.

The diehards running some of the businesses in this part of the world may wish to stick to the old order and take their risk with the tramp market but should they do so, I feel as this forthcoming decade progresses they will be the losers as they leave themselves open to manipulation.

Let us now look at the pro's and con's of shipowning

investments faced by a shipowner to-day. First of all let us consider the type of ship he should build. These may roughly be divided as far as dry bulk cargo is concerned, and I would hasten to add at this point that this entire paper is based upon dry cargo as I am not sufficiently knowledgeable to discuss the tanker market in any detail. Firstly we have the 12,000 to 15,000 tween deck type of vessel. Secondly the 25,000 to 30,000 geared bulk carrier, followed by the 50,000 to 70,000 Panamax bulk carrier, the 100,000 to 120,000 dry bulk carrier or 0BO, and latterly the 140,000 to 160,000 0BO.

Having established the various sizes that are open to him to buy or build, the shipowner must then consider the following dominant factors which could affect his investment, and these are -

- 1. An increase in under developed countries national flag fleets.
- 2. Increase in bunker costs.
- 3. Rapidly rising wages and conditions of seagoing personnel.
- 4. The expansion of the world trade as he sees it and whether either the source of his cargoes or the destinations of his cargoes are politically stable and whether there is any risk of his investment running aground due to political upheaval.
- 5. Whether he is likely to be troubled by the increasing imposition of UNCTAD's 40:40:20 code into bulk cargoes as it has already eroded many liner trades.

Dealing with the 12,000 to 15,000 tween decker, this I personally feel is not an attractive ship either to build or to buy unless an owner has a semi liner trade in which he can place the vessel from the word go. The standard 12,000 to 15,000 tween decker, such as an SD 14 or a Freedom, will of course always be a useful workhorse but the increase in operating costs of such ships together with the amount of cargo that can be carried in relation to the fuel consumed will make the vessel increasingly less competitive, especially if thrown into competition with larger ships which I feel will become inevitable. must be remembered that the crew on a Freedom or an SD 14 is exactly the same number of men as on a 26,000/27,000 tonner and therefore to operate this sort of ship; corners must be cut. It is no longer viable to crew them with Europeans and the owner must therefore change to a In making such a step he is inevitably thrown flag of convenience. against the ITF rates of pay, which for a ship carrying 26 men is in many instances just as onerous as having a European crew. argued that ownership can be disguised and an all Chinese crew from Hongkong placed on board such vessels, however the tracing of actual ownership of such vessels is becoming much easier and, therefore, if one is not to run foul of the ITF, one must trade such tonnage between those countries who at the present time do not have ITF inspectors and

ignore requests by the ITF to enforce higher wages for the crews of such ships. This inevitably means trading between Third World countries which immediately throws the owner into conflict with the UNCTAD principle and, therefore, as a shipowner, we would not consider building a ship of this size unless we had a specific trade in which to place the vessel, although again buying an old ship of this type at close to its scrap price will always make a professional shipowner a good return on his investment, providing the hull is sound, the engine is trouble free and the intention is 2/3 years trading before disposal.

The 20,000 to 30,000 geared bulk carrier is, in my opinion, and not because my company specialises in this particular size, the old 1945 "Liberty" replacement.

As in 1945 the Liberty carried the whole gamut of commercial cargoes from ore, coal, sugar, steel, fertilizers to timber and bagged cargo, so does the 20,000 to 30,000 tonner of to-day comply in an identical fashion. The majority of such vessels have shallow drafts and thereby can call at a far greater range of ports than larger ships, their fuel consumption whilst much heavier than the standard tween decker is proportionately much less in relation to the quantity of cargo carried and over the next ten years these ships should enable owners to obtain a fair return for their investment, not only a fair return but a safe return for their investment which is much more essential when looking at the vagaries of the market.

