

PIPER ALPHA - COST OF THE LESSONS

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The insurance placement of very high value and high hazard risks is extremely complex and does not just cover the damage to the facility but can cover business interruption (loss of profits), third party liability, pollution, clean up and debris removal. The amount insured can either be on an Actual Cash Value basis or on a Replacement Cost Value basis. Dependent on the breadth of cover and the value basis chosen by the client the Insurance Industry can bear a considerable, if not all of the value of the loss.

The insurance placement of these very high value and high hazard risks such as Piper Alpha is extremely complex and does not just cover the damage to the facility but can cover business interruption (loss of profits), third party liability, pollution and clean up and debris removal.

Before discussing some of the insurance costs it would be worthwhile having a quick overview of the costs to the oil industry and to explain how a risk such as this is placed in the insurance market place.

Piper Alpha was not just a production platform but was also a central collection / distribution point for other rigs. Five other fields were linked to it, Tartan, Petronella, Highlander, Claymore and Scapa (See Fig. 1). These were all shut down as a precautionary measure. There had to be a revision of plans for a new field called Chanter and another development - South East Piper.

The six fields accounted for around 12% of Britain's North Sea output, the Piper field alone accounting for approx. half of that - 130,000 barrels per day or about US.\$2 million per day. The platform also received about 18 million cubic feet of gas per day from its own wells with another 9 million cubic feet from the Tartan and Petronella fields respectively.

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The overall value of production from the fields for 1988 was approx. US.\$1.6 billion with revenues to the U.K. Government of between £460-£570 million in petroleum tax. This loss, therefore had a fairly severe effect on the U.K. balance of payments.

Not all of the above was insured, e.g. only one of the joint owners had a business interruption policy.

The placement of the insurance coverage for Piper Alpha was very complex, not least because the platform was jointly owned by a consortium of four companies - Occidental Petroleum, Texaco, International Thompson and Union Texas Petroleum. Each of these had separate insurance programmes for their own percentage ownership and interests. (See Fig. 2).

The insurance programme for a large oil/petrochemical risk e.g. Piper Alpha would start by the owner or responsible operating company (where there is multiple ownership) contacting a number of insurance broking houses and asking them to provide a comprehensive insurance programme to cover all aspects of insurance for the named risk. Usually terms of reference are given and each broker would then put together a programme giving the widest terms of coverage combined with the most equitable price based on his experience of the market.

The owner then chooses a short list of brokers and would then normally conduct an interview with the brokers to clarify some points and to question the scope of cover and the price indicated but more importantly to have an opportunity of meeting the individuals concerned with whom they have to work with over a period of 12-18 months.

When a choice is made and an order given to a broker, this broker must then approach the underwriting market to obtain quotations as close to the broker's estimate as possible. This procedure is normally carried out by the broker discussing the risk with a "leading" underwriter i.e. an underwriter who has large capacity and an expertise in the type of business being discussed and who has personnel capable of assessing this type of risk. Once terms and conditions are agreed with the lead underwriter, the brokers must then approach the following market for their agreement to follow the leader at the agreed terms and conditions.

Once this procedure is completed the broker then presents the terms and conditions plus the premium or price to the client. If the client finds these acceptable the broker then binds the underwriters at which point they are on risk.

Many underwriters during this process accept lines to a value that they can cope with. But this does not mean that they retain all of this amount. Many will accept a line beyond their own capacity and have the excess reinsured with other reinsurance companies.

In the case of a risk such as Piper Alpha the choice of broker would be made by a panel from the owners led by the operating company after interviews. This broker would then go through the procedure mentioned above.

The Oil Industry Insurance Mutual, O.I.L., took a large share of the risk and the London Master Energy Line Slip also had a share but otherwise the cover was spread over many insurance companies and syndicates world-wide distributed as follows:-

London 60%	U.S.A. 10%	Scandinavia 10%
Bermuda 15%	Middle East 5%	

However, a substantial proportion of the non-London placement was reinsured back into London. O.I.L. itself had excess of loss reinsurance which was largely placed in the London market. The final distribution of the loss can, therefore be more accurately estimated as

London 80%	U.S.A. 5%	Scandinavia 5%	Rest of the World 10%
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Before proceeding further it should be explained that O.I.L. (Oil Insurers Ltd.) the industry mutual is made up of the Oil Companies themselves and not the commercial insurance market and that the London Master Energy Line Slip is a facility whereby many underwriters commit their capacity on an automatic basis but terms have to be agreed by four leading underwriters and has a capacity of \$750,000,000.

