Déjà vu all over again! :the reluctant rise and protracted demise of Scott Lithgow Limited

Hugh Murphy

School of Social Sciences, Humanities and Languages

THIS: PHD

Chapter V: The long march to merger, 1965-1970

From February 1965 the SIC had begun to deliberate on how to re-invigorate the competitive ability of the British shipbuilding industry in relation to international competition. Thereafter, oral and written evidence was taken from the Shipbuilding Conference and Shipbuilding Employers Federation, the Chamber of Shipping, the Dry Dock Owners and Repairers Central Council, the National Association of Marine Engineers, and the Confederation of Shipbuilding and Engineering Unions. In addition to the SIC sponsor department, the Board of Trade, which also provided its Secretary, Victor Chapman, other departments, particularly the Admiralty's successor, the Ministry of Defence, Navy Department, MoD (N), and the Ministry of Labour were also consulted, as were a wide range of individual experts and sub-contracting firms. By a series of visits to shipyard and engineering establishments throughout the UK and abroad, the SIC, and the Secretary of State (Shipping) at the Board of Trade, Roy Mason, attempted to gauge both the extent and the prospects of the industry relative to both internal and external competition. [1]

During three days in April 1965, with the exception of the Swan Hunter owned, Barclay Curle, the SIC visited all of the larger shipyards and marine engineering establishments on Clydeside.[2] Individual members were given specific briefs, but Geddes had already decided in advance to visit Scotts'. This was in all probability due to Michael Scott's position as Chairman of the Warship Group and as the President elect of the Shipbuilding Conference.[3] Recalling the Geddes visit to Greenock, it was noted that Scotts' investment in plant and equipment was 'not so much a programme as a continuous process with humps'. Although £2,250,000 had been spent since 1945, Scotts' Secretary and Director, John Lee advised Geddes that investment decisions had not been made on the basis of a return on capital employed, but as a result of the need to survive. Nor, in terms of overall profitability was a return on individual equipment calculated. However, Scotts' methods of production had tended to minimise changes in tempo between civil and naval work. Welders, for example, were on time rates for naval work and lieu rates for civil work as different standards of inspection applied. Due possibly to their accent on close supervision, Scotts' found it possible to compete with Swan Hunter and Harland and Wolff at 20,000 tons, and could also compete with small builders because of modern methods of production. Although Scotts' could build up to 50,000 gross tons, the firm preferred to build two 35,000-ton vessels instead; however, at the time of the Geddes visit they were also building a small coasting vessel. The firm's system of steelwork control although simple was nevertheless adequate, but the need to change the direction of steel throughput was accepted. On the labour front, the workforce would not accept the need to work on nightshift, and demarcation was more intense on naval work. Moreover, a recent quarrel over two weeks riveting work for two apprentices had resulted in a three-week stoppage involving sixty men. George Hilton, the President elect of the Shipbuilding Employers Federation, defined flexibility, 'as a temporary arrangement whereby one man took over another's job on an ad hoc basis' with interchangeability being a permanent switch of occupation involving in due course a change in union card. To this, Geddes general impression was that Scotts' through, 'its somewhat paternalistic management attitude [was] out of line with modern life and unlikely therefore to break through traditional demarcation barriers'. On the engineering side, he noted that Scotts' had superficially excellent housekeeping, and were proud of their production methods particularly the application of naval practice to civil use, which in the Engine Works, but not in the shipyard tended to reduce costs. Geddes noted that in particular, the works production control system, 'seemed very good'. [4] Nevertheless, although this was not officially referred to, Scotts' claimed to have a maximum annual engineering capacity of 180,000 hp. Clearly, if the evidence of the past five years was any guide, the engine works had been severely under-utilised, as engines totalling only 70,470 hp had been produced, although modernisation was certainly a contributing factor.[5]

Geddes and most of his committee had visited Lithgows on the previous day and noted that the yard was crowded, but that plans were afoot to extend it by 400 feet by diverting the route of the A8 motorway. [6] It was also noted that the Kingston yard was the locus of more modern methods of production, whereas the, 'conventional and unimpressive' East yard, appeared to have little spent on it, and that the former Glen yard of William Hamilton was being used, 'virtually as a dump'. Nonetheless, Lithgows had spent £4,000,000 since the war, but mostly in the past five years on investment concentrated on the Kingston yard. The programme had began as an 'orderly modernisation, but had been converted into a crash operation...but in practice, [Lithgows] have had to decide on investment just to survive'. Although the firm had in some years exported seventy per cent of its output, it preferred to keep export work to around thirty per cent, but the firm had now to sell on credit with financing of home orders remaining difficult. Budgets were worked out on a historical cost basis with the control of manpower being the main object of cost control. At this stage Lithgows total labour force numbered 2,089 and the number of berths three with a maximum building capacity of 125,000 gross tons. Nevertheless, the firm believed that 500 to 600 men were the best manpower unit in a shipyard, which, it was noted, partly accounted for the two separate yards. [7] At this stage, however, Lithgows still remained in control of Fairfield-Rowan, Fairfield, and Ferguson Brothers, and also held a thirty per cent stake in John Kincaid.

Before Geddes had returned to London he had been asked by a fellow member of the SIC, Professor Lighthill, how he saw the effects of family control over so many of the yards visited in relation to the competitiveness of the industry as a whole? Geddes later noted that the longevity of the family firms had engendered a sense of trusteeship and the will to resist mergers, however, the visit had pushed him, 'a bit more in favour of specialisation and medium size, (whatever that is) than of a few giant corporations'. To him, Lithgows had, 'a harder more competitive feel than John Brown', but overall on the Clyde in relation to labour the dominant strand was paternalism. Both Scotts' and John Brown had provided excellent canteen and welfare blocks, but according to Geddes it seemed that firms had missed the point, which was, 'the look in the donor's eye as much as the facility'. However, Geddes did praise Lithgows shop stewards, for, 'the natural and relaxed way in which they joined the lunch party [which] was an experience'. Through talking to them he gained the impression that they did not have the outlook of casual labour, and mused that there was perhaps an advantage in location outside Glasgow, 'but if there was one, Scotts' had not found it'! [8]

Unlike ship repairing which, by its nature, was inherently casualised, shipbuilding labour by this stage could be more properly described as being prone to intermittent periods of unemployment as work on the hull or on the fitting out stage came to a halt. Firms strove to maintain an adequate balance between the trades and attempted to plan their production accordingly. Nevertheless, by this stage, there was a general feeling from the trade union leadership, and from some of the more enlightened shipbuilders in the industry that employment had to be made more secure to attract and maintain an adequate supply of labour. Attempts by a Ministry of Labour Working Party to encourage this in part had been frustrated, but Geddes did note that Scotts' management would welcome its resurrection. On main engines, Geddes noted that neither family nor public firms were able, 'to break out of the familiar pattern for diesels'. Scotts' like others were much influenced by installing engines of their own manufacture, 'but had little sense that engine costs could be improved by series production'. Nevertheless he noted that two family firms, Lithgows and Yarrows would like to widen their connections with land-based firms. Overall, Geddes felt that it was not easy to determine the effect of family control on the efficiency of the business. [9] Given that his visits were to a large extent superficial, his conclusion, at this stage, was just that.

Labour

By this stage, the overall labour question in the industry remained unanswered. Moreover, little would be gained by the SIC lambasting restrictive practices and demarcation if no *quid pro quo* was offered from the employers in guaranteeing some security of employment, as it was precisely the inherent insecurity of employment in shipbuilding that had given rise to the trade protectionism of individual unions. At the national level the employers maintained the stance that there was an acute shortage of skilled labour in the industry. Total employment had fallen by a quarter in the previous five years, and the intake of apprentices had apparently been drastically restricted by the unions and in some areas had ceased entirely. [10] Accordingly, the Shipbuilding Conference and the SEF, somewhat breathtakingly, remained convinced that the trade unions attitudes remained 'Victorian and inflexible', and had prevented the industry from reaping the benefit of modernisation by using labour in the most efficient manner. [11]

Throughout its inquiry the SIC to an extent recognised this, but later thought it desirable to introduce major changes in the utilisation of labour by stages, although, 'not so gradually that they could not be seen'. The onus was on the employers and unions to improve the climate in the industry, and that a suggested formula for discussion in the SIC was, *inter alia,* that the employers should, 'accept the desirability for greater security of workers' and the unions the need for, 'better utilisation of labour'.[12] At a later meeting with the office holders of the SEF and SIC, the former still were unconvinced on security of employment, as it seemed to be of 'little concern to shipyard workers, although the union executives were interested'. In addition, the workers, apparently, 'were only concerned with the amount of pay they could take home'. Nevertheless, the SEF did, however, acknowledge the lack of enthusiasm for job security might reflect the present labour situation in the industry. [13] All things considered, these attitudes hardly augured well for the future of labour relations in the industry.

The Naval Dimension

It is perhaps remarkable in reading the official record of the SIC minutes of evidence that the Warship Group of private shipbuilders were not subjected to any searching analysis as the dozen firms shared a naval order book worth £187,400,000 stretching to 1969. [14] Modestly, the Warship Group portrayed itself as a mere conduit in the provision of liaison between builders of naval craft and MoD (N) containing as it did all of the builders who built or were likely to build larger warships. [15] For the record, no questions were asked over possible collusion in tender prices, and would have been met in any case with the standard answer that Restrictive Practices legislation precluded it. Nevertheless, given the Admiralty's lack of will to rationalise the Warship Group firms in the post-war period it would seem that rationalisation could be achieved by a back door method pending the outcome of the SIC Inquiry. Both Scotts' and Lithgows, the latter at this stage through Fairfield, had to be concerned that in an increasingly competitive mercantile market as much naval orders as possible had to be won to remain profitable. The portents, however, were not good as by June 1965 the SIC had begun to take oral evidence from MoD (N) representatives to discuss points arising from the latter's earlier written evidence.[16] The naval deputation hoped to commit in the region of £70,000,000 a year over the next ten years to the future new building programme in private yards, and subject to a Defence Review, a new aircraft carrier, (which was not subsequently built) would be included. The priority, however, remained the construction of nuclear submarines and escort vessels, with the former accounting for one-sixth of annual expenditure. Moreover, the deputation saw little point in phasing orders to even out the building cycle, and although no single Warship Group firm could be singled out as being markedly below standard all firms in the Group, 'were having difficulty in coping with the increasing complexity of modern warships'.[17]

Beforehand, however, MoD (N) had suggested that the Warship Group should be reduced to three or four large (in terms of size of management, drawing office and planning resources) firms, and three or four medium-sized builders (which would specialise) for the smaller types of vessels such as frigates. [18] MoD (N) felt that this limited type of rationalisation should be brought about by mergers, rather than by casting out particular firms. For the larger yards, it was noted that, 'there should possibly be one on the Tyne, one on the Clyde, and two in North West England and Northern Ireland'. However, although MoD (N) wanted fewer establishments, they could not undertake to provide all of them with work. Save for natural selection in the case of Denny, and soon to be the case for J. Samuel White, MoD (N) continued to rely on the industry to reform itself. An unlikely scenario even in good times, and a course of action that the SIC recognised for what it was, a transparent attempt to evade responsibility. The SIC therefore insisted that MoD (N) provide a list of its choice of firms for the future Group, which would not however, be attributed to them. [19] Of the larger yards, only Swan Hunter and Vickers had the capacity to build capital ships on the Tyne, as did Cammell Laird and Vickers on the North West Coast. On the Clyde, two yards on the upper reaches, Fairfield or John Brown could do so, as could Harland & Wolff at Belfast. Moreover, all of these firms could also build destroyers and frigates, a position that could in theory lead to further concentration at a later date. At this stage, however, MoD (N) in effect wanted it both ways, an industry as it stood large enough to provide 'competition' for their orders, whilst simultaneously being unable to rely upon those orders. As well as passing the buck to the industry, MoD (N) also attempted to pass it to the SIC, as if the latter found that future prospects were not bright and that if capacity in terms of slips were reduced by half, MoD (N) 'would not worry'. This insouciance also applied to the marine sector where MoD (N) concluded that too many firms were building Sulzer, Doxford and Pametrada type engines and that these firms should be also be drastically reduced. Again MoD (N) was unwilling to nominate particular firms. [20]

After MoD (N) representatives had left, the SIC then went on to discuss by itself the possible grouping of yards, and suggested that at this stage, there might perhaps be two groups on the Clyde, one for the upper and one for the lower reaches. It was recognised however, that the 'individualism of Lithgows might be a problem'.[21] Geddes later noted regarding a discussion on grouping that Scotts' had a question mark over them, and that, 'it would be acceptable to the Navy Department that they should join a Lower Clyde group of specialised yards if such a thing happened for other reasons'. [22] Geddes did not make it clear just what those reasons were. Thereafter, the SIC received a deputation from the Warship Group including its chairman, Michael Scott, and Jim Lenaghan of Fairfield, and produced a paper on the general subject of rationalisation. As the Warship Group did not represent the industry as a whole, Scott therefore stalled. Nevertheless, Geddes considered that eventually some recommendation on rationalisation would have to be made and in the interim the SIC paper should be taken away and read widely on the basis of a working paper. [23] Overall, the MoD (N) agenda of the rationalisation of warship firms and of engine building capacity even at this stage was a powerful one, and as later events would subsequently prove, that agenda chimed with SIC thinking. Moreover, the rationalisation agenda also appeared to be closely in step with that of the Board of Trade itself.

Before the formal establishment of the SIC, Roy Mason had already visited numerous shipyards at home and abroad and had suggested plans for improvements in the shipbuilding and marine engineering industry, and continued to do so throughout the lifetime of the Committee. [24] By April 1965, however, Mason had given the SIC a resume of his visits to twenty-two shipyards in the UK, and to a number of yards in Sweden and Japan. [25] In the UK, Mason had apparently been shocked to find out just how old-fashioned techniques and management were in the majority of shipyards. In his opinion, only four unidentified yards had adequate production control. Moreover, labour and management relations were unsatisfactory, there were too many trade unions, and the industry was very much behind the best practice available in other industries. Mason had found a higher technical standard of management in Sweden, with the new yard at Arendal being more of a factory rather than a conventional shipyard. Of his visits to five Japanese yards, Mason stressed the importance of building docks for the construction of large vessels, and that production planning and group organisation all permitted central purchasing, design, budgeting and control. He also noted that a degree of automation and full use of plant and equipment combined with good labour relations had resulted in increased productivity, and if the UK industry was to compete with the Japanese then far-reaching changes were required. In answer to questions from the SIC, Mason thought that too much emphasis was put on quality in UK shipyards meaning that vessels would last far longer than required and that time was wasted through rigid adherence to demarcation. [26] By this stage, however, Mason had conveniently forgotten that he had previously stated that the quality of British shipbuilding was, 'unrivalled in the world'. [27] Shipyard labour also needed to be more flexible, but somewhat controversially for a Labour Government Minister, Mason thought that the industry, 'could be halved in size, but doubled in capacity'. [28] There is little doubt that Mason's opinion in this regard was very much motivated by his experiences in visiting foreign shipyards. [29] In Japan, to take only one example, as Chida and Davies inform, the government had an all-pervasive influence on the present and future policies of the Japanese maritime industries, whether by part financing ship construction, or guaranteeing interest payments on private sector loans. Moreover, the Japanese State influenced the concentration of its shipping industry, which resulted in a reduction in the number of ocean-going shipping firms from eighty-eight, into six huge groups. [30] As with the UK, legislation was enacted with the implied threat that no further finance would be made available if these firms did not merge. On the domestic scene, as Hogwood has noted, Mason also disabused the trade unions of the idea that nationalisation was the answer to the industry's ills.[31] Mason had also been impressed by the high levels of Japanese productivity, which he felt had grown because of a number of factors. First, a permanent labour force organised in a single shipyard union, paid at marginally lower rates than their UK counterparts, but working 'reasonably hard in good conditions...and enjoying collective bonuses paid twice yearly in lieu of piece work'. Other factors were, membership of large heavy engineering groups and diversification into other areas of economic activity other than shipbuilding and marine engineering, thus allowing the full use of overheads, the widespread use of simple and, 'relatively cheap' machine tools, and a strong middle management structure. Indeed, the size and quality of Japanese management and the emphasis on production planning were indicative of its shipbuilding competitiveness. Mason also noted that if the UK was to truly to compete in the world market then it had to eclipse Japan on productivity, moreover, he believed that this was possible, despite Japan's 'substantial lead'. [32]

Taking Japan as only one example, then there was little doubt that even at this early stage, that the Government had a somewhat fixed idea that concentration and rationalisation of production would be a prelude to greater efficiency. In this scenario, Scotts' was highly vulnerable, not only because of its size but also in terms of its marine engine building capability. On main engines, a SIC member, Professor Lighthill had earlier noted, quoting Len Redshaw of Vickers, 'that the present system stinks'. On Clydeside, apart from John G. Kincaid whose major customers were Lithgows and the Greenock Dockyard, Lighthill thought that Scotts', John Brown Engineering, Barclay Curle, Stephen and Fairfield-Rowan should all cease to produce engines for merchant ships. As a harbinger for what was to come in the marine engineering sector, the Lighthill view was remarkably prescient. [33]

1966: Towards a Merger

At the end of 1965 Lithgows had for the fifth year in succession topped the Clyde output table with five ships launched of 92,925 gross tons and were second only to Harland & Wolff in the UK. However, to put this in some kind of perspective, the Japanese yard of Mitsubishi at Nagasaki had launched sixteen ships of 618,226 gross tons, the largest output in the world and almost double the entire Clyde output for the year. Moreover, two Scottish and one English shipping company, all of whom had been previous customers of Lithgows had confirmed that they were placing orders worth £9,500,000 for seven vessels with Scandinavian shipyards. Lyle

Shipping had placed an order for three bulk carriers in Norway, and Hugh Hogarth & Sons for two, with Lithgows former partner in William Hamilton. Brocklebank, placing for the first time outside the UK an order for two general cargo vessels in Sweden. Lyle's managing director, Bill Nicholson stated that four factors had swayed his firm's decision to order in Norway, price, quality, specification and better credit terms. Brocklebank, who had previously had eighteen ships built at William Hamilton and one at Stephen of Linthouse also confirmed that the Swedish price was £100,000 lower than were two tenders from British shipyards.[34] Given that many domestic shipping firms were now ordering abroad, Lithgows, although by this stage they had not yet lost their naval yard, Fairfield remained in a very vulnerable position. The Port Glasgow firm's mercantile strategy had been to modernise its fabrication facilities, and to extend its berths and cranage to build larger bulk carriers and tankers. In so doing, it would eventually have to compete with far larger yards with greater capacity, such as Swan Hunter and Harland & Wolff who would fight tooth and nail to retain their bespoke customers. In any event the available pool of British owners in this market could not be relied upon to continue to build in the UK with any real sense of confidence. Neither could the multi-national oil companies who were just as likely to order abroad, particularly if available capacity was occupied in the UK. Moreover, unremunerative contracts would eventually tell on Lithgows Balance Sheet, as would the firm's increasing reliance on offering extended credit terms to owners. Liquidity remained all-important to finance work in progress, as did temporary bank overdrafts, and once again, despite its potential losses over Fairfield, the Bank of Scotland approved an overdraft limit to Lithgows of £1,500,000 in December 1965.[35] It had also been reported a month earlier that Lithgows had sold a vessel from its Dornoch Shipping Company, the *Vimeira* for £725,000, less commission to the Johnson Line of Liverpool. The proceeds of which were placed on short-term loan with Lanarkshire County Council at an interest rate of 6.125 per cent. [36]. For Scotts' unremunerative mercantile contracts could at least be balanced by naval work. The priority, given the uncertain future of the export market for conventional submarines in light of MoD (N) concentration on nuclear craft, was to retain some surface naval building capability. It was by no means certain, however, that Scotts' would be competitive enough to win orders for frigates and destroyers.

The Greenock Dockyard Company Limited

By this stage, Scotts' had advanced its take-over plans for the adjacent shipyard of the Greenock Dockyard, and had already given assurances that no redundancies would ensue with a long-term view to complete integration to achieve greater production. Combined output would be increased to around 100.000 gross tons per annum and management and workforces would be harmonised after Greenock Dockyard went into voluntary liquidation on 2 April 1965. [37] A wholly-owned subsidiary of British and Commonwealth Shipping, Greenock Dockyard had built most of its long run of ships for the Clan Line of its parent company, and had spent £1,750,000 on yard modernisation since 1957, which, in addition to better fabrication methods through flow line production, had comprised reducing the number of berths from three to two and introducing four twenty-five ton travelling cranes. The running of the Cartsdyke shipyard, which had just over 1,000 employees, was entrusted to local management whose number did not exceed ten. However, the firm had no engine works, but did have the largest ship repair facility on the lower reaches at the Garvel Dry Dock, prior to the advent of the Firth of Clyde Dry Dock Company. At March 1965, Greenock had three ships under construction but no new orders, but the yard saw its future in fast cargo liners and refrigerated food ships. Both management and unions had expressed themselves satisfied with labour relations in the yard to the SIC. Profits in the previous two years, however, which had been due partly to increases in production and income from investments, were unlikely to be repeated due to keen competition for orders. [38] The latter certainly played a large part in the ongoing negotiations for the Dockyard, in which Scotts' had the upper hand, but did increase its original offer of £200.000 to £264,000, plus £1 for the goodwill. Scotts' undertook to complete contracts in hand for the benefit of a new company formed by the vendor by being reimbursed for direct labour and materials plus a fixed rate of fifty-eight per cent on labour for overheads. However, this was conditional upon a final settlement whereby British and Commonwealth placed a fixed price order for a single screw cargo vessel for the Clan Line worth £1,520,000 with Scotts' to facilitate the transfer of the Dockyard assets. When accepted, this allowed Scotts' to register a new company, the

Cartsdyke Dockyard Company Limited, with an authorised capital of £100 which held its first meeting with Michael Scott as Chairman and Andrew Paxton, formerly of the Greenock Dockyard as Managing Director on 24 March 1966.[39] The underlying motive for the purchase of the Greenock Dockyard was clear as John Swire had earlier noted to Michael Scott, whichever government was in power, strong pressure was likely to be applied to merge with Lithgows, 'whether that is the right answer or not'. Swire suggested that if he were right then with the Greenock Dockyard in his quiver, Scott would be in a stronger bargaining position in advance of any proposed merger with Lithgows. [40] This, the retention of skilled labour on the Lower Clyde, and the increase in capacity combined with British & Commonwealth's willingness to sell seemed to be the motivating factors in the purchase.

The SIC Report

By the time of its publication, the SIC Report, popularly referred to as the Geddes Report after its chairman, Reay Geddes, was in many respects a confidence boost to an industry that had basically lost the plot since the heady days of the late 1940s and most of the 1950s. Prior to its publication, it was noted by an interdepartmental committee of civil servants that Ministers had agreed that the Geddes Report should be published by 24 March 1966, as they did not consider it to be, 'a highly political document'. Nevertheless, Redman of MoD (N) was concerned over the precise nature of the recommendations pertaining to rationalisation of warship building into three firms where, 'there was likely to be too little real competition for naval orders'. The feeling of his department was that some six to eight yards with facilities for building warships should be envisaged. However, he was a little unclear whether MoD (N) should only order from yards who were members of proposed groups, as opposed to withholding orders from yards who wished to remain independent. To this, MacMahon of the Board of Trade presciently pointed out that MoD (N) purchasing policy, 'would be an important factor in the early stages'. [41]

Nevertheless, the publication of the SIC Report a week before a General Election was held certainly did not hamper the Labour Party's chances of re-election in the majority of the shipbuilding districts. The SIC Report authors firmly believed that shipbuilding was still a growth industry. In a raft of recommendations, four stood out: the geographical grouping of yards through mergers; the rationalisation of the eleven warship firms capable of building frigates and destroyers into three yards; the separation and concentration of engine building from shipbuilding into four production units, and the creation of a Shipbuilding Industry Board (SIB) to oversee the process within a strict timetable.[42] However, if grouping was to be effective, then specialisation of shipyards within a group was necessary. Geddes noted that the technical requirements of the naval and merchant markets were diverging, and in this sense the industry with a large number of shipyards geared to naval and other sophisticated work could be at a disadvantage. Of the mixed naval and mercantile yards in particular it was also noted that as naval work was so thinly spread, no-one yard could concentrate on naval work alone. The result was a production line on which, 'lorries and racing cars were intermingled' a situation that led to inefficiency and is an important source of weakness'.[43] Groups would therefore include three types of yards; an 'S' yard building sophisticated ships such as naval vessels, passenger ships or ferries, an 'M' yard building multi deck mixed cargo ships and finally a 'B' yard building vessels such as bulk carriers and tankers. Geddes did not recommend that any group should have more than one 'S' yard but did allow two or more each of 'M' and 'B' yards, with an element of interchangeability. It was felt that the ideal numbers for competitive mercantile building in yards was around 1,500 to 2,000 men, and for an 'S' yard, 3,000 men, within a group structure comprising 8,000 to 10,000 employees on shipbuilding aiming to achieve an output of 400,000 to 500,000 gross tons per annum.[44]

There was in all this, however, a largely uncosted belief in the efficacy of economies of scale and scope in that greater size would equate with competitiveness and efficiency. On the face of it, combined central purchasing, design, drawing, estimating, costing, production planning and personnel functions, combined with interchangeability of labour were superficially attractive only if the collective will was there to make these changes work. Given the individuality of the shipbuilders, however, there was never likely to be any guarantee that this would be the case. A point not lost on the SIC, who had recommended the establishment of the SIB to provide an incentive to concentration in the industry to encourage mergers through payment of consultancy fees, and then through grants and loans. [45]

In his capacity as president of the Shipbuilding Conference, Michael Scott publicly welcomed the SIC Report, as a 'great report' and stated that the industry would, 'work like blazes' to keep to the timetable. [46] Clearly, most of the Geddes proposals had been to a large extent flagged up beforehand, in particular those on grouping and rationalisation of main engine and warship building. Nevertheless, the promise of SIB incentives when many firms were taking on contracts at cost in inflationary conditions was a powerful incentive to group in the expectation that market conditions could eventually improve, and even if they did not, Government might in any case bail them out. However, as John Swire again noted, 'to throw a number of disparate companies into a large group at short notice [was] going to lead to the most fearful headaches and probably some expensive mistakes'. Swire then advised Michael Scott that it would be 'vital' for the latter to be in the 'central direction of whatever Group we go into'. Nevertheless, even at this early stage, Swire thought that a single Clyde group would be, 'altogether too unwieldy'. He hoped that it would be possible to get a separate group formed on the lower reaches, in which Scotts' would be in a fairly strong position to take the leading part, but only if they moved quickly so as not to be, 'left out on a limb'. Swire then promised Scott the backing of his company for anything that the latter would do in this connection.[47] Geddes had, however, omitted to recommend a single grouping on the Clyde. Instead, he effectively gave both Scotts' and Lithgows a get out clause by stating that rationalisation would thus, 'provide for not more than two groups'.[48] Consequently, in the wake of the publication of the SIC Report, Michael Scott and Sir William Lithgow had been involved in tentative discussions about a possible lower Clyde grouping of yards. Indeed, this was expressly acknowledged in a reply to a letter of 4 April 1965 on possible grouping sent by Sir Eric Yarrow, the chairman of the Scotstoun warship building firm of Yarrow and Company. In reply, Scott wrote that a single Clyde grouping did not attract Sir William Lithgow. From the outset it was clear that Sir Eric Yarrow did not favour one either. Yarrow wondered if one or two groups on the river were the answer to the problem Geddes had set the firms on the river? And, if it was too much to ask that this would be resolved in principle before the SIB arranged, 'marriages of convenience with the resultant honeymoons resembling hell rather than heaven'! [49]

Contemporaneously, two other Warship Group firms on the upper reaches, Stephen and John Brown were already in financial trouble, as was the third of the quartet, Fairfield. [50] The other, Yarrow, which had increasingly specialised on frigate construction and design to the exclusion of most other building, was in contrast to the three other mixed mercantile and naval builders in a strong position to become the 'S' yard in any future grouping. Meanwhile on the Lower Clyde, a merger between Scotts' and Lithgows had apparently much to commend it. Both firms were geographically isolated, had co-operated on labour matters and superficially met the Geddes criteria for a group. With Scotts' Cartsburn yard as the 'S' yard, the Cartsdyke Dockyard as the 'M' yard and Lithgows Kingston and East shipyards as the 'B' yards, and with Ferguson, Scott of Bowling and Scotts' engine works thrown in the potential group was just about big enough. However, if in line with SIC recommendations, the eventual rationalisation and separation of Scotts engine works did take place, the 'group' could not hope to have anything near the requisite eight to ten thousand employees originally envisaged by Geddes. Moreover, given the urgency required to make the shipbuilding industry more competitive, Geddes had indicated a timetable for the establishment of the SIB, in which firms were expected to give that body detailed proposals for grouping and rationalisation between March and December 1967. [51]

From the outset, however, any real merger between Scotts' and Lithgows was in no way a foregone conclusion. Both were family firms with a narrow shareholder base, even more so with Lithgows, and were organised accordingly. In the Lithgow case, Fairfield and Fairfield-Rowan were proof that it was not sufficient just to keep a weather eye on developments and delegate much of the day-to-day running of firms to local management. Ominously, Lithgows had yet to digest this message, as it was envisaged that the Group concept would be similar to that which pertained under the old Lithgow Group of companies. Individual companies would operate as separate units:

> Thus retaining all the advantages of relatively small compact teams using their own initiative and having their own individuality-but still sharing certain common services and enjoying all the advantages of being part of a larger group...[giving] the best of both worlds. [52]

How this strategy could work across a Geddes group of companies remained to be ascertained. However, pared management teams and individuality did not augur well for central direction and control of a complex group of companies where the whole, in terms of management, had to be more important than the sum of its parts. Contemporaneously, in the case of Scotts' at least the Greenock Dockyard was next door, yet Scott of Bowling was upriver, but was comparatively insignificant. Public companies, such as Swan Hunter on the Tyne, for example, would inevitably be better geared to merge its activities without the baggage of family tradition and loyalties. What had in essence prompted the Lower Clyde merger talks was a realisation that the survival of major shipbuilding in Greenock and Port Glasgow was at stake. Scotts' owing to the lock-up investment of Swire could hardly re-locate elsewhere, but Lithgows could more easily have liquidated, and even moved their shipbuilding activities abroad if they had chosen to do so. Family tradition and loyalty to the local community in which they had formerly prospered was to some extent important. Of more likely and pressing importance, however, was the enticing lure of SIB funding for consultancy studies, transitional grants to cover losses borne in re-organisation, and loans for capital schemes and for working capital. This government largesse provided a powerful incentive to both firms to de-merge their shipbuilding activities into a separate merged firm, whilst retaining all of their other interests in a holding company to preserve their family assets. Business sense dictated that both Scotts' and Lithgows could not keep throwing money at their shipbuilding activities in a period of declining profits merely on the expectation that market conditions would improve. Each firm had after all modernised just to survive in the market, but an unanswered question remained as to whether their view of the market as it stood and of future trends justified an attempt to try to recoup some of their capital outlay to at least justify it. Moreover, in the case of Scotts' in particular, the dual cornerstones of its policy throughout the century, the retention of naval orders and bespoke linkages was no longer guaranteed. Nevertheless, few commentators could have guessed just how protracted the merger negotiations would turn out to be.