We next come to the Panamax type vessel, 50,000 to 70,000 deadweight. This is probably the best investment for the next ten years as taking the Hitachi or Burmeister Wain. type of Panamax vessel, say 60,000 ton deadweight on a draft of 40', the vessel can fully load at most Australian ports during the eighties, all major American ports, and many Asian ports. Thus there is a genuine flexibility which the next size, the 110,000 to 120,000 tonners do not have but perhaps more important, the problems that currently beset us with the current oil crisis are much more amply illustrated with this vessel than with any other.

The old adage that consumption of oil varies as the cube of the speed is never more truly illustrated than by this vessel. The design speed of a Hitachi or Burmeister Wain Panamax is 15 knots on 55 tons of oil. At 14 knots they burn 45 tons of oil and at 13½ knots they burn 33 tons of oil. Burning 33 tons of oil a day with a payload of 58,000 deadweight tons of cargo they are burning the same amount of oil that a good 27,000 tonner will burn. In fact probably a ton or a ton and a half less and thus, this particular ship is a more exciting prospect for, as will be mentioned later in this paper, the oil problem is likely to be exacerbated rather than relieved during the decade.

The deterring factor about building a ship of this nature The cost of building a Panamax during the eighties, or is the cost. the first two years of the eighties, will probably vary between \$25,000,000 and \$27,000,000. In order to pay this type of vessel off in, say, 10 to 12 years the break even rate would have to be of the order of \$12,000 to \$14,000 a day. I must stress that these are rough figures as when writing this paper I had no access to the figures within my own organization and have merely applied a rule of thumb to such costs, but translating this into something that can be understood. The freight for a cargo of coal from, say, Port Kembla to Europe would have to be of the order of \$24.00 to \$25.00 FIO in order to achieve this daily rate. This compares with rates paid last year of \$12.00 a ton and the year before \$9.00 to \$10.00 a ton. It can be argued that such a price rise is inevitable because of the tremendous rise there has been in oil prices, however, a market slump which would reduce this earning capacity would place a great strain on the cash flow of any owner, especially if he owned 3 or 4 such units, all: of which were operating on the open market and not tied in some ways to contracts.

In taking contracts with this type of ship with the present heavy escalation in port charges and crew wages, the wise shipowner would probably wish to contract his vessel for three years and at the end of that period re-negotiate rates for a similar period unless he can, like the average Australian miner, place a complete set of escalated rates over the period of the ship's life to cover such rises, say an increase in freight rate of 10% a year.

The next size of vessel open to the shipowner is the 110,000 to 120,000 straight dry bulk carrier or 080. This is a size of vessel which has not enjoyed a good market in previous years, with the exception of those owned by the Japanese shipowners, but in the case of the Japanese shipowners their fortunes are completely tied to those of the Japanese steel mills and where we spoke earlier in this paper of orderly marketing, the Japanese long ago contracted vessels on a consecutive basis to run, for example, between Australia and Japan with iron ore or Brazil and Japan with iron ore on a consecutive voyage basis for up to ten year periods with escalation costs included to cover increases in wages and port charges. This enabled them to have a guaranteed base price for their steel over a decade, they could plan expansion of their steel mills and they knew that they could land goods in the form of finished steel products in any country in the world at a more or less fixed price.

A vessel of this size again carries no more crew than a 27,000 tonner and, therefore, by and large, there is a much lower ratio operating costs to carrying capacity for this type of ship than for the smaller vessels. This size of vessel has in the past twelve months become the standard type of ship in which Shell Oil Company have

concentrated their coal transportation from Australia and South Africa to Europe and this in itself is a guide, in my opinion, to what will be followed by successive exporters of coal or bauxite. In building an OBO the cost is substantially increased over a straight dry cargo ship but there is the advantage in an OBO of having segregated ballast tanks in this type of ship which, hopefully, will enable the vessel to comply with the changing oil regulations demanding segregated ballast tanks to enable the vessel to trade as a tanker when the market permits the switch of dry cargo to oil.

