

NORTH SEA OIL: PUBLIC CONCERN, PRIVATE KNOWLEDGE

PETER WYBROW

RESEARCH ASSISTANT
DEPARTMENT OF SOCIOLOGY
MEMORIAL UNIVERSITY, NEWFOUNDLAND, CANADA

Introduction

Oil remains the single most important resource necessary for the continued productivity and growth of modern western societies. Many of the world's greatest multinational corporations have been built on oil exploration and production. Western nations and the multinational oil companies have become dependent on uninterrupted supplies of crude oil for their continued prosperity. The last decade has seen changes in the political power structures of the established Middle East oil-producing areas, resulting in the rise of OPEC and the ability of oil-producing countries to control the availability of crude oil supplies.

The North Sea, the Gulf of Mexico and latterly the Eastern Canadian Seaboard have provided the possibility for oil production to continue in politically more favourable climates. Nowhere is this more so than in the North Sea. Political stability, close proximity to large European markets for refined products, and the existence of a refining capability, operating at below its full capacity, on the doorstep, have ensured that the North Sea has been an ideal location for oil developments. These factors, coupled with the fact that successive British Governments have seen North Sea oil as a possible panacea for Britain's continuing balance of payments crises, have ensured rapid development of the oil resources found in the British sector of the North Sea. More recently other areas of the United Kingdom Continental Shelf (UKCS) have been of interest to the companies. Seismic surveys and/or exploration drilling having taken place in the English Channel, the Western Approaches, the Irish and Celtic Seas, West of Shetlands and North of 62°N.

Costs and Benefits

The economic impact of North Sea oil is substantial. According to the Governments' annual statistical review of Britains oil and gas resources, Development of the Oil and Gas Resources of the United Kingdom (hereafter referred to as the Brown Book) 1983 edition, the 1982 oil and gas production accounted for just under 5% of the UK Gross National Product (GNP) at factor costs.

This is not the place to go into the present economic policies on North Sea oil, which is covered elsewhere in this volume by Alex Kemp. It is however useful to look briefly at the economic costs and benefits of North Sea oil in order that we may examine later what Carson (1982) has called 'the other price of Britain's oil', namely the costs in life and limb to those working offshore.

Department of Energy figures estimate that the total revenue from the sale of oil and gas produced on the UKCS in 1982 was around £14.3 billion and £1.0 billion respectively. (Brown Book, 1983, p.19). The companies are calculated to have contributed £7.8 billion to the Exchequer in tax and royalty payments in the financial year 1982/83 (ibid). In order to put this into perspective, tax and royalty receipts from the UKCS amount to just over half of the sum collected in VAT and just under a quarter of that collected in income tax in 1982/83.

Despite company rhetoric to the contrary, their interest in the potential of the North Sea continued unabated. Expenditure on exploration in 1982 totalled £861 million, an increase of approximately 50% on 1981. This figure demonstrates the high level of exploration drilling which occurred in 1982, totalling some 111 exploration and appraisal wells. This represents the highest level of exploration and appraisal activity since the record year of 1977 (Brown Book, 1983, p.7). Much of this exploratory effort is potentially good news for the Scottish-based oil industry since it occurred in two main areas, East of Shetland and East of Scotland. Nine new discoveries of oil and gas were announced in 1982.

The construction and installation of platforms and the associated equipment together with related gas-gathering pipelines, terminals

etc. amounted to some £2961 million for oil and gas fields in 1982 compared with £2757 million in 1981.

The start-up in the Fulmar and North Cormorant platforms in 1982 was reflected in the increase in operating costs for oil fields from £929 million in 1981 to £1175 million in 1982 (Brown Book, 1983, p.21).

In 1982 approximately 25% of the UK's gross capital investment was made in the exploration and production industry including contractors providing services unique to the oil industry. This totalled about £3.1 billion compared with £2.9 billion in 1981, this representing about 7% of gross domestic capital formation for 1981 and 1982. It is estimated that, at 1982 prices, about £29 billion has been invested on the UKCS and in addition some £6 billion has been spent on exploration (Brown Book, 1983, p.21).