Talks about Talks

Although the trade unions had given a guarded welcome to the SIC Report, it was not until May that a joint meeting was held between the SEF and the CSEU on implementation of the Geddes proposals at York. There, Dan McGarvey the chairman of the CSEU and the president of the Boilermakers Society gave an undertaking on behalf of the nineteen shipyard unions represented, that, 'there would be no more stoppages from who-does-what disputes'. Two weeks later seventy sheet metal workers went on strike over a demarcation dispute at Scotts' Cartsburn yard, and were then followed three days later by two hundred boilermakers, before eventually returning to work on 6 June. [53] Despite this, however, talks on a Lower Clyde merger had moved on as both Scotts' and Lithgows had agreed in principle that grouping might be in the interests of both. Scotts' had appointed William Giles of Baring Brothers as their financial advisor on grouping and Lithgows, Larry Tindale, of the Industrial, Commercial and Financial Corporation (ICFC). Both firms had also appointed a former SIC member, Anthony Burney, of Binder Hamlyn to put their proposals on grouping to the SIB. In addition, Deloitte, Plender, Griffith & Company were appointed to submit a report to Giles and Tindale on the audited accounts covering five years to 31 December 1965, the activities to be merged, the possible forms of merger, and the profits and losses for the period, and as estimated for 1966. [54] Thereafter, at a meeting on 26 June 1966, which is worth considering extensively, Sir William Lithgow and Michael Scott learned from Burney, that, despite not employing 10,000 men in the proposed group, in his opinion the merger was likely to be acceptable to the SIB. The problem of what to do about engine building was nevertheless recognised, but not discussed. Both Lithgow and Scott had given much thought to alternative patterns of grouping with Upper Clyde yards. Scott had already been approached by Yarrow who had, 'proposed a scheme, but although his warship know-how and business would be valuable, the yards on the Lower Reaches [did] not want to be "contaminated" by Upper Clyde wage rates'. Another scheme of grouping for all of the yards on the Clyde had also been proposed by Lord Aberconway, to be headed by John Brown. It was noted that this ostensibly had the backing of Roy Mason. On the latter point, it is difficult to comprehend why this would be the case, given the Clydebank yard's losses, short of an expression of preference by Government for a single Clyde grouping. By this stage, however, both Scott and Lithgow had privately closed their minds to a merger with Upper Clyde yards but had not publicly said so. Nonetheless, the question of whether naval work would continue was crucial, as a group would require Scotts' to provide the 'S' yard. Warship building at the moment was much more profitable than mercantile, because of longevity of building contracts, the full recovery of overheads, modifications and price escalation clauses. By this stage, both Lithgow and Scott believed that the only way that Fairfield could be kept going was if the Government awarded it plum naval contracts. Burney, however, thought it unlikely that a Lower Clyde group would not qualify for naval work, but, nevertheless 'the anxiety lest the naval fuse be pulled out' remained. [55]

It is clear that at this juncture, Sir William Lithgow remained sceptical, it was not sufficient for him, ' to be convinced that Lithgows and Scotts' would be better off together than separately'. He would also need 'to be satisfied that it was in his shareholders' interests to continue in the shipbuilding business at all'. Moreover, inflation imposed a tremendous burden on shipbuilding owing to the long building-cycle, but nevertheless, 'the arguments in favour of two of the most efficient companies in the industry going into liquidation were formidable. The shareholders interests were his prime concern, not what the SIB thought was right'. [56] Lithgow's concern with inflation was understandable, before the publication of the SIC Report and the General Election, he had publicly stated that, 'the Wilson regime's contribution to inflation, the curse of our time, had made a mockery of all [his] company's efforts. [57] In contrast to Lithgow, Michael Scott was not so pessimistic as he remained convinced that if Scotts' and Lithgows could not make a go of it in shipbuilding, 'then no-one could'. Nevertheless, his principal anxiety was the retention of his naval business. Thus far, however, it was noted that the chief motive for grouping seemed be the negative one of the consequences of not grouping. Tellingly, even at this stage, both Lithgow and Scott said that they did not intend to integrate production facilities. Lithgow emphasised that the key to successful shipbuilding management (evidently missing at Fairfield under Lithgow Group control) was 'quick decisions'. Drawing offices could not be centralised since naval and merchant ships presented different problems (this did not seem to too problematic at Scotts'), however, both Lithgow and Scott agreed that, 'a new palace of varieties was unnecessary'. At this stage, however, Scotts' was profitable, whilst Lithgows was not. Scott stated that his present order book, barring accidents, would be profitable for three to three and a half years. There were, however, certain parts of his business that he would not want to transfer as he had built up, 'certain reserves, which he would like to distribute to shareholders'. Regarding this, he then asked Burney whether the SIB would be prepared to lend working capital to the proposed group? Burney replied that in the light of paragraph 560 (b) of the SIC Report, Scott might have to satisfy the SIB that it was 'unreasonable to expect the shareholders to invest these spare funds in shipbuilding'. Burney then advised that they prepare their case for the SIB, and work out the financial terms of the merger, and plan the integration of the operations of the companies. Scott then asked Burney whether or not to announce publicly the fact that they were thinking of merging, if only to disabuse Roy Mason of the idea that Scott acquiesced to the scheme for a single Clyde group put forward by Lord Aberconway. However, he recognised that, on the other hand, going public might well smoke out the warship builders to protect their interests on the Upper Clyde. Burney, adroitly, advised them to hold their fire. [58]

By July, however, Lithgows managing director, Ross Belch thought that it might be advisable to disclose the merger in order that Government might be put off any idea of a single Clyde group, but Burney again cautioned against it. This was in keeping with the grave situation that the Upper Clyde yards found themselves in. Burney informed that at a meeting with Board of Trade, Ministry of Technology and Treasury officials to look at financial figures for mergers, it had emerged that those figures were based on the assumption of two groups on the Clyde. Lithgow, however, still remained reticent, and noted that four alternatives faced his firm; to get out of shipbuilding, to go on alone, to merge with Scotts' or to merge internationally. However, while remaining rightly sceptical about the Government's ability to control inflation, he was, 'inclined to favour a diversification of the business out of shipbuilding altogether'. Conversely, he was not 'unenthusiastic' about merging with Scotts', which was easier than going it alone, but all in all he remained unconvinced. He informed that there were stronger arguments for merging with Swedish or German firms rather than with firms on the Clyde. Lithgow thought that 'internationalisation, bringing the chance of limiting competition, might be the long-term solution for the industry. And if this were so, he did not want to caught digesting a domestic merger when the chance arose'. [59] To this apocalyptic pronouncement, Scott could do no more that state that he had three or four years profitable work in hand. Burney concurred, but stated that he was making these profits from naval orders, and unless they went into a group along Geddes lines, 'these orders will probably cease'. Lithgows on the other hand were losing money, and if they were, 'to liquidate or get out of shipbuilding they would incur substantial terminal losses'. The merger offered them a future as a going concern and allowed them to obtain some of the benefit of Scotts' profitable contracts whilst rationalising their own interests to become more competitive. Burney did, however, agree that, 'it all boiled down to inflation, [and if] it were to continue at the present pace, [without a corresponding change in contract terms] so as to spread the burden then the shipbuilding industry was a dead duck'. He did, however, recognise that this was on the assumption that it would not be possible to quote fixed prices taking present rates of inflation into account without pricing oneself out of the market altogether. After much more discussion it was agreed that that the immediate task in hand was to decide what assets were to be taken over by the merged company? [60]

At the next meeting, the vexed question of retention or not of Scotts' Engine Works was raised by Burney. In reply, Michael Scott stated that its continued existence was vital to his company's future survival as a naval builder, as without it, it would be impossible to continue to build submarines. The engine works would not be competitive, however, without some commercial main engine building as well. Lithgow agreed that the group should have access to an engineering works, and with the departure of Fairfield-Rowan from the scene, and with the continuing uncertainty over Barclay Curle, the situation on the Clyde had materially changed since Geddes had reported. Burney agreed that it was essential for Scotts' to retain its engine works, the problem, however, was not to attract the opposition of the SIB. This could be done by introducing an element of rationalisation into their submission, and possibly linking this with the main engine building activities of Kincaid at Greenock. [61] In this regard, Harland & Wolff and Kincaid as principal and sub licensee respectively were the only marine main engine builders in the UK producing the popular Danish patented Burmeister & Wain slow speed marine main diesel engine at the time of the SIC Report. The SIC envisaged the concentration of marine engine capacity into four main production units manufacturing a single type of engine, with each unit having an annual capacity of 300,000 hp. As presently constituted, however, no main engine manufacturer in the UK could approach this volume, although the SIC noted that Harland & Wolff and Kincaid had a combined average annual output over the past six years of 200,000 hp and that the former had considerable room for expansion. [62]

The road to the Shipbuilding Industry Board

On 9 August 1966, the President of the Board of Trade, Douglas Jay announced that the Government would, in the light of progress already achieved, play its part in the re-organisation of the industry. He intimated that William Swallow, formerly the chairman and managing director of Vauxhall Motors would be the first chairman of the SIB, and that the names of the other two members would be released shortly. All three, however, would be able to hold discussions with firms and trade unions in advance of legislation as recommended by Geddes. The bad news for Scotts' however, was that Jay agreed with the recommendation that destroyer and frigate orders should be concentrated in a few yards, but the detailed arrangements remained to be worked out with the SIB in light of the re-organisation of the industry. [63] Contemporaneously, the vexed problem of credit for home shipowners building in the UK as opposed to abroad, already flagged up by Geddes was in the event to hold up the passage of a Shipbuilding Industry Bill. [64] Another telling factor was the impending transfer of responsibility for the shipbuilding industry from the Board of Trade, which had overseen the entire Geddes process thus far to the nascent Ministry of Technology headed by Anthony Wedgwood Benn. Indeed, this would be the fourth Ministry to be responsible for the shipbuilding and marine engineering industries in the past nine years.[65] It later transpired, however, that the shipbuilding industry had not been consulted on the proposed change, which in any event they were opposed to in principle. [66]

By 19 August, however, Scotts' and Lithgows had jointly announced that they were in the process of conducting exploratory talks on a possible Lower Clyde merger. [67] Following on from this, and with the SIB Chairman, William Swallow due to visit the area in the last week of the month; Burney reiterated the importance of submitting plans to Swallow before his trip had begun. Michael Scott, although it was important to inform Swallow of progress to date, thought it would be unwise to send a full submission to the latter, who 'was in no position to give it proper consideration'. Quite apart from Swallow having no knowledge of the industry, he had no office, and had not yet been able to find a suitable trade unionist and consultant to be his partners on the three-man SIB. Despite this, however, a memorandum on progress was sent. Burney, who was in constant contact with civil servants, confidentially informed that Sir Richard Powell of the Board of Trade was in favour of plans for a merger on the Lower Clyde, but appeared to be wary of any merger on the Upper Clyde until the success or not of the Fairfield 'Experiment' could be judged. Moreover, Burney had also discussed main engine building with Geddes and Powell who both agreed that the timetable for rationalisation laid down in the SIC Report was unrealistic. Furthermore, in this regard it would be most unfortunate if mergers were held up by non-compliance with the strict guidelines in the Report. In this light it was decided to re-emphasise the importance of retaining Scotts' Engine Works, both for naval work and other commercial engine building in a future submission to the SIB, and to re-write the submission accordingly in time for Swallow's visit. [68]

Thereafter, the two other members of the SIB, Anthony Hepper, and the trade unionist, Joe Gormley were appointed to assist Swallow, their work, however, continued to be on a non-statutory basis. [69] Hepper subsequently visited the Lower Clyde in November, and as Sir William Lithgow noted, the former believed in a return on capital employed. By this stage, Lithgow remained reticent about any future merger, Deloitte continued to investigate the financial implications and a working party had been formed to consider the benefits of a possible Scott Kincaid engineering merger. Nevertheless, Sir John Hunter, of Swan Hunter had tried to sell, 'in a high-pressure visit' to Lithgow the idea of the Tyne firm's subsidiary Barclay Curle engine works coming into such a merger.[70] That month, responsibility for the shipbuilding and marine engineering industries finally passed to the Ministry of Technology (Mintech). [71] In December, Lithgow in company with Swallow had seen Wedgwood Benn ostensibly to discuss a credit deal with Clarksons, regarding the construction of an oil bulk ore carrier vessel (OBO), a market which Lithgow was keen on entering, but where credit terms were decisive. Before Christmas, Lithgow, in a letter to Wedgwood Benn hoped that if the latter were to visit the Lower Clyde, he would be encouraged by, 'a forward looking enthusiasm'. [72] With seventy-one per cent of British orders being placed abroad in the first nine months of the year, up by thirteen per cent from the previous year, it remained to be seen whether or not this enthusiasm was entirely misplaced. [73]

Earlier in November, Scotts' had launched its second Australian submarine, *RAN Otway*, and by December the firm had also launched from its Cartsdyke yard, *Clan Alpin*, the vessel used to oil the wheels of the deal to take over that facility in March. Lithgows, with the launch in August 1966 of the largest bulk carrier at that stage built in Scotland, *Naess Talisman* at 71,000 deadweight tons, again headed the river in output, followed by Scotts' in second place. [74] Significantly, the total Clyde output at just over 304,000 gross tons was the lowest since 1939 with the one exception of 1963 when the total was just less than 260,000 gross tons. One vessel, the *British Commodore*, at 40,000 deadweight tons was sufficient to place Fairfield in third place.[75] By January 1967, however, William Swallow had been granted a knighthood, and in his capacity as chairman of the SIB he wrote a letter to the heads of all the shipbuilding firms that he had earlier visited. By this stage, legislative enactment to quantify the SIB powers had yet to take place. Nevertheless, Sir William Swallow sought to deny that this had held up the process of mergers, simply because even if the SIB had been formally approved, it would have been unable to act as it had not received any detailed proposals from consultants for major shipbuilding groups. Moreover, if Swallow had received detailed proposals then he would have requested that commitments should be entered into in advance of legislation. Tellingly, in line with the deteriorating competitive situation against the industry's international competitors, Swallow believed that the formation of major groups must be brought about rapidly, and in this regard he hoped to receive a proposal from the Lower Clyde in the near future.[76] Contemporaneously, events there had moved on apace, and it is to the ramifications of the Deloitte Plender Griffith Report that I now turn to.

The Deloitte Plender Griffith Report

By 10 February 1967, Deloitte had at last reported on the audited accounts of both Scotts' and Lithgows and their subsidiary firms to be merged within a Lower Clyde group.[77] Deloitte found that Scotts' had an approximate number of 4,400 employees and had been profitable in the past five years. Efforts were being made to put in place a central buying organisation for the Cartsburn, Cartsdyke and engineering departments, and also to create one shipyard-estimating department for Cartsburn and Cartsdyke, with a separate unit for engineering. In addition to this a combined design department for Cartsburn and Cartsdyke would be made available to Bowling, with one accounting and costing office covering shipbuilding and engineering. Scotts' profits before taxation for the five years ended 31 December 1965 totalled £1,569,034, however, it will be recalled that Scotts' took their profits only on completion of contracts. Accordingly, a conservative view was taken of the outcome of the contract for *HMS Opportune* in the 1964 accounts, but the addition of extras and price variation clauses were brought over to the 1965 accounts. Similarly, the loss in 1964 on the last frigate built, *HMS Euryalus* was computed without taking into account extras and price variation clauses, which were again added to the 1965 accounts. As Deloitte noted these contracts swung over £300,000 of profit from 1964 to 1965, and but for this 1965 would have shown an appreciable loss, as it stood, profits before taxation amounted to £187,881. Lithgows, with approximately 2,500 employees had in contrast to Scotts' performed poorly, with trading profits before taxation of £112,428 in 1961 and £13,114 in 1965, which did not include Ferguson, being almost equalled by losses before taxation of £47,838, £47,649 and £29,637 in 1962, 1963 and 1964 respectively.[78] Lithgows performance, however, has to be seen in the light of increasingly cut-throat competition for mercantile orders, moreover, unlike Scotts' the Port Glasgow firm did not have the advantage of regular payments for warship work to fall back on. Despite this, however, with this level of profitability, liquidity remained all-important, as did the chase for more profitable orders.

The Deloitte report also gave two alternatives to the form of merger envisaged. First, the creation of a new merged company to acquire the whole of the issued share capitals of a company formed by Scotts' to which it would transfer, [prior] to the date of the merger, its shipbuilding and engineering interests including the work-in-progress and liabilities thereon. Similarly, Lithgows would do likewise with their shipbuilding and repairing interests. Second, the creation of a new merger company to acquire from Scotts and Lithgows [at] the merger date, land, buildings, plant, machinery and equipment to be merged. The fixed assets would be valued independently, but contracts in progress and orders current at the merger would remain in the ownership of the existing companies. Under method one, the formation of wholly owned subsidiaries was mooted because both firms had further interests that would not be merged, and which would be retained for the direct benefit of the existing shareholders. Under this method no taxation disadvantage accrued in respect of the non-merged interests, they merely remained with the existing companies. If however, the non-merged interests were in the first instance to be hived off to newly formed subsidiaries, grave taxation disadvantages would ensue. If the second method were chosen, this would secure for Scotts' shareholders, the profits on existing contracts and allow maintenance of dividend payments, whereas method one would jeopardise the flow of dividends. Moreover, both firms were for tax purposes, under the control of five or fewer persons. As such, each would require clearance from the Inland Revenue in accordance with the provisions of section 28 (10) of the Finance Act 1960 as amended (cancellation of tax advantages from transactions in securities) on the ground that the proposed transactions were being carried out for commercial reasons. [79] It can therefore be seen without attempting to exhaust the various alternative options and scenarios, that a proper merger taking into account the relative strengths and weaknesses of either firm, which, on the basis of past profits would favour Scotts' was likely to be a drawn out process.

Due to the understandable need to get the best possible deal for each firm, it later transpired that all was not well in respect of the discussions on the financial aspects of the merger between Giles of Barings, and Tindale of the ICFC. Giles informed that Michael Scott wished that his shareholders, through the maintenance of dividends in the first two years after merger would need a guaranteed income of at least £50,000, and that control of the merged undertaking should be 70:30 in favour of Scotts'. This ratio was based on past profits, a position that Tindale was loathe to accept, but did state that if a deal was done on the basis of fixed assets, then Scotts' did have a case for additional income for a total of five years, post merger. In this regard, Tindale was prepared for a quick settlement based on the valuations already done by James Barr & Company, CA on the fixed assets of both firms, but was unable to recommend a 70:30 split. The following day Giles wrote to Scott on what appeared to be an irreconcilable position between the advisors, which was, 'placing the goodwill, which existed between [the] principals in jeopardy'. Giles suggested that Scott should get together with Lithgow in convivial surroundings and suggest to him that, 'the atmosphere of cold logic is the wrong one in which to deal with the issue of living business'. Clearly, throughout this process, John Lee of Scotts' was concerned about Lithgows future profits potential, a factor that had given rise to the suggested 70:30 split. However, both he and Giles did come round to a 60:40 split, which Tindale and Lithgow had consistently assumed to be correct, and advised Scott accordingly.[80]

Scott Lithgow Drydocks Limited

By May 1967, however, another factor had been added to the merger equation when it was announced that Scotts' and Lithgows had purchased the ill-starred Firth of Clyde Dry Dock Company, which had already gone into liquidation.[81] The Dry Dock, which had cost £4,600,000 to build, was sold for £1,100,000 (in effect for the fixed assets) and renamed Scott Lithgow Drydocks Limited with an authorised share capital of £100 divided into one hundred shares of £1 each. Only two £1 shares were initially issued one to be held by Scotts' and the other by Lithgows. The consultants, Booz-Allen & Hamilton who had been employed to report on the value of the bid had put an upper limit on the value of the Dock as £2,750,000 in a situation of competitive tendering and £1,800,000 if it was not. [82] The sorry saga that had begun with much hope had ended with two of the major shareholders buying the Dock at a knockdown price, with the entire episode resulting in an outright loss to the taxpayer of £2,400,000. [83] Scotts' and Lithgow later decided to increase the share capital of the new company to £500,000 Authorised and £250,000 Issued as the best method of financing the purchase. And in this respect, the National Commercial Bank of Scotland advanced a credit line to the company of £500,000 at half a percentage point over Bank Rate for a period not exceeding six months.[84] The purchase of Scott Lithgow Drydocks did give a possible Lower Clyde merger a ready made ship repairing facility, but it remained to be seen if the lesson of the Firth of Clyde Dry Dock collapse was to be learned. Indeed, if any major shiprepairing facility, by its very location on the Clyde was to be successful, it had to depend on the prosperity of shipbuilding firms on the river.[85]

Towards a Merger

At a meeting held between the principals and their financial advisors on 6 April 1967, it was agreed to request James Barr to re-adjust his initial valuations on the fixed assets of both firms by adding back the deductions he had made from the valuations in respect of profitability. The next day, Barr produced a revised valuation, which in the case of Scotts' had risen from £3,998,650 to £6,090,594, and in Lithgows case from £2,856,850 to £4,791,330. This gave a total valuation of the fixed assets of each firm of £10,881,924. Again it must be emphasised that these valuations were on the basis of an assumption, [a huge one in this case] of the, 'presence of a willing buyer and a willing seller and viewed as part of a going concern'. [86] Just how realistic these valuations were is difficult to determine, however, on liquidation, such values would be virtually meaningless. Moreover, with past and future profitability assumptions presumably used as a yardstick, there seems to a large element of unreality about these figures as a basis for determining the ratio of any proposed merger. Nevertheless, Lithgows with its increasing experience in the construction of large bulk carriers and tankers had apparently won in May an order for two 130,000-deadweight ton tankers from the Samyang Navigation Company of South Korea, to be delivered in 1969. This prompted Ross

Belch of Lithgows to comment that the Kingston yard was designed with this type of vessel in mind, and that the labour force would go flat out to finish the contract in the next eighteen months. To oil the wheels of this export deal, Clarksons of London and Doddwell's of Tokyo acted as brokers in conjunction with the Bank of Scotland and the Export Credit Guarantee Department. Tellingly, however, the deal was announced despite it being subject to the completion of detailed financial negotiations. It was hoped, however, that talks on this aspect of the deal would be resolved soon. [87]

By the end of July, however, the long and detailed negotiations between the financial advisors of the respective firms had finally ended, and it was publicly announced that both Scotts' and Lithgows had settled the terms of their proposed merger. In a joint statement, it was noted that it was not anticipated to make any further announcement until the proposals had been submitted to the respective shareholders and the SIB. Nevertheless, it remained the intention of the new group to be operational, 'as early as is reasonably practicable'. [88] Subsequently, Michael Scott and Sir William Lithgow put the terms precedent upon forming a new company to take over the shipbuilding and engineering interests of their firms to their respective shareholders in mid October 1967. By this stage, a fair and reasonable settlement on the financial aspects of the merged firm had been agreed, with Scotts' receiving sixty per cent of the share capital. The newly merged firm would have at its disposal, the Cartsburn, Cartsdyke and Bowling shipyards of Scotts', and Lithgows Kingston, East, Glen, and the Newark shipyard of Ferguson Brothers. It was noted that there would be practically no market for which the new firm could not build, whether they could in fact do so was not considered. Nevertheless, bearing in mind the Geddes-inspired rationalisation of main engine building, and in an attempt to satisfy the requirements of the SIB, which by this stage had been formally set up to carry out its statutory functions, it was considered that it might be necessary to combine the engineering function of the new firm with that of another. However, the other assets of Scotts' such as the two ships built on its own account, *British Monarch* and *Bolnes* already on a bareboat charter to shipowners for fifteen years, and investments, debtors on deferred terms, current assets less current liabilities and loans would remain outside the merged firm.

Nevertheless, the value of these assets remained to be ascertained until such time as the work-in-progress on current contracts was completed. Moreover, the shares in Scott Lithgow Drydocks would also be outwith the terms of the proposed merger. [89]

At an EGM called to on 30 October 1967, Michael Scott noted that from the point of view of family pride and sentiment, the shareholders might find the proposed merger hard to digest. He then admitted that he and his Board, 'had been suffering from that same indigestion for somewhat more than a year'. Scott, reiterated the Geddes criteria, and then stated that a merged firm was a, 'natural and logical development in the rationalisation of shipbuilding activities in the area'' Nevertheless, the proposed merger could not be compared with a normal commercial amalgamation, as Scotts' had no option but to do so. In the case of Lithgows, Scott reiterated that the Port Glasgow firm had many facilities to offer, which would be of 'immense value' in an re-organisation, particularly their recent experience in building large ships and the space they have to offer for further expansion to build even larger vessels. Scott then looked to the future by stating:

> It is our sincere hope and belief that, by re-organising the complete production of Scotts' and Lithgows in a rational manner by the combination of our management's and with the help which we hope to obtain under the Shipbuilding Industry Act, the merger will ultimately be able to earn reasonable profits.

On the question of future dividends, the intention was to pay a ten per cent dividend for 1967 and 1968 out of current contracts and assets retained, however, the position in shipbuilding had deteriorated rapidly in recent months. Consequently, a lack of orders and rising labour costs would affect contracts on hand on Scotts' account. However, as distinct from the proposed Merger Company-Scott Lithgow Limited, the Scotts' Shipbuilding and Engineering Company Limited would continue to operate as a separate holding company by retaining:

> Two ships on bareboat charters, which would be kept for at least five years in order not to lose investment allowances granted.

Shares in Scott Lithgow Limited on the basis of 1.000,000 Ordinary Shares of £1 each and 500,000 Participating Preference Shares of £1 each. The granting of the latter satisfied the 60:40 ration in favour of Scotts` and was intended to preserve its dividend policy in the future. As such Lithgows would hold only 1,000,000 Ordinary Shares in Scott Lithgow Limited. Scotts' would retain whatever residue of funds were left after the completion of current contracts on its account

Michael Scott did, however, point out to his fellow shareholders that the SIB might insist on their firm providing its share of working capital for the merger. However, in the initial stages, subject to various reservations made, it was hoped to make a tax-free profit from Scotts' ex merger dividends, after fully depreciating the ships on charter. Thereafter, those present approved the proposed merger with Lithgows, and authorised the Directors to proceed accordingly. [90]

Similarly, Lithgows Limited would also retain its myriad shipowning interests and investments outwith the proposed Scott Lithgow Limited. Before any real merger took place, however, two major problems affecting the proposed deal remained to be thrashed out with the SIB. First, as Sir William Lithgow noted, both Scotts` and Lithgows desired to stay out of any single Clyde group. And secondly, as a precondition to a formal merger, Scotts' had to retain its `S` yard status and place on the Navy List as both a builder of conventional submarines and surface warships, and be allowed to submit tenders accordingly. [91] Since the completion of the Leander class frigate, *HMS Euryalus* in 1964, Scotts` had continued to tender for surface warships, however, a record of two frigates built from fifty-one completed from 1953 to 1965 did not bode well for the future construction of these increasingly complex craft. [92]

The SIB deliberate.

In only its second official meeting in March 1967, the SIB had considered the use of naval orders to promote rationalisation, but at that stage they regarded the direct planning of re-organisation of the shipbuilding industry as their, `first priority`. The

SIB did, however, propose to discuss the use of naval orders with MoD (N) and also to keep Mintech informed as to their progress. [93] In the same month, the question of a single Clyde group was also discussed. It was noted that an Upper Clyde group could not build very large ships, but that there was scope for doing so on the Lower Clyde. Nevertheless, in the interim, progress on an Upper Clyde group should not be held up. [94] By the end of March, however, the SIB in response to questions set by Baylis of Mintech on the acquisition by Scotts' and Lithgows of the Firth of Clyde Dry Dock stated that it would recognise a Lower Clyde group as qualifying for assistance. However, this would only be an interim measure pending the formation of a single Clyde group. On the acquisition of the Dock the SIB noted that the Lower Clyde firms seemed mainly concerned with the retention of their own labour force, and were accordingly anxious that no outside party would come into the district. Indeed, this was a, 'dog in the manger attitude,' and moreover, the SIB had the clear impression that the two firms did not want to keep the Dock in regular operation, as the terms of their offer did not provide sufficient working capital to do this. It was therefore, likely that the firms would take labour from the Dock for their own shipyards, and that no case had been made through the acquisition to improve the firms' shipbuilding competitiveness. [95]

By June, however, Tony Hepper, the SIB member most intimately involved with the Upper Clyde merger proposals stressed that the need to achieve sufficient production in order to provide continuity of employment on the river was a strong reason for a single Clyde group. [96] With the industry's order book at the end of the first quarter of 1967 at its lowest level since 1963, and with orders booked at less than three per cent of world orders in the period, some urgency in advancing grouping proposals was necessary. [97] The following month, another SIB member, Joe Gormley expressed concern at the slow rate of progress on the Lower Clyde. He noted that almost a year had been spent by Scotts' and Lithgows on talks about 'delicate financial measures, with as yet no real sign of a full physical merger, let alone a grouping scheme'. To this, Sir William Swallow mused that a public statement by the SIB on the lack of progress should be made, however, timing was crucial and issue by autumn at the latest was deemed desirable. [98]

In the interim, the Government already concerned at the incidence of British shipowners ordering abroad had deemed that a satisfactory system of credit facilities for home shipyards had to be devised. Consequently, under section 7 of the Shipbuilding Industry Act, 1967, which had received Royal Assent on 28 June. Mintech, only on the recommendation of the SIB, could approve and guarantee applications for credit facilities for home shipowners on the same terms as those available for export credits. The loans applied to British shipowners for the construction of ships in British shipyards up to a maximum of £200.000,000 at any one time. The Act, however, as Hogwood noted, stipulated that progress on re-organisation of resources was necessary as a pre-requisite to SIB approval. [99] Nevertheless, despite the SIB concern over the snails pace of the Lower Clyde merger talks, it did approve an application for section 7 assistance from Lithgows to enable the construction of two 130,000-deadweight ton bulk carriers in June. It was noted that this would extend Lithgows order book into 1970, a little further ahead than the SIB would normally consider, but nevertheless it was agreed to as the, 'overall advantages outweighed other considerations'. [100]

Although SIB approval had been given to the Lithgows application, it still had to be approved by the Treasury. The SIB, however, remained wedded to the idea of a single Clyde group, a factor that was stressed to Tony Hepper in July 1967. Hepper's Working Party on the Upper Clyde had put forward the idea of a new fitting out yard costing over £4,000,000 at John Brown's Clydebank yard. This was questioned by other SIB members on the basis that adequate fitting out facilities were already in place on the Lower Clyde, and in this light, 'was it right to consider a heavy capital investment with the John Brown yard in the circumstances'? Hepper agreed to take this into account. [101] In August, the SIB noted that a letter had been received from its sponsoring department, Mintech, on the progress of Lower Clyde grouping plans. This missive advocated holding up submission of Lithgows Section 7 applications to the Treasury until up-to-date information was available on substantive plans for grouping. The SIB view on this was not recorded, but it did agree that progress thus far had been unsatisfactory and that both Scotts' and Lithgows should be reminded of the ultimate objective of a single Clyde group. [102]

Clearly, with pressure mounting, Scotts' and Lithgows duly announced their intention to merge on 12 September. The following day, however, at a meeting of the Shipbuilding and Ship Repairing Council, chaired by Sir William Swallow, which included representatives of the employers and trade unions, Swallow reiterated the SIB view that the long-term aim was still the formation of a single Clyde group. [103] By October, the SIB had received a draft letter from Scott and Lithgow, which still sought an assurance that Scotts' would be an 'S' yard capable of building both submarines and surface warships. Again, such an assurance was regarded as fundamental to the formation of a Lower Clyde group. The SIB, however, was unable to give any such assurance, and in any case, 'the Navy Department [did] not consider that Scotts' would ever be able to build sophisticated naval vessels'.[104] Despite this negative opinion of the qualities of the Greenock firm, MoD (N) nevertheless continued to invite Scotts' to tender for the sophisticated naval warships that they were apparently unable to build. Moreover, no decision had yet been reached on the composition of the favoured naval yards, where thereafter-naval orders would be concentrated. Geddes had envisaged three yards building frigates and destroyers, but had not stated that every 'S' yard should build for the Navy.

The twin dilemmas of retaining some form of surface warship capability and remaining outside a single Clyde group continued to form the stumbling block for any real Lower Clyde merger. Michael Scott again reiterated this stance at a working lunch with the SIB on the subject of a Lower Clyde merger in November. On the single Clyde group, Joe Gormley for the SIB stated that there was no question of forcing Scotts' and Lithgows to merge with the Upper Clyde immediately. However, they should hasten their own merger, whilst co-operating with the Upper Clyde group and move towards a single group in the lifetime of the SIB. In reply, the Lower Clyde party, correctly, did not think that it was likely that any Upper Clyde group would be viable or profitable for at least four years. Nevertheless, as an SIB member had already pointed out, if, in effect, a single Clyde group emerged, then this would offer MoD (N) 'a single tendering party on the Clyde instead of two'.[105] Clearly, Scotts' were in direct competition with Yarrow who were likely, given their gearing towards frigate construction and design to be the 'S' yard in the Upper

Clyde consortium, where negotiations with the SIB were far more advanced than on the Lower Clyde. Moreover, there were not enough frigate orders to justify two Geddes 'S' yards on the Clyde, and due to the advanced state of negotiations on the upper reaches, SIB funding would be granted quicker there. Simply put, no merger on the Lower Clyde meant no SIB funding.

Nevertheless, the Mintech-SIB line on a single Clyde group did not, however, necessarily equate with MoD (N) priorities. Previously, Sir William Swallow had told the Navy department that as a start he thought that that the requirement to build sophisticated warships could be brought down to just four yards. Geographically, these yards would be located as follows; one in Northern Ireland, one on the Tyne, one on the Clyde and one on the South Coast of England. However, the SIB plan was likely to be frustrated by yards that could theoretically build most types of naval vessels. [106] An equally frustrated Director of the SIB, Barry Barker stated in a note to Baylis at Mintech if the Government thought that three or four yards would be enough to handle the future naval programme for sophisticated warships then they should clearly say so. Barker then voiced the SIB concern over Scotts' insistence on 'S' yard status, on which an immediate decision was needed. [107] In reply, Baylis got to the heart of the matter by stating that, 'he saw no prospect of an early agreement with MoD (N)', of the type suggested by Barker. Baylis lamented that:

> We know from experience that the Ministry of Defence have their own direct links with the shipbuilders, would like to establish such direct links with the SIB, and would not hesitate to use these links to advocate policies which differ from ours...This is reasonable enough from their point of view even though it causes embarrassment for us. [108]

In a nutshell, Baylis was commenting on Whitehall *realpolitik*, Mintech remained a relatively junior department, and the SIB was but a transitory body. It remained in MoD (N) interests to have as many builders as possible bidding for contracts by competitive tendering, even though political considerations often outweighed strictly commercial judgements

Given capital constraints, Lithgows intended move into giant tanker construction could only be achieved with SIB support. That support had temporarily gone elsewhere to two of the Port Glasgow firm's major rivals in the domestic market, Swan Hunter, [who had already formed a group] and Harland & Wolff, [who had not]. Each had with the aid of Mintech and the SIB secured a joint order for four 240,000-deadweight ton tankers from Esso Petroleum, on the basis that the British shipbuilding industry might break into the VLCC market. Finance was therefore granted to extend the facilities of each firm to complete the order, which was deemed to be in the national interest. In the case of Swan Hunter, this involved the modification of a crossover berth, and an excavation of the opposite bank of the Tyne at a total cost of around £200,000. Harland & Wolff needed a much more extensive modernisation programme. The first stage of the Belfast scheme required that the Musgrave Channel should be emptied, dock gates would then be put in, and the bottom of the Channel piled for 1,200 feet. Further work would need to be undertaken at the end of the Channel, and the fabrication facilities needed to re-organised accordingly at a total estimated cost of between eight and ten million pounds. The orders for the four tankers were placed on 26 September 1967 at the SIB headquarters in London, with Sir John Hunter of Swan Hunter and John Mallabar of Harland &Wolff in attendance, as were Dan McGarvey and Barratt of the CSEU. Accordingly, it was noted that this was an historic occasion, as for the first time representatives of the shipowners, the shipbuilders and trade unions, the SIB, and Mintech had came together to attract an order by giving assurances on delivery and union co-operation. [109] A factor other than Government support that had aided the deal was the closure of the Suez Canal as a result of the Arab Israeli War, which had led to a tanker-ordering boom. At a combined cost of £25,000,000 and at 1,100 feet in length these tankers were the largest ever built in the UK. [110] Another factor likely to lead to an increase in overseas orders was the subsequent devaluation of sterling in November 1967.