It must be remembered, however, that the tanker role of the 0B0 is really very much a gamble on the United States insofar as these ships with a relatively shallow draft suit the American seaboard which does not have any real deep water ports, however, these ships are not competitive against true tankers of the VLCC size running from the Persian Gulf to Europe.

The classic role that these ships played three or four years ago was in the carriage of oil from the Persian Gulf to Brazil then a full cargo of iron ore Brazil to Japan thereafter ballast Persian Gulf to repeat, however, the oil imports Persian Gulf/Brazil are all carried in Brazilian flag vessels and similar situations have occurred in the other combination trades that rendered the 100,000 to 120,000 ton 0B0 really confined to the carriage of dry cargo with the owner gambling on at least some period during the vessel's lifetime, the oil market presenting an opportunity where she can carry oil to financial advantage.

Having isolated principal types of vessel I envisage will be built during the eighties, we must now look at the means of propulsion for these vessels. There is no doubt that technology will improve the already efficient standard marine diesel engine. No doubt further technical advances will be made during the eighties to reduce fuel consumption whilst maintaining the same power output, and shipowners I think will continue to opt for engines that are well tried and well proved, such as the Sulzer diesel engine and the MAN diesel engine which are basically "slow" speed diesel engines as against modern trends in the last five years where there has been an effort by engine builders to sell shipowners medium speed diesel engines which upon the face of it have many exciting features as you have two engines side by side working off the same screw shaft, the theory being that one engine will maintain the vessel's speed at 15 knots while the other one may be taken down and maintenance carried out, pistons drawn and that sort of thing, thereby enabling maintenance to be performed at sea by the engine room staff. However, we can vouch that this engine is not a satisfactory answer.

- 9 -

We had the misfortune to install a British built medium speed engine in eight of our ships in 1970. The engine had not been widely tried and as a result of this advanced technology and innovation we found ourselves with the rather unpalatable prospect of having to re-engine eight ships at no small cost. The fact that we learned this lesson is one thing but the publicity that has also surrounded others that have built medium speed diesel engines of a similar nature have been given wide circulation and shipowners are unlikely to contemplate opting for a means of propulsion that has not been tried and proved.

We now come to the first of the great innovations that I consider will take place in the eighties and that is the return to the old coal burner. With oil becoming scarcer and increasingly more expensive, certain trades do have the opportunity to return to steam propulsion with coal firing. To you this may sound a retrograde step as the last coal burners were really pensioned off in the early 1950's. However, surprisingly enough, Australia up until 1968 operated two coal burners on the Australian coast. These vessels were owned by BHP and they had automatic coal firing installed and operated very successfully between Newcastle and Whyalla carrying raw material in one direction and product in the other.

Obviously, where you have a source of power supply in the form of coal at either end of a run there is the possibility of utilizing a coal burner economically and let us consider where this type of vessel could find an application. Australia/Japan is certainly an area that lends itself to the operation of a coal fired ship. Adequate stockpile could be made available in Japan. There is still a steam coal mining industry in existence in Japan. There are more than adequate supplies in Australia and a vessel could bunker to capacity in Australia with coal and only have to top off in order to get back on the return voyage from Japan.

Roughly what economics are we talking about? Taking a 25,000 to 30,000 ton vessel this unit burns approximately 36 tons of oil a day. The voyage from Australia, say Sydney to Japan, at 15 knots is of 12 to 13 days duration. The price of the oil to-day either burkering in Sydney or Japan let us put roughly at \$170.00 a ton. Against this a coal burner the same size and type at 14 knots which would give a transit time of 13 days would burn 48 to 50 tons a day of coal at to-day's current price of \$28.00 a ton. The savings are apparent. The differential in the cost of the engine, a coal burner surprisingly enough would probably cost about 25% more than the diesel counterpart. This ironically enough is a total reversal of what happened with the advent of the diesel engine as a means of propulsion immediately prior to and following the Second World War when the vogue was to have a steam turbine which was cheaper to build but more expensive to run whereas the diesel engine was much