The costs of the exploration and exploitation of oil and gas resources, in financial terms, are enormous. The main source of funds for this development in the North Sea is internally-generated funds from the companies themselves. British-based banks provide about 25% of the total financing requirement. The returns to the Exchequer are substantial. Oil has brought costs and benefits to the N.E. of Scotland; some areas such as Aberdeen and Peterhead have experienced considerable social change (see Moore, 1982).

Employment

In 1980, the last time the breakdown in employment figures was given, nearly 16% of the offshore workforce gave their normal place of residence as Aberdeen. Out of a total of 8,900, 52.5% gave their normal place of residence as somewhere in Scotland. This information was obtained by means of a survey and the figure of 8,900 represents the number of returns made. It was estimated that the numbers employed offshore in the UKCS was 10,500. (Brown Book, 1980, p.44). Strictly comparable figures are not available in the current Brown Book (1983) because in 1981 the Department of Energy changed its method of calculating the numbers. From June 1980 the Department of Energy statistics now includes those employed on service vessels, survey teams, construction support barges etc. which had not previously appeared in surveys published in earlier Brown Books.

The latest figures, produced as a result of a survey carried out for the Inland Revenue, give a figure of 21,500 employed offshore in the UKCS as of July 1982. 84% of these were UK nationals. It is interesting to note here that there is no disaggregation in terms of gender. The number of women employed offshore in the UKCS is unknown but is probably less than the order of 1-2%. This compares very unfavourably with the situation in the Norwegian sector where some 20% of the workforce is female. The 1975 Sex Discrimination Act has never been extended to the UKCS. Section 10(5) of the Act makes provision to introduce an Order in Council to extend the Act to the Continental Shelf, as defined in the relevant Order in Council under s.1(7) of the Continental Shelf Act (1964). No such order has ever been made. To date, sex discrimination is not illegal outside territorial waters on the UKCS.

In the haste to develop the resources of the North Sea one important area had been overlooked and that was the conditions under which people had to work and the legislative problems associated with such employment. By 1977, ten years after gas production had started up, it was still doubtful whether the National Insurance Acts were relevant to the North Sea, and whether these Acts applied to people working for non-British firms. It was known that the Redundancy Payments Act and the Conditions of Employment Act did not apply to people working on rigs. There were other anomalies. If a rig was self-propelled, then whilst moving, the workers on board were treated as merchant seamen, but if stationary and drilling then they were governed by the Mineral Workings (Offshore Installations) Act.

Legislation

The legal system offshore in the British sector has been a hotch-potch. The use of 'enabling legislation' in the formulation of policy offshore, especially in respect of labour relations and health and safety regulations, ensures that changes in legislation is of an ad hoc nature, new legislation being enacted only when it becomes absolutely necessary because of public pressure.

Carson, in his book The Other Price of Britain's Oil, writes in great detail of the 'unconscionable haste' with which the Conservatives pushed through the Continental Shelf Bill. In such an

atmosphere, Carson argues,

"It was highly unlikely that any doubts about the adequacy of arrangements for securing the safety of offshore operations would be allowed to impede the rapid provision of the legal framework required for further exploration. Nor were they, even though safety was one of the major misgivings raised by the Bill's critics from the very beginning and even though the doubts which they expressed also exposed some major elements of confusion in the proposed enactment's crucial provisions for the application of British Law in general" (Carson, 1982, pp.143-144).

Thus was created the 'legal chaos' that has epitomised the North Sea safety regime ever since. Carson goes on step-by-step to build up his thesis that successive Governments have been prepared to allow the Department of Energy to determine and enforce safety standards. The Department of Energy became responsible for devising and policing safety standards and at the same time was responsible for pushing through the development of North Sea oil as rapidly as possible in conjunction with the oil companies. This was despite the fact that such an arrangement was seen to be wholly unacceptable in the case of nuclear power generation and in coal-mining which are covered by the Health and Safety Executive (HSE). This latter fact was referred to by the Note of Dissent to the Burgoyne Committee Report on Offshore Safety (1980, p.60).

The most complete account of the structure and responsibilities of the Department of Energy in relationship to UKCS is given in Carson (1982, Ch.5). Carson underlines the point that the 'salient feature' of the developments was the vertical structure within the Department of Energy in which the Petroleum Engineering Division (PED) was located.