PE Engine Building Study on the Clyde

Earlier in July the SIB had commissioned PE Consultants at a cost of 11,500 guineas to undertake a study of slow speed marine diesel engine building on the Clyde.[111]

The results made depressing reading as it was noted that PE personnel had visited the engine works of Burmeister & Wain in Denmark, and Sulzer Brothers in Switzerland and found that both machine tool and labour utilisation there were much superior to those on the Clyde. Moreover, overseas levels of productivity would take years of development to achieve on Clydeside. Assuming reorganisation and increased capital expenditure along the lines of Sulzer, where a high level of tooling and low level of labour was present, would require a productivity increase on the Clyde in the region of seventy per cent by 1970. It was noted that discussions had already taken place between Scotts' and Kincaid's on a possible merger, but in Scotts' case half the labour capacity was taken up in submarine work. This was totally different from engine building and if the two firms were to combine then it was desirable that the submarine work should be divorced from engine work. In Kincaid's case it was noted that fifty per cent of machine tools were over twenty years old, and in Scotts' case, sixty per cent were over ten years old. It appeared, however, that in recent years both firms had operated regular replacement policies. [112] This less than ringing endorsement showed the magnitude of reaching continental standards in main engine production. Moreover, it obviously gave the SIB considerable food for thought if any real attempt was to be made to divorce the marine main engine building sector from shipbuilding where the prosperity of the former was inextricably linked to that of the latter.

Meanwhile the Scott Lithgow saga rumbled on and by 1968, despite Mintech and SIB dissatisfaction over the MoD (N) line which offered no real support for a reduction in warship firms, Mintech remained clearly frustrated at the situation on the Lower Clyde. Whilst a *volte face* in the tone of SIB correspondence was undesirable, somehow:

> Things must be brought to a head, if necessary by threats, without the SIB giving away essential positions on Clyde reorganisation, or getting embroiled in the question of the extent to which reorganisation effects the placing of naval work

Clearly the essential position remained the creation of a single Clyde group. However, it was not thought right that Mintech should buy a lower Clyde grouping, 'at the cost of some moral commitment, which we may not be able to honour in any case, that Scotts' must be able to tender for frigates'. [113] Just what these 'threats' in fact were remains unclear, but sabre rattling aside, and irrespective of MoD (N) insouciance, Mintech and the SIB still remained committed to a single Clyde group.

Scott Lithgow Limited and the long march to a Scott Lithgow Group

Earlier on 20 December 1967, Scott Lithgow Limited had been incorporated in Edinburgh. Subsequently, Michael Sinclair Scott was formally appointed as Chairman of the Board of Directors and Sir William Lithgow as Vice Chairman. Each took one share in the capital of the company, with work-in-progress remaining the responsibility of the respective firms. Somewhat belatedly, however, Scott Lithgow appointed Alan Borland as Director of Marketing Services, whose salary would be met equally by Scotts' and Lithgows until the formation of a Scott Lithgow Group. [114] Previously, both Scotts' and Lithgows marketing, more properly, 'selling', efforts had been dealt with at broker and at directorial levels. For Scotts' Michael Scott and George Hilton would normally deal with ship orders and negotiations thereon, as would Alex White and latterly Ross Belch at Lithgows. It must be stressed; however, that in the Heads of Agreement to merge signed in September 1967 it was envisaged that the SIB would provide the working capital to do so. Moreover, two conditions precedent to the implementation of a full merger still remained to be fulfilled- the acceptance by the SIB of Scotts' as an 'S' yard, and clearance under Section 28 (10) of the Finance Act 1960. [115] An earlier SIB minute informs that Ross Belch envisaged that the estimated requirement for working capital for a merged Lower Clyde group would be £3,000,000, and it was clear that the SIB was expected to provide this. On this latter point, the SIB stressed that it would only be prepared to consider lending working capital to such extent, 'as this could not reasonably be provided from other sources ...[and]... that money in shipbuilding should be left in shipbuilding and should not be taken out for other purposes'. [116] By this stage, however, it was apparent that Scotts' and Lithgows by their conditions precedent on 'S' yard status and non-membership of a single Clyde group, combined with their expectations as to the provision of working capital were already risk averse on the future merging of their shipbuilding activities.

At the dawn of 1968, therefore, any real merger (joint corporate responsibility for finance, working capital, debts, guarantees, workforces etc..) of the shipbuilding activities of Scotts' and Lithgows seemed just as far away as it had been in the previous two years. Contemporaneously, Scotts' had the largest concentration of submarines ever at its Cartsburn yard, with *HMS Sea Lion* and *HMS Otter* (the latter launched in 1961) in for refits, and three Australian submarines, *Ovens*, *Otway* and *Onslow* in various stages of completion. Lithgows were, however, still negotiating over the Samyang Navigation Company of South Korea order, which, as it turned out, had been prematurely announced in May 1967. The domestic situation was also compounded by a hurricane that had hit the Greenock area in January in which two people had died. The violent storm caused considerable damage at the Scott Lithgow Dry Dock, which had resulted in a 600-ton crane falling into the dock and a 300-ton crane falling across a ship at the Repair Quay. Fortunately one 60-ton crane was only slightly damaged and operations resumed a month later. However, the continuing saga over the Korean order rumbled on, despite Samyang and the Bank of Scotland signing an agreement in January 1968 covering the contract. This provided for two down payments for twenty per cent of the contract price, with the remaining eighty per cent to be paid in annual instalments over a period of ten years at a rate of interest of 5.5 per cent. The problem now was over the insurance cover provided by the ECGD and the question of whether Korean law allowed the customary payment default clause to be implemented. Clearly, as Ross Belch noted, legal interpretation was holding up the contract, as Lithgows could not start work on the tankers until a down payment had been received. This delay had necessitated a re-arrangement of Lithgows building programme with the transfer of smaller ships from the firm's East yard to its larger Kingston yard. However, it was later announced that Scott Lithgow had won the biggest order yet on the Clyde at £10,500,000 for six 20,000-deadweight ton bulk carriers for Kristian Jebsens Rederi of Bergen for delivery in 1969 and 1970, with all six vessels powered by Burmeister & Wain engines built at Kincaid. All things considered this was a sizeable boost for the local economy, as was the announcement that another Greenock marine engineering firm, John Hastie, would provide the set of the steering gear and ancillary equipment for a massive 276,000-deadweight ton tanker being built at the IHI shipyard complex in Japan. [117]

Gas Lion

Beforehand, Scotts' had attempted to enter a new market for liquefied petroleum gas carriers (LPG) with a design bought from Hawthorn Leslie on the Tyne, which had cost the Greenock firm £100,000. This fee covered the introduction of the contract, the information required to build the vessel, specifications, drawings, and guidance on low temperature welding techniques. The order dated 14 July 1966 had been taken on at a fixed price of £2,220,000 from Kristian Jebsen Rederi of Bergen and a consortium of Norwegian owners. The contract terms were, five per cent of contract price on signature of contract, five per cent when fabrication commenced, five per cent on launching and the remaining eighty-five per cent on delivery. Eighty per cent of the delivery instalment would be paid from the proceeds of a loan to the owners under a financial guarantee from the ECGD. A condition of the agreement with Hawthorn Leslie, who subsequently were incorporated into the Tyne Group of companies headed by Swan Hunter in January 1968 was that Scotts' were precluded from underbidding the Tyne firm for similar LPG work up to the completion of the Jebsen contract. The price of £2,220,000 included £25,000 for 'know how' with the remaining £75,000 being, 'the cost to the company for entering the important market for LPG Carriers'. [118] The resultant vessel, the 9,300 deadweight ton *Gas Lion* was launched in April 1968, and had provided a significant challenge to Scotts' boilermaking trades in terms of the close tolerances and new techniques needed for her construction. [119] At the launch, Jebsen remarked that he believed that, 'Scotts' would be the first firm to build such a vessel without losing any money on it'. [120] Despite the considerable outlay involved in entering this new and important market, *Gas Lion* proved to be the only LPG carrier that Scotts' ever built. In light of this, one has to question the management strategy involved in entering an important market and then abandoning it after a brief flirtation.

The Long March continued.

SIB frustration over Scott Lithgow intransigence on merging continued with the former noting in April 1968 that it was still without concrete merger proposals from the Lower Clyde. [121] Predictably, Scott Lithgow still maintained the sanctity of 'S' yard status, a position that Barker of the SIB had earlier considered as, ' a sorry one'. He could not help but feel that Scotts' 'like lemmings are marching their company straight into the sea'. Moreover, they did not seem to realise that goodwill was, 'declining all around them' and that they, [the SIB] 'were getting a little weary of Mr Scott's threats'.[122] Subsequently, at a later meeting with the SIB and Mintech, the Lower Clyde representatives considered it vital to remain on the Navy list of approved contractors as the maintenance of that relationship was crucial in order to tender for export orders. A factor given added importance as South American countries were apparently interested in ordering five conventional submarines. Scotts' and Lithgows had, by this stage, slightly changed their tack by stating that on frigates and destroyers, as well as on submarines, that they were, 'prepared to stand or fall on their competitive ability'. Their grouping scheme was based on an 'S' naval yard, 'but not one at arms length'. However, 'active support' was sought from the SIB for Scotts' to tender for naval work. For the SIB, Joe Gormley pointed out that no other group had asked for 'S' yard recognition as a precondition to merge. To this, Belch again reiterated the Lower Clyde mantra that naval yard recognition remained fundamental to their plans to merge, and if this were not granted then, 'the whole project would have to go back into the melting pot'. Later in the discussion, Sir William Lithgow then produced and unfurled a plan 'some twenty feet long' of proposed future yard developments. A key feature, however, the re-routing of the A8 road at Port Glasgow remained unresolved. [123]

Nevertheless, on the 'S' naval yard point submitted in Scott Lithgow's Interim Report, it was a stated intention to use Scotts' yard as a 'buffer' for mercantile work according to sales mix and volume at any given time. Clearly, as the SIB Secretariat noted, this would not be the separate entity envisaged by Geddes, with the possibility [more accurately the probability] that expensive naval practices and overheads might be transferred to mercantile work.[124] Returning to the April meeting, Baylis of Mintech, who later left that department to take up a position at the Shipbuilders and Repairers National Association (SRNA), the successor organisation to the Shipbuilding Conference and SEF founded in 1967, was highly critical. Although he thought it wise to start examining the Lower Clyde proposals setting aside their 'stupidity' over the 'S' yard question, Baylis found their performance and proposals, 'pretty pathetic'. The more he listened, to the questions put by Barker and the SIB, Baylis doubted whether this constituted a Group, 'which could be supported at all'. Moreover, it had reinforced his preference for a single Clyde Group rather than diminishing it, as he could not justify major expenditure on two separate areas of the same river, although the Lower Clyde had the better natural advantages of deep water. A position on which a judgement had to be made, but one given added focus by Sir Eric Yarrow's offer that the Upper Clyde would drop the John Brown/Rothesay Dock proposals if a merger with the Lower Clyde could be speeded up. [125]

In the interim, the Korean order saga remained unresolved, although in June 1968, Lithgows partly compensated by winning an order from Anglo Norness for a 133,500-deadweight ton oil tanker to be built at its Kingston yard. Scheduled for completion by 1970, this vessel was almost twice the size of any other vessel yet built by the Port Glasgow firm. As on the Korean order, Kincaid would again provide the engines. [126] A month later, Ross Belch, at a launch speech at the firm's East yard hoped that Scott Lithgow would grow and expand into, 'something really big in British and World shipbuilding, and to reap all the economies size can offer'. Belch, again peddled the now familiar Lithgow line, which contradicted the centralisation of buying, design, estimating, labour, management, marketing, production planning and specialisation needed if a large group was to be truly integrated along Geddes lines, by stating:

> We still intend to retain, by our philosophy of de-centralisation, short taut lines of communication between management and men, and a close and intimate relationship with our client. This we believe is essential if we are to survive in the tough world of big business which, nevertheless, is still

controlled and operated in the main by ordinary decent human beings who appreciate the personal touch. [127]

If Belch realised that this somewhat unreal view of the world of shipping and shipbuilding still had any real currency, with British owners deserting the domestic industry *en masse*, then he kept his own counsel.

Contemporaneously, Scotts' management had made public that they had informed their shop stewards that the question of naval work being withdrawn had been under discussion for almost a year. Predictably, removal from the Navy List remained, 'quite unthinkable'. A week before, Yarrow had tendered successfully to MoD (N), against Scotts' and other firms for two frigates for the Royal Navy, and one for the Royal New Zealand Navy. [128] This public airing of perceived grievances, however, had the effect of smoking out the preferences of the local Labour Member for Parliament, Jesse Dickson Mabon for a single Clyde group. Mabon made it clear that the Government's aim was the creation of a 'super yard' on the Clyde. He did, however, 'guarantee' that Scotts' could build naval vessels, 'for some time ahead', and that Yarrow had won the contracts, 'fairly and squarely'. [129] This was hardly surprising as the Scotstoun yard was specially geared towards this type of construction, whilst Scotts' were not. Nevertheless, Mabon, who obviously had not recently read the SIC Report, had insisted that the aim of Geddes was a single Clyde group. Predictably, and correctly, Scott Lithgow then issued a public statement that it was not, and an editorial in the local newspaper, the *Greenock Telegraph*, wondered why Mabon had, 'all of a sudden started to recommend the unification of Clyde yards'? [130]

Caledonia Joinery

As part of the Lower Clyde rationalisation programme it had been intended to centralise Scott Lithgow's joinery operations in the old William Hamilton subsidiary, the Caledonia Joinery Company. When effected in January 1968, Caledonia was located at Lithgows Kingston yard, and the majority of Scotts' Cartsburn Joiners' Shop woodworking machines were transferred. In total, the estimated cost of this centralisation was £10,000 with the bulk of the expenditure being borne by Lithgows. [131] It was not long, however, before the predictable question of parity of wages with the Upper Clyde was raised by the Caledonia workforce, and just as predictably refused by Scott Lithgow. This resulted in a strike involving 260 joiners, which began in late August 1968 and was not fully resolved until the end of the year. By 5 September, the joiners stated that they had been sacked by Caledonia and had been told to collect their insurance cards at the local Ministry of Labour office. Caledonia stated that the men had been laid off, and not 'sacked', nevertheless the Amalgamated Society of Woodworkers (ASW) insisted that none of their other members would work for the company, until the men were reinstated and parity was complied with. In the interim, it was noted that of the 260 men 'sacked', only sixty, including forty-three apprentices were now out of work, with the remaining 200 being mainly absorbed into Upper Clyde firms. Two weeks later an attempt to resolve the dispute was rejected, not surprisingly as the joiners were earning three guineas or more on a forty hour week on the Upper Clyde. The impasse obviously had a deleterious effect on Scott Lithgow's programme of fitting out, particularly as eight vessels had been launched in the year so far. Management then decided, and just what the shipping and shipbuilding world at large thought of this beggars belief, to tow a Jebsen vessel, *Borgnes*, to Bergen to fit it out there in order to relieve the backlog at Greenock and Port Glasgow and to comply with delivery clauses. [132] Subsequently, another vessel, *Craigffion* was also towed to Norway to be fitted out at a total cost of £50,000. [133] With the likelihood that its predecessor cost about the same, this was a high price to pay to retain the principle of not acceding to Upper Clyde wage rates. Nevertheless, it reinforces the view of just how averse Scott Lithgow were to concede any ground on parity. By 20 November, however, a Scott Lithgow offer on reinstatement did not get a single vote at a meeting of joiners, many of whom had taken advantage of higher wages in fitting out the liner *Queen Elizabeth II* at Clydebank. On the completion of this contract, more than half of the men did return to work at Caledonia, but it is testament to Scott Lithgow's bespoke linkages with Norwegian owners that Jebsen ordered another two vessels worth £3.5 million in December 1968. [134]

Demarcation

Just as the Caledonia strike was at last resolved, another dispute had already broken out at the Greenock end of the Scott Lithgow operation. This strike had its roots in the failure of management and unions to truly integrate working practices in the Cartsburn and Cartsdyke yards in the wake of the Greenock Dockyard take-over. Thereafter, each yard essentially maintained its demarcations and other work practices. However, from January 1968 negotiations began with plumbers and boilermakers, with the latter agreeing to allow the former to weld pipe flanges in the Cartsdyke yard but not in Cartsburn. Earlier it had been decided to integrate each yard's plumbing departments, but in doing so it was considered necessary by management to apply the Cartsburn demarcation to all ships built either in Cartsdyke or Cartsburn. Owing to the lack of agreement between the two unions concerned, the scheme for rationalisation of plumbing was stopped pending further negotiations. In a myriad of trade demarcations, this was not unusual. This essentially nonsensical situation was given added focus when the *World Hongkong* was launched in November 1968 from Cartsdyke and sent to the Cartsburn basin for fitting-out. The next day the Cartsburn sheet metal workers stopped work and remained on strike until the middle of January 1969. On their return to work they made it abundantly clear that bringing a Cartsdyke ship into Cartsburn would again result in them withdrawing their labour. This dispute resulted in Scott Lithgow removing *World Hongkong* from Cartsburn and transferring it to the Clyde Port Authority-owned James Watt Dock for fitting out. It was later estimated that the cost of the plumbers and sheet metal workers disputes was around £50,000. [135]

Throughout this period the attitude of Scotts' sheet metal workers shop stewards had been that since Scotts' had taken over the Greenock Dockyard's Cartsdyke shipyard, then Cartsburn demarcation practices were 'all embracing'. Clearly, negotiations on an overarching demarcation agreement in all the Scott Lithgow yards, given the enmity between individual unions, and the near certainty of strike action would be time consuming even if the managerial will was there, which it was not, to accomplish it. In this regard, one sheet metal shop steward, Owen Murphy, insisted that individual yard demarcation agreements must be honoured, and that an overarching agreement might take five to ten years to achieve. [136] Such was the frustration with the sheet metal workers stance, that Andrew Paxton, the Scott Lithgow Director in charge of Cartsdyke, later lamented that the situation had deteriorated to such an extent that the sheet metal workers were claiming everything, 'no mater how remotely connected with sheet metal work. It was in fact, only one step away from the stage when they would be opening the tins of soup in the canteen'. [137] It would be grossly unfair, however, to single out the sheet metal workers alone, all other trades were equally determined to preserve their status through demarcations and restrictive practices. It was all part and parcel of the everyday jungle of industrial relations in the shipyard, where barely a week went past without some dispute arising out of which particular trade had the right to do a particular operation and who did not. Had there been a strong personnel function present, then things might have been different, but there was not. Instead, senior management dealt with these time-consuming details both in the shipyards and Engine Works. With the competitive situation becoming more acute in relation to foreign shipyards, this was obviously detrimental to them overseeing the production process properly to ensure timely delivery of ships.

The Long March endures.

By September 1968 the long running saga of the Korean order had finally been resolved, with the two 133,000 deadweight tom tankers now scheduled for delivery in 1970 and 1971 respectively. Lithgows had hoped to start building these vessels almost a year earlier, however, along with the Anglo Norness tanker order, these three vessels were to be built one after the other. At a combined cost of £15,000,000 these export orders contributed to an Order Book comprising twenty-one vessels valued at around £50,000,000.[138] Meanwhile, a certain amount of agitation and confusion still reigned within the SIB as to the true extent of the Scott Lithgow 'merger'. On receipt of an application from Lithgows in September 1968 for Section 7 credit guarantees for two Sugar Line vessels, the SIB noted that the merger was still held up over the precondition on naval work at Scotts'. This remained the case despite a letter that had been sent from Mintech to Scott Lithgow informing the latter that without 'indefinite commitment' that MoD (N) would continue to invite tenders for destroyers and frigates from the Lower Clyde. In this regard the SIB wished to be informed over what steps had been taken, 'formally and financially' to complete the merger. Correctly, the SIB were still under the impression that the shipbuilding activities of Scotts' and Lithgows still remained separate, a fact supported by the Sugar Line application on behalf of Lithgows alone. This was despite the case that in recent press and trade paper advertisements; Scott Lithgow had been portrayed as a shipbuilding firm. In this light, therefore, the SIB welcomed details of the structure and activities of Scott Lithgow Limited. [139]

In reply, Scott Lithgow, although surprised that the SIB was not fully aware of the present position on the Lower Clyde, admitted that the latter had been correct in its assumption that the merger was yet to be financially finalised. However, on the 'S' yard situation things had moved on and a meeting on 28 October had been arranged with Mintech to finally clarify the situation. Nevertheless, the Board of Scott Lithgow thought that co-ordinated progress towards a shipbuilding group had been 'substantial'. A common marketing and sales effort, apart from orders already announced, had been instituted, and the latest flexibility agreement with the Boilermakers Society was proceeding satisfactorily. With the aid of the Shipbuilding Industry Training Board, the Scott Lithgow Training Centre for apprentices had been established, and of the eight-vessel Jebsen order, five vessels would be built at Lithgows East yard, and three at Scotts' Cartsdyke yard. Moreover, the Board of Scott Lithgow Limited was presently acting as a co-ordinating body controlling the policy and activities of Scotts' and Lithgows and their associated companies. It was hoped that Scott Lithgow Limited would soon be able to assume its full role as a holding company owning the separate profit centres which it was the intention to operate within a Lower Clyde Group. [140]

With the naval dimension remaining to be clarified, the Geddes vision of three yards producing frigates and destroyers, although favoured by Mintech and the SIB was clearly not sacrosanct. Two groups, one on the Tyne and one on the Upper Clyde had already been formed, and both had 'S' yards capable of building warships. Clearly, as Scott Lithgow complied with the Geddes criteria for a group of shipyards, irrespective of the position of its Engine Works and the numbers employed, its Cartsburn 'S' yard apparently had just as much right to compete on warship orders as did the other two groups. By this stage, this position was just about on the whole accepted by Mintech, what was not, however, was Scott Lithgow's insistence that this right should be indefinite. Moreover, the single Clyde group situation was at present 'impracticable', as Scott Lithgow was viable and Upper Clyde Shipbuilders (UCS) was not. [141] Indeed, the formation of UCS had been allowed despite an economic assessment made to the SIB that the former would not be commercially viable as a Group due to serious inherited trading losses, and the burden of debts payable to the SIB. Moreover, the SIB was of the opinion that the closure of Stephens and the 'phasing out' of Connells may be inevitable. Nevertheless, no doubt due to political realities, the SIB had in November 1967 approved the formation of UCS. [142] This was the real beginning of what was in effect a form of outdoor relief for indigent industrialists in Clyde shipbuilding.

By September 1968, however, the Lower Clyde firms had significantly changed their approach in private to a single Clyde group and now sought an assurance from Mintech that:

> Our present naval building status will certainly remain until such time as it may be agreed by everybody that the formation of one shipbuilding group on the River Clyde is in the best interests of all concerned. If and when such a situation develops, then we obviously accept that there might have to be a further rationalisation of naval building facilities on the river. [143]

With John Brown, Stephen and Fairfield effectively now out of contention, any future naval rationalisation on Clydeside involved Scott Lithgow and Yarrow only. At a meeting with the SIB, Mintech, MoD (N) and the Scottish Office on 28 October to decide if the merged company would retain its naval status, George Hilton for Scotts' noted that Scott Lithgow had received an earlier letter from the Government. He further noted that although the letter had been helpful, it did not carry an indefinite commitment on warship building desired by Michael Scott. Hilton thought that the refusal to commit indefinitely might be linked to the future creation of a single Clyde group, and that Government might also use naval building as a threat to bring this about. On UCS, Hilton could not see it being viable for at least three to five years, and that only when a merger was considered to be in their best interests of the Lower Clyde would a single Clyde group be contemplated. For Lithgows, Ross Belch endorsed these comments, and reinforced the need to tender for warships, not least to remain in the export market. For Mintech, Wedgwood Benn reiterated that neither he nor the SIB had powers of compulsion to enforce mergers, but nevertheless they could not give Scott Lithgow an indefinite commitment to be allowed to tender to construct warships. Equally, no such assurance could be given to other firms; however, the Government still welcomed a single Clyde group because they believed that the industry would benefit. Nevertheless, such a group should be viable, and Government should not contribute to the duplication of facilities. For MoD (N) Dr David Owen, whilst acknowledging Scotts' long association with the Royal Navy, could not give an indefinite commitment either. After further discussion, Belch stated that the position was now clearer, but that he still hoped to be reassured of Scotts' naval building status. To this Benn replied that he would be happy to restate the Government's position on this in a letter to Michael Scott, who was absent due to illness.[144]

Consequently, Benn wrote to Scott on 3 December and pointed out that because of the delay in merging, expenditure incurred after the end of 1970 (or 1971 at latest) would not be eligible for financial assistance. He asserted that he could go no further than to restate his junior ministerial colleague's position in a letter to Scott of 20 August that MoD (N) would continue to invite Scotts' (or the merged undertaking) to tender for frigates, destroyers or similar types of ships without an indefinite commitment. [145] Clearly, by this stage, it was evident that the Government would go no further, and Michael Scott finally acknowledged in reply that no open-ended commitment could be given. Consequently, he was satisfied that decisions would be made on merit and would not be influenced by the question of a single Clyde group, and accordingly accepted the position as it stood. In this regard, Scott informed Benn that he had now instructed his lawyers and accountants to proceed with the complicated but necessary formalities to merge as quickly as possible.[146]

By this stage then, two of the three conditions precedent on a merger. 'S' yard status, and non-membership of a single Clyde group had at last been addressed, if not wholly satisfied, another, the implications of Section 28 (10) of the Finance Act, 1960 remained. Subsequently, the Commissioners of the Inland Revenue did give clearance to the formation of a new merger company and subsidiaries. However, they had refused clearance in relation to later transactions whereby: 'The parent companies of Scotts' and Lithgows will seek to realise all their assets except shares in the merger company and, when sufficient cash is available, each of Scotts' and Lithgows will make a repayment of share capital to their respective shareholders'. Furthermore, in discussions with the Board of Inland Revenue it had been indicated that Section 28 was likely to be applied 'when cash temporary loans to the merger company and perhaps other assets (except the shares in the merger company) reached the hands of the shareholders in Scotts' and Lithgows in a capital form'. Counsel's opinion was sought, and it was decided that, 'it would be too dangerous now to take a firm decision when the time eventually arrives in two to three years time Scotts' and Lithgows should go into liquidation'. In his opinion, the only course was to continue with the merger on the expectation that, 'eventually it would be possible to achieve the final object of liquidating the companies and distributing their assets without falling within Section 28'. In any event the worse case scenario was that shell companies would have to kept in existence, and 'if that possibility could be faced there was nothing to prevent the merger going ahead'.

Accordingly, both Scott and Lithgow agreed that the conditions precedent to merge had been met to the best of their ability. On the contracting procedure of the new company, legal advice was that shipbuilding contracts should be completed by the subsidiary companies, and that all existing contracts at the date of the merger should be novated to the companies with the agreement of all parties concerned. [147] Accordingly, seven operating companies were formed in 1969. In Scotts' case, their shipbuilding assets and business was transferred to Scotts' Shipbuilding Company (1969) Limited, incorporating Cartsburn and Cartsdyke, a wholly owned subsidiary of the parent Scotts' Shipbuilding and Engineering Company Limited, as were Scotts Engineering Company (1969) Limited and Scott and Sons (Bowling) 1969 Limited. Lithgows incorporated four wholly owned subsidiary companies, Lithgows

(1969) Limited, Ferguson Brothers (Port Glasgow) 1969 Limited. Caledonia Joinery (1969) Limited and Caledonia Fabrications (1969) Limited. Immediately following these transfers, the whole share capitals of Scotts' (1969) Limited and Lithgows (1969) Limited would be taken over by the already incorporated Scott Lithgow Limited. Contemporaneously, Scott Lithgow Limited would take into the proposed Group with an effective date of 31 December 1969, the share capitals of all the other subsidiaries engaged in shipbuilding and marine engineering.[148]

In the interim, Lithgows had in September 1968 transferred two 20,000 deadweight ton bulk carriers to Scotts' Cartsdyke yard, and in November. MoD (N) had contracted for an experimental trials vessel at a cost of £2,057,309 subject to price variation to be built at the Cartsburn yard. [149] By the end of the year Scott Lithgow topped the output table for the river, with 12 ships launched of 93,834 deadweight tons, in contrast the five yards of UCS had launched six ships and one frigate. It was also announced that Scotts' Engine Works and Kincaid planned to merge in the coming months, with Kincaid's managing director, Cameron Parker commenting, 'it is my regret that we cannot do it today'. Despite the plans for eventual merger in shipbuilding and engineering, however, 1969 opened up with another industrial dispute in January, when the entire electrical department at Scotts' went out on strike for a week over a bonus dispute.[150]

The Scott Kincaid merger

From the outset the course of proposed engineering merger had been difficult. and all the more so because of Scotts' insistence on retaining its submarine capability. Kincaid, through the London merchant bankers, Rothschilds originally proposed in April/May 1968 that the engineering assets of Scotts' be sold to Kincaid in exchange for shares in that company amounting to eighteen per cent of their Issued Capital. Scotts' however, deemed this to be 'unacceptable'. as they feared, *inter alia*, losing their corporate identity and naval capability. [151] Subsequently, Scotts' stance changed and Michael Scott mooted a merger of their engineering assets with Kincaid as the dominant partner in a holding company with the existing engineering companies operating as subsidiaries under the title of Kincaid Scott. Scott rationalised this by stating that he could not agree to the abolition of the name Scott, partly through pride and partly through history, but not least to preserve the important engineering connection with the Royal Navy. [152] Beforehand, the SIB position at February 1968 remained that Kincaid and Scotts' should not be encouraged to merge until it was made clear that there was no possibility of a merger between Kincaid and Harland & Wolff'. [153] By December, however, the SIB position had changed as by this stage it had no doubt been made clear that Kincaid did not wish to merge with the Belfast firm, as the former's engine works would probably be closed down as a result. The SIB now felt able to support the Scott Kincaid venture, but remained concerned over the licensing position with Harland & Wolff. [154] This concern was not baseless. Harland & Wolff, as the principal licensee of Burmeister & Wain engines in the UK, had an absolute right to veto an assignation and therefore refused to assign Kincaid's sub licence to the proposed Lower Clyde engineering group as this was inimical to the Belfast's firm's interests. In August 1969, Harland's chairman, Mallabar, turned down an offer from Rickman of Kincaid to assign the licence to the Greenock firm on the payment of £50,000. He reiterated that he would approve of the Lower Clyde merger if Kincaid doubled its royalty payment to the Belfast firm, but also suggested that the firms should merge with Harland owning two-thirds of the proposed firm. Rickman turned down these offers by telephone. [155] By September, Mallabar's position had hardened. He stated that he considered an increase in royalty to be fair and one that Kincaid could afford, and that in the circumstances he would not renew the royalty on existing terms, and, 'would oppose most strongly a direct licence'. The following month, Mallabar forwarded the decision of his Board that the £50,000 payment was inadequate, but was nonetheless prepared to accept an increased royalty plus fifty per cent (instead of doubling it) and promised to renew Kincaid's sub-licence when it ran out. As the increased royalty would cost Kincaid between £40,000 to £50,000 per year, the Harland offer was again turned down. [156] Prior to this, a condition precedent to the Kincaid Scott merger was that SIB approval was regarded as a prerequisite (Clause 14, first sub-clause of draft Heads of Agreement to Merge). [157] The SIB in turn, felt unable to agree to this precondition as it identified them too closely with the commercial judgements inherent in the agreement, and also implied that if the SIB approved it then it would be prejudging the proposals before any application for financial aid were received. [158] Negotiations nevertheless continued into 1970 on the legalities of assigning the licence, which, given the intransigence of Mallabar, had little or no chance of being resolved.

The long march to merger of the shipbuilding assets of Scotts' and Lithgows and the engineering assets of Scotts that had begun almost four years earlier seemed to have an end in sight. Scott Lithgow had managed to remain on the Navy List, and had avoided (rightly as it turned out owing to the financial state of UCS) being dragged into a single Clyde Group. The question of whether Mintech and the SIB had the powers, covert or overt to compel the Lower Clyde to do so remains moot, but their policy was always to encourage a single Clyde group. Taxation difficulties aside, although these were of fundamental importance, Scott Lithgow's decision to enter the giant tanker market had been publicly announced in April 1969.[159] Even then the skilled labour needed for such a scheme was already scarce with three tankers of 133,000 deadweight tons ordered, the firm remained restricted to building only up to 150,000 deadweight tons due to the limitations of its present berth. Nevertheless, the firm had decided to go ahead and an order for a 250,000-deadweight ton tanker worth £8,000,000 for Anglo Norness was announced in May. [160] With the likelihood, however, that the SIB would not provide the working capital needed for the newly merged firm in the light of the UCS experience, it would seem that Scotts' and Lithgows would have to do so themselves.