more expensive to build but more economical to run in terms of consumption,

How big a ship could be coal fired? From researches that we have made we feel that the optimum size to run between Australia and Japan would have to be in the order of 25,000 to 30,000 tons. The problems of the Panamax vessel of 60,000, which would obviously be the ideal size, produces in our opinion too many imponderables and would be too much of a gamble to take. If such a ship were built, we feel it would have to be totally subsidized as an experimental ship by not only the coal exporters but the coal importers in Japan. A major Australian company we understand are looking at the possibility of building a Panamax coal burner to run between Gladstone and Weipa and this is fairly short haul business and it is conceivable that a design could be made to work where you are looking at a total round trip of about 11 days.

New Zealand, a country which faces major problems in respect of oil, and according to newspaper reports for every \$1.00 increase in the price of a barrel of oil \$35,000,000 are added to New Zealand's import bill which last year I understand totalled 3.1 billion dollars.is another country to which coal could be applied. New Zealand's annual export income is only 3.7 billion dollars and therefore the oil factor is of crucial importance to New Zealand. New Zealand has an extremely high grade coal source at Greymouth and I understand that it is possible now to rail these coal exports through the mountains to Lyttleton, a deep water port. between New Zealand and Australia is a mere 1200 miles, an ideal distance on which to place a coal burner. Adequate supplies are available in Australia, adequate supplies are available in New Zealand. The saving from the figures already given are apparent and this in itself would give New Zealand a decisive saving in foreign exchange. Other areas where one could envisage coal burners being utilized are the United States to Great Britain, South Africa to Australia, South Africa to the U.S.A. In all instances there are adequate coal supplies at either end of the trading leg.

I personally anticipate that before 1985 there will be a coal burner under construction, probably in Japan and this I think will be the forerunner of several others. There are obviously going to be problems with the environmentalists, however, modern technology hopefully will be able to take care of the pollution problem. Other than this Governments, I feel, will have to accept the pollutant as an irritant, the alternative being continued use of oil which would be both wasteful and expensive if there is a viable alternative

and the savings to countries that are not self-sufficient in oil are incalculable.

Will we ever see a large sailing ship in the 1980's?

Personally I feel there will be an experimental vessel but it is doubtful whether a great deal of progress will be made with a 15,000 to 20,000 ton sailing ship with aluminum sails before the 1990's.

I say this because it is in many ways a retrograde step to go back to sail and I think long before shipowners look in any great depth at the possibilities of returning to sailing ships, they will exhaust the coal burner, its potential, as the burning of fossilized fuel does not give a guaranteed speed and I think shipowners to-day, having had five of the most depressing years, would be unwilling to gamble on wind power until such time as their financial positions are recovered.

So far we have talked of the shipowner, we have mentioned the charterer, but up to this point in time we have not mentioned the operator. The operator is a man who does not own ships, he has a knowledge of shipowning, he takes vessels on time charter and then trades them as though they were his own. In other words, he is a shipowner by demise. During the past five "bloody" years for shipowners there have been a spate of operators who have had the presence of mind to take ships on time charter at low depressed rates and traded them reasonably successfully. However, not many friends have been made from the shipowners' side, principally because many operators have caused owners serious financial losses. There have been a spate of operators who have misjudged the market and taken ships on time charter, the freight rates have fallen and they have loaded vessels on time charter, collected the freight, had the bills of lading signed and then defaulted on the hire payable to the shipowners. The bills of lading, having been signed, the owner is then under an obligation to carry the goods to their destination and, if need be, if the bills of lading call for it, pay for the discharge of the goods. The fact that he has not been paid hire is immaterial and we have had a variety of operators, especially to areas such as the Persian Gulf, who have in fact done just this.