The PED was divided into four branches; Branch I was responsible for the administrative organisation of development; Branch II for assessment of discoveries, conservation, petroleum revenue tax etc.; Branch III for operations safety and inspections; and Branch IV for research and development related to safety of offshore installations and the exploration for and exploitation of petroleum resources of the UKCS (Civil Service Year Book 1979). According to John Liverman, who was Deputy Secretary with responsibility for North Sea oil and gas policy from 1972-80, after allowing for staff providing common services, about half of the Department of Energy staff were engaged in

matters related to UKCS. Those staff attached to the PED who were primarily professional engineers, geologists and other petroleum experts were the main source of advice within the Department of Energy on the approval of field development plans, gas flaring controls and offshore safety (Liverman, 1982, p.464).

Attracting these highly qualified staff presented serious problems.

"the necessary qualifications for the more senior staff included experience in the oil industry since representatives of the department had to be able to match oil company executives in qualifications and expertise". (Liverman 1982, pp.464-465).

Demand for such personnel, from both the Department and the oil industry, outstripped supply. Companies could pay high salaries to such people. Successive periods of pay restraint meant that the Department of Energy could not attract the staff and consequently the PED 'was often one-third or more below complement' (Liverman, 1982, p.465). In order to rectify this matter the Civil Service Department was forced to concede the creation of a petroleum specialist class, the salaries for which were determined separately from those of other professional grades. The salary scale for this petroleum specialist class was thus broadly comparable to similar positions in industry. (Liverman, 1982, p.465). Consequently, within the Department of Energy, the PED was staffed by people recruited directly from the oil industry and so could be expected to retain the general attitudes of multinational oil companies towards oil development. They were vertically integrated into the rest of the Department of Energy structure ensuring that within the PED those responsible for safety were directly responsible to superiors whose working brief was the rapid exploitation of Britain's oil resources. That objective is not necessarily compatible with safety.

According to the dissenting note in the Burgoyne Committee Report (p.59) as far as was known 'none of the PED Inspectors were specially qualified or trained in occupational health and safety'. This vertical integration of personnel, untrained in occupational health and safety matters, into a structure whose dominant ethos was for the rapid exploitation of North Sea oil resources flies in the face of the accepted wisdom in all other industries which, since the Second World War, have been developing horizontal structures for dealing with these

matters. Such structures were consolidated in the Health and Safety at Work Act, 1974.

Health and Safety legislation continued to be amended during 1982. Most recently, on 1st November 1982, section 24 of the Oil and Gas (Enterprise) Act, 1982, came into force. This introduced a new section 1 of the Mineral Workings (Offshore Installations), Act 1971 thereby extending this latter Act to include the storage of gas and the provision of accommodation for persons working on offshore installations. Because of this Act installations which provide accommodation facilities are required to possess a Certificate of Fitness as required under the Offshore Installations (Construction and Survey) Regulations, 1974. As a result of discussions with the oil industry it has been agreed that where appropriate, and 'subject to adequate safeguards', the Department of Energy was prepared to exempt such accommodation units from such certification for the period 1 November 1982 until 31 October 1983.

In November 1982 the Offshore Installations (Including Apparatus or Works) Order, 1982 came into effect. This order extended the UKCS safety regime to the pipeline booster platforms on the UKCS which serve the Frigg and Ekofisk fields.

Discussions continued throughout 1982 between the industry and the Department of Energy over improving the braking mechanism on the winching machinery for raising and lowering the drilling equipment, known as the draw-works. (Brown Book, 1983. p.17). Following these discussions, broad agreement was reached with the industry on the standards required and it is expected that monitoring systems will be developed during 1983.

The Human Cost of Britain's Oil

1982 was not a good year for offshore safety. Figures given in the Brown Book, 1983, show the number of deaths in 1982 as 13. This is the highest figure for deaths in the North Sea since 1976. These are deaths reported under the Offshore Installations (Inspectors and Casualties) Regulations 1973.