The actual size of the loss to the insurance industry is still not finally known but an approximate breakdown can be given as follows:- (Fig. 3)

	U.S.\$ (MILLIONS)
Physical Damage	680
Cost of Well Control	34
Redrilling Expenses	87
Damage to Pipelines, Removal, re-routing	30
Removal of Wreck	100
Seepage and Pollution	4
Business Interruption	275
Bodily Injury and Fatalities	160
	<hr/>
	1,470



The reason that the figures are not accurate is complex but as an example the value of the platform itself was the subject of much negotiation and effectively different valuations have been used by different parties. O.I.L. the industry mutual, who have a large share of the risk only insure for actual cash value as distinct to replacement cost value. Some owners buy wrap arounds of O.I.L.'s actual cash value to give replacement cash value in the commercial market. Other owners may not buy this replacement value.

Also not all policies cover removal of wreck or debris and as mentioned earlier only one owner had taken out business interruption.

Another complication within the insurance market is the reinsurance and then the reinsurance of the reinsurers into the XL (Excess of Loss) market producing a phenomena known as the excess spiral. Obviously the bottom line cost of any loss irrespective of the way in which reinsurance is allocated or placed does not change but because of the interplay of reinsurance payments and recoveries between various reinsurers cash flow problems and some extra costs develop. It has been estimated by some sources that the excess spiral is resulting in costs of approx. US.\$7 billion for the Piper Alpha claim. This is not a real cost but is a "cash flow" situation.

Another way of expressing this aspect is that when we as brokers go to the market to place a large insurance package such as Piper Alpha the primary underwriters accept a volume of business which indicates that the market capacity is about \$1.6 - \$1.8 billion. They accept this volume of business with the understanding that they can lay off some of this with reinsurers who in turn lay off some of their business with the London Market Excess, but the situation becomes so complex that some of this starts to turn back on itself and you find original underwriters taking reinsurances of third and fourth underwriters in the chain.

The result of the above is that the real capacity is only 50% of what it is supposed to be.

This has the effect that some reinsurers have run out of reinsurance limits and reinstatements and there are now syndicates in Lloyd's for instance who have stopped underwriting and are calling on names for payment.

To finish I would just like to mention that since the Piper Alpha claim there have been some very large claims from the energy industry made to the insurance industry e.g. the Phillips Petroleum loss at the petrochemical complex at Passadena is now estimated at US.\$1.4 billion. The Exxon Valdez incident and clean-up costs are approx. US.\$2 billion with other claims totalling another US.\$3.2 billion, the cost to the insurance industry is horrendous and outweighs the premium payments by a huge amount. The nett result must be that the insurance market will harden and premiums will soar. The process has started to happen.