Himhoff, an American time charter operator, went out in a blaze of glory in 1975 with something like 35 ships on time charter. I understand that an operation set up by what was left of the Himhoff staff in New York has just gone bankrupt again. Sovereign Marine, Mr. Fronsdal's organization, crashed in exactly the same way, with probably a similar number of ships on time charter.

Only in the last month have a well-known London company of Pakistani origin defaulted on a grain contract for the Australian Wheat Board to a Persian Gulf area. This is normally regarded as the first and last warning that all is not well with a specific operator and the

word quickly goes out that these people look as though they are in trouble and the principal of "caveat emptor" is immediately applied and any shipowner wishing to fix to such a firm wants two or three months time charter hire paid in advance, or at least paid into escrow or a revolving letter of credit set up, so that he has some guarantee of being paid in the event of the time charterer going bankrupt and leaving him to deliver the goods with perhaps a five or six thousand mile voyage together with its attendant expenses to bear himself.

This all leads up to my next point which is that the number of time charter operators which are in operation in January 1980 will be far greater than the number of operators I envisage in operation in December 1989. I think shipowners' confidence over the last five years has been shot to ribbons and I am confident that there will be a tendency on the part of shipowners to do business with firms that have an unimpeachable track record.

I am also of the opinion that far more financial investigations of charterers will take place in the 1980's than have hitherto taken place in the previous two decades, primarily because of the enormous losses suffered by a wide ranging number of shipowners through either unscrupulous operators or those operators whose financial backing is totally insufficient to the number of vessels they had on time charter. It is interesting to note that companies operating vessels on time charter can be bankrupt and yet if they have say six ships on time charter they can continue to trade those ships as long as seven or eight months, the cash flow keeping their heads just above water. what happens of course is on cargo (a) freight is paid, this then goes to pay the time charter for vessel (b), vessel (b) is then paid freight on a voyage and her freight goes to pay hire on time chartered vessel Slowly but surely the payments get-later and later. vessel has been on time charter for six to eight months with no problem, if the hire is a week late the average owner sends a hurry up reminder but does not think very much about it and it is not until he has had three hires that are ten to fourteen days late that the penny drops there could be serious trouble - and normally something like a major strike tumbles the pyramid and exposes the fact that the operator himself is, in fact, bankrupt.

The next part of this paper must deal with the market forces which are going to have influence over shipowners' decisions in the next ten years.

Economic development follows a cyclical pattern, the timing and degree of any downturn or stagnation being of crucial importance in the bulk shipping market. The shipping slump that existed until January of this year, which was probably the most serious ever faced by

operators of bulk carriers, had its origins in the world trade recession which started in 1973 and which has persisted for five years. The causes of the recession coupled with the effects of the '1973 oil crisis' are too well known to repeat here but suffice it to say the economic climate worsened in 1974 and 1975 and the culmination was a decline in international trade which resulted in a large surplus of vessel capacity.

The severity of the trade recession and the shipping slump that followed was reflected in the extremely low freight rates which persisted up till January of this year. However, since January there has been a rapid increase in freight rates, the cause of which has been twofold. The increase in the price of oil, which has artificially increased freight rates and the extremely poor harvests, particularly in Eastern Europe, which has led to massive grain shipments with the Russians and others.

Ironically when the market should have dipped in the middle of the summer, what to shipowners is known as the traditional summer market, the months of June, July and August in the Pacific, has been more than propped up by the prolonged strike of the iron ore ports in North West Australia, the Japanese being compelled to substitute tonnage on the longer round voyages to South America thereby employing a greater number of ships to carry the same amount of iron ore denied them by the two month strike at Dampier and Port Hedland, which for once means that the shipowners can be thankful, apart from those unfortunate enough to have ships standing at Dampier for the period of the strike, that the Australian unions on this occasion rendered a service.