Contemporaneously, a flow line production system was due to be installed in the Kingston yard at a cost of over £500,000 to enable the automatic assembly of large flat steel sections to enable the construction of tankers of 250,000 deadweight tons by the autumn of 1970. This, in tandem with a fundamental change in yard layout and cranage was required to build these vessels in two sections and join them up in a specially built cofferdam elsewhere. The whole scheme was, however, at heart dependent upon SIB capital in the form of grants and loans. There simply was not enough capital in the present business to adequately finance such a venture independently, given the inherent risk that a proper return on capital investment in an uncertain market might not accrue. In all this, however, one has to conclude that an eventual merger had been primarily undertaken in the light of SIB or other government assistance to finance the firm's development plans. Indeed, Scott Lithgow had informed the SIB Secretariat by June 1969 that they wished to frame their development plans only after an indication had been given to them of the sums that they were likely to receive from the SIB by way of financial assistance. This as the SIB noted was the wrong approach, and as for the future Sir William Swallow wanted it made clear to the Lower Clyde that large sums for capital expenditure by way of grants were unlikely, but was informed that this had already been done. Moreover, Barker of the SIB believed that Scott Lithgow appeared to be slow to take a decision on major capital expenditure, and had further indicated that they might find difficulty in paying interest on loans. [161]

Meanwhile, industrial relations continued to deteriorate further when over 500 platers went on unofficial strike for ten days in September over a productivity scheme, followed by 700 labourers, including cranemen in October. As Ross Belch later remarked in November, with 1,242 employees laid off because of strikes, 'it was necessary to be completely logical and consistent at all times, and to do nothing which might destroy the finely balanced, very delicate shipbuilding wage structure, which has been built up so painstakingly on the Lower Clyde over so many years'. Moreover, '...the one guiding principle ...[was]... one's ability to pay'. Despite this, however, the firm continued to win orders with a five-vessel product tanker order worth £14,000,000 from British Petroleum, four of which were to be built at Cartsburn with Scott Sulzer engines announced in September. Subsequently, further orders for refrigerated cargo liners and bulk carriers were announced in October, bringing the Scott Lithgow Order Book to over the £100.000.000, mark. With the last of Scotts' four Australian submarines, *RAN Onslow* commissioned on 22 December, however, hopes on the naval front now rested on a possible two submarine order from the Government of Chile.[162] From 1939 to 1969, naval vessels had contributed fifty-six per cent of net profits on main contract outcomes of vessels built and engined or machinery installed at Scotts'. [163] In the past four years since merger talks began they had allowed dividends of ten per cent at an annual cost of £150,000 to the Greenock firm's shareholders. It was plain that the naval dimension would remain vitally important to the merged firm, Scott Lithgow, if only to offset the likelihood of losses on mercantile contracts, which would inevitably show on

Scott Lithgow's consolidated balance sheet. The long march to merge had meant that Scott Lithgow had only received £20,000 from the SIB for consultant's fees. In stark contrast, by the end of 1969 the Government had taken a forty-nine per cent equity stake in UCS, and had expended some £20,000,000 overall in propping up what had in effect been a disaster waiting to happen. [164] The future then for Scott Lithgow remained uncertain, not only because of the Lithgow end of the business development plans and inherent learning curve, but also if the preceding four years were anything to go by, then this was likely to be a merger in name only, not in reality.

Endnotes: Chapter V.

[1] PRO BT186/10 List of SIC Papers. The SIC appointed by the President of the Board of Trade, Douglas Jay on 16 February 1965, consisted of R.M. Geddes OBE, A.G. Burney OBE, Professor T. Wilson, Professor M. Lighthill, M. Bowman Scott MBE and C.G.P. Smith JP. Only Burney had any previous connection with shipbuilding.

[2] PRO BT 186/39 SIC 67 Reports of Visits to firms on the Clyde, 27-30 April 1965.

[3] PRO BT 186/1 SIC Minutes of Fifth Meeting, 24 March 1965.

[4] PRO BT 186/39 Clyde Visit, Scotts' 30 April 1965, Chairman and Mr, Smith.

[5] Ibid.

[6] Ibid., Clyde Visit, Lithgows, 29 April 1965, Full Committee less Bowman Scott.

[7] Ibid.

[8] ibid., Clyde Reflections, Note by Chairman, 4 May 1965.

[9] Ibid.,

[10] PRO BT 186/1 SIC Minutes of Second Meeting, 16 February 1965.

[11] Ibid.

[12] ibid., SIC Minutes of Tenth Meeting, 8 July 1965.

[13] Ibid., SIC Minutes of Sixteenth Meeting, 17 September 1965.

[14] NMM SRNA 8 S42/10/4 SIC Paper submitted by the Shipbuilding Conference, Subject: The Warship Group, May 1965.

[15] PRO BT 186/5 Revised Extract from Minutes of Oral Evidence by the Warship Group, 25 June 1965.

[16] PRO BT 186/1 SIC Minutes of Eighth Meeting, 3 June 1965, the Navy deputation consisted of Sir Alfred Sims, Director General, Ships, Captain Haynes, Director, Naval Ship Production, Mr. P. Williams and J.S. Kay, Director, Contracts (Naval), Rear-Admiral H, Tracy, Director Marine Engineering and Mr. A. Pritchard, Director, Material Division 1 (Naval)

[17] ibid.

[18] PRO BT 186/20 The Shipbuilding Industry Inquiry, Memorandum by the Ministry of Defence (Navy Department), undated but 26 April 1965.

[19] PRO BT 186/1 SIC Minutes of Eighth Meeting, 3 June 1965.

[20] Ibid.

[21] ibid., Afternoon session of SIC.

[22] Ibid., Chairman's Note of a Meeting with Controller and Sir Michael Cary, 21 June 1965.

[23] PRO BT 186/5 SIC revised extract from minutes of a meeting held at the Board of Trade, 25 June 1965.

[24] See for example, *Manchester Guardian*, 23 December 1964, Costs and Prices, out of line with competitors, Lack of Concentration of Capacity. The UK was contrasted with Sweden where the majority of capacity was concentrated into five yards controlled by three groups; *Daily Telegraph*, 13 January 1965, Production Control, production control and planning throughout the entire organisation in Japanese yards was very efficient; *Economist*, 23 January 1965, Bulk Buying, Mason suggested this as a cure for difficulties with sub contractors; *Board of Trade Journal*, 23 March 1965, 6 August 1965, 12 November 1965, Action Needed to make UK marine engineering competitive; Japanese Shipyards; British Shipbuilding's 'need for change and fresh thinking'

[25] PRO BT186/1 SIC, Summary of statement by Minister of State (Shipping), Board of Trade and subsequent discussion dated 3 March 1965.

[26] Ibid.

[27] *Board of Trade Journal*, 28 January 1965, p.198.

[28] PRO BT 186/1 Summary of Statement, Minister of State (Shipping) dated 3 March 1965.

[29] For Roy Mason's trip to Japan, see *Japanese Shipyards, Board of Trade 1965: A report on the visit of the Minister of State (Shipping) in January 1965.*

[30] Chida & Davies, *The Japanese Shipping and Shipbuilding Industries*, chapter five, pp.136-174.

[31] Hogwood, *Government and Shipbuilding*, p.68.

[32] *Board of Trade Journal*, Roy Mason, 'Reasons for Japanese shipbuilding success', 30 April 1965.

[33] PRO BT 186/13 SIC A Note to stimulate discussion, following the Committee's visits to Tyne, Wear and Clyde by Professor Lighthill, 17 May 1965.

[34] *Glasgow Herald Annual Trade Review* 1965, and *Greenock Telegraph*, 4 January 1965 for figures, and Greenock Telegraph, 28 January 1965 for information on shipping companies.

[35] GD 320/1/2/105 Letter from Sir William Watson, Treasurer, Bank of Scotland, to Ross Belch, 21 December 1965.

[36] GD 320/1/104 Minute of Directors Meeting, Lithgows 16 November 1965 and Minute of Directors Meeting, 1 February 1966.

[37] GD 319/12/1/76 Draft Press Release to coincide with the Greenock Dockyard Agreement Signing, March 1965.

[38] PRO BT 186/39 SIC Note of visit by Mr. Burney and Professor Lighthill to Greenock Dockyard, 3 April 1965.

[39] GD 319/1/5 Minute of Directors Meeting (Scotts') 25 March 1966 and Minute of First Meeting of Cartsdyke Dockyard Company Limited, 25 March 1966.

[40] GD 319/12/1/62 Letter from Swire to Scott, 4 September 1965.

[41] PRO BT 291/150 Note of a Meeting in Mr Brown's Room at the Board of Trade, 10 March 1965.

[42] SIC 1965-1966 Report, (Hereafter SIC Report) Cmnd. 2937, London, HMSO, March 1966) chapters 11, 18,24, and 26.

[43] ibid., paras 71,502-518.

[44] Ibid., paras 307-313.

[45] Ibid. Chapter 26.

[46] *Greenock Telegraph*, 25 March 1965. For a much fuller discussion of the SIC Report and the establishment of the SIB, which, although written in 1979, has stood the test of time, see Hogwood, *Government and Shipbuilding*.

[47] GD 319/12/1/75 Letter from John Swire to Michael Scott, 28 March 1966.

[48] SIC Report, para. 319 (b).

[49] GD 319/12/1/75 Letter from Sir Eric Yarrow to Michael Scott 4 April 1966, and letter in reply from Scott to Yarrow, 6 April 1966.

[50] John Brown in particular had accumulated losses of over £4,000,000 in the past three years. See I. Johnston, *Ships for a Nation, 1847-1971 John Brown & Company Clydebank* (West Dunbartonshire, Libraries & Museums, 2000) p.271.

[51] SIC Report, para. 578.

[52] GD 320/1/2/103 Board Papers for 3 June 1966, Hand-written Notes.

[53] *Greenock Telegraph*, 13,30 May, 6 June 1966.

[54] GD 319/1/5 (a) & (b) Minute Book, Scotts' Minute of Directors Meeting, 6 June 1966.

[55] Scott Lithgow Papers, GD 323/1/15/5 Note of a Meeting on 22 June 1966, Sir William Lithgow, Michael Scott, A.G. Burney and J.A. Scott.

[56] Ibid.

[57] *Greenock Telegraph*, 23 March 1966.

[58] GD 323/1/15/5 Note of a Meeting on 22 June.

[59] Ibid., Note of a Meeting in Greenock on 14 July 1966, Burney, Scott, Lithgow.

[60] Ibid.

[61] ibid., Note of a Meeting on 29 July 1966.

[62] SIC 1965-1966 Report, paras 201-223.

[63] *House of Commons Official Report*, Vol. 731 cols.1400-6, 9 August 1966. See also, Hogwood, *Government and Shipbuilding*, pp.86-7.

[64] Hogwood, *Government & Shipbuilding*, p.87.

[65] *House of Commons Official Report*, 19 July 1966, Vol. 732, cols. 380-381.

[66] Ibid., 9 August 1966, col. 1402.

[67] *Greenock Telegraph*, 19 August 1966.

[68] GD 323/1/15/5 Note of a Meeting on 24 August 1966, Burney, Scott, Lithgow.

[69] For Joe Gormley's account of his time at the SIB, see his autobiography, J. Gormley, *Battered Cherub* (London, 1982) pp. 70-71.

[70] GD 323/1/15/5 Letter from Lithgow to Burney, 24 November 1966.

[71] *House of Commons Official Report*, 6 December 1966, Vol. 737, col. 276.

[72] GD 323/1/15/5 Letter from Lithgow to Benn, 23 December 1966.

[73] *Lloyd's Register of Shipping Annual Returns*.

[74] *Greenock Telegraph*, 5 August, 29 November, 1 December 1966.

[75] Ibid., 26 December 1966.

[76] GD 323/1/15/5 Letter from Sir William Swallow to Sir William Lithgow, 26 January 1967.

[77] GD 323/1/15/2 Deloitte, Plender and Griffith Report on Lower Clyde Shipbuilders, 10 February 1967. These firms were, Scotts' Shipbuilding & Engineering Company Limited's Cartsburn, and Greenock Dockyard's Cartsdyke shipyards, Scotts' Engine Works, and Scott & Sons (Bowling) Limited. Lithgows Limited's Kingston and East shipyards, William Hamilton & Company's (now ceased trading) Glen yard, Ferguson Brothers Newark shipyard, the wholly Hamilton owned Caledonia Joinery Company Limited, Caledonia Fabrications Limited (formed on 1 October 1965), Lithgow Housing Company Limited, and Kingston Marine Technology Limited (formerly the Lithgow Power Development Company).

[78] Ibid., Deloitte, Plender Griffith Report.

[79] Ibid.

[80] GD 323/1/15/7 Note of Meeting held at Barings on 11 April 1967, Giles & Tindale. letter from Giles to Scott, 13 April 1967 and letter to W.D. McLennan, Baring Brothers from John Lee. 19 April 1967

[81] Greenock Telegraph, 5 April &20 May 1967

[82] GD 319/1/5 Minute of Directors Meeting, Scotts' 6 June 1967.

[83] Parliamentary Papers, Report of Comptroller and Auditor General on the accounts of the Local Employment Acts 1967-1968, Firth of Clyde Dry Dock Company Limited.

[84] GD 319/1/5 Minute of Directors Meeting, Scotts' 6 June 1967.

[85] cf. L. Johnman & H. Murphy, 'No Light at the End of the Dock: The Long Rise and Short Life of the Firth of Clyde Dry Dock Company', *International Journal of Maritime History* Vol. X No. 2 December 1998.

[86] GD 319/1/5 Minute of Directors Meeting, Scotts' 6 June 1967.

[87] *Greenock Telegraph*, 20 May 1967.

[88] Ibid., 28 July 1967.

[89] GD 323/1/15/1 Memorandum on Merger proposal to Scotts' shareholders, 12 October 1967.

[90] GD 319/1/5 Minute of EGM of Scotts Shipbuilding & Engineering Company Limited. 30 October 1967.

[91] GD 320/1/2/118 Minute of Directors Meeting, Lithgows Limited, 16 November 1967.

[92] The ratio of frigates is calculated from an appendix in a paper presented to the Royal Institute of Naval Architects on 12 April 1974, by M.K. Purvis, 'Postwar Royal Navy Frigate and Guided Missile Destroyer Design, 1944-1969, *Transactions of Royal Institute of Naval Architects*, 1974.

[93] PRO FV 37/70 (Ministry of Technology) SIB Minute of Meeting, 2 March 1967.

[94] Ibid., SIB Minute of Meeting, 14 March 1967.

[95] Ibid., SIB Minute of Meeting, 29 March 1967.

[96] Ibid., SIB Minute of Meeting, 12 June 1967.

[97] *Lloyd's Register*, First Quarter, 1976.

[98] PRO FV 37/70 SIB Minute of Meeting, 27 June 1967.

[99] Hogwood, *Government and Shipbuilding*, pp.87 & 125.

[100] PRO FV 37/70 SIB Minute of Meeting, 27 June 1967.

[101] PRO FV 37/158 SIB Minute of Meeting with Mintech, 16 August 1967.

[102] PRO FV 37/70 SIB Minute of Meeting, 22 August 1967.

[103] PRO FV 37/48 Minutes of Sixth Meeting of Shipbuilding and Shiprepairing Council, 13 September 1967.

[104] PRO FV 37/70 SIB Minute of Meeting 9 October 1967.

[105] PRO FV 36/4 SIB Note of a Working Lunch, Lower Clyde Merger, London, 17 November 1967.

[106] Ibid., Letter from Barker, SIB to Baylis, Mintech, 27 November 1967.

[107] Ibid.

[108] ibid., Letter from Baylis to Barker, 1 December 1967.

[109] PRO FV 37/49 Shipbuilding and Repairing Council, Report on the Esso Tanker order, 20 October 1967.

[110] Price quoted in *Greenock Telegraph*, 26 September 1967.

[111] PRO FV 37/70 SIB Minutes of Board Meeting, 25 July 1967.

[112] GD 323/4/1/1 Slow Speed Diesel Engine Building on the Clyde, Report no. 3 by PE Consulting Group Limited, the five firms visited were, Barclay Curle, John Brown, Alexander Stephen, Kincaid and Scotts'.

[113] PRO FV 36/4 Memorandum Head ECG, V.I. Chapman, ECS 4, 18 January 1968.

[114] GD 323/1/2/127 Meeting of the Directors of Scott Lithgow Limited, 4 January 1968.

[115] Ibid., and GD 319/1/5 Scotts' Minute of Directors Meeting, 6 June 1968.

[116] PRO FV 37/21 Note of Meeting at SIB on 28 September 1967 between Hypher and Glass, SIB and Belch and Hilton-representing the Lower Reaches Consortium.

[117] *Greenock Telegraph*, 1,5, 12, 14, 16,17, 18, 31 January, 1, 3 February, and 30 April 1968.

[118] GD 319/1/1/5 Scotts' Minute of Directors Meeting, 6 June 1967.

[119] Interview with J.F. Robb, Director, Scott Lithgow and Jimmy Macmillan, Chief Ironworker, 20 June 2000.

[120] *Greenock Telegraph*, 30 April 1968.

[121] PRO FV 37/21 SIB Note of a Meeting, re the Scott Lithgow Project, 17 April 1968.

[122] PRO FV 36/4 Letter from Barker, SIB, to Baylis, Mintech, 8 April 1968.

[123] PRO FV 37/21 SIB Note of Meeting, re Scott Lithgow Project, 17 April 1968.

[124] Ibid., Lower Clyde Shipbuilders, Interim Submission in connection with proposed Scott Lithgow facilities, 3 May 1968.

[125] PRO FV 36/4 Letter from Baylis to Barker, 19 April 1968.

[126] *Greenock Telegraph*, 14 June 1968.

[127] Ibid., 26 July 1968.

[128] Ibid., 7 August 1968.

[129] Ibid., 13 August 1968.

[130] Ibid., 14 August 1968.

[131] GD 323/1/1/54 Scott Lithgow Merger, undated but 1969. As part of the Cartsburn Joiners Shop transfer, the old McLean Sawmill in the Cartsburn yard, which was mainly used for storage was discarded and left vacant.

[132] *Greenock Telegraph*, 24 August, 5 September 1968.

[133] GD 323/1/1/54 Scott Lithgow Merger, undated but 1969.

[134] *Greenock Telegraph*, 20 November, 13 December 1968.

[135] GD 323/1/1/54 Scott Lithgow Merger, undated but 1969.

[136] GD 319/13/4/51 1946-1969 Demarcation Correspondence and Meetings, Meeting with Sheet Metal Workers Shop Stewards, 31 July 1968.

[137] Ibid., Meeting with Mr, Buck, Sheet Metal Workers Union, 17 September 1968.

[138] *Greenock Telegraph*, 13 September 1968.

[139] PRO FV 37/21 Note by Barry Barker, Director, SIB, to Ross Belch, 30 September 1968.

[140] Ibid., Letter from Belch to Barker, 8 October 1968.

[141] Ibid., Mintech, Brief for Minister's Meeting with Lower Clyde shipbuilders, 25 October 1968.

[142] PRO FV 37/42 Formation of a Shipbuilding Group on the Upper Clyde. Memorandum from the SIB to the Minister of Technology, November 1967.

[143] PRO FV 37/21 Mintech, Brief for Minister's Meeting with Lower Clyde Shipbuilders, 25 October 1968.

[144] Ibid., Mintech, Lower Clyde Shipbuilders, Note of a Meeting, 28 October 1968.

[145] GD 319/1/1/5 Scotts' Minute of Meeting of Directors, 9 June 1969, Letter from the Right Honourable Anthony Wedgwood Benn to Michael Scott, 3 December 1968

[146] ibid., Letter from Michael Scott to Benn, undated but December 1968.

[147] Ibid., Scotts' Minute of Meeting of Directors, 9 June 1969.

[148] GD 323/3/3/1 Letter from Michael Scott to Woodman, Assistant Director Contracts, MoD (N), 18 November 1969.

[149] GD 323/1/1/5 Scotts' Minute of Meeting of Directors, 6 June 1969.

[150] *Greenock Telegraph*, 11 & 25 December 1968, 14 & 21 January 1969.

[151] GD 323/1/4/2 Minute of Meeting of Directors of Scott Lithgow Limited, 24 September 1969, wherein the nature of the original Rothschilds offer is mentioned, and GD 323/1/15/8 Note of a Meeting of Scott Lithgow Limited, 10 May 1968, wherein the naval dimension was referred to by John Lee, a Director of Scotts'.

[152] GD 323/1/4/17 Letter from Michael Scott to Rickman at Kincaid, 31 December 1968.

[153] PRO FV 37/30 SIB Board Meeting, 13 February 1968.

[154] Ibid., Letter from Barry Barker, SIB, to Michael Scott, 30 December 1968.

[155] GD 323/1/4/17 Scott Kincaid Merger, Note of Meeting at Scotts' 27 November 1969.

[156] Ibid.

[157] PRO FV 37/30 SIB Copy letter from Rickman to Barker including copy of draft Heads of Agreement, 13 June 1969.

[158] Ibid., SIB Letter from Ezra to Parker, managing director, Kincaid, 14 July 1969.

[159] *Greenock Telegraph*, 22 April 1969.

[160] Ibid., 15 May 1969.

[161] PRO FV 37/21 SIB Lower Clyde Development Plans, 12 & 17 June 1969,

[162] *Greenock Telegraph*, 18,24,25,29 September, 1,15,24 October, 10,12,13,14,15,20,27 November, & 22 December 1969.

[163] J.F. Robb, 'Scotts of Greenock', Appendix, Table 8/1 Main Contract Outcomes of Scotts Shipbuilding & Engineering Company Limited, 1921-1969.

[164] SIB Reports and Accounts for the year ended 31 March 1969 and 31 March 1970.

Chapter VI: The road to nationalisation, 1970-1977

By 1970, the long campaign by Scotts' and Lithgows to avoid being sucked into a single Clyde group and also to remain on the MoD (N) list of surface warship builders had temporarily ended. Bearing in mind, however, that a change of government could have an impact, no guarantee existed that these issues had gone away. At the close of business on 31 December 1969, by which stage the remaining legal problems of novating existing shipbuilding and engineering contracts had been resolved, the shipbuilding and engineering assets of Scotts' and Lithgows had been transferred to seven specially created operating (1969) companies already incorporated in Scotland. [1] Nevertheless, the arrangements for a merger of these operating companies into one holding company, Scott Lithgow Limited, which it will be recalled had already been incorporated in September 1967, did not take place until 6 February 1970.[2] Scott Lithgow Limited was, however, not the ultimate holding company, that honour belonged to Scotts' Shipbuilding & Engineering Company Limited (Scotts') who at 6 February held sixty per cent of the former's shares. This amounted to 500,000 Participating Preference Shares of £1 each and 1,000,000 Ordinary Shares of £1 each, with Lithgows holding 1,000,000 Ordinary Shares only. In addition to the 1,500,000 shares held in Scott Lithgow Limited, Scotts' retained two vessels built on their own account on bareboat charter, and their half share in Scott Lithgow Drydocks Limited, which did not form a part of the merger.[3] Scotts' from now on was in effect, primarily an investment company, as was similarly the case with Lithgows Limited. However, it is with Scott Lithgow Limited (Scott Lithgow) and to a lesser extent its operating companies that we are primarily concerned with from 1970 onwards.

The underlying philosophy behind the merger had already been explained in some detail in the first edition of the *Scott Lithgow House Magazine* some nine months earlier by Scott Lithgow's chairman, Michael Scott, and its vice chairman, Sir William Lithgow. [4] In interview, Scott was at pains to explain that the merger was not a 'shotgun marriage', but that both he and Lithgow were only prepared to join forces by retaining their respective firm's individuality, expertise and names. Moreover, they were 'most certainly not going to run ourselves as a single massive organisation…with all the departments under one roof and all our yards under detailed control'. To support his view, Scott stated, 'that the men, who design and build a submarine are not the people to build a tanker, so why push them together'? He then elaborated that the group would be run on a separate profit centre basis and that separate skills and techniques would be kept, 'fairly much as they are at present in units of handy size, say not more that 1,500 people'. On the other hand, Lithgow held that the ideal unit should be much less, say 400 to 1,000 people in a single plant. That way, 'management would know employees as people and, not as units...who's been ill, and who's had twins and who won the [football] pools last week.' Lithgow saw Scott Lithgow, 'as a number of interlocking specialist companies...[and] in general the units will make their own decisions-and quick'. He then repeated the by now familiar refrain that lines of communication would be kept short, and that there was, 'nothing more soul destroying than frustrations, and that's what you get when everything has to find its way to some central department and then find its way back again'. However, some central functions were desirable such as computerisation of accounts, and commodity buying. Nevertheless, as was pointed out by the interviewer, the SIC envisaged a central sales and marketing operation in every shipbuilding group, an idea that cut across the traditional way of selling by either the chairman or managing director. When asked how they wanted to sell-sales department or chief executive? Scott succinctly replied 'chief executive', and Lithgow although he elaborated further, agreed that a big sales department was not the instrument to use. Rather, a small department plus brokers could do the job better, but the final sale should be undertaken at managing director level. Thereafter, Scott and Lithgow when asked how the merged firm would survive when others were having a rough time, gave reasons such as deep water and a close knit community for a start. The firm also had the ability to build a whole range of ships, as well as a ship repairing facility. To this, Lithgow added strong management and that the firm was solvent, but on marine engine building, Scott, predictably, disagreed with the SIC contention that engine manufacture should be separate from shipbuilding. [5]

In all of this, no mention was made of a central production planning office with real powers to direct and plan the course of production and labour and material flows in what would be an increasingly complex group. Neither was mention made of any increases in middle management control or numbers despite Scott Lithgow's expansion plans, and barring a merger with Kincaid, Scotts' Engineering (1969) Limited would not be separated. What was evident long before the official merger had been carried out was that each shipbuilding firm intended to carry on much as they had done before. In this sense the merger was not so much a 'shotgun marriage' but a marriage of convenience. Neither party fully consummated the relationship despite being consenting adults. Given the well-documented troubles of UCS, however, it would have been something of a miracle if Scott Lithgow had avoided the inflationary effects of taking on mercantile contracts on credit terms at fixed prices. Indeed, whether the Lower Clyde group was solvent or not remained unknown to the public at large due to the private nature of the firms involved. From the outset, however, it did not require inside knowledge to predict that the success or failure of the newly merged firm hinged on the provision of adequate working capital to ensure liquidity, and on securing naval contracts to offset losses on mercantile work. Nevertheless, given the SIB refusal to provide working capital to Scott Lithgow, this capital would have to be provided by Scotts' and Lithgows alone probably by way of a loan. With a panel line already under construction for completion by the autumn of 1970 and plans afoot to enable Lithgows to enter the large tanker market by again expanding their facilities to cope with the two 250,000 deadweight ton vessels ordered from Anglo Eastern Bulkships, the naval dimension remained all-important. Accordingly, well before the last Australian submarine was due to be completed, Michael Scott and George Hilton (the latter had retired in October 1969 to be eventually replaced as sole managing director by Ross Belch) had visited three countries in South America to drum up business. [6] Resulting from this, Scott Lithgow announced on 14 January 1970 that it had won an order for two *Oberon* class submarines worth £14,000,000 with price variation clauses from the Government of Chile. Just how far the naval market had sunk in the UK was reflected in Michael Scott's pronouncement that this news was, 'a milestone in the fortunes of the group...[and] firmly establishes Scott Lithgow's position among the leading naval builders in the UK'. [7] By the following month, however, it had transpired that Scott Lithgow had been offered an unlikely route back into surface warship production, when Sir Eric Yarrow, as a result of an earlier discussion with Michael Scott, invited the Lower Clyde group to make a bid for the Yarrow group of companies.[8]

The Yarrow bid and the general shipbuilding situation

The Yarrow group of companies included Yarrow Shipbuilders Limited in which UCS held 51 per cent of the equity, Yarrow (Engineers) Limited and the Yarrow Admiralty Research Department (YARD). On joining UCS, Yarrow had received a payment of £1,000,000 in cash, £800,000 in shares, and retained a 49 per cent minority equity stake in Yarrow Shipbuilders. As the 'S' yard in UCS from February 1968, the Yarrow position reflected the Scotstoun firm's past performance, and perceived position as the leading frigate builder in the UK. From 1956 to 1965, Yarrows had spent £3,574,000 on re-equipment and modernisation, and since the last war had constructed more frigates for the Royal Navy than any other shipbuilder.[9]

By January 1970, however, UCS, already in receipt of £20,000,000 of taxpayer monies in grants and loans, remained in deep trouble. If an underlying reason can be discerned for this government largesse short of gross incompetence on the part of all concerned, then it was undertaken in the belief that the Labour Government had sought concentration of shipbuilding interests in an attempt to avoid the consequences of large-scale unemployment on the Upper Clyde.[10] The effect, however, of this largesse, which had saved UCS from liquidation, was to reinforce the message in other shipbuilding groups, notably on the Lower Clyde, that they were being treated unfairly by Government. A view not lost on Ross Belch, who had prepared some rough notes on the UCS situation prior to an unofficial Shipbuilders and Repairers National Association (SRNA) meeting in January 1970 with the Paymaster General, Harold Lever. [11] Belch noted that Fairfield had been saved four times and the rest of the yards, with the exception of Yarrow two or three times, factors that were causing the rest of the industry in the UK, 'grave concern'. The Government subsidy to UCS amounted to 'unfair competition', had increased labour costs, and had 'almost completely destroyed the initiative and self-help attitude of the Upper Clyde labour force, and, moreover, was also undermining the morale of the entire West of Scotland labour force'. Belch did, however, admit that Scott Lithgow were desperately short of skilled labour, and due to its expansion plans would ultimately require an additional 1,500 workpeople. In this light, the Lower Clyde and other shipbuilding areas could easily absorb labour if UCS were to collapse. If it were felt, however, that Government would continue to prop up UCS, then the rest of the industry would have no alternative but to request the same levels of subsidy. [12]

Subsequently, the SRNA submission, whilst rather more emollient, mirrored much of the Belch concerns and concluded that the industry's view was that, 'if the recently announced loans and guarantees do not create a viable shipbuilding undertaking on the Upper Clyde, no further assistance should be made available to UCS'. The shipbuilders did, however, offer their assistance in mopping up redundant labour. [13] At the meeting with Lever, which was not attended by UCS, although they apparently knew of it and with Michael Scott and Ross Belch in attendance, the shipbuilders put their case. The SRNA President, Sir John Hunter, of Swan Hunter, stated that if State subsidised building were allowed to continue, the result would be disastrous for the rest of the industry. Lever, *inter alia*, replied that he did not think that the Government was likely to give any further assistance to UCS, as monies had been given with the intention and expectation that UCS would become viable. After some predictable complaints from the shipbuilders over the high level of wages at UCS, and fears that the latter were undercutting other builders on prices, Lever concluded that, 'if UCS escaped his determination that they should offer reasonable prices, wages and delivery dates, they would not be viable and would not last very long'. [14]

Plainly, the elite shipbuilders present had a number of real concerns, all employed substantial numbers of workpeople in areas of relatively high unemployment and were subject to precisely the same inflationary pressures as UCS without, with the exception of Harland & Wolff, massive government support. The Swan Hunter group of shipyards on the Tyne and Tees, for example, who it will be recalled had already entered the giant tanker field with Harland & Wolff to build tankers for Esso Petroleum, had made loss provisions totalling £5,000,000 in their 1969 accounts. A factor that the SIB accountant, Humphrey, regarded as being the only good aspect of Swan Hunter's accounts, a feature of which was that insufficient information was given. Humphrey regarded the payment of a final dividend of four per cent in these circumstances as being, 'quite unjustified'. Moreover, the firm's auditors, Price Waterhouse, had qualified the accounts on the basis that it was 'virtually impossible accurately to forecast [at this stage] the outcome of long-term fixed price contracts'. [15] If Swan Hunter, widely regarded as the most successful British shipbuilding firm, had to make loss provisions on this scale, then by association it was likely that other large firms were in similar trouble. By March 1970, with internecine sectarian strife underway in Northern Ireland, Sir John Mallabar, who it will be recalled had been firmly against a Scott Kincaid merger, had resigned. With Harland & Wolff in deep financial trouble, Mallabar put the blame for the Belfast firm's situation entirely on the shoulders of its workers, as in his view, 'the same management had in the past produced much better results from the same workforce'. With his Board of Directors no longer behind him, and noting that he had fallen foul of the SIB, Mallabar preferred to resign and to do so, 'without causing embarrassment'. [16]

By this stage, however, although it was not yet made public, Cammell Laird, who it will again be recalled had beaten Scotts' on the nuclear submarine front, were in deep trouble also. Although it had not been publicly announced until 20 February 1969 that the Birkenhead firm would in future be left out of the nuclear submarine building programme in favour of concentrating future production at the lead yard, Vickers, Cammell Laird had been officially informed of thls a year earlier.[17] By March 1970, however, the Director of the SIB, Barry Barker suggested at a meeting with Mintech officials that Cammell Laird could collapse. Three courses remained open, either to redevelop the shipyard themselves, to amalgamate with another company, or to sell out to a third party. Barker put the cost of reorganisation at around £11,000,000 to £13,000,000, but it transpired that the SIB approved of an approach to Appledore Shipbuilders on a possible take-over of Cammell Laird. An unlikely scenario unless Appledore could be protected against losses on current contracts and work in progress. On this point Barker believed that shipowners had obtained orders at Cammell Laird at ridiculously low prises, and that these might be renegotiated to avoid an expected £5,000,000 loss. Barker agreed to keep Mintech informed of developments. [18] By April, however, it was clear that the shipbuilding arm of the Birkenhead conglomerate was bankrupt. Accordingly, the Labour

Government's industrial concentration vehicle, the Industrial Reorganisation Corporation (IRC), whose remit by Government was to save the whole of Cammell Laird, and not just Cammell Laird minus the shipbuilding and engineering subsidiary had a difficult task ahead. As Barker of the SIB noted in regard to the shipbuilding arm at Birkenhead, apart from skilled labour and certain berths, there were no other assets worth preserving.[19]

Contemporaneously, the situation at Yarrow Shipbuilders was also giving the SIB cause for concern as much of the shipyard's problems, alike Swan Hunter, Cammell Laird and Harland & Wolff, lay in the fields of management and finance. In a report by accountants commissioned by the SIB on Yarrow, it was noted that the latter's accounting systems were inadequate for the production of frequent financial information, 'such as should keep the Board informed of current happenings'. This had been caused by a failure on the part of management as a whole, 'to appreciate the need to be so informed to the extent of acting to that end'. Although an able financial director led the Yarrow accounting staffs, they were 'quite inadequate in numbers to perform the several duties which would be regarded as necessities in many businesses of similar size'. [20] It was against this background that Sir Eric Yarrow's invitation to Scott Lithgow to take over his firm must be judged in line with separating Yarrow from UCS, and of the possible creation of a single Clyde group. From the outset, Sir Eric did not hide his discomfort with UCS, particularly in the wake of the latter's first financial crisis in May 1969. By December, he had met the Conservative Party spokesman on shipbuilding, Nicholas Ridley, the results of which were later to engender a great deal of controversy over the future course of shipbuilding policy. In a subsequently leaked memo, Ridley believed that the best long-term solution on UCS was to detach Yarrow Shipbuilders from it and allow the Scotstoun firm to merge with either Scott Lithgow or Vosper Thornycroft. [21] Nevertheless, by April 1970, the Labour Government, with the advantage of inspecting the accounts, concurred, and it was publicly revealed that UCS, who held the majority stake in Yarrow Shipbuilders was willing to let the latter go with the blessing of Mintech and the SIB. This revelation forced Scott Lithgow to publicly declare its interest in Yarrow, and likewise Vosper Thornycroft did so the next day. [22]

From the outset, the lure of profitable naval work made a possible Scott Lithgow acquisition of Yarrow an attractive proposition. Although separated by some distance on opposite ends and banks of the river Clyde, the construction of the Erskine Bridge due to be completed in the following year obviated the need for a long detour through Glasgow. Moreover, this geographical proximity and similar culture would be politically preferable to a bid from the English group of fast patrol craft and frigate builders, Vosper Thornycroft. The disparity in wage rates between the Upper and Lower Clyde, however, whilst problematic, did not stop Scott Lithgow from executing a *volte-face* on a single Clyde group. After four years of determined opposition in public, it now appeared by February and March 1970 that Scott Lithgow believed that an acquisition of Yarrow Shipbuilders would be 'a natural first step in this direction'.[23] However, Sir Eric Yarrow had earlier made it plain that any bid placed had to be for the Yarrow group of companies as a whole and not just the shipbuilding subsidiary, and that such a bid should be in cash.[24] Given that both Scotts' and Lithgows had to inject liquidity by way of working capital into Scott Lithgow to satisfy the SIB of its continuing commitment to shipbuilding on the Lower Clyde, it was unable or unwilling to mount a bid for Yarrow on its own. Consequently, the London firm of H. Clarkson and Company was approached and eventually agreed to head a consortium to take shares in Scott Lithgow to enable the cash purchase of the Yarrow group.[25] In a discussion with the SIB, Teddy Boyd of Lithgows thought that some £3,000,000 in capital would have to be put into Yarrow. For this money, however, Boyd indicated that Scott Lithgow would prefer to buy the entire Yarrow group, in order to have available the assets and profits of the non-shipbuilding companies in offset potential losses on shipbuilding. Nevertheless, it now transpired that Boyd had reiterated his wish that SIB assistance that might be available to purchase Yarrow Shipbuilders, 'would come in the form of equity participation in Scott Lithgow'. To this the SIB pointed out the risks that might attend upon Government taking an equity holding, but neither Boyd nor Ross Belch, who was also in attendance, were deterred as they preferred this to any further loans. In all this it was apparent that Belch and Boyd did not believe that Yarrow's losses on shipbuilding, which by this stage had been made clear, had stemmed primarily from the effects of grouping with UCS. Contrary to public statements, the Scott Lithgow men believed that the losses had occurred through Yarrow 'buying' the contracts for Leander class frigates at unrealistic prices.[26] Unfortunately, the author is unable to explain further the course of SIB equity participation in this regard, as the SIB Board Minutes for 1970 have been withheld from public scrutiny at the Public Record Office, Kew. From the Scott Lithgow side, however, the Yarrow bid eventually unravelled when the question of financial guarantees given by Yarrow Shipbuilders, jointly with UCS and severally, came to light. This largely unknown factor meant that the future position of Yarrow Shipbuilders could threaten the solvency of the Yarrow group of companies as a whole, and led to the proposed deal collapsing in May 1970.[27] That month, a fortnight before the Labour Prime Minister Harold Wilson announced a General Election was to take place in June, it was publicly announced that Cammell Laird were ten days from liquidation. [28] It will be recalled that the Ministry of Defence regarded the Birkenhead firm as being better capitalised than Scotts' was to build nuclear submarines. With a General Election looming, the Labour Government had little choice but to act, and as Harold Lever remarked, 'putting it bluntly we have rescued this firm from total collapse'.[29]

With the possibility that a change of government would entail a change in shipbuilding policy, Greenock's Member of Parliament for the past fourteen years, Jesse Dickson Mabon pledged to back Scott Lithgow's plans for a 'super yard'. With site preparation already started, Mabon did not have to stand against a Conservative and Unionist Party Opposition candidate as the Tories did not field one for the first time since 1950 in order to give the Liberal Party candidate a clear run. As it turned out, Greenock was the only one of seventy-one seats in Scotland not contested by the Conservatives. Moreover, before the result of the General Election was known, although the SIB had not drawn up a formal agreement, it seemed that permission had been granted for Scott Lithgow to develop its giant tanker yard at the former William Hamilton, Glen yard. Dickson Mabon duly retained his seat; however, the Conservative Party won the General Election. [30] By August 1970, although approval had been given for the Glen yard development, Scott Lithgow had still not received any money from the SIB. [31] It is to the plans for a 'super yard' that I now turn.