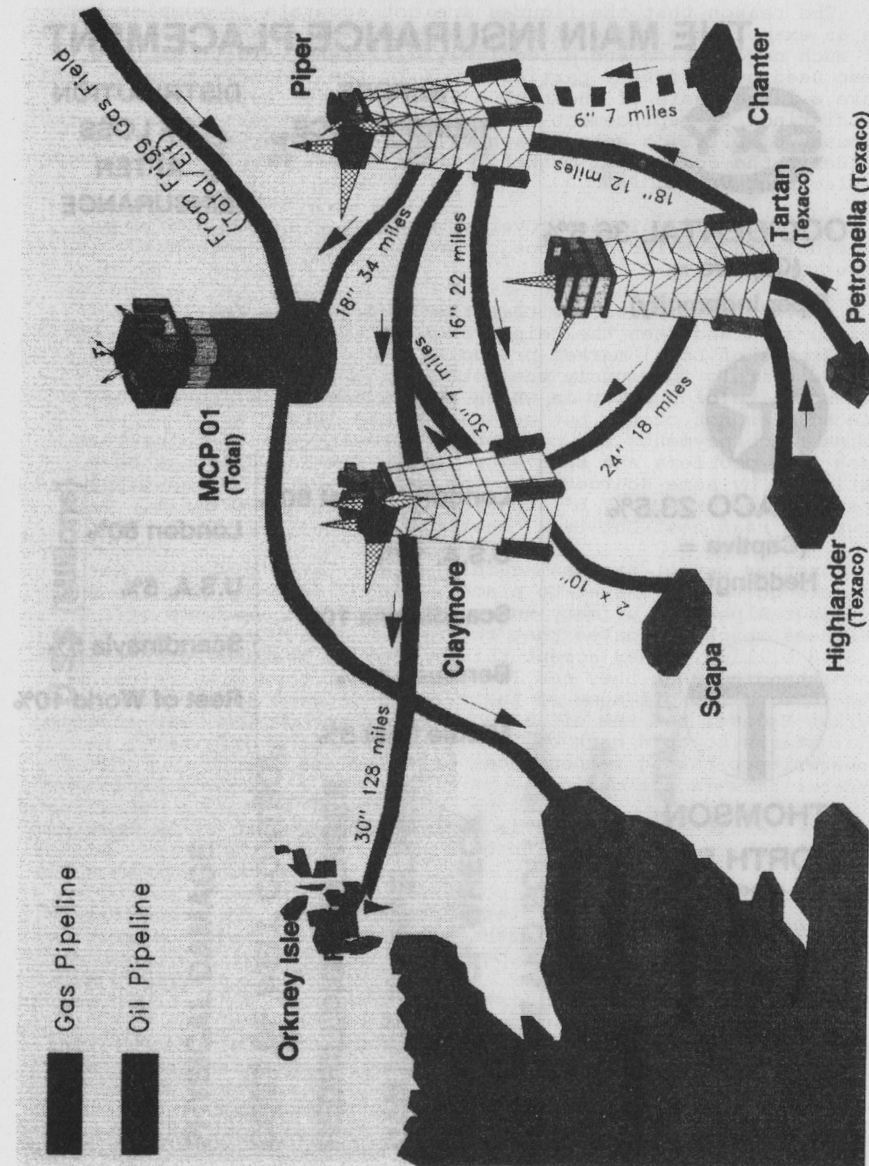


FIGURE 1

## THE MAIN INSURANCE PLACEMENT

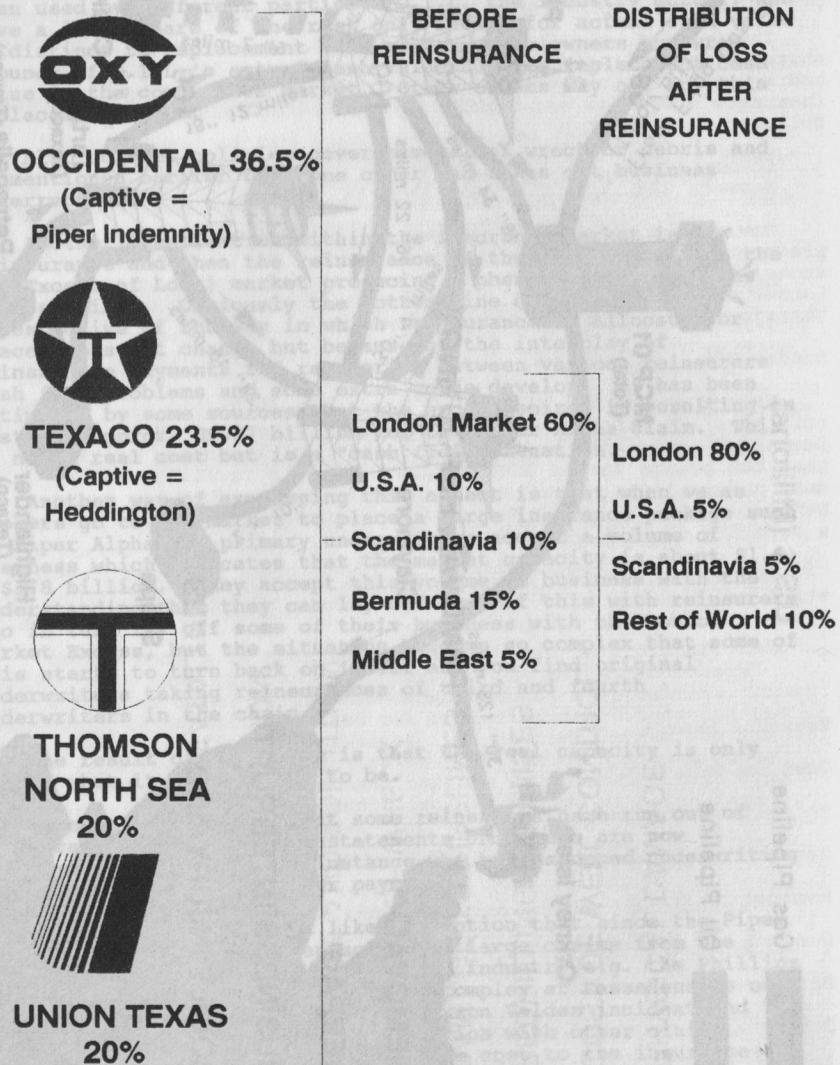