The owners having lost substantial amounts of money and many household names with histories going back 50 or 75 years having been wiped out in the last five years, there is obviously going to be a great deal more conservatism in fleet expansion over the next decade. Added to this the capital outlay for new or relatively new secondhand ships is going to be gar greater than it has ever been before and therefore shipowners are bound to proceed with caution in the renewal of their existing fleets. This in itself, it is hoped, will maintain steady growth and not lead to over tonnaging which has been the downfall of the shipping industry in the past.

Thus it is hoped that supply will only just keep up with demand and that through the eighties a gradual increase, or at least steady rates of freight, may be expected.

The factors against this happening are basically ones of political repercussions which may occur.

The Ayatollah Khomeini has unfortunately started something which may be extremely difficult to stop, namely the resurgence of

the Moslem religion. If one looks at what used to be called the Trucial Oman States and the Persian Gulf Sheikdoms of Bahrein, Kuwait, Oman, etc., one is faced with super wealth confined principally to the Oman, etc., one or two families. This super wealth enables the sons of hands of one or two families. This super wealth enables the sons of middle-class traders in those countries to further their educational middle-class traders in those countries to further their educational studies at such universities as Harvard or Yale and to return to their native land highly qualified young men but with little facing them as a future unless they are fortunate in being able to obtain a good job in the service of the Sheik and they may well end up running their father's two coffee shops with a Harvard degree in business administration.

It is not hard, therefore, to understand how people of this type can be reached and how a minor revolution can be formented under the guise of returning to a strict religious Moslem life. It would only take one such revolution within the Persian Gulf to cause the entire world to more than hiccup and the shortage of oil which could follow such a revolution could well bring about the destruction of the freight market, there being insufficient oil to keep all the vessels presently at sea in the market.

The position of Russia in all this must also be considered, as quite apart from "the red under the bed" syndrome, any prudent shipowner when looking at the Persian Gulf and the oil supply that emanates from that quarter must consider that Russia will by 1984 be a net importer of oil. This means that the satellite nations of Comecon Romania, Poland, Hungary, East Germany, will all be dependent upon outside sources of oil just as the Western World are and will be unable to draw their supplies from Russia, as they have done in the past.

It is also interesting to note that the majority of oil supplying countries in the world are, in fact, Moslem. The Persian Gulf, Indonesia, Libya, Algeria, and even Nigeria have a substantial Moslem population and the formation of a Moslem common market would place all these countries in a position whereby they could dictate the economic terms to the West and by stretching the imagination, one could envisage the situation arising at the end of the eighties whereby the control of oil in the hands of unscrupulous States could well means that owners were forced to time charter their ships to these Arab nations at extremely low rates, say \$2000 or \$3000 a day, merely to keep them moving, being unable to obtain bunker oil themselves. Admittedly this is very far fetched but not entirely beyond the realms of possibility in this day and age.

The next great question is "Will South Africa scrape through the 1980's?" Personally I believe it will but by the end of the eighties there will be considerable trouble in South Africa. There is no doubt that the African nations are gaining strength all the time and are determined to end white supremacy in South Africa. The shipowner looks at what will happen in the event that South Africa becomes ruled by black Africans. Personally, looking at the track record of other African nations, there would in my opinion be a decline in the exports of raw materials and South Africa has, in fact, an abundance of raw materials which she exports to Europe, Japan and America, all of which are carried by tramp ships, principally iron ore, coal, maize and steel.