Reported under these Regulations were 39 serious accidents and 181 dangerous occurrences. ('Dangerous occurrences' are those events

which, whilst not causing death or injury to persons, might have done so). Whilst the number of serious accidents declined in 1982 as compared with 1981, the number of dangerous occurrences increased from 135 in 1981 to 181 in 1982.

In addition to these figures shown in Appendix 15, of the Brown Book, 1983, entitled 'Accident statistics', two further deaths and three serious injuries were reported to the Department of Energy under the Submarine Pipe-lines (Inspectors etc) Regulations 1977.

In September 1982 a further six men died in a helicopter crash which is a useful illustration of the vagaries of North Sea statistics. These deaths are not included in the figures quoted above.

On the 14th September a crew man was injured on the seismic vessel Baffin Seal. The crew of Baffin Seal contacted the 'flotel' Treasure Finder, which also houses the Brent area's hospital facilities. A Bell 212 helicopter took off from Treasure Finder with a pilot, co-pilot, winch operator, winchman, doctor and medic. Contact with the helicopter was lost some 20 minutes later. The helicopter had crashed into the sea killing all six occupants. The deaths of these six men are reported in the Brown Book, though not in the Appendix of accident statistics. The serious accident that caused the injuries to the crewman of the seismic survey ship would not be included in the Brown Book accident statistics. However those men working on survey ships are included in the statistics when numbers employed offshore are given.

Defenders of the North Sea oil safety record point to the increasing numbers recorded as working offshore compared to the relatively small increase in accident statistics. Brown Book figures for respective years shows 'numbers employed on installations rising steadily from 1973 from 2,430 to a peak in 1978 of 12,500 and then declining to 10,500 in 1979'. The numbers suddenly jump in 1980 to 22,000 and are 21,000, and 21,500 respectively for 1981 and 1982. Whilst a footnote reminds the careful reader that the figures before and after 1980 are not directly comparable, no such footnote draws the reader's attention to the fact that the basis for calculating accident numbers given in the same table has remained the same.

From 1980 the statistics for employment include construction workers, the personnel of mobile drilling rigs, service vessels, support barges and survey teams. Many of these personnel fall outside the Offshore Installations (Inspectors and Casualties) Regulations, 1973, and the Submarine Pipe-lines (Inspectors etc) Regulations 1977. In the event of them having an accident or being killed, such accidents or death would not appear in Brown Book statistics.

Taking the Brown Book figure for 1982, the numbers working offshore were 104% higher than 1979 whilst the number of deaths occurring in 1982 were 30% higher than 1979. On the face of it this is encouraging news but given the change in number calculations such figures must be treated very carefully.

It is true that figures for serious accidents are down from 59 for 1981 to 39 for 1982. However, some care must be taken in accepting these figures. Experience has shown that there is some lee-way in what constitutes 'a serious accident' and certainly some laxity in the reporting procedures. Carson (p.30-38) quotes managers and workers alluding to under-estimation of the true position vis-a-vis casualty statistics and the minimisation of injuries. In addition he gives accounts of Department of Energy officials expressing doubts over the accuracy of official statistics.

Of particular concern is the failure to report structural and other failures which could lead to deaths or serious injuries. Carson quotes one Certifying Authority as stating that "such failures are not generally notified unless they involve some more or less catastrophic consequences which are unlikely to escape public attention".

In looking at the reporting of weld failures recorded by Lloyd's Register in the course of surveying sixty-seven installations, the Burgoyne Committee report said 'few if any' had been reported to the Department of Energy. Despite the fact that none of these weld failures had caused fatalities the Burgoyne Committee did not shrink from expressing considerable concern

"It is interesting that weld failure has been identified as the cause of only five accidents in nearly six years. ...The incidence of weld failures is nevertheless known to be quite large from information scattered in the files, and it is fortunate that so few have caused accidents. That they are not considered - and reported -

as dangerous occurrences is perhaps less fortunate. It is known that in a number of semi-submersibles, weld failures have been so extensive that the safe operation of the entire rig was in jeopardy" (Burgoyne Report p.114).

Companies can afford to dismiss accusations of secrecy and obfuscation with the wave of a hand because they control access to information. The unique position of the oil industry offshore provides them with total control of communications and knowledge.