FIGURE 2

## THE MAIN INSURANCE PLACEMENT

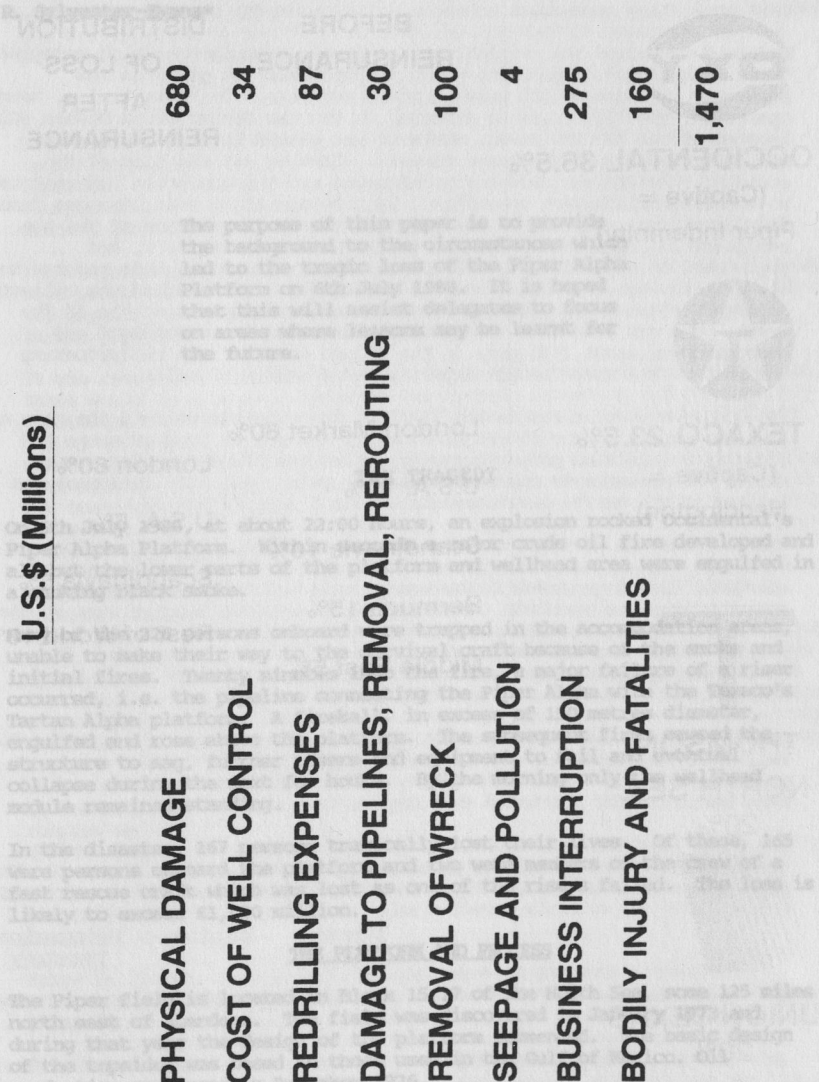


FIGURE 3