Coming further South, we come to Malaysia. a source of rubber and tin, the principal source of tin now in the It is also a market for a considerable amount of grain, world. manufacturered goods, frozen food from Australia and New Zealand. However, this country could well be headed towards a Northern Ireland situation in the late 1980's. The 'Bhumiputra' system introduced after Malayan independence in 1957 has ended up as blatant racialism with the Malays having all the power and the Chinese being denied such things as a university education. When I say it can be likened to Northern Ireland, the population differential between Malays/Chinese is approximately the same as that between Protestant and Roman Catholic. The land rights, the passport rights of the Chinese are, if anything, somewhat worse than those of Catholics in Northern Ireland and we, therefore, could have a complete breakdown in this country towards the end of the eighties unless something drastic is done to rectify the South East Asia itself will continue to remain a hotbed of intrigue and it is to China that the Western world will look to prevent any further Vietnamese empire building. However, in the short term, the turmoil in the Indo-China area of South East Asia will predictably be a boon as far as shipowners are concerned as it is unlikely that decent harvests will be possible in these war torn countries in the immediate first three or four years of the eighties and, therefore, a substantial grain market should develop to these countries where there was none before.

There is evidence currently of this, Russia having bought substantial amounts of Australian wheat which it is then giving to Vietnam as aid cargoes.

Having dealt fairly rapidly with the possible problem areas of the eighties, let us now consider the environmentalists and what they are likely to do to the tramp market.

As environmental problems grow in Western democracies and the voice of university professors and lecturers are heard in greater volume than they are entitled to, it could well be that the vast steel furnaces of the West could be closed down, in which case a whole industry will spring up in my opinion principally in South Africa,

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Brazil and Australia whereby raw steel ingots are manufacturered and it is these ingots that will be shipped to Japan the Western World where the raw steel itself is then transformed in those countries into manufacturered articles, leaving the basic pollution from the iron ore, pig iron to steel slab process to the vast open areas of Australia, South Africa and Brazil, all of which countries have abundant space far away from populated centres to do this type of work, hopefully with a mininum of interference from the ecologists.

I would anticipate that in the last three years of the eighties we could well expect to see a move of this nature and this in itself could change the entire tramp structure as of course by far the greatest movement of raw materials is confined to the steel industry.

The commodity that will probably expand most of all during the eighties is undoubtedly coal. Never again is Europe going to be caught with insufficient power due to shortage of oil with oil fired power stations and there is already a matter of some urgency in most Western European countries of either building new or reconverting old power stations to coal firing. Thus the great coal mines of Australia can look forward to an unprecedented profitable era during the next decade.

The increased output of aluminium on a worldwide basis is another major factor that can be expected and, therefore, the increase in shipments of bauxite on a global basis, the increase in shipments of alumina on a global basis, will be undoubted factors which will add to the seaborne trade over the next decade.

The movement of the world's grain, however, continues to be an unpredictable matter. Drought, rains and other problems of a similar nature strike geographical areas of the world without warning and inevitably a shipowner gets employment from someone else's misforture.

with a considerable percentage of the world starving there is obviously going to be a constant source of employment for shipowners but it will equally have its peaks and troughs during the next decade. That grain will be maintained at substantial levels from the principal exporting countries is undoubted as there has been a decline in many grain producing areas over recent years. Take for example Burma. Burma was a basic exporter of rice until independence, thereafter the Government having taken the incentive away from the farmer to produce large quantities, production dropped until there is a minimal amount exported from that country. Vietnam, Laos and Cambodia were all rice exporting countries. The aftermath of war has probably put them back at least a decade and these countries will in the interim, as we have

stated earlier, have to be fed on grain products rather than rice products. India, surprisingly enough, in the last twelve months has become self sufficient in grain, a remarkable achievement in itself, however, Africa looms as another area that could become a much greater grain importing area than hitherto.

CONCLUSIONS:

The shipowner in the eighties is going to build Panamax's, 27,000 tonners and 120,000 tonners to get the best return for his investment. Providing the next decade is not full of civil wars or major revolutions the freight market should be steady with not a vast difference between the peaks and the troughs. Charterers are going to have to take a far greater interest in the shipping transportation of their goods in order to achieve orderly marketing which will not only be necessary but absolutely essential in the next decade. From a shipowners' viewpoint there are more bull factors than there are bear factors but caution must be the watchword of the eighties because the investment to be outlaid is so much greater than it has been in previous years.