The common financial interests of the companies operating offshore binds them together into a freemasonry of the North Sea - not a secret society so much as a society with secrets. All industries have secrets, legitimate secrets of scientific or commercial value. The ability of people to work in a safe environment has long been a public issue in Britain. Those people working in an industry know of its dangers and problems. Those entering an industry onshore know of its inherent problems and dangers because of public debate and the extensive publicity given to results of enquiries into accidents. Workers are assured that inspections and investigations will be carried out by independent inspectors free of the constraints of a sponsoring Ministry. This is not the case offshore, or more specifically is not seen to be the case.

Carson's book The Other Price of Britain's Oil was exceptionally well received in Canada, with its rapidly expanding offshore oil industry on its Eastern Seaboard. The book received extensive coverage in the press, on radio and television and has been widely read by Government Ministers, trade unionists, company personnel etc. In Britain the book has been largely ignored. Primarily this is because of the lack of public debate over the issue of the North Sea generally, (an historical feature of oil policy-making in Britain) and companies have been able to avoid the problem, to them, of adequate public scrutiny in matters related to offshore oil.

Freemasons protest that their rituals are a private concern and to expose them is unwarranted intrusion. Likewise, oil companies protest that their offshore health and safety records and procedures are a private concern and to expose them is an unwarranted intrusion. Academics or journalists, no matter how objective, are viewed as

enemies. Social scientists are seen as aggressive towards the companies and reported as being 'out to prove the companies are doing wrong'. Objectivity is often seen by company personnel as being a quality only possessed by themselves.

If people are to be given an opportunity to form considered objective opinions about offshore safety then access to such information cannot be denied them. It is and it will continue to be denied whilst companies continue to escape the examination of public accountability. It is an interesting paradox that the oil companies are terribly sensitive about their image. Tens of thousands of pounds are spent each year on advertising, public relations and charitable works in order to promote the good name of the companies. Esso's current annual expenditure on charitable giving and sports sponsorship now exceeds £½ million per year (Esso Magazine, Spring 1983. p.8.)

Despite their size and strength they are also paper tigers. Interviewed for Shell Times, (No.32) in 1981, Sam Gallacher, then Shell UK's newly appointed Director of Public Affairs said:

"In the longer term, the overall issue is really nothing less than our acceptability to society. This obviously has many facets, such as our sensitivity to the environment, our impact on the economy, and our contribution to the quality of life. These are all big and rather theoretical concepts, but the fact is that unless we operate acceptably in such areas, we may not be allowed to operate at all". (P.17)

Gallacher saw public affairs as not simply being the guardian of the corporate conscience or as protector of the public image but as part of the corporate organisation which continuously influenced action.

"The ultimate test in public affairs is how many people will say "no" when we propose a particular course of action" (ibid).

Neil Groundwater, writing in the Esso Magazine (No. 125, p.8) explains Esso's considerable spending on charitable works and sports sponsorship in terms of being justified because it demonstrates the company is concerned with the:

"wider role as good citizens taking part in the whole pattern of life of a well-rounded community. In the long term there is a degree of enlightened self-interest in that a well-ordered and stable society, which cares for the whole man and protects the weak, is more likely to be a setting for successful private business than an unstable, uncaring society".

Such views are strangely paradoxical, emanating from corporations who become so secretive when people's safety offshore becomes involved. It is not just the workers themselves who have an interest. A number of researchers in Aberdeen have experience of the anxiety of oil workers' families in connection with offshore, work, in particular the period of the helicopter flight to and from shore. Many people spoken to, who work offshore expressed the opinion that because of the number of helicopter accidents in the North Sea this was the most anxious time for them and their families.

Any academic or journalist interested in what is going on in the North Sea has many accounts given them of accidents unreported, lack of adequate supervision, flouting of agreed safety procedures, threats and intimidation. Such accounts are always prefaced by such requests as 'for God's sake, don't quote me or I'll lose my job'.

As is the case in so many other walks of life such accounts are embroidered along the way, bits being added at each telling. Some excellent work on offshore safety has been emasculated by publishers' libel lawyers for fear of legal battles with companies. Talking to people within the industry who are concerned with the corporate response to accidents, it is evident that a major priority, after giving every aid and assistance to the injured, is the absolute control of information regarding the incident.