The 'super yard' considered

Clearly the earlier receipt of two super tanker orders from Anglo Eastern Bulkships had precipitated the need for Scott Lithgow to press ahead with its development plans with rather more urgency than it had displayed in merging. These vessels could not be built at the Kingston yard, which was already stretched to the maximum in building vessels up to 150,000 deadweight tons without further extensions to berths and cranage. However, the genesis of a new 'super yard' at Port Glasgow had already begun before the publication of the SIC Report, as Lithgows had commissioned a feasibility study by the consulting engineers, Crouch and Hogg. They duly reported on 13 January 1966 on two schemes to build tankers of up to 500,000 deadweight tons covering all operations other than engine building to be carried out under cover in building sheds. Vessels would then be engined and tested in a fitting out dock before leaving the yard in a wholly completed form. With the estimated costs of the three schemes studied, which included a building dock, ranging from £24,000,000 to £31,000,000 the plans were, not surprisingly, put in abeyance. [32] By November 1969, however, another feasibility study had been commissioned on the practicality of converting a public facility, the nearby James Watt Dock, into a dry dock. At a cost of almost £5,500,000 this was again an expensive option. [33]

Beforehand, in May 1969, in discussion with Reed of the SIB, Ross Belch had intimated that a dilemma existed on whether or not to proceed with a much broader scheme of development for the group as a whole. Regarding SIB assistance, Belch stressed that grants would be preferable to loans, and the extent of this, 'would determine in a very real sense the extent to which their development would proceed'. A full scheme would cost around £6,000,000 but Scott Lithgow were averse to the servicing of such a large amount of capital. Reed, however, indicated that although some grant monies would be paid, these would be limited in respect of the total sums involved. [34] Scott Lithgow did, nevertheless, have an ultimate plan in mind and had other alternatives open to them on yard development, but due to cost considerations an intermediate plan was eventually submitted to the SIB for funding. The ultimate plan had envisaged the construction of a huge sloping concrete mat of uniform stressing, and an adjacent fabrication hall at the Glen yard both spanned by an 800 ton Goliath crane capable of lifting varying sizes of pre-assembled sections onto the mat. The intermediate plan, however, had been arrived at this stage in preference to the far more technically efficient building dock method of construction favoured in Japan and Sweden. The intermediate option consisted of constructing super tankers in two halves on a concrete mat half the size of the one envisaged in the ultimate plan, and with a Goliath crane of only 225 tons capacity. Scott Lithgow could not, however, construct vessels of 250,000 deadweight tons in one piece as the distance between the Clyde and the main A8 road was not great enough to accommodate a vessel of this size. Moreover, even if it were possible to extend the berth, it would not be a permanent solution to the growth in size of tankers, a factor also applicable to the construction of a dry dock, not to mention excessive cost. Building tankers in two halves was undoubtedly the cheaper option in start up costs but it remained to be seen whether or not this would prove to be the case in a production environment. By May 1970, however, Ross Belch had admitted that Scott Lithgow could only build one super tanker per year with their present resources and present manpower. This was against international competitors who could build up to five of these large vessels per year in one operation in building docks, rather than in two halves. Belch commented that if Scott Lithgow were to stay in this market then productivity had to be substantially increased, and that the 'super yard' expansion would come to naught unless Scott Lithgow could find a way to increase its steel working labour force. [35]

Given this, an impartial observer may have surmised that an increase in labour could increase productivity but at a greater unit cost per man making a firm less competitive. If this were the case, then why was Scott Lithgow not working towards a scheme that actually saved labour and increased production through the use of appropriate plant and technology? After all, the idea of the new panel line to increase steelwork flow and to enable quicker production of prefabricated units coupled with the idea of one giant crane to improve handling seemed to be a proper course of action. It seems that the answer lay in the choice of the building mat method of construction in that it required more steelwork labour to join together large pre-assembled sections, which would be moved progressively down the sloping mat into the water. Therefore, the savings accrued from the assembly of sections undercover, would be to a large extent balanced out or exceeded by the increase in costs of erection by extra labour on the mat. Moreover, if as admitted more labour was needed, then with the present workforce two or three shift working could not commence to make better use of the overheads employed. Indeed, it seems that the SIB, who after all would be paying through grants and loans for the facility, were initially sceptical that the savings envisaged through improved handling and flow methods were not being pressed to advantage at the end of the production line. Regarding this, the SIB Secretariat noted that there was probably a limit on the size of prefabricated unit which could be built into a ship on a mat at a declivity as opposed to on the level in a building dock. [36]

A year later, however, it was noted that Lithgows could see no problems whatsoever in the joining of the largest ships afloat. [37] Indeed, the Lithgow method was in line with an already proven similar method of construction undertaken in Holland. [38] In short, Lithgows intended to complete the more complicated stern half first and then float it round to an outfitting quay to await the bow section. Thereafter, by means of a coffer dam the two halves would then be mated by welding them together, and the ship fitted out and made ready for trials accordingly. In all this, however, it was necessary to expand Scott Lithgow's fitting out facilities and labour force to cope with the increase in the size of vessels under construction. The key feature of the Glen yard building mat, however, was flexibility with the facility as a whole being supposedly less susceptible to changes in demand than would have been the case if a fixed system of berths had been maintained. [39]

Two factors would now dominate the ensuing months: the financial details of SIB funding and the necessity to increase the Scott Lithgow labour force just to cope with present contracts. On the latter, Belch had sent the local Boilermakers Society delegate, George Thomson, twelve copies of the Scott Lithgow Group Development Plan in March 1970. At that stage, Belch considered that there was a need for an additional 232 steelworkers. Although he considered that Scott Lithgow would be able to take redundant boilermakers from UCS providing they were suitable and willing to travel, Belch saw the need to create a much greater steelwork labour force in the local area. Belch portrayed the Glen 'super yard' development as an act of faith in the future, but suggested that the increase in labour could be achieved by a dilution scheme with adequate safeguards to protect the boilermakers' interests. These dilutees would arrive in groups of fifty men at a time to be trained. When their training was completed they would then be absorbed into the steelwork labour force and another fifty would be trained accordingly. Belch, however, recognised that dilution alone was not a long-term solution but a large increase in the intake of apprentices apparently was. Again the boilermakers interests would be protected so as not to damage the prospects of the present workforce. Moreover, Scott Lithgow would ensure by joint consultation that the danger of too many apprentices being accepted into the shipyards did not occur, or if it did it would be a question of, 'turning off the tap' for a period of time until the situation was put right. Ultimately, Belch required an extra 1,700 workers to make the present and planned facilities fully competitive and economic. [40]

In all this it will be already recognised that by taking on orders for vessels that they had no experience of building before in the manner in which they had chosen to do so, and in building new facilities to accommodate this method of construction, effective management was crucial. There was, however, absolutely no guarantee that Scott Lithgow could attract labour of sufficient quality to match their ambitious plans, and even if they did they had to keep them from going on strike or elsewhere for better paid jobs. Just how desperate the firm was to attract labour was evidenced in May 1970, when Scott Lithgow's Personnel Manager, R.C. Abrahams wrote to a retired UCS boilermaker, Mr James Imrie to offer the latter a job. Abrahams had read of the 65-year-old Imrie's retirement in the *Daily Record*, however, Imrie replied that the distance to travel was too far especially in the cold weather and respectfully declined the offer. [41] Setting aside labour problems for the moment, it is to financial assistance by way of grants and loans from the SIB that we now turn.

By July 1970, Barker of the SIB had noted that Scott Lithgow had sought its agreement to £5,000,000 in bank borrowings to rank equally with the SIB security. However, after the SIB had stated that this was too much, it was reduced to £4,000,000 as Lithgows already had a borrowing facility of £1,500,000 and Scotts' were negotiating for one of £2,500,000. [42] By the following month, the SIB decided to loan Scott Lithgow, subject to Mintech approval. the sum of £2.300.000 and to award grants totalling £1,400.000. Of the loan. £1.900,000 was to Lithgows (1969) Limited and £400,000 to Scotts' Shipbuilding Company (1969) Limited to enable both to effect a reorganisation of their resources and to meet the capital expenditure on the intermediate Glen yard plan. The reason why the 1969 companies were utilised in this way was because Scott Lithgow Limited owned the shares of the seven operating companies, and not the assets. The loan was repayable in sixteen half-yearly instalments commencing in April 1972 and was secured by fixed and floating charges on the assets of the 1969 companies. In the course of the negotiations, however, 'it had became necessary to modify some of the proposed terms and conditions of the loans and grants'. Consequently, not more that £1,700,000 would be advanced by the SIB until £2.000.000 had been advanced by way of a loan for working capital to the two 1969 shipbuilding companies by Scotts' Shipbuilding and Engineering Company Limited, and Lithgows Limited. This was to be evidenced by an auditor's certificate, and in addition restrictions were also placed on borrowing and on the creation of charges without the consent of the SIB. However, this prohibition did not apply to bank borrowings by the two companies up to £4,000,000 in the aggregate and the creation of fixed or floating charges to secure the same, such charges would rank equally with those created by the SIB. This, of course, did not affect unsecured borrowing, but as evidence of just how far the balance had tilted in favour of the SIB, the limit on capital expenditure on any one item without prior SIB approval had been agreed at £100,000.[43]

By this stage, however, the SIB Agreement with Scotts' and Lithgows 1969 companies was in its sixth draft. Nevertheless, it had been agreed by the parent firms, Scotts Shipbuilding & Engineering and Lithgows Limited to provide Scott Lithgow with £2,000,000 in working capital with £1,200,000 being provided by Scotts' and £800,000 by Lithgows. This total sum would then be advanced to Scotts' Shipbuilding (1969) Limited and Lithgows (1969) Limited, with both of these firms being able to advance up to a maximum of £250,000 to the other subsidiaries of Scott Lithgow Limited. It was also noted that all existing contracts on the Order Book at 31 August 1970 with the exception of the naval contracts were on a fixed price basis. Scott Lithgow had also increased its apprentice intake as 250 youths had been employed in the year, however, negotiations with the boilermakers on dilution were continuing. To counter this, Scott Lithgow had advertised nationally for steelworkers and was able to offer the inducement of a Scottish Special Housing Association house for incoming workers. Nonetheless, labour shortages had contributed to delays in the programme of ships under construction with vessels late at Cartsburn and Cartsdyke, and three months late at Kingston due to strikes and the 'problems' in producing bigger ships. Sensibly, albeit rather late in the day, it was agreed that from now on the statement of the Order Book included in Board Papers should include the anticipated date of delivery of each vessel in addition to the contract delivery date. It was also reported that the manufacturers under licence of the Goliath crane needed for the Glen yard development, the Scottish firm of Sir William Arrol Limited were well behind schedule and that a serious delay in commissioning could arise.[44]

Nonetheless, the signing of this contract with Arrol had originally been conditional on Scott Lithgow gaining suitable SIB loans. [45] By October, it had been noted that the SIB Agreement had been finally executed earlier on 3 September and that loan drawings of £1,699,812 at six and three-eight per cent per annum and grants of £613, 268 had been subsequently received. [46] However, by December it had also been noted that the SIB might be willing to consider a request for a further loan to provide additional working capital.[47] Clearly, throughout these long and complex financial negotiations the initial parameters had been considerably changed. Due to the private nature of the Scott Lithgow group of companies it was likely that SIB accounting investigations into its financial structure and the future commitments of its 1969 operating companies were limited to the information granted to them. However, the extent of these investigations remains unknown. Nonetheless, if sufficient information was in fact granted to the SIB, then as with Swan Hunter, Cammell Laird, Harland & Wolff and Yarrow, it is likely that the SIB found that the accounting staffs, although clearly competent were too few in number to exercise close control over Scott Lithgow's complex finances. Moreover, it does not need a leap of imagination to surmise that the SIB and Mintech under close Treasury scrutiny must have been keen to avoid another financial debacle on the scale of UCS.

With the granting of the SIB grants and loans, however, and with work proceeding accordingly on the Glen yard development, it seemed that some sections of the Scott Lithgow workforce remained suspicious. At a meeting with Cartsdyke shop stewards, it was noted that in response to an earlier statement by Ross Belch, Scott Lithgow's Order Book was full, but unprofitable. Whilst that may have been true, Belch was told that many of the men felt that they were not being told the truth on profitability. Indeed, 'there was always a doubt that the Company was continuing to make profits because it seemed unthinkable that they should keep the business going if they were making losses'. Belch replied to this prescient observation by stating that if he was in the men's shoes then he would probably think the same. To which a shop steward, George Barrett, replied that, 'it was difficult to believe that [Scott Lithgow] stays in business just to provide jobs for people in this area'. In response, Belch gave a remarkably honest reply, which is worth quoting in full as he summed up the Lithgow position on shipbuilding in the post war period.

> After the war and right up to the [1950s] we were making profits. In 1957 it looked as though the good times would go indefinitely. At Lithgows we had an order book that went up to 1967. Owners were queuing up for ships. But overnight the picture changed. Suddenly, the effect of expansion in Japan and the building of new shipyards in various parts of the world turned a seller's market into a buyer's market and our wonderful order book just disappeared. We were in a situation in the late [1950s] where practically any order we booked meant taking a loss. The best we could hope for was to, 'wash our face'. Over the last ten years, in fact, Lithgows have just managed to keep their head above water. At Scotts' the picture was marginally better because they had a certain amount of naval work. So why go on? The simple answer is that, leaving aside any responsibility we feel-and we do feel it-for the people of this area, we must try to keep going. If we were to go into liquidation and wrap everything up, the shipyards would be almost worthless and there would be no possibility left of salvaging the very big investment which has been put into them. [48]

There could hardly be more eloquent testimony than this coming from the managing director of a private company, had it been a public one then shareholder pressures could have been brought to bear to either to further rationalise the concern or to cut and run to liquidation. With losses on fixed priced contracts likely to intensify in a volatile market Belch, nevertheless, gave the shop stewards the opportunity of inspecting Scott Lithgow's books. [49] However, in tandem with the poor outlook for British shipbuilding in general, any form of outdoor relief at that stage had to be preferable.

The new Government makes it mark

With the election of the new Conservative Government in June 1970, shipbuilding policy was at something of a crossroads. With the Tory Party's traditional distaste for state interference in industry it was likely that the life of the SIB, already extended by the previous Labour Government to the end of 1971 would be extinguished. Indeed, Mintech, and with it, responsibility for the shipbuilding industry would be merged into a new department of state, Trade and Industry, by October. However, as was customary with a change of government, civil servants in the SIB and Mintech attempted to put their stamp on future policy. A first draft of a paper to Sir William Swallow at the SIB, which could be used as a basis for a discussion with the Secretary of State at the Department of Trade and Industry (D.T.I.), John Davies, was prepared. Titled, 'The New Government…A Pragmatic Approach to Shipbuilding', the authors of the draft, in summary, still believed that the industry was operating in a growth market and was, 'not incurably diseased' as its structures, facilities and attitudes had been, 'markedly improved'. However, it still required a further period of 'nursing, which need not involve propping up'. Nursing meant, access to capital, maintenance of government support to owners at an internationally competitive level, and general pressure to improve managerial standards. Moreover, each major group should be analysed, and the possible use of expertise from outside the industry should be considered as well as the possible 'hiving off' of the Government's role in the industry from the Civil Service. It was noted that in Scott Lithgow's case, 'if survival on the basis of copper-bottomed propositions is considered a commercial virtue, then Scott Lithgow will continue to deserve its halo. [The] group has accepted-predictably-rather late- an adequate amount of financial assistance from the SIB, and there is little doubt about its capacity to survive'. [50]

Subsequently, in September 1970, Sir William Swallow and his SIB colleagues met Nicholas Ridley MP who remained at this stage in a junior ministerial position at Mintech. The purpose of the meeting was ostensibly to discuss the separation of Yarrow from UCS, however, it began with a general discussion on what Ridley termed, 'the deplorable state of the industry, with companies such as Harland & Wolff, UCS, Cammell Laird and Swan Hunter, 'balanced on a knife-edge'. On the future strategy on Harland & Wolff, which was yet again in major trouble, Ridley did not favour the continuation of the existing set up with the same 'dud' management. Yarrow Shipbuilders was regarded as a 'cliff hanger' and Ridley wanted it segregated from UCS quickly, and emphasised that the Tories would not want to be the cause of a Yarrow collapse. Therefore, Yarrow should not be allowed to go bust, and its shareholders must have a fair deal in view of its 'shotgun merger' with UCS. The SIB, in Sir William Swallow's view had treated Yarrow fairly, 'after all they had eliminated all warship competition on the Upper Clyde when put into UCS'. Sir William then mentioned that the SIB had turned down a request from Scott Lithgow over an extension of the interest-free period of their loan. Ridley, in turn, said that Scott Lithgow, 'seemed to be doing well and there was nothing to be done on this'. [51] In this regard, Scott Lithgow had to a large extent been a victim of their own obstinacy on merging long after other groups had, and then asking for funding from a rapidly diminishing pot. Moreover, the Lower Clyde group was also to a large extent a victim of its own propaganda, as its cautious approach and self-reliance was portrayed as somehow bucking the trend of disastrous losses elsewhere in the industry. That this perception had taken root was to some extent due to the public persona of Ross Belch, but also mainly due to the cloak of private status that Scott Lithgow enjoyed.

With most of the other large shipbuilding firms in the UK making losses on fixed priced mercantile contracts, it was hardly surprising that the consolidated Scott Lithgow accounts for the year ended 31 December 1970 showed a loss on vessels delivered in that year.[52] Although, as Michael Scott later noted, the majority of contracts in hand at 1 January 1970 had been taken on in 1969 at fixed prices with some provision for inflation based on past experience and a reasonable profit, a steep rise in inflation had led to losses. The 'depressing result' was a loss of £400,153. In addition it was found to be necessary to make a provision for losses on uncompleted contracts at 31 December 1970 amounting to £1,150,000. This provision, as Scott acknowledged, was a deliberate departure from accepted accounting principles in that Scott Lithgow had deducted estimated profits from estimated losses and thereby not provided for the losses only. The rationale behind this was that profitable contracts had escalation clauses providing against the risk of continuing inflation. Consequently, 'to provide for losses only would not give a true and fair view of the state of the affairs at 31 December 1970'. [53] Scott Lithgow's auditors were not impressed with this argument, and accordingly qualified the accounts.[54] Michael Scott, did, however, note that the prospects for the next two to three years for Scott Lithgow were going to be difficult until the fixed price contracts were disposed of. [55] In an inflationary climate Scott Lithgow's commitment to the SIB-financed modernisation programme to build super tankers in its Glen Yard was evidently a high-risk strategy. Moreover, the loans received from the SIB had to be repaid before the £2,000,000 loan for working capital given by Scotts' and Lithgows to the two 1969 shipbuilding companies. With the Glen yard modernisation programme coming on stream, and the Lithgow end of the company committed to the super tanker market, whilst retaining a degree of flexibility to build smaller vessels if needs be, then market projections were crucial. The SIB encouragement of Swan Hunter, Harland & Wolff and Scott Lithgow to enter the giant tanker market had obviously been undertaken in the national interest and at that stage market projections had been deemed to be favourable. With the Tyne and Belfast firms getting a head start on Scott Lithgow, however, the market had begun to change. It now transpired that Mintech at February 1970 had already undertaken a study on the super tanker market, which also confirmed recent Japanese work that the rate of ordering for this class of vessel was likely to fall off in the next few years. This made the sector increasingly vulnerable to over capacity, a factor that Scott Lithgow did not refer to in its submission on yard development to the SIB.[56]

The future for Scott Lithgow then, post-1971, was anything but bright. Margins would inevitably be tight, naval work would be all-important to counter balance unprofitable mercantile work, loans would have to be eventually repaid, and a breakdown in industrial relations, the largely unknown factor, could seriously impair production. Almost on cue then the latter had occurred by February 1971, when, after giving three weeks notice of their intention to withdraw their labour, Scott Lithgow's 2,000 boilermakers officially went out on strike over parity with the Upper Clyde. They did so after having voted against a management offer that would have given them almost a thirteen per cent pay rise, an average of £3 per week. A similar offer had been made to the unskilled, semi-skilled and outfitting trades, however, which had been accepted. Although this offer was apparently much more than Scott Lithgow could afford, Belch had felt compelled to offer it the light of UCS and other national wage awards.[57] Two weeks later a further 1,784 men had been laid off, and by 5 March after failing to reach agreement on the boilermakers demand for £1 per hour, Scott Lithgow had offered to increase the hourly rate to between seventy and seventy-five pence, complete closure of the yards was instituted. [58] Ross Belch, who as a matter of policy dealt with all negotiations over wages personally, had but one tactic, not to concede until the strikers returned to work. However, Belch had afforded the opportunity for Dan McGarvey, the Boilermakers leader to inspect Scott Lithgow's books but McGarvey latter dismissed this as, 'a gimmick' and stated that, 'the Lower Clyde firm was trying to build ships on the cheap at the expense of his members'. Five days later in a speech given in London, Michael Scott asked for state aid to be given in the present inflationary climate on the proviso that the shipbuilding industry's long term prospects were seen to be good. According to Scott, the effects of inflation on long-term fixed price contracts were, 'utterly devastating'. Contemporaneously, with one in four of the adult male population of Greenock and Port Glasgow on strike, laid off or unemployed, the situation was serious. [59] After seven weeks, however, the Scott Lithgow strike petered out when McGarvey told his brethren that if they did not return to work then the Union would withdraw its official backing for the strike. Originally, Belch had required a wage freeze of fifteen months as a condition of his offer, but after the capitulation of the boilermakers, this period was extended to twenty-one months, and the sum offered remained about the same. At least this period also served as a guarantee of employment for the boilermaking trades, but provision had been made as a result of the settlement for the immediate introduction of dilution. [60] Yet again, a major strike could only have one outcome, a serious delay in delivery of ships, with the concomitant damage to the firm's reputation at home and abroad. With some urgency needed to divest itself of the fixed price contract loss makers on its books, this hardly augured well for the future of the firm.

By this stage, however, the separation of Yarrow Shipbuilders from UCS was closer as it had been publicly announced on 12 February 1971 that Yarrow were to receive a loan of £4,500,000 from the MoD spread over the next three years, and that the Scotstoun firm would leave UCS. [61] In view of this largesse to Yarrow and to UCS in general, Michael Scott and Ross Belch met Ridley and John Davies at the D.T.I. five days later. There, Scott, with Scott Lithgow's boilermakers about to strike, complained about the constant propping up by Government of UCS and the great damage it caused to the Lower Clyde, and now Yarrow seemed to be following on. [62] Just as Harold Lever had stated before the election of June 1970, Davies and Ridley pointed out that this would be the last help to UCS that the present government would give. The two ministers prevaricated, however, and announced that the Yarrow situation was a matter for the Ministry of Defence. Belch, not unreasonably, then requested that some tangible assistance be given to the Lower Clyde. Scott Lithgow might require an additional loan of three to four million pounds for working capital to tide the firm over the, 'next three difficult years before returning to profit in 1974/1975'. Secondly, he would require the commitments already entered into with the SIB on grant money to be extended into 1972 after the SIB had expired, and that the Government would continue to honour the obligations undertaken by the SIB during its lifetime. Third, that capital repayments on the SIB loan should be deferred to commence at a later date, and last that its interest free status should be extended for a further period. Both Davies and Ridley again avoided this and pointed out that this was a matter for the SIB. Consequently, Scott and Belch met with Sir William Swallow and Joe Gormley in London on 27 February. Although the SIB generally approved of a loan for working capital, figures had to be tabled to justify it, and it was thought that the Government would, 'probably continue' to honour SIB obligations undertaken. Moreover, a revised agreement on capital repayments might be drawn up but as to the wiping out of interest, only legislation could achieve this. In addition the SIB had noted that it had not received any quarterly reports from Scott Lithgow as required under their existing loan agreement. [63]

To a large extent these negotiations were typical of what had gone on before despite the change in government in that no real commitment was offered. However, Scott and Belch met the Minister of State for Defence, Lord Balniel and a junior colleague, Kirk, in March. Balniel offered no suggestion that Scott Lithgow could expect comparable treatment to Yarrow, however, he did state that the effect of the loan on the latter would be judged in future competitive tendering and that Scott Lithgow would not be competing against a subsidised concern. As was noted, 'It was not possible to ascertain what was meant by this statement'. Balniel again assured Scott that the Cartsburn yard was still regarded as a facility in which to build surface warships. Balniel's colleague, Kirk, hoped that Scott Lithgow would tender for the latest round of type 21 frigate orders, and voiced the opinion that competitive tendering, 'was certainly not always going to be possible in the future'. Consequently, and of no surprise, it was minuted that the meeting, 'had been very encouraging'.[64] No doubt this was an acknowledgement that Scott Lithgow were not competitive on surface warships, after all Scotts' had not completed one since 1964, yet the firm had nonetheless, somewhat optimistically tendered for two Type 42 Destroyers. It was expected, however, that the firm would soon receive an invitation to tender for two *Oberon* class submarines for Australia, two Type 21 frigates and an underwater research vessel for the Royal Navy.[65]

In the interim, Scott Lithgow had submitted another application to the SIB for an additional loan of £4,000,000 for working capital and a loan of £500.000 to cover extra costs in their Glen yard plans. The SIB was also asked for a revision of the terms of the present loan so that capital repayment would not commence until 1975, and cancellation of interest due under it. By 19 April 1971, accountants for the SIB had visited Scott Lithgow and requested a monthly cash flow statement, which was complied with to enable the SIB to consider it at its June meeting. [66] Subsequently, a monthly cash flow statement for the next five years was also submitted in early June.

Armed with this information, the SIB had turned down Scott Lithgow's application by September.[67] However, the receipt of this bad news prompted the firm to resubmit its application, which was a far cry from its April proposal. Briefly, a secured loan of £500,000 was requested for additional capital expenditure, and the existing loan agreement was to be amended for capital repayment to commence on 1 April 1975, rather than on April 1972 as originally agreed. Additionally, the SIB would grant a subordinated unsecured loan of £1,000,000 for repayment between 31 December 1975 and 31 December 1978. Interest on the latter loan would be repaid at normal lending rates, with an additional premium between 25 and 37.5 per cent rising in accordance with various redemption dates. This loan ranked before Scotts' and Lithgows earlier unsecured loan of £2,000,000. Such was Scott Lithgow's financial position that the SIB had to be satisfied that the Royal Bank and the Bank of Scotland would support the firm over its period of poor liquidity. Moreover, the subordinated loan gave the SIB the right to nominate a director of Scott Lithgow.[68] Subsequently, the two loan agreements for the sum of £1,500,000 were executed on 17 December 1971, and the money received six days later [69]

Therein ended Scott Lithgow's long and involved association with the SIB, which was dissolved as of 31 December 1971, with its rights and obligations vesting in the Secretary of State at the D.T.I. The Lower Clyde firm had, however, outlasted UCS, which had earlier imploded in June. As a result, UCS petitioned the Court of Session for a winding-up order and an appointment of a provisional liquidator on the grounds that the Company was unable to pay its debts. Contemporaneously, the Government announced that it would allow UCS to go into liquidation. Subsequently, the Government appointed a three-man, later extended to four, advisory committee to investigate and report on the prospects for the continuance of mercantile shipbuilding on the Upper Clyde. By the end of July, the Government had accepted the conclusions of the three-page report, which lacked detailed analysis. The report's authors had, however, given due weight to social considerations, but postulated that mercantile shipbuilding should be continued at Govan and Linthouse only. Despite the intention of those organising the so-called 'UCS work-in', whose policy was to maintain employment in all four divisions of the consortium in the event of a successor company being found, Davies commissioned Hill Samuel to further investigate and report upon the Govan Linthouse option. Subsequently, Govan Shipbuilders was incorporated on 21 September 1971, comprising the former Govan and Linthouse divisions of UCS, with the possibility that the Scotstoun division would also be saved. This left the Clydebank division apparently doomed, but the trade unions delayed the arrangements until a separate future for Clydebank was determined. Nevertheless, by 28 February 1972 the Government announced that it was prepared to support Govan Shipbuilders with funds that could amount to £35,000,000. Of this sum £18,000,000 would be allocated to cover the acquisition of the assets of Govan, Linthouse and Scotstoun, and up to £17,000,000 to cover anticipated losses in the first three to four years of operation. This level of funding was, however, dependent upon the passing of a new Industry Bill, which was introduced after the 1972 Easter recess. [70]

Earlier, in October 1971, production had been gradually run down at Lithgows East yard to phase with the construction of a stretch of the A8 through the yard to straighten out the road through Port Glasgow. Accordingly the East yard had under construction its last ship.[71] By this stage, however, Scott Lithgow had successfully tendered for two *Oberon* class submarines for the Royal Australian Navy at prices of £5,531,637 and £5,293, 814 respectively. Moreover, the firm had also concluded an agreement for a consideration of £80,000 with the possibility of further cash payments with the consultants, A & P Appledore International Limited, to undertake the training of staff and supply of drawings to Hyundai who were starting up a shipyard in South Korea.[72] By December, Scott Lithgow had been informed that under the Government's programme of accelerated naval construction, orders would be placed for two Royal Fleet Auxiliary (RFA) Replenishment Ships and one Underwater Research Vessel (URV). [73]

Beforehand, Ross Belch had journeyed south to discuss the accelerated programme, which was worth around £70,000,000 and included two Guided Missile Destroyers and four Type 21 Frigates, one of which was apparently destined for Scott Lithgow. Hardly surprisingly, as it turned out, Scott Lithgow failed to win any frigate or destroyer orders. Yarrow, the lead yard for the Type 21 won all four frigate orders, worth in the region of £32,000,000. [74] Scotts' and then Scott Lithgow had paid the price of failing to modernise its naval facilities. Nonetheless, a new fabrication hall at Cartsburn costing around £500,000 had virtually doubled the specialist ship capacity, however, and work was in hand to expand the berths at the adjoining Cartsdyke yard, whose steel facilities were already modern. With this probably in mind, Ross Belch still hoped that Scott Lithgow would be given the opportunity to build a frigate at Cartsburn in future, but the award of the two RFA ships and the URV had given the group 'a welcome boost'.[75] Belch's upbeat assessment, which had apparently vindicated his decision to keep the Cartsburn order book short in the expectation of naval contracts accruing, had to be offset against the expected losses on tanker construction and on other fixed price contracts. At a later meeting, Belch stated that Scott Lithgow was entering a period, 'when practically every contract was a substantial loss maker'. His strategy, therefore, was to concentrate on ridding themselves of these loss makers as quickly as possible, and at this stage, 'every penny counted', thus the co-operation of everyone involved was needed in this difficult period.[76] However, as a result of naval orders, and as a consequence of its lengthening order book, Scott Lithgow would again have to expand its workforce that had grown, when competitor firms' workforces had contracted, from 7,000 in 1967 to 8,400 in December 1971.[77] In all this, there was good news for Scotts' Engine Works, which would provide Scott Sulzer engines for the two RFA vessels, in addition to mercantile and submarine work. This was just as well, as by this stage any Scott Kincaid merger had been effectively abandoned.

By February 1972, however, operational problems still persisted with the 225 ton capacity Goliath gantry crane at the Glen yard and this had a serious effect on costs, as all the firm's calculations had been based on the Arrol-built crane being in full operation long before. In the interim, Scott Lithgow had purchased a second-hand 40-ton crane from Arrol and were proceeding as best as they could with one part of one half of a super tanker. [78] At a later meeting, although Belch claimed that during the past ten to twelve years, Scotts' and Lithgows had spent around £16,000,000 in modernising facilities, another five to six million pounds was nevertheless needed to continue planned developments. [79] This figure obviously included SIB loans and grants; however, with the SIB gone it remained to be seen where further money would come from, especially in light of what Governments had already spent on

UCS and on its successor, Govan Shipbuilders. On the latter issue, as was the case with the former. Ross Belch was rightly incensed and publicly announced that the case for similar treatment was, 'surely unanswerable'. According to Belch, Scott Lithgow, 'management and men had worked and fought together to continue [their] existence by [their] own efforts in the belief that self-help [would] gain the greatest rewards'. With double the numbers employed at Govan Shipbuilders and with a sizeable amount of the population of Greenock and Port Glasgow, directly or indirectly affected, Belch had a point.[80] It remained to be seen, however, whether his plea for similar treatment to Govan would cut any ice with Glasgow-obsessed politicians. By March, the East yard, formerly the yard of Robert Duncan had launched its last ship, *Brimnes* for Norwegian owners. At the launch speech, Atle Jebsen, who had ordered twenty ships in twenty-three years from Scotts' and Lithgows stated that Scott Lithgow deserved a cash injection and severely criticised the Govan loan. [81] However, the Industry Bill was published some weeks later and contained proposals for short-term aid in the form of tapering grants of ten per cent of the contract of work carried out in 1972 and at rates of four and three per cent respectively for 1973 and 1974. The Scott Lithgow Board noted that in their opinion these grants were being given to meet losses incurred and to be incurred on fixed price contracts. [82] It was also acknowledged in public that this, ' would undoubtedly help to restore the financial strength of the group...so adversely affected by in recent years working out long-term fixed contracts in a period of unprecedented inflation'. [83]

Just how bad the situation actually was, was reflected in the consolidated trading loss of Scott Lithgow of £1,441,255 for the year ended 31 December 1971. Moreover, it was estimated that losses on the remaining fixed price contracts for delivery in 1972, 1973 and 1974 would be around £5,000,000. As a result, however, of proposals for tapering grants announced in the Industry Bill and with the addition of profits on the estimated outcomes of contracts taken on with escalation clauses, the Board was of the opinion that this would exceed the losses on fixed price contracts in hand at 31 December 1971. Accordingly, the Scott Lithgow Board decided not to make a provision for future losses. Furthermore, the loss provision of £1,150,000 made in the previous accounts was no longer required, and was brought into the credit of the Profit and Loss Account. This made the trading loss for 1971 only £291,255 and with the adverse balance brought forward of £1,559,123 from the1970 accounts, gave an adverse balance carried forward of £1,850,378. This display of creative accounting cut no ice with the firm's auditors who qualified the accounts on two fronts, the fact that no loss provision had been made, and on the difficulty of accurately assessing contract outcomes on fixed priced vessels due for delivery up to 1974.[84]

Nationally, as Hogwood noted, in two years the Conservative Government had moved on general industrial policy from a stance of non-intervention, 'with some possible exceptions, [notably Rolls Royce] ...to setting up a framework for selective intervention'. On shipbuilding, however, the Government had moved from, 'a position of ambiguity about shipbuilding as an exception to the general approach, through a declaration that shipbuilding would not be treated as a special case, followed soon after by massive assistance to a number of individual yards'. And thereafter, to a policy, 'of temporary general subsidy to all firms in the industry'. [85] As John Eden MP, a Minister for Industry at the D.T.I. noted in February 1972, the Government intended to stabilise the UK shipbuilding industry, not only by the accelerated naval programme, but also by increasing the limit by legislation on Shipbuilding Industry Act Credit Guarantees to £1 billion. [86] In addition, a new Industrial Development Executive (IDE) at the D.T.I had been set up in March and would take a special interest in shipbuilding. Subsequently, the IDE commissioned yet another major report on the long-term prospects of the shipbuilding industry to be undertaken by the American management consultants, Booz-Allen and Hamilton, and Scott Lithgow were to be one of the firms visited by them. [87]

With the level of anticipated losses at Scott Lithgow subject to many variables such as possible industrial action, an increase in the rate of inflation, a decrease in productivity and management failings to name but four, the die on the firm's future was effectively cast. Tapering grants and expected profits on vessels other than those taken on at fixed prices could offset losses only to a certain extent as too many variables existed to ultimately rely upon this method as a way of returning Scott Lithgow to profit. It was plain, however, that in order to effectively stem losses, across the board increases in productivity levels were essential, particularly on steel throughput. Moreover, it was axiomatic that if Scott Lithgow were to remain in the super tanker market as a serious player then output had to be increased from potentially one vessel per year to two if the level of present investment was to bear fruit. As it stood, Scott Lithgow were effectively trying to compete in a market against competitors with far more resources who were geared to tanker construction. However, as a mixed mercantile and naval builder, an official strike of seventeen weeks duration by the firm's engineers in pursuit of a national wage claim, which ended in October 1972, must have had a deleterious effect on the firm's prospects. Despite this, however, Scott Lithgow's consolidated accounts for the year ended 31 December 1972, showed a surplus of £662,102. This turnaround had been achieved by including the estimated total of grant receivable in respect of 1972 amounting to £3,655,000 in the firm's reserves. Moreover, an amount of £1,425,000 had been transferred from reserves to the credit of the Profit and Loss Account to offset trading losses of £1,287,775. The balance of £2,230,000 was carried forward in reserves. The surplus for the year, however, included a non-recurring surplus of £524,877 arising on the sale of the East yard. Again, the Board made no loss provisions in the belief that grants and estimated profits on more recent contracts would exceed losses on fixed priced contracts. Accordingly, the firm's auditors again qualified the accounts. However, the extent of estimated losses on fixed priced contracts for ships due for delivery in 1973 and 1974 had risen to £7,500,000, no doubt partly due to the engineers' strike. [88] Clearly, without Government grants, the Scott Lithgow position would have been more serious still. Neither was Scott Lithgow's future prospects helped by the 'shocking' level of absenteeism in its workforce, which moved Ross Belch to comment in January 1973 that it was one of the biggest problems facing the firm. According to Belch, it was not uncommon for a quarter of a department to be absent and on Sundays it reached fifty per cent, thus a survey had been instituted to find the cause of the problem. [89] With systemic overtime being worked, however, particularly with those who did turn up for work on Sundays, a culture of taking off the following Monday had taken root. This was known and referred to as the 'Monday Club' by all concerned. [90]

The Booz-Allen & Hamilton Report

By 16 May 1973, an edited version of the Booz-Allen Report had been published with Scott Lithgow one of the nine firms visited in compiling the 263-page report. Unlike the SIC Report, which was essentially an exercise in confidence building, Booz-Allen was a polar opposite and made depressing reading. The yellow-jacketed Report nicknamed the 'yellow peril' by shipbuilders, contained the damning indictment that Britain was the only shipbuilding nation in the world to register no growth in the past fifteen years. Moreover, management and industrial relations were generally bad, late delivery predominated, and equipment was out of date. Ominously, output was seen as remaining static, and a large decline in employment in yards was forecast at the current level of Government support. [91] Although Booz-Allen's terms of reference precluded them from making policy recommendations, they nevertheless made five hypothecations based on different scenarios. [92] To take one example only, with massive Government support of around £250,000,000 British shipyards could raise their output to about 2,500,000 tons per annum. However, even then the labour force would shrink due to increased productivity. More ominously still for Scott Lithgow, on warship building, Booz-Allen forecasted that mixed naval and mercantile yards could be phased out of naval contracts by 1975. Currently, naval work was concentrated in three specialist naval yards, (Vickers, Vosper Thornycroft, Yarrow) and in three mixed mercantile and naval builders (Cammell Laird, Scott Lithgow, Swan Hunter). Booz-Allen, nevertheless recognised that naval capacity would exceed demand, and moreover, that the export market was unlikely to bridge the gap after 1976. Such was the forecast that even if the mixed naval and mercantile yards were removed and production concentrated in the three naval yards, no guarantee could be given that the latter would be wholly viable. [93]

Contemporaneously, the Minister for Industrial Development, Christopher Chataway had stated that the Government was in no way committed to accept any of the financial or employment implications hypothecated by Booz-Allen. However, Chataway did invite written observations on the Report from interested parties to arrive at his Ministry before 15 June 1973. [94] Subsequently, although Michael Scott found that some of the Report's contents appeared to be helpful. 'others were unjustifiably damaging to the Industry's reputation, particularly the indiscriminate criticisms of management which [were] so sweeping and general in nature as to be wholly inaccurate'. Moreover, Scott was profoundly disturbed that, 'the management over which [he] was proud to preside should be commented upon in such a totally destructive manner'. By this stage, however, the 1969 had been omitted from the operating companies, but Scotts' Shipbuilding & Engineering Company Limited (the ultimate holding company of Scott Lithgow Limited) had been deemed to be too similar in name by the Registrar of Companies to the operating company, Scotts' Shipbuilding Company Limited. Accordingly, the holding company name had been changed to Scotts' of Greenock (Estd.1711) Limited. [95]

If accepted by Government, the rationalisation of the warship building sector would mean that Scott Lithgow would have only the export market for conventional submarines and RFA work to tender for in future. With no guarantee, however, that further orders would accrue, this had to be particularly damaging to Scott Lithgow in terms of offsetting future losses on mercantile construction. Not only was there a steep learning curve to be surmounted on super tanker construction, but substantial losses had already been incurred on the five BP product tankers order as the oil major had demanded the very highest standards and the contract had also borne the full brunt of inflation.[96] Beforehand, Scott Lithgow had also attempted to interest the Ministry of Defence to improve the Oberon submarine by either modifying it, or re-designing it, or by abandoning it and designing a new conventional submarine. [97] However, the Minister of State for Defence, Ian Gilmour offered cold comfort as he could not hold out much hope of going beyond what Ross Belch had termed, 'improving the Oberon'. Shockingly, the MoD did not have enough staff with specialist submarine knowledge and experience, even for their own programme. [98] Moreover, prior to the publication of Booz-Allen, even this faint glimmer of hope had been extinguished. Both the Director General Ships, (DGS) Sir George Raper and Belch had acknowledged that no hope existed of setting up a joint design team, or of the MoD offering even a small amount of assistance hinted at by Gilmour.[99]

In May 1973, Ross Belch had requested Booz-Allen to submit a proposal on how it could help Scott Lithgow solve some of the weaknesses previously identified by the consultants in their visit to the Lower Clyde yards. The most important of which were obtaining company-wide standard financial information and the control of rising costs. At present both Scotts' and Lithgows retained separate accounting organizations and little integration had been achieved to date. Moreover, progress in the development of long-range planning had been limited. Overheads had risen at over ten per cent per year between 1967 and 1971, maintenance had jumped by eighty-six per cent, general overheads sixty-three per cent and indirect labour by fifty-three per cent. It was noted that if the upward trend continued unabated then it would have a severe effect on the firm's future profitability, and that by the end of 1973, total overheads could exceed £4,600,000. Accordingly, Booz-Allen proposed to rationalise Scott Lithgow's accounting systems by the installation of a uniform budgetary control system, and to develop a cost control and cost reduction programme in both operating and overhead cost areas. The former would take around one year to take effect, but the latter could have a more immediate effect, not least by stimulating cost consciousness. It was also noted that Scott Lithgow's prime objective was to earn sufficient profit to allow it to meet its essential obligations to the people of Greenock and Port Glasgow, and that in long-term support of these objectives the company had spent millions of pounds on modernisation. [100] This was in and of itself incredible-a public company's foremost obligation was to its shareholders, a sentiment equally appropriate to non-charitable private companies like Scott Lithgow. In addition, however, to Governments paying vast sums to indigent industrialists, we now had a similar system of outdoor relief where some of that money was apparently being used just to keep people in employment on the Lower Clyde. Setting this aside, it can be seen therefore, that if the whole basis of Scott Lithgow's future profitability assumptions had been made on what appeared to be subjective and partial information, in what after all was a period of unprofitable trading, then the firm was in real trouble. In this scenario then, the retention of profitable naval work was absolutely crucial. A factor that was to become the leitmotif of Scott Lithgow's relationship with Governments for the rest of the decade and beyond, and which was underpinned by the potential effects on future employment.

The fight to retain naval contracts

From now on in there began a series of correspondence and meetings between Scott Lithgow and MoD (N) that would become increasingly strained, but did serve to define the respective positions. Indeed, the ongoing debate would also encapsulate much of the arguments over the placing of naval work that had raged unresolved since the SIC Report. It will be recalled that Christopher Chataway had written and spoken about the Government not having made up its mind either way on Booz-Allen and that it would invite written representations up to a month after publication. The day before the publication of the Report, however, Admiral Sir Anthony Griffin had written to Michael Scott enclosing a memorandum for further discussion, which set out MoD (N) policy on future warship procurement. [101] Hardly surprisingly, the memorandum's conclusions exactly mirrored those of Chataway some two months later. Noting that the current six warship building firms were the result of a process of natural selection, which had reduced the number of such firms from a total of fourteen at the end of the Second World War, it was also noted that present capacity substantially exceeded likely demand. Moreover, the accelerated programme in 1971 was untypical. In future, the Ministry concluded, 'with regret', that it would concentrate warship orders in those firms, who between them: could provide sufficient production capacity to meet likely defence demand, and possessed a full range of lead yard and design capability on which MoD (N) 'must increasingly depend...[and who could]...take the fullest advantage of future opportunities of warship export business'. And with no hint of irony, the three firms chosen were exactly those that the SIC had recommended to do the same work in 1966, Vickers, Vosper Thornycroft and Yarrow. All three firms were almost wholly dependent on warship orders, and the Ministry had already reached the stage where first of class orders were done by allocation, thus the scope for competitive tendering, so long aspired to, would remain limited. [102] It seemed, therefore, that the previously declared policy of over a decade by MoD (N) of value for money in naval procurement, the self same policy that had thwarted Scott Lithgow's attempt to tender for frigate orders, had now been abandoned. However, it was noted that Scott Lithgow's future would depend on their success in the export market for submarines.

Again, as MoD (N) was unable to provide technical assistance to improve the *Oberon* class this must also have also been cold comfort indeed.

A fortnight later, however, Scott and Belch met Griffin and Raper to discuss the implications of the memorandum. Scott, predictably, was extremely disturbed on the implications of the Ministry's proposal as his firm carried substantial naval overheads and the loss of naval work could have profound implications for employment at Cartsburn where 3,000 to 3,500 men might well be unemployed as a result. Scott then revealed for the first time that it was their engagement in *Oberon* work that, 'had prevented them from developing a surface warship capacity and that there was no other reason why they could not build frigates cheaply'. Belch then changed tack and requested that RFA work should be allocated to Cartsburn to preserve jobs and to retain a naval capability. Griffin, in summing up stated that he would be prepared to examine the case for allocating the more specialised RFA vessels, but that these orders would be few and far between and could not constitute a base load for Cartsburn. Moreover, the defence budget could not be used to alleviate unemployment, and Scott Lithgow could not even rely on refit work, which as a matter of policy was the preserve of the Royal Dockyards. [103] Nevertheless, by June, Scott Lithgow had admitted that it was out of the frigate market, but still hoped that research vessels and RFA ships might be allocated to it. [104] By July, however, Griffin had rejected Michael Scott's plea to be allocated a base load of RFA work. Other firms in assisted areas were quite capable of carrying out this work, and he could not find any reason that MoD (N) could possibly give to justify excluding them from competition for these ships. [105] Throughout the process, Scott Lithgow's argument was deceptively simple, if the Government could discriminate in favour of three warship builders, then why could they not discriminate in favour of RFA builders? This argument was, however, apparently flawed in that competitive tendering was established for these types of vessels, and future orders for this type of ship were the weakest part of the Defence Vote. Indeed, the difference in skills and design capability between these types of ships and modern warships was immense. Although these arguments were consistently deployed by MoD (N) they did not get to the heart of Scott Lithgow's real concern that the three preferred warship yards in lean times would advantageously bid for RFA contracts from accumulated reserves built on naval profits. Griffin did, however, recognise that this could occur. Moreover, Sir Michael Cary the Chief of the Procurement Executive conceded that in future it might be necessary to allocate RFA work to the three specialist yards, 'who must remain the first care of the Ministry, because of the Ministry's dependence on them for warships'. Accordingly, no undertaking was given to exclude the specialist naval firms from tendering for RFA work. [106]

By this stage, Scott Lithgow had also sought and had been given the active encouragement and support of its workforce to lobby Government ministers. In what was a rather heated atmosphere the potential for misunderstandings and recrimination was legion and the spectre of the withdrawal of naval work from Cartsburn and resultant civil unrest hovered over the discussions. In response to this, however, Sir George Raper had become increasingly frustrated at the Scott Lithgow stance. Raper believed that the reputation of MoD (N) had been seriously impugned, as Scott Lithgow needed, 'a whipping boy'. Accordingly, in a written defence, he demolished the Lower Clyde firm's arguments. Raper confirmed that the central weakness of the Scott Lithgow case was that it would still be dependent on the MoD whether RFA orders were allocated or not. He bridled over the arrogance of Ross Belch who he alleged had stated to him on a recent visit to the yard that naval work was essential for Cartsburn and that, 'Consultants have been suggested, but no one else can judge what we need'. Raper regarded this as being risible, and suggested that management and workforce should get together and work out a strategy to replace the firm's dependence on naval work. He realised, as did Scott Lithgow that redundancies would no doubt occur in any event when the export market for *Oberon* submarines ended. With no other design of submarine to sell, he argued that Scott Lithgow should tender for RFA contracts on the same basis as before. Moreover, Raper acknowledged that he had only been allowed to go this far because the Royal Navy faced an extremely serious situation in the new construction programme. However, although Scott Lithgow management had never openly declared that civil disobedience could occur as a result of MoD policy, nonetheless, the imputation was there. Raper concluded by predicting that if Scott Lithgow maintained its stance on allocation of RFA work then this would lead nowhere, 'but to misery for us all, and in the long run for Scott Lithgow more than anyone else'. [107]

On receipt of this missive, Scott Lithgow could have been left in no doubt whatsoever of the strength of MoD feeling. Accordingly, at a meeting with the Secretary of Defence, Lord Carrington, Ross Belch accepted a formula that if Scott Lithgow remained competitive then it could expect a fair share of RFA orders. The firm was content to rely on an assurance, which Carrington confirmed that if the current policy changed, or if expectations were unfulfilled, then discussions would ensue at the highest level. Scott Lithgow, were, on this basis, prepared to wait and see.[108] Realistically, any other strategy, apart from liquidation, would have been superfluous, particularly as fixed priced mercantile contracts were likely to prove disastrous.

Contemporaneously, as the argument on RFA work raged, Scott Lithgow was finalising plans for a scheme to double its tanker output, a scheme which inevitably rested on substantial government monies being granted on the basis of employment considerations. At a meeting with Jack Rampton at the D.T.I. Belch and Boyd put the cost of reconstruction at around £15,000,000 and that it would request this sum in the form of grants and loans. To this obvious gambit, Rampton replied that his department would normally require fifty per cent of the cost to be met from Scott Lithgow's own resources, to which Boyd with tongue in cheek stated that, 'you cant take the breeks [trousers] off a Highlandman'. [109] When Scott Lithgow got around to publicly announcing its expansion plans it revealed that the rationale behind the scheme was to meet the challenge of Japanese and Swedish builders by doubling steel output. However, Ross Belch reiterated that with its present facilities Scott Lithgow was only able to produce one large tanker per year, and accordingly, the firm could not, 'live on that'. [110] Scott Lithgow had in mind the creation of a new sub assembly shop across the road from the newly re-aligned A8, a new panel line and fabrication facilities, and a new crane able to handle 300-ton sections. By this stage grandiose plans to create a new shipyard centred on the James Watt Dock, at a cost of £40,000,000 had not surprisingly been shelved. It followed from Belch's own admission that if the new scheme was not undertaken then the optimum use of the present facilities was fundamental. With four giant tankers now on order, Maritime Fruit Carriers had ordered another two by September 1973, improvements in productivity were essential. However, by initially undertaking what in effect was an intermediate option in the Glen yard re-development, Scott Lithgow's horizons in the giant tanker market had been limited from the outset. Although the firm did have an ultimate plan in mind, realistically this had always depended on substantial Government aid. Moreover, any private funding, whether from Scotts' or Lithgows, given Scott Lithgow's trading losses, or by a combination of banks was highly unlikely, and the future was even more uncertain if the Labour Party was to be returned to power.

Nationally, at a meeting in June 1973, between Chris Chataway and the SRNA including Ross Belch, the shipbuilders put their case for further capital assistance. A case that the Minister recognised in that more generous terms than those applicable under the Industry Act had been asked for, rested on the employment argument. Why else, in Chataway's words, 'should shipbuilding be treated any differently from any other industry'? Of the possible forms of investment discussed it was confirmed that under the Industry Act regional grants of twenty-two per cent available in Development Areas (such as Greenock and Port Glasgow) were included in the normal maximum of fifty-five per cent of the cost of any project in which assistance could be provided. The SRNA, however, wanted an additional grant of ten per cent or an improvement in the duration and terms of loans and stressed the need for a three-year moratorium on repayments. Furthermore, the threat of nationalisation if the Labour Party came to power was also mentioned, thus it was stressed that assistance should be given in a format that would support private investors at the present time. In conclusion, Chataway welcomed the frank exchange of views, but in effect promised little more than to make a statement to the House of Commons in due course. [111] A week later on the day after Scott Lithgow made its expansion plans public; the Labour Party announced that if returned at the next General Election, it would nationalise the shipbuilding industry under a centralised National Shipbuilding Corporation. [112]

In the interim, however, shortages of steelworkers had held up progress on the bow section of the first super tanker under constriction, *Naess Scotsman*, later to be renamed *Nordic Clansman*, leading to a launch date some two months later than expected. This hardly augured well for the future tanker programme, which had been further augmented by an order in December 1973 from a Greek owner, Angelicoussis for two 135,000 deadweight ton crude oil tankers to be built at the Kingston yard. With almost all of Scott Lithgow's vessels badly delayed, Ross Belch had earlier informed the local Boilermakers delegate that the acute shortage of steelworkers in the firm had now become critical. Prior to this Belch had to take men from one production unit to another to prioritise construction with the result that he was in effect continuously 'robbing Peter to pay Paul'. Moreover, in respect of new development, Belch also recognised that it would be crazy to do this if the firm could not even man the facilities that it had at the present. On the other hand, however, if they did not build new facilities then Scott Lithgow would be unable to compete internationally. [113] In short, this was the essential paradox that faced Scott Lithgow. Shortly afterwards, in a typically paternalistic gesture, Scott Lithgow provided a loan of £25,000 at a rate of interest of five per cent per annum over seven years for the Boilermakers Society to purchase a social club for its members in Greenock. [114]

With the OPEC price hike, when the oil states first trebled then quadrupled the price of crude oil by January 1974, demand collapsed precipitating falling freight rates, cancellations, and a freefall in the tanker market. Combined with supply restrictions and the termination of the Bretton Woods system that had underpinned much of the postwar monetary consensus during the Long Boom, the international outlook for tankers in particular was decidedly bad. In tandem with an increasing incidence of strikes in Britain in the midst of an energy crisis the imposition of a three-day working week by Government was not far off. For Scott Lithgow, the decision to enter the giant tanker market already had profound implications for the future of the company in terms of losses, and in this light the pressure on delivery dates to get loss making orders off the books as quickly as possible would be even more intense. In this gloomy climate, Scott Lithgow's consolidated accounts for the year ended 31 December 1973 showed a deficit for the year of £1,809,132 which added to the adverse balance brought forward from the previous year of £8,438,276 gave an adverse balance to be carried forward of £10,047,408. However, in an about turn, the firm did decide to make provision for future losses amounting to £9,361,000 on outstanding loss making contracts likely to be delivered in the next nine months. Of this figure, £2,111,000 was reflected in the deficit for the year, £2,250,000 in the restated deficit for 1972, and £5,000,000 in the restated adverse balance brought forward from 1971. The Directors were, however, still of the opinion that the 1974 grants and estimated profits on more recent contracts would substantially exceed future losses. Accordingly, with a return to more standard accounting practice, the firm's auditors for the first time did not qualify its accounts.[115] Given the magnitude of the loss provisions, however, it is likely that discussions with the auditors must have been intense.

In the interim, the position on the naval front had changed alarmingly owing to a successful United States of America-backed illegal military coup against the democratically elected government of Chile, which it will be recalled had two *Oberon* submarines under construction at Scott Lithgow. A coup that the Conservative government of Ted Heath accepted with indecent haste, whilst at the same time the military junta tortured and murdered thousands of its opponents in Chile.[116] With one submarine, *O'Brien* fitting out, and the other, *Hyatt* due to be launched in September 1973, the position on payment was obviously fluid, as was the question on eventual delivery. With *Hyatt* launched in the presence of a Chilean rear admiral and his wife, who had been taken in by a side entrance to avoid demonstrators, it later transpired that the quality of product offered in *O'Brien* was deficient in many respects. Among a raft of justified complaints the vessel had failed its first run with main generators, and had also failed torpedo equipment trial and sonar tests. This had occurred despite repeated warnings from the Royal Navy overseers on the failure of Scott Lithgow to introduce an adequate Dockside Test Organisation and to strengthen its middle management.[117] Faced with manpower shortages, deficient planning structures and huge loss making contracts, Scott Lithgow's future was in the balance. However, the General Election of February 1974, called by Ted Heath on the question of who ran the country, the Government or Trades Unions, eventually produced a minority Labour Government pledged to nationalise the shipbuilding industry.

Scott Lithgow moves into oil-related work.

With the OPEC hike in the price of crude oil, Britain's North Sea oilfields were by now a more attractive proposition than hitherto. However, the response of the shipbuilding industry for much of the previous decade to the oil related market had by and large been a disappointing one with only ten rigs completed, half of which were relatively unsophisticated jack up rigs built by one shipyard, John Brown.[118] By 1972, however, the consultants, IMEG had reported to the D.T.I. on future prospects for British involvement in the North Sea. Although the portents for the offshore market appeared to be good, it was nevertheless imperative that Government should encourage firms to enter the market as time was running out to establish a realistic British presence in the sector. IMEG, however, were not at all confident that the shipbuilding industry could rise to the challenge as previous experience had shown that offshore oil related work was a high risk business and was not really compatible with building ships in the same establishment. The report concluded that no British shipyard would voluntarily enter the offshore market, and that in consequence Government should take the lead and encourage the creation of a single establishment by giving it financial support, and that the selected yard, which would complement Marathon at Clydebank, should be indemnified against initial losses. [119] This, of course, presupposed that a Government already with its finger badly burnt in shipbuilding would be keen to back a speculative venture and risk losing its arm.

Clearly, IMEG had not envisaged that Scott Lithgow, which it had visited, would of all the major shipbuilding groups in Britain go it alone and develop a clear offshore strategy by attempting to diversify its product base away from loss-making tanker contracts. Scott Lithgow duly entered the offshore market by winning orders worth £3,600,000 from the Aberdeen based Seaforth Marine for two Offshore Supply Vessels (OSV) for its Ferguson Brothers Newark yard. [120] Although the move into offshore work had been contemplated for some time, the OSV orders prompted Ross Belch to publicly declare that Scott Lithgow hoped to make a two-pronged entry into the potentially lucrative offshore market with the building of the most sophisticated oil rigs and the vessels to serve them. [121] However, given the difficulties that Scott

Lithgow had already encountered in constructing giant tankers, and in light of admitted shortages of labour, it seemed that it would be prudent for Belch to hold fire on sophisticated oil rig platforms until the firm was properly geared to construct them in future. Moreover, the contracts were in all likelihood taken on at keen prices to establish a foothold in the market, and Ferguson Brothers had not yet built a vessel of the OSV type. Accordingly, it was likely that the initial learning curve would be steep. As the second small shipyard of Scott Lithgow, alike its smaller brother at Bowling, Fergusons, which had around 480 employees in 1972 kept a short order book, which in turn enabled a greater turn around at the berths, and to some extent kept the effects of inflation tolerable. Nevertheless, alike the parent company, Scott Lithgow, trading conditions had been difficult and the Newark yard's accounts showed a loss for the year ended 31 December 1971 of £178,295, however, by the following year end a profit of £32,076 had been posted. This was indicative of an upward trend in the Ferguson performance aided by construction grants, and by 1974, the firm had wiped out an adverse balance carried forward from the previous years of £201,777.[122]

If Scott Lithgow was to enter the offshore structures market in a meaningful way at a later date, however, then Marathon, the Successor Company to UCS at Clydebank, provided a salutary lesson. In its first year of operation the Clydebank firm had built a relatively straightforward jack-up rig, but had posted a loss of £1,250,000. However, on the back of the OSV orders, Scott Lithgow's major entry into the offshore market was not long delayed as it was announced in March 1974 that it won an order worth £16,000,000 drill ship to a Dutch design from a partnership of the Ben Line of Leith and Odeco of New Orleans (Ben-Odeco). This sophisticated vessel would be dynamically positioned by means of lateral thrusters and two propellers to maintain position without recourse to anchors or seabed moorings. Again Belch went public and stated that the Scott Lithgow strategy was to establish series production of these sophisticated vessels, and that the Scott end of the operation would build them. [123] Unfortunately, Scotts' Lithgows and Scott Lithgow Board Minutes are unavailable for the five-year period from 1973 to 1977, with the exception of one Board Meeting of Scott Lithgow in May 1973, 1975 and 1977. As previously stated, however, these Board Minutes were deliberately sparse in any event, and it is possible to discern the firm's strategy from other sources. Clearly, with the two OSV orders and the drill ship, Scott Lithgow intended to initially concentrate on offshore shipshape vessels rather than on platforms. By this stage, however, the firm's first giant tanker, and loss maker, *Nordic Clansmen* had been successfully joined up and named by Lady Inchcape, who had asked for an aluminium horsebox for her gift rather than the traditional piece of jewellery. After her trials, the tanker made for Lisbon to dry dock, as no facilities were big enough to accommodate her in Britain. [124]

After the previous Conservative Government's disgraceful attitude to the Chilean military dictatorship, the new Labour Government soon announced that all aid would be suspended to Chile, as would new armaments licences. However, somewhat pragmatically, it did decide to go ahead with the sale of two warships and the two Scott Lithgow submarines, *Hyatt* and *O'Brien*. Although the engineers union the AEU had ordered its members to boycott work on Chilean contracts, Scott Lithgow engineers refused as they felt that if they did, no other work would be available for them. The submarine, *O'Brien* was finally handed over to the Chileans on 24 July 1974, but remained at Greenock. Nevertheless, with a diversified order book, the firm still remained desperately short of labour with 1,000 jobs available, and in this light Ross Belch had earlier bemoaned the tactics of firms engaged in offshore work in attracting skilled labour as, 'little less than sheer piracy'. The firm had already lost 300 steelworkers in the previous year, and another 130 had left in the first five months of 1974. By September, after a two-hour meeting with the Conservative Party leader, Ted Heath, Sir William Lithgow accepted the former's invitation to become his industrial adviser in Scotland. However, with Labour again going to the country in October, the first time that two General Elections had been held in the same year since 1910, the situation with nationalisation remained fluid. Just days before the election, Scott Lithgow announced that it won an order worth £50,000,000 for two dynamically positioned drill ships from Pacific Norse Shipping a company registered in Bermuda and headed by an old established customer, Atle Jebsen of Bergen. [125] Clearly, bespoke linkages were an important factor in winning this order. Again, this order was for a sophisticated vessel was probably taken on at a very keen price that would leave little margin for error.