No one denies the right of the injured people or their families, or indeed the families of people who may have been killed, to privacy in their time of grief. Indeed the major companies have a record second to none in their concern at this time. There is however a difference between morbid interest and the objective pursuit of knowledge concerning the potential safety hazards of an industry vital to the needs of the economy.

As in the area of legislation there is a wide variation in the practices in the Norwegian Sector of the North Sea and the British Sector. For instance, members of the Institute of Work Psychology of the Work Research Institute in Oslo have access to a number of companies' platforms in the Norwegian Sector to carry out a variety of research tasks. As a result of this they are able to monitor accidents as soon as they have occurred, speaking to the injured, witnesses, those in supervisory roles at the time of the accident etc. Such accounting is independent of any enquiries that may be carried out by the companies themselves or by Government officials.

Such a situation is unthinkable on the UKCS. Research, such as it is, is carried out by the companies and is regarded as a commercial secret. Existing publicly available statistics are, by the Department of Energy's own admission, inaccurate. The true number of deaths and serious injuries experienced by those working offshore is unknown (Wybrow, 1982, p.267). The official statistics are simply the minimum that are known.

Given that such statements have been made by the Department of Energy and coupled with the large numbers of accounts that abound about lack of safety offshore, it cannot be considered surprising that people ask questions.

If the safety record is as good as the companies state then they have nothing to fear from public scrutiny. If on the other hand, since they are so concerned with their public image and things are not as good as they publicly admit, then they are deliberately clouding public debate. Carson points out that the majority of accidents occurring offshore are not the result of the unique environmental conditions of oil developments or indeed of working at the forefront of technology but rather the consequence of disregarding precautions and safeguards, such as those embodied in the Factories Acts and as such are enforced by the Factories Inspectorate onshore. In which case, as Garner points out in a review of Carson's book, the question must be asked whether the apparently high accident rate in UKCS can be attributed to the administrative arrangements prevailing (Public Administration, Vol. 60, p.496). In the same way as an individual organises his affairs in order to pay the minimum of tax within the existing fiscal regime, so companies will operate within the existing

administrative framework to their own maximum advantage. It does not need a vast imaginative effort to see that this doesn't necessarily coincide with the interests of the individual. Social scientists have for the last twenty years used C. Wright Mills' call for the reconnection of personal troubles to public issues as a basis of their research. Nowhere is there a clearer example than that of offshore safety. The sufferings of individuals need to be located within the social structure which encompasses that individual. Such location can only be determined by empirical enquiry.

"The purpose of empirical enquiry is to settle disagreements and doubts about facts, and thus to make arguments more fruitful by basing all sides more substantively" (C. Wright Mills, 1970, p.226)

Empirical enquiry remains out of the question in Britain whilst the companies maintain their powerful position in terms of communication and in the prevention of unionisation. Precisely the same companies hold contradictory positions over access to data and personnel on either side of the dividing line between the British and Norwegian sectors of the North Sea.

In a recent industrial dispute between divers and a diving company in the North Sea, 26 divers were sacked after a week-long protest over failure to win recognition for their union. As a result of the protest more than 80 divers joined the union in a week, which meant that over half of the 1,200 divers in the North Sea had become members.

The Founder and General Secretary of the Professional Divers Association, Mike Todd, claimed that this had an immediate impact on the diving companies who were then agreeing to talk about improving conditions. Todd is quoted as saying

"safety and conditions are our main concerns....
10 years in the North Sea without any clear representation has resulted in some bad conditions and needless risks" (Sunday Times, 15/5/83)

Companies small and large appear to cut corners, take risks and obfuscate statistics if they can 'escape public attention'. This occurs in all walks of life. No-one would deny it. The evidence, such as it is, points to the inevitable conclusion that it occurs in the oil industry of the North Sea to a greater extent than elsewhere, precisely because of its particular geographical location conferring

as it does a very powerful domination over access and communications by the companies. There is a pressing need for objective empirical enquiry into offshore safety that will remain whilst the 'freemasonry of the North Sea' is allowed to continue.

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