Disaster strikes

Beforehand, however, a potentially disastrous situation had arisen over the Chilean submarine, *O'Brien*, when it was discovered that insulation on pressure tight cables manufactured by BICC Limited to the Director General Ships specification 213 and installed in a Brazilian Oberon submarine by Vickers had failed. Arising from this, Scott Lithgow engineers examined the same pressure tight cables on *O'Brien* and found them to be similarly faulty. Scott Lithgow were then ordered to strip out all of the suspect cables and replace it. This would have entailed the removal of the majority of the submarine's equipment and its replacement at a cost of around £1,400,000 after all the cables had been installed. As this would have taken a year or so to accomplish, Scott Lithgow sought an agreement with the Chileans whereby the former would be released from their obligation to strip out and replace the cables by repairing them at a cost of £469,528. The firm would also supply a new set of replacement cables at a cost of £52,961, and pay to the Chileans, £500,000 in compensation and also provide them with technical assistance up to a cost limit of £25,000. Similarly, the pressure tight cables were also stripped out of *Hyatt*, which was at an advanced stage of construction at a cost of around £947,000. Similar remedial action had also to be undertaken in respect of the Australian submarine, RAN *Orion*, which at September 1974 was partly built at an estimated cost of around £221,005 and resulted in a substantial delay in construction and in payment. Fortunately, in respect of RAN *Otama*, the last of the four submarines in various stages of construction at Scott Lithgow, although the pressure tight cables had been delivered they had not been installed. Nevertheless, replacement costs were estimated at around £80,000 and would again result in a substantial delay.[126] Each submarine had around five and a half miles of electrical cable. All this, coming at a stage when estimated profits on submarines had been banked upon to offset losses elsewhere in Scott Lithgow, had a severe effect on the firm. Not only in the disruption to its programme at Cartsburn, but also on the inflationary effects of a substantial delay in a period of rising costs and consequent disruption to the two RFA vessels and the Underwater Research Vessel. Despite the fact that these cables were MoD (N) approved items, the buck effectively stopped with Scott Lithgow.

Litigation against the manufacturer was the only option open to recover the substantial sums spent on obtaining replacement cable from another manufacturer and refitting it, in addition to seeking damages against BICC for the subsequent disruption to the building programme.

Following on from the difficult trading conditions in a year of continuing high inflation where twenty-eight working days had been lost as a result of the imposition of a three-day working week by the Conservative Government, the financial position offered little respite. Scott Lithgow's consolidated accounts for the year ended 31 December 1974, although the firm made a tiny profit of £136,069, showed yet more loss provisions. Provision had been made in the 1973 accounts for estimated future losses on outstanding contracts amounting to £9,361,000 of which £3,881,000 had been credited to profit and loss account to offset losses on completed contracts for 1974, leaving a balance of £5,480,000. The Directors, however, were of the opinion that a provision of £8,205,000 was required in the 1974 accounts to cover anticipated losses on contracts still outstanding and therefore a further provision of £2,725,000 was made. This left an adverse balance to be carried forward of to the 1975 accounts of £9,911,339. [127] It will be recalled that tapering construction grants had only been made available for the three years from 1972 to 1974. Given this then, the former strategy that estimated future profits and construction grants would eventually outweigh losses on fixed price contracts had not proven to be correct. Clearly, labour shortages, which by this stage had become serious, and the lack of any real centralised production planning department with complete power over production had combined with high inflation to place the firm in a perilous situation. From now on it was extremely doubtful in the extreme that profitable contracts would outweigh the debilitating effects of ongoing losses as a result of unprofitable contracts taken on at fixed prices.

Meanwhile, Scott Lithgow's labour problems were put into sharp focus as a Public Inquiry had been opened into the siting of a John Laing oil platform production complex, which had already been given planning permission by Dunbartonshire County Council across the Clyde at Portkil, near Kilgreggan. Scott Lithgow as a matter of course strongly opposed this, as the probability was that even more skilled labour would be lost if the site were approved. In evidence, Ross Belch stated that the potential damage to the company's labour force of a high wage complex in easy reach, would be irreparable, and in support he informed that half of his firm's sheet metal workforce had already been attracted to the new Hunterston B nuclear power station. His colleague, Frank Grant pointed out that in 1973, a total of £3,760 had been spent on advertising by Scot Lithgow to attract more labour with the result that only fifty-eight men were recruited. The following year £5,000 had been spent to recruit even fewer employees as the firm took on only thirty-eight men. In the event, the Portkil proposal was eventually rejected and permission to build accordingly refused, which was just as well given the proximity of the proposed site to Scott Lithgow by boat. [128]

By March 1975, however, Wedgwood Benn had announced, somewhat prematurely as it turned out owing to the strength of Conservative Opposition's pathological hatred of nationalisation in both Houses of Parliament, which had the support of the industry, that shipbuilding would be brought under public control in the next year.[129] A week later, Benn stated that the industry had to be led in a different way by people who were committed to the success of the industry within the public sector. Even at this stage, this vision was fatally flawed, as it would be precisely the same people in situ under public control that had brought the industry to nationalisation in the first place. Benn's solution to this was that trade unions should sink their historical differences and work together with management under public control. Consequently, 'industrial democracy' would bring a new and harmonious relationship between workers and management at Board level in an industry that had hitherto been the antithesis of such a scenario. Benn, did, however, recognise that if this did not take place on a practicable basis, 'then the industry [would] remain as it is-a mirror image of private ownership with little changing except the ownership of the capital assets concerned'. [130]

Meanwhile, the crisis in the tanker market had continued virtually unabated, and by June had led the Greek owner, Angelicoussis, to unilaterally cancel the two 134,000 deadweight ton tankers on order from the Kingston yard. The tankers were in any event at the end of the Scott Lithgow order book and were due to be delivered in late

1977 and 1978. Given the dire performance thus far on the two super tankers this was in all probability a blessing in disguise. In June, Lithgows celebrated with a 100th anniversary party to commemorate the launching of its first vessel. *Commonwealth* with its oldest serving employee in attendance, a seventy-four year old plater, Thomas Moore, who had been employed by the firm for sixty years. That month, Scott Lithgow Drydocks had won an order to convert a former New Zealand merchant vessel, *Monowai* into a hydrographic survey ship for the Royal New Zealand Navy at a reported cost of £7,000,000, and the Underwater Research Vessel, *Newton* had been launched at the Cartsburn yard.[131] By this stage however, the first OSV *Seaforth Jarl,* had been launched at Fergusons but had proven to be yet another loss maker. Loss provisions had been made in the Ferguson 1974 accounts amounting to £335,000 and by September, Belch had enquired whether the senior staff at Fergusons had been strengthened to cope adequately with complex 'one-off' vessels? In response, the changes made in recent months in technical and administrative management were outlined. Although it was not always practical given the yard's short order book to carry out tank tests, Belch nevertheless requested that this should be undertaken whenever untried hull or propulsion features arose. This admonition was in all probability in reference to a research vessel, *Scotia*, for the Ministry of Agriculture and Fisheries, which was later taken out of service due to excessive vibration. Moreover, Belch stated that the loss on *Seaforth Jarl* would be 'substantial'. [132]

A month earlier, the cable disaster had been finally made public when the Australian Minister of Defence, Bill Morrison had stated that owing to a two-year delay in construction of the submarines *RAN Orion* and *Otama* that he would never again place an order with that, 'Goddamn shipyard'.[133] By this stage, however, a year later on from the discovery of the faulty cables, Scott Lithgow had only received replacement cables for the two Chilean submarines, and were still awaiting cables for the two Australian craft. Michael Scott, nevertheless, remained 'incensed' at Morrison's remarks, and 'utterly heart sick to find [Scott Lithgow]-an innocent party- in the middle of an affair which so adversely effects the RAN'. Scott, however, turned down an Australian offer to supply replacement cable. His reason was that as the second Chilean submarine, *Hyatt* came before *RAN Orion* and *Otama* in the building programme, it therefore had to be rewired before similar work on the latter two submarines commenced. The building programme at Scotts' and the labour situation would not allow work to commence in parallel; therefore the offer to replace the cable would not bring delivery forward, and had already been discussed in various meetings between the parties at Australia House and at Cartsburn. [134] Nevertheless, the resultant publicity had impacted negatively on Scott Lithgow's reputation as a builder of conventional submarines, and in all probability had holed the firm's future export potential below the water line.

Concurrently, due to the economic climate, Ross Belch had announced that Scott Lithgow would cut its summer intake of apprentices by half, and later confessed that only half of the apprentices recruited for training in 1970 still worked in the firm's shipyards. Nevertheless, Belch was able to recruit another one hundred boys from September 1975 due to cash aid from the Shipbuilding Industry Training Board and a further fifty at the firm's own expense. In the interim, however, upriver at the nationalised Govan Shipbuilders, Government largesse continued with a further injection of taxpayers monies, this time to the tune of £17,200,000 and the limit for support was also extended for another two and a half years to the end of 1979. This brought the total expended on Govan to £54,400,000 since it had been formed from the wreckage of UCS in 1972. To compound this it had earlier been announced that the second drill ship order from Pacific Norse was in the balance. Ross Belch, who had been elected President of the SRNA, a year earlier, now pleaded in this capacity in October 1975 for a speedy resolution by Government to help the industry. With the industry in effect in limbo as the nationalisation process lumbered on, Belch stated that unless the matter was quickly resolved then there would soon be little or no shipbuilding left in the country with vast implications for unemployment in shipbuilding areas. Against a background where orders placed in British shipyards in the first two quarters of the year totalled a meagre 33,000 gross registered tons set against an annual output of 1,000,000 gross registered tons, Belch's concern was evident. By November, however, the second super tanker, *Nordic Clansman* had been named and work was underway on the third, and in December, Princess Anne launched *RAN Otama*, the last of the six *Oberon* class submarines built for the Royal Australian Navy. [135]

As for 1974, Scott Lithgow's consolidated accounts for the year ended 31 December 1975 showed a profit, this time of £220.729, which left an adverse balance to be carried forward of £9,690,610. Of loss provision made in the previous accounts of £8,205,000 of which £6,003,000 had been credited to profit and loss account to offset losses on contracts completed in 1975, a balance of £2,202,000 was left. The Directors were, however, of the opinion that a provision of £2,644,000 was required to cover anticipated losses on contracts still outstanding, and in this regard a further net provision of £442,000 was made. Credit had been taken, however, in the accounts for the balance of instalments received on two cancelled contracts for Angelicoussis after deducting costs incurred and estimated sub contractors claims arising for an amount of £1,500,000 being the estimated surplus arising on the cancellation. A provision of £1,000,000 was also made against possible losses arising on the cancellation of suspended contracts. Understandably, the firm's auditors were unable to express an opinion owing to the uncertainty relating to the final outcome of these contracts, and made their reservation known. [136]

Just how bad the situation was for British shipbuilding, however, was confirmed when the SRNA figures for orders received in 1975 totalled a barely believable low of 67,000 gross registered tons, and of this total, only eleven per cent was from British owners. By February 1976, Scott Lithgow's first drillship, *Ben Ocean Lancer* had been launched at Cartsdyke after its initial launch date had been postponed due to high winds, leaving *PacNorse* I under construction. With the future of the third drillship still in doubt, however, and just before Ross Belch departed for India to attend the opening ceremony of the Kochin shipyard that Scott Lithgow had helped to build and develop, it was announced that Maritime Fruit Carriers were in default of loans.[137] It will be recalled that the two remaining super tanker orders at Scott Lithgow were for MFC with one under construction and the steel ordered for the other. With work well advanced on the first, Scott Lithgow decided to carry on building, however, the dire situation in British shipbuilding continued, with the industry winning under two per cent of world orders for the first quarter of 1976. To compound this, almost ninety-four per cent of all mercantile orders placed by British shipowners in the quarter went to Japan.[138] The extent, however, of the MFC debacle was that thirty-five per cent of all British orders, although some of these were for options to build, were for the troubled firm.[139]

By June, however, it had finally dawned on the Government in the person of the Industry Minister, Eric Varley who told trade unionists that the shipbuilding industry was witnessing a major structural change in demand, which could last for years. Consequently, the prospect for future orders was bleak, and Varley admitted that, 'shipbuilding was the greatest industrial problem facing Britain today'.[140] The grave situation facing the mercantile builders, at last smoked out the cosseted warship builders led by Sir Eric Yarrow who put forward three alternatives to avoid nationalisation, which at this stage was being fought tooth and nail by the Conservatives in Parliament. First, the Government should drop the Bill, but use its powers under the Industry Acts to reorganise and rationalise the mercantile sector. Second, the Government could redraft the Bill, by excluding the warship builders and some ship repairers from its provisions. And third, the industrial Darwinism option of rejecting nationalisation and letting firms sink or swim on an individual basis. In the interim, Scott Lithgow continued its discussions with Government to try to secure the third drillship order, but the process had again stalled when it was revealed that the Offshore Supplies Office had confirmed that a consortium who had been prepared to take it on had decided against a financial package involving a Government grant.[141]

By August 1976, *Hyatt* had been commissioned at a private ceremony, six years after it had been ordered and two years later than promised for delivery. *O'Brien* had finally left the Clyde a month earlier, but *Hyatt* would remain for some time to come. In the interim negotiations had been progressing with the MoD over a £20,000,000 order for a specialist seabed operations vessel (SOV), and Fergusons was in the process of completing its last firm order, a small bulk carrier. Bespoke linkages, however, again saved the day when Jebsen (UK) Limited ordered two mini bulk carriers with an option for another two to service the company's operations in the North Sea. In November in a launch speech of the bulk carrier, *Jalahivar*, the sixteenth vessel built for the Indian Company, Scindia over half a century, Sir William Lithgow railed against nationalisation. He stated, 'what a poor dead substitute is all the phoney paternalism of the giant corporation. What hypocrisy will next be perpetrated in the name of public accountability? The public interest is merely the sum of individual interests. There is no substitute for being personally accountable to each other'. Sir William then observed that this would probably be the last time that he would preside over a launch from what had been for over one hundred years a family shipyard. A week later his mood had not lightened when he accused Britain as being, 'a nation of intellectual bankrupts' and Scotland as being, 'the homeland of hypocrisy'. In this regard, he called for nothing less than a Cultural Revolution to save Britain. Clearly, the dire situation of the shipbuilding industry and of Scott Lithgow, which had to contend with soaring inflation over the past three years, had made its imprint on Sir William. A situation confirmed by the Chief Executive Designate of the proposed British Shipbuilding Corporation, Graham Day, who had stated in a speech at Glasgow that his first priority in taking over the industry in the next year would simply be survival. In a damning indictment of the Labour Government and the Civil Service, Day stated that it had no overall policy for shipbuilding before it was due to be taken over, thus local crises would be tackled by the Department of Industry on an individual basis. With 35,000 tons of steel lying unused at Scott Lithgow, the situation over the third MFC tanker and the third drill ship remained unresolved, however, the first RFA vessel, *Fort George* was named in December, with another RFA vessel, *Fort Austin* still under construction. Before the end of the year, however, the first MFC super tanker, which in effect had been built speculatively, but stage payments had been made by the Bank of Scotland as guarantor, had been sold to the Greek shipowner, Niarchos for a reported price of £20,000,000. [142]

After two years of modest trading profits, given what had occurred during the year it was hardly surprising that Scott Lithgow's consolidated accounts for the year ended 31 December 1976 showed a trading loss of £883,243. Provision had been made in the 1975 accounts for estimated future losses on outstanding contracts amounting to £2,644,000 of which £540,000 had been credited to profit and loss account to offset losses on contracts completed in 1976 leaving a balance of £2,104,000. The Directors made a further provision of £6,132,000 to cover anticipated losses on outstanding contracts including those taken on during the year. Accordingly, a further net provision of £4,028,000 was made.[143]

With the future of the industry still undecided with the process of nationalisation dragging on after three years, in February 1977, the Government announced a Shipbuilding Intervention Scheme worth £65,000,000. This Scheme, in effect, hinged on a firm having a concrete prospect of an order, but only when that order required a lower tender than could be met by the firm's own resources. Consequently, in March 1977 Scott Lithgow obtained a grant under the Scheme of £5,000,000 to complete the second MFC super tanker for another Niarchos offshoot, Dexter Shipping Company for the purchase of the tanker as an export contract payable in cash, not credit. In all this it was likely that Scott Lithgow had to put up a considerable sum of money on this deal, but just how much remains unclear. By March 1977, however, the Aircraft and Shipbuilding Bill had finally been given the Royal Assent, with vesting day for the new State Corporation, British Shipbuilders, earmarked for 1 July 1977. Scott Lithgow's troubles continued, however, when the first drill ship, *Ben Ocean Lancer* had been rejected in April by her charterers Chevron, as it was already three months late in delivery. Belch put the delay down to design changes and other matters outwith Scott Lithgow's control, again the matter was likely to take months to be resolved. With the second, and ultimately last, drill ship, *PacNorse I* also launched in that month, Belch stated that Scott Lithgow had proved beyond doubt that it had the skills and technology to build these sophisticated vessels. And, moreover, that in this light it could build the proposed Seabed Operations Vessel as no other yard in Britain could do it. In June, Scott Lithgow duly obtained a design and development contract for the SOV, which if successful could lead to an order worth £20,000,000. Meanwhile, *Oraya,* a general cargo vessel for Furness Withy became the last ship launched at Scott Lithgow before nationalisation.[144]

Given the long road to merger and nationalisation, labour shortages, the lack of capitalisation and a truly integrated approach to production planning, Scott Lithgow had done remarkably well to survive thus far. The move into giant tanker construction on which most of the losses and loss provisions were made had promised much, but had delivered little and had prompted the firm to enter an offshore market that would become increasingly sophisticated. With the likelihood that inherited losses could drag the firm further down into a spiral of losses, the future for the nationalised undertaking was anything but rosy. With the last submarine on order nearing completion, the warship situation had been compounded by the cabling disaster, and had left the Scott end of the firm in a highly vulnerable situation. Moreover, with the *Oberon* getting decidedly long in the tooth, and with no real prospect at this stage of another craft of newer design and capability on the horizon, warship orders could no longer be relied upon. It seemed that the firm's last real hope would be to make a real go of the offshore market and to gear its production towards it. With the situation as it was, given the likelihood of increased losses, there is little doubt that nationalisation had saved Scott Lithgow by prolonging its life. It remained to be seen, as British Shipbuilders assumed responsibility for the Lower Clyde group, just what the real extent of the firm's financial situation was of what had remained since 1711 in the case of Scotts' and 1874 in the case of Lithgows, family enterprises. That the component companies had survived at all to Vesting Day as Scott Lithgow, despite the fact that the individual firms had to a large extent ploughed their own particular furrows was also an achievement in itself. Indeed, Scott Lithgow had survived albeit with on the whole little Government support compared with the millions of pounds expended by the State on four large shipbuilding establishments, Cammell Laird, Upper Clyde Shipbuilders and its successor, Govan Shipbuilders, and the money pit of Harland & Wolff at Belfast.

Endnotes: Chapter VI

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[1] GD 323/1/2/2 Scott Lithgow Limited, Directors Report for the year ended 31 December 1970.

[2] Scott Lithgow Limited had originally been formed with a nominal capital of £100 with Sir William Lithgow and Michael Scott each holding £1 shares. Subsequently on 6 February 1970, 500,000 £1 preference and 1,999, 998 ordinary shares were issued fully paid in settlement of the transfer to Scott Lithgow, as at that date, of the shares in the seven operating companies, which were incorporated on 6 February 1969. These were, Scotts' Shipbuilding Company (1969) Limited, Scotts' Engineering Company (1969) Limited, Scott & Sons (Bowling) 1969 Limited, Lithgows (1969) Limited, Ferguson Brothers (Port Glasgow) 1969 Limited, Caledonia Joinery (1969) Limited, and Caledonia Fabrications (1969) Limited.

[3] GD 319/1/1/5 Scotts' AGM 2 July 1970.

[4] GD 319/25/2/1 *Scott Lithgow House Magazine*, Volume 1, #1 spring 1969.

[5] Ibid.

[6] On the South American visits, see, GD 319/12/1/83 Letter from MoD (N) to George Hilton, re Naval sales to Argentina, 8 December 1966, Note for File, Chilean Submarines, 16 June 1967 and letter to Brazilian Navy Minister, 19 July 1967.

[7] *Greenock Telegraph*, 14 January 1970.

[8] GD 323/1/1/53 Letter from Sir Eric Yarrow to Michael Scott, 9 February 1970.

[9] PRO BT 291/166 Letter dated 31 March 1966 from Sir Eric Yarrow to Second Permanent Under-Secretary of State, MoD (N).

[10] *Greenock Telegraph*, 13 February 1969, the Minister of Technology, Anthony Wedgwood Benn was firmly of the opinion that had it not been for grouping in the wake of the SIC Report, then the present unemployment on the Clyde would be, 'terrifying in its proportions'.

[11] NMM SRNA 8 S42 Letter from Ross Belch to R.D. Brown, SRNA 27 December 1969.

[12] Ibid.

[13] ibid., Submission to the Rt. Hon Harold Lever MP, Paymaster General, Upper Clyde Shipbuilders.

[14] Ibid., Note of a meeting between the SRNA and Harold Lever at Mintech, 14 January 1970.

[15] PRO FV 37/135 Swan Hunter group, Annual Report and Accounts 1969, comments of SIB Accountant, Mr Humphrey, undated but probably January 1970

[16] PRO FV 37/133 Mintech, Resignation of Sir John Mallabar, 24 March 1970.

[17] *Liverpool Daily Post*, 20 February 1969, and House of Commons Official Report, Fifth Series, Vol. 801, 13 May 1970, cols. 286-7.

[18] PRO FV 37/158 Notes of meeting with officials of Mintech and SIB, 13 March 1970.

[19] PRO FV 37/134 SIB, Note on Cammell Laird, 24 April 1970.

[20] Ibid., Report by Thomson McLintock & Company CA, and James Fraser & Sons CA, 17 April 1970.

[21] For a full discussion of the Yarrow Ridley nexus see, J. McGill, *Crisis on the Clyde*, (London, 1973) pp.38-74.

[22] *Greenock Telegraph*, 13,14 April 1970.

[23] GD 323/1/1/53 Letter from Ross Belch to Stephen Spain, Mintech, 17 February 1970, and PRO FV 37/133 SIB Note from Scott Lithgow handed to the Director, 11 March 1970.

[24] GD 323/1/1/53 Summary of negotiations for the acquisition of Yarrow and Company, 1 February 1971.

[25] Ibid.

[26] PRO FV 37/133 SIB Note on discussions with Belch and Boyd, 11 March 1970.

[27] GD 323/1/1/53 Summary of negotiations for the acquisition of Yarrow and Company, 1 February 1971.

[28] *Greenock Telegraph*, 4 and 18 May 1970.

[29] House of Commons, Official Report, Fifth Series, Vol.801, col.591.

[30] *Greenock Telegraph*, 19 May, 18, 19 June 1970, in the General Election, Mabon beat his Liberal opponent William Riddell by 19,334 votes to 16,100, but the Conservatives won the election with 330 seats to Labour's 287, with the Liberal Party winning only six seats.

[31] GD 323/112/1 Shop Stewards Meeting, Kingston yard, 24 August 1970.

[32] GD 320/1/3/8 Lithgows Limited Glen/East shipbuilding yard, Port Glasgow, Report on Proposed Yard for Super Tankers, 13 January 1966.

[33] GD 320/1/3/9 Feasibility Study of Converting James Watt Dock into a Dry Dock, Crouch and Hogg, 28 November 1969.

[34] PRO FV 37/21 SIB Lower Clyde Development Plans, Note of a visit to Scott Lithgow on 28 May 1969 by G.W.S. Reed.

[35] *Greenock Telegraph*, 6 May 1970.

[36] PRO FV 37/21 SIB Interim Submission in connection with proposed Scott Lithgow facilities, 3 May 1968.

[37] Ibid., Visit to Scott Lithgow by G.W.S. Reed, 28 May 1969.

[38] *Journal of Commerce*, 11 February 1969, NSDM who had already merged with Verolme, had undertaken to build a tanker in two halves for A.P. Moller

[39] GD 319/25/2/11 Scott Lithgow House Magazine Vol., 1 No.11.

[40] GD 323/1/3/13 Scott Lithgow Limited, Letter from Belch to Thomson, 16 March 1970.

[41] GD 323/1/12/20 Letter from Abrahams to Imrie, 14 May 1970 and letter from Imrie to Abrahams, 16 May 1970.

[42] PRO FV 37/136 SIB Scott Lithgow Group, Financial Assistance-Security, Memo from Barker to A.J. Suich, Mintech, 23 July 1970.

[43] Ibid., Lithgows (1969) Limited and Scotts Shipbuilding Company (1969) Limited, Approval of Draft Loan Agreement and Security Documents, 28 August 1970.

[44] GD 323/1/1/2 (3) Minute of Directors Meeting of Scott Lithgow, 20 August 1970.

[45] PRO FV 37/21 Mintech, Letter from Chapman to Barker, Scott Lithgow Cranes, 16 December 1969.

[46] GD 323/1/1/2 (4) Minute of Directors Meeting of Scott Lithgow, 21 October 1970.

[47] GD 323/1/1/3 (2) Minute of Directors Meeting of Scott Lithgow, 14 December 1970.

[48] GD 323/1/12/1 Shop Stewards Meeting, Cartsdyke shipyard, 28 October 1970.

[49] Ibid.

[50] PRO FV 37/136 SIB Mintech The New Government...A Pragmatic Approach to Shipbuilding, undated but probably July 1970.

[51] PRO FV 37/137 SIB Note of a Meeting with N. Ridley, Joint Parliamentary Secretary at Mintech, 27 September 1970.

[52] GD 323/1/2/2 Scott Lithgow Limited, Directors Report and Accounts for the year ended 31 December 1970.

[53] GD 323/1/1/5 (a) Chairman's Report to AGM of Scotts' Shipbuilding and Engineering Company Limited, 3 August 1971.

[54] GD 323/1/2/2 Scott Lithgow Limited, Directors Report and Accounts, year ended 31 December 1970.

[55] GD 323/1/1/5 (a) Scotts' AGM, 3 August 1971.

[56] PRO FV 37/133 Mintech, Letter from Stephen Spain to Barry Barker, Director, SIB, 27 February 1970.

[57] GD 323/1/1/3 (3) Minute of Directors Meeting, Scott Lithgow Limited, 16 March 1971.

[58] *Greenock Telegraph*, 25 February and 5 March 1971.

[59] Ibid., 8.13, 26 March 1971.

[60] GD 323/1/12/20 Clyde Shipbuilders Association, Steelworking Classes-Basis of Payment, Lower Reaches Firms, 5 April 1971.

[61] *Glasgow Herald*, 12 February 1971

[62] GD 323/1/1/3 (3) Minute of Directors Meeting, Scott Lithgow, 18 March 1971, discussions with Ministers and SIB, meeting with Davies and Ridley, 17 February 1971..

[63] Ibid., meeting with Barker, Gormley and Swallow, SIB 23 February 1971.

[64] Ibid., Meeting with Balniel and Kirk, 11 March 1971.

[65] Ibid., Directors Meeting.18 March 1971.

[66] GD 323/1/1/3 (4) Minute of Directors Meeting, Scott Lithgow, 17 May 1971.

[67] GD 323/1/1/3 (5) Minute of Directors Meeting, Scott Lithgow, 1 October 1971.

[68] GD 323/1/1/4 (1) Minute of Directors Meeting, Scott Lithgow, 14 December 1971. In addition, Scotts' Shipbuilding Company (1969) Limited would increase its authorised capital by £450,000 to £1,450,000 by the creation of 450,000 10 per cent Non-Cumulative Redeemable Preference Shares of £1 each. These new shares would be issued 270,000 to Scotts' Shipbuilding & Engineering and 180,000 to Lithgows Limited. Lithgows (1969) Limited would also increase its authorised capital by £300,000 to £1,200,000 by the creation of 300,000 10 per cent Non-Cumulative Preference Shares of £1 each, with 180,000 issued to Scotts Shipbuilding & Engineering, and 120,000 to Lithgows Limited. When issued one new pence would be called up, and the shares would be redeemable at par after repayment in full of the SIB subordinate loan.

[69] GD 323/1/1/4 (2) Minute of Directors Meeting, Scott Lithgow, 16 February 1972.

[70] The liquidation of UCS, the myth of the 'work-in' and the hagiographic treatment of its leaders are discussed in far greater detail in a plethora of books. See, for example, Hogwood, *Government and Shipbuilding*, McGill, *Crisis on the Clyde*, F. Herron, *Labour Market in Crisis, Redundancy at Upper Clyde Shipbuilders* (London, 1975), and W. Thompson & F. Hart, *The UCS Work-In* (London, 1972). See also, Report of the Advisory Group on UCS, Parliamentary Papers, 1970-1971 HC 544, and, Shipbuilding on the Upper Clyde. Report of Hill Samuel & Company, Cmnd. 4918, (London, HMSO, 1972).

[71] *Greenock Telegraph*, 8 September 1971, the East yard could only construct vessels up to 25,000 deadweight tons, but this limit had been stretched to 30,000 deadweight tons, The redevelopment of the road through Port Glasgow took away almost 40 per cent of the yard's space.

[72] GD 323/1/1/3 (5) Minute of Directors Meeting, Scott Lithgow, 1 October 1971.

[73] GD 323/1/1/4 (1) Minute of Meeting of Directors, Scott Lithgow, 14 December 1971.

[74] *Greenock Telegraph*, 21 October & 12 November 1971.

[75] GD 323/1/12/1 Shop Stewards Meeting, Cartsburn yard, 7 December 1971.

[76] Ibid., Shop Stewards Meeting, Kingston Yard, 10 December 1971.

[77] Ibid.

[78] GD 323/1/12/1 Shop Stewards Meeting, Kingston yard, 7 February 1972.

[79] Ibid., Shop Stewards Meeting, Cartsdyke yard, 21 February 1972.

[80] *Greenock Telegraph*, 1 March 1972.

[81] Ibid., 3 March 1972.

[82] GD 323/1/2/4 Scott Lithgow Limited, Directors Report & Accounts for year ended 31 December 1971.

[83] *Greenock Telegraph*, 23 March 1972.

[84] GD 323/1/2/4 Scott Lithgow, Directors Report and Accounts for the year ended 31 December 1971.

[85] Hogwood, *Government & Shipbuilding*, p.166.

[86] *The Motor Ship*, January 1972.

[87] GD 323/1/4/30 Letter from James Darragh, D.T.I. to Michael Scott, 1 June 1972.

[88] GD 323/1/2/5 Scott Lithgow Limited, Directors Report and Accounts for the year ended 31 December 1972.

[89] GD 323/1/12/1 Shop Stewards Meeting, Kingston yard, 11 January 1973.

[90] Private source.

[91] British Shipbuilding 1972: A Report to the Department of Trade and Industry by Booz-Allen and Hamilton International BV (London, HMSO, 1973).

[92] House of Commons Official Report, vol.856 col.347, 16 May 1972.Written Reply to question by Dame Judith Ward by Christopher Chataway, Minister for Industrial Development.

[93] For a more detailed discussion on Booz-Allen, see, Hogwood, *Government & Shipbuilding*, pp.167-172.

[94] House of Commons Official Report, vol.856, col.347, 16 May 1972.

[95] GD 323/1/5 Minute of AGM of Scotts' of Greenock (Estd. 1711) Limited, 27 June 1973.

[96] GD 323/1/4/3 Minute of Directors Meeting, Scott Lithgow Limited, 18 December 1972.

[97] GD 323/3/3/3 Letters to Gilmour and Raper from Ross Belch, 8 November 1972.

[98] Ibid., Letter from Gilmour to Belch, 7 December 1972.

[99] Ibid., Letter from DGS to Ross Belch, 16 April 1973.

[100] GD 323/1/4/34 Discussion Draft Letter from Hilditch, Booz-Allen to Belch, 19 June 1973.

[101] GD 323/1/3/35 Letter enclosing MoD Memorandum from Admiral Griffin to Michael Scott, 15 May 1973.

[102] Ibid.

[103] Ibid., Record of a Meeting with Messrs Scott Lithgow to discuss the Booz-Allen Report, 30 May 1973.

[104] Ibid., Letter from Michael Scott to Griffin, 4 June 1973.

[105] Ibid., Letter from Griffin to Scott, 2 July 1973.

[106] Ibid., Summary Record of a Meeting between Scott Lithgow and Sir Michael Cary, 17 September 1973, also present were Admiral Griffin and Vice Admiral Sir George Raper.

[107] Ibid., Letter from Sir George Raper to Michael Scott, 13 August 1973.

[108] GD 323/1/3/17 Note for the Record of a Meeting held at the Ministry of Defence, 27 September 1973.

[109] GD 323/1/4/11 Notes of Discussion with Mr. Jack Rampton, 21 February and 2 May 1973.

[110] *Greenock Telegraph*, 27 June 1973.

[111] GD 323/1/3/34, SRNA: Note of a Meeting with Christopher Chataway, Minister for Industrial Development at the D.T.I. 20 June 1973.

[112] *Greenock Telegraph*, 28 June 1973.

[113] GD 323/1/12/20 Letter from Belch to George Thomson, Boilermakers Society, 1 October 1973.

[114] Ibid., Letters from Belch to Thomson, 10 October & 26 November 1973.

[115] GD 323/1/2/6 Scott Lithgow Limited, Directors Report & Accounts for the year ended 31 December 1973.

[116] The *Greenock Telegraph* at 30 October 1973 reported that 30,000 Chilean democrats and workers had been brutally murdered by the military regime in Chile. Thousands more were in all probability unaccounted for.

[117] GD 323/1/3/35 Letter from MoD Ship Department, Bath, to Ross Belch 3 December 1973.

[118] For the initial attempts by Government and oil companies to interest the shipbuilding industry in the North Sea offshore market, see NMM SRNA E36/21 Enquiries: Drilling Rigs, 1961-1966. There exists a huge literature on Britain's alleged failure by British Governments to fully exploit the vast potential of North Sea oil, see for example, G. Arnold, *Britain's Oil*, (London, 1978), A. Hamilton, *North Sea Impact: Offshore Oil and the British Economy* (London, 1978), A. Jones, *Oil: the Missed Opportunity* (London, 1981) and C. Harvie, *Fool's Gold: The Story of North Sea Oil* (London, 1995). Also, for a consideration of the British Shipbuilding Industry's approach to the offshore market, see, L. Johnman and H. Murphy, 'A Triumph of Failure: The British Shipbuilding Industry and the Offshore Structures Market, 1960-1990: A case study of Scott Lithgow Limited', *International Journal of Maritime History* (forthcoming, 2002).

[119] International Management and Engineering Group, Study of Potential Benefits to British Industry from Offshore Oil and Gas Developments (London, HMSO, 1972), pp. 9 and 85-96.

[120] For the OSV market in general, see, A. Jamieson, 'British OSV Companies in the North Sea', *Maritime Policy and Management* Vol., 25, No. 4, (1998).

[121] *Greenock Telegraph*, 16 January 1974.

[122] GD 323/14/2/2-5 Directors Reports and Accounts, Ferguson Brothers, for the year ended 31 December 1971-31 December 1974.

[123] *Greenock Telegraph*, 29 January and 11 March 1974. For Marathon, see S. McKinstry, 'Transforming John Brown's Shipyard: The Drilling Rig and Offshore Fabrication Businesses of Marathon and UIE, 1972-1977', *Scottish Economic and Social History*, Vol., 18 (1998).

[124] *Greenock Telegraph*, 28 February and 26 April 1974.

[125] Ibid., 2 and 14 May, 24 July, 4 and 18 September and 7 October 1974.

[126] GD 323/3/4/7 Second Schedule to Statement of Claim between Scotts' Shipbuilding and Engineering Company Limited and BICC Limited, High Court of Justice, Queen's Bench Division, 4 February 1977

[127] GD 323/1/2/7 Scott Lithgow Limited, Directors Report and Accounts for the year ended 31 December 1974.

[128] *Greenock Telegraph*, 4 January 1975.

[129] House of Commons, Official Report, Vol. 888, 17 March 1975, cols. 1146-1165.

[130] *Greenock Telegraph*, 25 March 1975.

[131] Ibid., 30 May, 21, 25, and 26 June 1975.

[132] GD 323/14/2/5 Ferguson Brothers, Report and Accounts for year ended 31 December 1974, and Directors Meeting, 29 September 1975.

[133] GD 323/3/3/2 Press Association Summary of statements by Morrison, 11 August 1975.

[134] Ibid., Letter from Michael Scott to Commander W. J. Owen, RAN, 15 August 1975.

[135] *Greenock Telegraph*, 8,11,15 August, 3,20 September, 9 October, 18 November and 3 December 1975.

[136] GD 323/1/2/8 Scott Lithgow Limited, Directors Report and Accounts for the year ended 31 December 1975.

[137] NMM SRNA Statistics, *Greenock Telegraph*, 31 January, 2, 9 February 1976, and *Lloyd's List* 4 February 1976.

[138] *Greenock Telegraph*, 10 April 1976.

[139] House of Commons, Official Report, Vol. 905, 12 February 1976, col. 385.

[140] *Greenock Telegraph*, 23 June 1976.

[141] Ibid., 26 June and 11 August 1976.

[142] Ibid., 27 August, 11 September, 1 and 8 October, 2 November, 9 and 29 December 1976.

[143] GD 323/1/2/9 Scott Lithgow Limited, Directors Report and Accounts for the year ended 31 December 1976.

[144] *Greenock Telegraph*, 25 February, 2 and 8 April, 3 June 1977.

Chapter VII: Nationalisation to Privatisation, 1977-1984

By Vesting Day on 1 July 1977, in addition to Scotts' Engine Works, Cartsburn, Cartsdyke and Bowling shipyards, and Lithgows Glen, Kingston and Ferguson Brothers Newark yards, Scott Lithgow's shiprepairing arm, Scott Lithgow Drydocks was also nationalised. This was on the basis that it formed an integral part of Scott Lithgow's operations, as did Caledonia Joinery, Caledonia Fabrications, and two other recently formed small companies, Newark Ferguson Limited, and Cowal Engineering. The temporarily London-based State Corporation, British Shipbuilders (BS), was now responsible for all the major shipbuilders, a sizeable amount of ship repairers and marine engineering firms in the country. [1]

During the seemingly interminable march to nationalisation it had been decided as a matter of policy not to over-centralise the functions of BS in its formative stage.[2] Accordingly, all the larger firms had a degree of autonomy, 'in line with the general policy on decentralisation and free competition', which in any case was enshrined in Section 5 of the Act.[3] From the outset a number of Chief Executive's of individual firms, including Ross Belch, had a place on the Board of BS, as did, in the name of industrial democracy, a trade unionist, Ken Griffin. Belch's view, however, was that there was 'no great enthusiasm on either side for a rigid form of industrial democracy'. On pay, the Chancellor of the Exchequer, Denis Healey, had informed the BS Chairman, Admiral Griffin that he would expect that BS (whose overall responsibility for industrial relations was enshrined in the Act) would strictly adhere to Government pay policy with the exception of self-financing productivity schemes and possible pension improvements.[4] Given the parlous state of the industry, however, centralisation in BS had surely to increase, as little foresight was required to see that inherited losses could seriously undermine any attempt at profitability. Commercial prudence would also dictate that BS would naturally wish to investigate the basis of financial forecasts, particularly the extent of loss provisions in its constituent firms. Furthermore, different rates of pay in these firms were all but guaranteed to be a source of considerable friction, particularly with Scott Lithgow employees over the long-running sore of pay parity with their Upper Clyde counterparts. Indeed, it was difficult to contemplate how Scott Lithgow could continue for any length of time to justify a pay gap in a nationalised setting. In the short-term, however, the firm could certainly offload responsibility for this to BS and rely on Government-inspired pay restraint policy to effectively dampen expectations.

During the initial period of nationalisation, Michael Scott and Sir William Lithgow remained on the Board of Scott Lithgow as they awaited compensation for nationalisation on the basis of 1974 values of individual firms. By 19 July 1977, however, it had been announced that Scott Lithgow's former ultimate holding company, Scotts' of Greenock (1711) Limited was to be wholly taken over by the London-based John Swire & Sons, who prior to nationalisation already owned a third of its ordinary shares. The consideration would be determined by the amount of compensation received from the Government by Scotts' as an unlisted holding company, which formerly held the majority of shares in Scott Lithgow.[5] By August, the second half of the third super tanker to be built at the Glen yard, *World Score*, for the Niarchos offshoot, Dolman Shipping had been launched. This left the fourth, and ultimately last super tanker to be built at the Glen yard, *World Scholar* for another Niarchos company, Dexter Shipping. By this stage, however, it had been noted that Scott Lithgow was in competition with five other UK firms to construct an Emergency Support Vessel (ESV) for BP. Indeed, Mike Anketell-Jones for the oil major had indicated that 'various pressures were already building up on BP to ensure that the vessel was built in the UK'. In this regard, Anketell-Jones had mentioned that in passing that the Shipbuilding Intervention Fund (SIF) might be used to bridge the gap between UK and Japanese prices, but Belch found this unlikely. Nevertheless, Anketell-Jones indicated that BP would ultimately hold the chosen yard totally responsible for the performance of the ESV, but also admitted that nothing like it had yet been built. Although the ESV was a 'complicated animal' Belch believed that it was a very real project that Scott Lithgow must try to win. BP, however, had in mind delivery in 1979, but Belch believed this was 'totally impossible', in view of lead time for equipment and to the complicated nature of the vessel. Indeed, at this stage Belch thought that the earliest delivery date would be the second half of 1980, but that this would have to be carefully assessed.[6]

By September 1977, Belch had been informed that three financial experts from BS, Reg Arnell, Philip Hares and Bob Hutchinson would be visiting Scott Lithgow shortly to look at forecast outcome predictions on vessels under construction. Moreover, a large order from Poland for BS as a whole was in the pipeline, with the emphasis being placed on strict delivery date compliance. In this light, Belch was hopeful that some orders for Polish mini bulk carriers might be allocated to Fergusons. Contemporaneously, the initial emphasis on decentralisation was already under threat as BS had informed its constituent firms that owing to Treasury pressure, no individual yard wage offers could be made without the positive authorisation of Government. Predictably, as Admiral Griffin noted in October, the operation of this procedure was having a seriously damaging effect within the industry. Again, this was entirely foreseeable due to the myriad number of separate bargaining units, wage structures and demarcations within constituent shipyards. In short, timely approval from Government was proving to be impossible. Employee frustration with local management was mounting, as was employer frustration that their hands were effectively tied in negotiating, as they now had no power to settle claims. Accordingly, Griffin again noted that the provisions for decentralisation of management and decision making in Section 5 of the Act were in danger of becoming an empty formula.[7]

The naval situation

As with the first Chilean submarine, *O'Brien*, Scott Lithgow's problems continued with the second, *Hyatt,* when the MoD (N) representative, Euan Haig, unilaterally sent a list of complaints on the firm's performance to his superiors at Bath. Although overall basic functions of quality assurance had been executed in accordance with the Quality Plan for *Hyatt*, it was noted that quality assurance was only as good as the coverage undertaken, and in Scotts' case this was, 'often inadequate'. Somewhat bizarrely, expensive items of equipment such as periscopes and masts were left unprotected and unexamined after installation. Moreover, Haig alleged that Scotts' had on numerous occasions failed to reassure the Chileans of the quality of build and fittings on the submarine, but nevertheless had the gall to criticise the customer for failing to be reassured. There was also a disturbing tendency in the programme of construction to let major and minor events slip, although *Hyatt* was completed within a few days of the set date before the cable disaster had been discovered. Haig also noted that, 'there was (and is) an underlying habit of leaving too many defects undone and this was indeed the cause of failures. Clearly, according to Haig, Scotts' quality assurance function was undermanned, and the firm's professional standards were not high enough. Furthermore, Scotts' practice was to work in conditions that were often 'dirty and cluttered', with little formal planning. Nevertheless, *Hyatt* was completed to a satisfactory material standard and finish but these approaches to submarine work in Haig's view, did not produce consistent results. Haig evidenced, *RAN Orion*, which in the last six months of her programme had slipped many weeks due to failed inspections and trials. Scotts' approach to planning was also deficient in the sense that the tendency was to fix unrealistic dates to keep up the pressure to produce. The virtual absence of short-term planning was, however, 'almost wholly offset' by sound professional knowledge and judgement built up on previous experience. Nonetheless, the firm's weaknesses lay in 'longer-term manpower and in investment in production facilities rather than in technical or shipbuilding expertise'. Concurrently, though, Scotts' were now more aware than before of the need to improve on cleanliness, which Haig hoped would result in less damage to equipment, such as scoring on the attack periscope on *RAN Orion*. Similarly, cleanliness on the two fleet replenishment vessels, *RFA Fort Austin* and *RFA Fort Grange* had improved. Scotts' had also began to produce detailed short-term plans leading to major events such as the basin dive on *RAN Otama*. This had led to a marked improvement even though it was a bit late in the day, but the firm had also accepted that the rate of clearing defects was too slow. [8]

The majority of Haig's observations, apart from not notifying Scott Lithgow of his intentions to criticise the firm to his superiors, were on the whole, constructive criticisms. Nevertheless, Ross Belch took great exception to them and wrote to the Principal Naval Overseer (Clyde), Bill Sanders to express his disapproval. Belch stated that unless the continual criticism of Scotts' stopped, then, far from the relationship between the firm and MoD (N) improving, 'the opposite will be the effect'. Belch refuted most of Haig's assertions, and noted that *RAN Orion* was delivered, 'within three weeks of the date given two years previously'. Neither did he accept that Scotts' worked in an environment any less sordid than in other UK yards. On cleanliness, Belch stressed that the two RFA vessels were being built to commercial standards only, and did not reach the standard required on naval warships. On a more conciliatory note, however. Belch hoped the Scotts' staff would be encouraged rather than continually criticised, but sent a copy of his reply to MoD (N) at Bath.[9] In reply, Sanders wrote that there was little point in letting all this get out of hand, and he had spoken accordingly to the senior figures at Bath explaining that Haig's comments were not meant to, 'indicate any new circumstances'.[10]

Consequently, at a later meeting to discuss the episode. Scotts' agreed on the need to appoint a single co-ordinator for each project responsible for day-to-day activities. However, it was stated that the failure of a Ministry vessel to achieve the required standard at Acceptance, 'must not occur again at Scotts'.[11] This entire episode, although views on such issues as cleanliness were in all probability subjective, served to highlight the inherent lack of appreciation of properly supervised production planning at Scott Lithgow in general. Moreover, in respect of the RFA vessels, building to 'commercial standards' covered up a multitude of sins. This was, however, by no means exclusive to Scott Lithgow, as there was a general tendency in the industry to do just enough and no more on commercial contracts. Furthermore, all of this served to stress the vulnerability of the future naval programme at the Cartsburn yard, particularly on submarine work. Due to the rundown on this work, and a changing sales mix with less engineering content, particularly at Ferguson, and at Scott of Bowling, Belch had informed a union representative, Bolton that a surplus of fifty fitters had arisen and that discussion on redundancies would ensue. Moreover, Scott Lithgow Dry Docks, was now 'virtually out of work'. Therefore, unless some submarine refit work was won some 150 redundancies would occur by the following spring. [12] Although the focus of this thesis had been on shipbuilding and to a lesser extent, marine engineering activities of the two Lower Clyde firms, their performance in ship repairing and conversion was hardly sparkling either. In converting the *Monowai* to a hydrographic survey vessel, Scott Lithgow Dry Docks had lost £1,650,000 on the contract. [13]

By late October, at a meeting of the shipyard chief executives with Mike Casey and other senior members of BS in London, the question of consultation with trade unions was discussed at length. It was emphasised that in some yards the unions were still 'euphoric in their expectations of obtaining a co-operative form of management at all levels without fully understanding the financial commitments and problems involved'. The move toward increased centralisation was given a further boost when it was generally agreed that BS, and not the constituent firms, was responsible for the production of a Corporate Plan to Government, and with the major consultations with relevant unions. BS could not, however, produce a Corporate Plan of its own before individual profit centres such as Scott Lithgow could produce their own corporate plans and send them to BS by the end of March 1978. This would leave BS some leeway to finalise its Corporate Plan for the industry as a whole and present it to the Department of Industry by the end of May 1978. In all probability recognising that planning on this scale was novel, BS did, however, offer to train relevant personnel in profit centres at planning workshops. Accordingly, the purpose of these workshops was that by January 1979, BS should have 'an entirely clear idea what the EEC/Government really want, and thus what BS wants from the profit centres'. By this stage, the profit forecast for BS for the nine months to 31 March 1978 had been completed in draft and showed a satisfactory profit. In a far more realistic mode, however, it was noted that this profit might be subject to a downward revision when the profit taking rules for the warship builders had been finally agreed.[14]

Astoundingly, even at this stage, there was no mention of a loss on the mercantile side of the industry, that given inherited losses, which were almost certain to accrue on fixed priced contracts taken before the advent of cost escalation insurance, and Intervention Fund assistance. On pay, the BS Chairman, Admiral Griffin had met the Industry Minister, Eric Varley in December with the object of obtaining a delegation of pay authority to the latter's department, which in turn could then delegate that authority to BS to achieve pay settlements. Griffin's view was that if this was not done and soon then BS would continue to suffer from severe delays and inevitable disruptions in industrial relations. Griffin's plea was however, not acted upon, and later several of the assembled executives from the individual yards stated that the Government had made their negotiating position, 'hopeless'. Nevertheless, it was also noted that BS was dependent on Government for further financial support. For BS, Mike Casey insisted that it was absolutely necessary that within the constituent firms there should be no 'accidental' breaches of pay policy, neither should executives think that BS was unique as all other nationalised industries were subjected to the same pay restraints. By this stage, however, the profit forecast had been revised by the BS Finance Director, Maurice Elderfield, who reported that it was not a healthy one and that BS was just not competitive. In this light, it was necessary to have 'a renewed hard look at both capital expenditure and investment, for which there are no guidelines or yardstick'. Current projects in train would have to carry on, but an urgent examination was needed of all proposals to see what pruning was possible. The hard fact was that BS was running out of money rapidly. In the ensuing discussion, it was, again somewhat belatedly noted that the shipbuilding industry had not really been run on strictly commercial lines. By this stage, however, Ferguson Brothers had been awarded two of the Polish mini bulk carriers. It was also noted that Ross Belch would head a BS delegation that would attempt to drum up business by visiting the Indian Government in Delhi, and then proceed to Bombay for a week before embarking for Calcutta to visit other shipyards.[15]

By January 1978, however, Belch had stated that survival was now the name of the game, and with seventy fitters already made redundant, it was announced that the Cartsburn yard had secured an order to refit an *Oberon* class submarine, *HMS Oracle* to be undertaken during the summer. In addition, Scott at Bowling had won an order worth £1,000,000 for two tug boats to be delivered in the summer of 1979, and Ferguson had topped this with an order worth £ 3,500,000 from MoD (N) to design and build a trials and experimental sonar vessel. By the end of the month, however, Sir William Lithgow publicly announced that no compensation for nationalisation had yet been received, and also revealed that a big American offshore company had wanted to buy into Scott Lithgow prior to Vesting Day. Nevertheless, the firm's future position on wages provisions was likely to be affected by the news that at a Central Arbitration Committee meeting in Glasgow, Scott Lithgow workers had made a claim for another £10 per week to give them parity with Govan Shipbuilders under the 1948 Fair Wage resolution.[16]

Contemporaneously, Scott Lithgow's general position on prior shipbuilding and offshore contracts had continued to deteriorate, and by March, Belch had warned his colleagues not to let situations develop on contracts where they had not lodged suitable *force majeure* claims until it was too late.[17] Talks with BP on the possible ESV order had continued and the oil major had indicated that it would place the order in June 1978. To this, Belch again reiterated that the winning of this order was of critical importance, otherwise large-scale redundancies would ensue.[18] The Scott Lithgow management also noted that the hourly paid workforce had received a Fair Wages award that was higher than anticipated. Ominously, this award would worsen the Scott Lithgow position by a further loss provision of £2,000,000 even though wage parity with Govan Shipbuilders had still not been obtained. Furthermore, regarding the ESV, it was noted that the project management required would be to offshore industry standards, and that this would exceed even the naval standards that Scotts' were used to. On the naval front, the last of the Australian submarines, *RAN Otama* was due to be commissioned on 27 April, however, delivery would be possibly delayed on *RFA Fort Grange* due to the failure of GEC not having commissioned one of the lifts on the ship. On the mercantile side, on the three-ship order for Ocean Transport and Trading, it was noted that Cartsdyke was almost up to speed again after a serious dip prior to obtaining the Ocean contract. Problems, however, still persisted with the third super tanker, *World Score*. The tanker had suffered a speed deficiency in her first trials, and had now sailed to Rotterdam to undergo bottom cleaning, which it was hoped would correct her speed problem when she returned to the Clyde for further trials. Nevertheless, her owner, Dolman Shipping was 'seeking perfection', and the vessel had been on trials since December 1977.[19] Meanwhile, the position at Scotts' Engine Works had deteriorated and by the end of March 1978 the Scott Lithgow Board had expressed concerns over the lack of orders for main engines and noted that this work employed a quarter of the total workforce there. *World Score* had returned from Rotterdam, but had again failed her speed trials, this time in very poor weather conditions. However, it was considered that when the weather improved the vessel would easily meet her contract speed, with delivery pencilled in for April. [20]

In the interim, the naval outlook continued to look far from promising. In May, Belch wrote to the Director General Ships, R. J. Daniel, to reassure him that after a recent discussion that he had taken the necessary steps at Scotts' to ensure a suitable organisation and management structure was in place to meet MoD (N) future requirements. This was obviously necessary given the submarine situation and the fact that Scott Lithgow had placed such importance on the retention of RFA work to maintain employment at Cartsburn. Given this, Belch was evidently pleased that Daniel had agreed to meet him to establish the main reason why *RFA Fort Grange* had been delivered so late. Nevertheless, in mitigation, Belch bizarrely stated that apart from the submarine cable disaster, there were other reasons outwith Scott Lithgow's control, such as when the order was placed in 1971, his firm had anticipated taking around one thousand redundant men from UCS, but that this had not materialised.[21] By this stage, however, Belch's earlier admonition on timeous application of *force majeure* claims was brought into sharp focus, as he had earlier informed Peter Milne of BS that there might be difficulty on this account with Dolman Shipping over the third super tanker, *World Score*.[22] All things considered then, problems for Scott Lithgow were mounting by the day, and were about to get worse as BS had sent in a team of consultants from Touche Ross to investigate and report on certain aspects of the Lower Clyde firm's performance. In the event, the Touche Ross conclusions spread over forty pages were seismic, and are worth considering in greater detail as in many respects the report encapsulated the fundamental problems that the firm had faced and were to experience in the following years.

Touche Ross Report

On BS instructions the consultants, Touche Ross were commissioned over a three-week period in May-June 1978 to report on Scott Lithgow on the following terms of reference:

1. To establish the reasons for the unacceptable fluctuations in profit and loss forecasts given for the year 1977-1978.
2. To determine whether or not the losses incurred reflected inaccurate estimating/costing practices and procedures, or whether they had arisen as a

consequence of unrealistic assessment of selling prices made in order to secure orders.

3. To assess, depending on the outcome of 2 above, whether new quotations recently provided (for vessels not yet under construction) may give rise to similar losses.
4. To report to a Board member of BS, Maurice Elderfield on:

a) The reasons for the escalating losses being experienced, the unreliability of financial forecasting information, and the apparent lack of financial and cost accounting control.
b) Recommendations on how management controls might be improved
c) Recommendations on the principles and practices to be employed in cost estimating and sales pricing methods. [23]

Given the complexity of the companies within Scott Lithgow and the short time allotted to examine the firm in detail, Touche Ross faced a difficult task. In respect of putting into context the fluctuating forecasts made in the nine months after nationalisation ended 31 March 1978, Touche Ross believed it necessary to look at the trading patterns of the major component companies of Scott Lithgow for over four years preceding nationalisation. Accordingly, in the four and a half years before June 1977, they found that Scotts' Shipbuilding had in total, lost £2,700,000. As accounting policy provided for losses to be taken as soon as they had been recognised as such, then effectively Scotts' had been operating at an average loss of £600,000 a year. However, Scotts' Engine Works had operated at a profit of £1,400,000 over the same period. As both the shipbuilding and engineering companies were almost wholly integrated, Touche Ross thought it more helpful to see them both as losing £1,300,000 giving a combined loss of some £300,000 a year. [24]

Lithgows, in stark contrast, lost £8,500,000 over the period at a rate of almost £2,000,000 a year. However, the two smaller specialist yards, Ferguson at Newark and Scott of Bowling made good profits of £1,800,000 and £1,200,000 respectively. As the other companies in Scott Lithgow were comparatively insignificant to the study, Touche Ross did not examine them in any detail, but did note that Cowal

Engineering was a consistent loss maker and that steps were being taken to rectify its position. It was abundantly clear, therefore, that prior to nationalisation, losses on tanker construction at Lithgows accounted for Scott Lithgow's main problems on profitability and that the huge loss of £8,500,000 there turned a small profit for the other firms combined, into a £7,400,000 loss.[25] Touche Ross also noted that excluding Lithgows, losses were contained in a period of excessive inflation, and that this reflected some credit on the management of firms concerned. Scotts' had been obviously aided by having price escalation clauses in many of their contracts, but not in all. Ferguson Brothers and Scott at Bowling, both on short order books were not so subject to the damaging effects of inflation. However, at Lithgows the effects of fixed priced contracts had mercilessly exposed the firm to the worst effects of inflation. Indeed, the bulk of the losses had been incurred on two super tankers, *Nordic Commander* and *Nordic Clansman* taken on at fixed prices in 1969, and which were not delivered until 1974 and 1976 respectively. These tankers had been at first delayed by the late delivery of the 225-ton gantry crane from Arrol, which was deemed essential for their construction. Crucially, Touche Ross further noted that during construction it was found that both vessels were, 'seriously underestimated in terms of man hours owing to the lack of prior experience in building ships of this size'. In addition to the increased costs accrued due to these factors, the completion of these vessels was unfortunately undertaken in a period of unprecedented inflation, which exacerbated the losses.[26] This analysis, particularly the observation that an underestimation of man-hours contributed to losses on both vessels, seems unduly reliant on the Scott Lithgow historical viewpoint. Why, for instance, did management get the man-hours wrong on both vessels? It seems that the answer could be that man-hour costs were not properly recorded owing to the late delivery of the crane. Thus, on the construction of the second vessel the previous estimates were incorrect as a result. However, it may also have occurred because labour savings resulting from the use of the gantry crane were over-estimated, or on account of labour shortages, particularly in the steelwork trades, or indeed a combination of both.

Nevertheless, Touche Ross in respect of the factors comprising the budget variations dealt comprehensively with the main causes of the fluctuating profit and loss forecasts. By June, the consultants also noted that a further loss provision of £1,400,000 had been made in the final accounts for the first nine months of trading as part of BS, and that the adjusted increase in man-hours per ton on the fourth super tanker, *World Scholar* would be £400,000. Moreover, the revised total of factors contributing to overall losses within the direct responsibility of management amounted to £6,600,000 whilst further losses of £10,800,000 remained outwith their control. Touche Ross further noted that Scott Lithgow had a total order book of around £225,000,000 over the period under consideration for delivery over approximately three years. Consequently, cost increases such as the Fair Wages award or other costs caused by new legislation had to be extended forward over the period of each contract to establish adequate provisions for losses. Clearly, a shorter order book would have resulted in less loss provisions, however, the original budget forecast of September 1977 with a forecast profit, 'must have been optimistic in the light of past history and the uncertainty that shrouded many significant contracts'. Even though this combined with past unreliability of inflation provisions and the short order book at Lithgows, Touche Ross accepted that the original budget was treated as a target, rather than, 'a considered view of probable trading results'. In the February 1978 reassessment, however, further factors could have been quantified; but the downward revision in March of £6,000,000 was a result of a more conservative viewpoint. These reassessments arose from the determination of BS to anticipate all future losses; the results of the first comprehensive review of contract outcomes at Scotts' since June 1977; the full recognition of the effects of the Fair Wages award and BS HQ charges; and credit not be taken for various outstanding claims where results were uncertain. Taken together, the increased loss of £6,600,000 deemed to be within the control of Scott Lithgow management, 'would still have been sufficient to cast doubts on the Group's survival without nationalisation'. A factor given further focus by the probable results for the year 1978-1979, where loss provisions needed to take into account that the full utilisation of the Lithgow end of the operation depended on winning the ESV order in competition with Harland & Wolff if under recovery of overheads was not to ensue. [27]

The fact that forecasts had gone, 'so radically wrong in the past year', was in the Touche Ross view due to a number of factors. First, the lack of experience of Scott Lithgow directors in a large group of companies, and secondly, the relative inexperience in budgeting and forecasting techniques. It was also noted that the Scott Lithgow systems were moving towards budgetary control, but as yet were underdeveloped, and that some of the losses consequent upon nationalisation had been outwith management control. Nevertheless, other factors certainly were within the control of the firm. Given the general trading conditions pertaining in the industry, 'taking fixed priced contracts in a period of high inflation [would] lead to disaster whenever contracts are likely to be spread over a number of years'. Furthermore, incorporating untried equipment and new technology and where contract outcomes were dependent on delivery of equipment by sub-contractors exacerbated the situation. Touche Ross further commented that in relation to Lithgows, it was unable to find a single vessel that had been delivered before or on time within the past five years, a factor that inevitably contributed to losses through penalty clauses in contracts. [28]

As a wake-up call to possible problems if the BP ESV order was won, the Touche Ross assessment could not have been starker. Even though the consultants had found the Lithgow line management, 'dedicated and resourceful' they believed that two main and related problems faced the company which could lead Scott Lithgow as a whole into serious difficulty. The Lithgow yard had developed into a single contract business, where each contract would occupy the greater part of the firm's resources over a period of two years or more. Plainly, the firm was vulnerable to market fluctuations and if mistakes were made as on the super tankers, single contracts taken on at any price formed too large a proportion of the firm's business and subsequent losses had a bigger effect. On super tankers, Lithgows had entered a business with which it was not familiar and had to learn by its own mistakes. However, as Touche Ross starkly noted, Lithgows was proposing to do the same again with the ESV contract, and in future when it hoped to build an oil production platform. In the interim the ESV contract exemplified the Lithgow dilemma, and Touche Ross noted the problems and risks that the company could well face in the coming years. First, the contract had already been tendered for a fixed price without profit margins or adequate contingency provisions. Second, the technology involved was new to Lithgows and could result in delays in completion. Third, the contract had been accepted on a tight delivery schedule that was dependent on things going well. Fourth, the start of the contract depended on whether the last tanker, *World Scholar* was completed on time and on suitable civil engineering work to strengthen the berth being undertaken on schedule. Last, it was also noted that there was a number of nominated sub contractors who were new to the field, and who were not under Lithgow control. Therefore, their performance would affect the timing and the cost of the contract. Given this combination of factors, Touche Ross considered that they were not capable of assessment, and in this regard, Ross Belch's view of the contract as costing, ' plus or minus £5,000,000 on the tender price might well be an underestimate, particularly on the downside of risk'. In conclusion, Touche Ross considered that measures should be undertaken to improve the financial and cost control procedures of Scott Lithgow, and that estimates should as far as possible conform as closely as was practicable to actual cost outcomes on each contract. In addition, the firm had to provide an integrated cost control system encompassing labour, material and overhead expenditure based upon labour targets, material estimates and overhead expenditure budgets. Fundamentally, a management control system had to be designed that incorporated the above, and which crucially was capable of reconciliation with the financial accounts. Plainly, Touche Ross did not think that Scott Lithgow could achieve this of its own volition, after all, the evidence they had provided supported this view. Accordingly, the consultants considered that outside assistance (Touche Ross) would be needed in the application of this work.[29]

To his credit, in reply to what was a frankly devastating report, Ross Belch's first reaction to it was that it was generally fair. Nevertheless, he attempted to qualify certain points, and pointed out that labour shortages when building vessels with such a large steel content had contributed to losses, as did the need to continually introduce crash training programmes for apprentices and dilutees. Belch did, however, admit, with breathtaking understatement, that there was no doubt that the move into giant tanker construction, '[had] not proved to have been an outstanding success'. He again tried to qualify this by stating that the Shipbuilding Industry Board had supported the move into this type of construction in 1969, as had market projections. Belch then noted that there was little hope of keeping Lithgows going with normal merchant ships, there was at the moment no market for tankers or bulk carriers, and it would be difficult to find three or four cargo liners each year, which was needed to keep production viable. Although there was a large element of risk in building the ESV, Belch believed that the firm had made the right decision in the early 1970s to move away from Lithgows traditional shipbuilding market towards the offshore structures market. He was also satisfied that if the firm were awarded the ESV, then it would have been as a result of quoting a low price. Moreover, even if a substantial loss were made, then it would have been probably less than the amount needed from the Intervention Fund if normal merchant ships had been built in its place. [30] This argument was at best disingenuous and at worst, complacent. Given the dire market situation, Scott Lithgow could in no circumstances rely on winning any mercantile work in any event, and its naval strategy on submarines was now entirely restricted to refits until it could possibly bid for a new generation of conventional submarines sometime in the future. Again, given the clearly documented past failures of Scott Lithgow management by Touche Ross, and with a BS representative on the Scott Lithgow Board, one must conclude that employment considerations were paramount, and that this was particularly the case in respect of Lithgows operations at Port Glasgow.

By July 1978, however, Michael Scott and Sir William Lithgow had resigned from the Board of Scott Lithgow thus ending the last vestige of family involvement in the firm. Ross Belch now became Chairman, with Alan McNeilage becoming Finance Director. In the following month it was publicly announced that Scott Lithgow had won the BP ESV order. This column stabilised semi submersible represented the largest contract at a price of £60,000,000 ever placed in a British mercantile yard. The ESV would be seventy-five per cent owned by BP and twenty-five per cent by the British National Oil Corporation (BNOC) and when built would be based in BPs Forties field in the North Sea for emergency fire fighting and lifesaving duties. Its two pontoon hulls would house machinery, propulsion units and thrusters, and would be dynamically positioned by computer, with further buoyancy being given by six columns supporting the deck.[31] It remained to seen, however, whether

Lithgows, in light of demanding offshore standards, could limit its losses to an acceptable level on this contract.

In the interim, work on the last super tanker, *World Scholar* was progressing, but Dolman Shipping had refused to accept *World Score*, which had been dogged by problems since undergoing trials from 1 December 1977. The completion of *World Score* had been beset by engineering problems, including the condenser, main engine exhaust lines, cargo pump exhaust lines, cargo pumps and Danish manufactured Aalborg boilers. However, there were other areas of dispute with the owners on technical and specification grounds, which meant that Dolman had adopted a policy of reviewing the entire construction of the vessel along with the original specification. Even though subsequent modifications had been agreed, and in most cases represented improvements, Belch noted that the owners were seeking to reject the vessel, but that Scott Lithgow, nevertheless had to sort out the boilers and meet the revised delivery date of 4 November 1978 in Greece.[32]

By this stage, however, Scott Lithgow had attempted a Corporate Plan, which had been subsequently revised into preferred and contingency plans. Under the preferred plan, Scotts' Cartsburn and Cartsdyke yards would continue in full production, but mainly on naval work, with facilities to be rationalised. Scotts' Engine Works would continue on the basis of two main engines per year, and Lithgows would enter full production on the ESV, with Ferguson and Scott at Bowling continuing as they were. Under the Contingency Plan, however, Cartsburn would continue mainly on naval work, but the labour force equivalent to the Cartsdyke numbers would be made redundant. Main engine building would be terminated at Scotts', Lithgows would continue with the ESV and possible orders for Tension Leg Platforms, but Bowling would close and its work would be transferred to Ferguson. In light of the Touche Ross report, however, Belch noted that investigations were proceeding satisfactorily and that regular progress meetings were being held with the hope that substantial benefit would accrue from the exercise. Belch nevertheless stressed that it was essential that management in the individual companies hold regular monthly meetings to review all current matters including accounts and outcomes to be submitted to BS. In all of this, however, no mention was made of establishing a dedicated project management team with overall control of the ESV, and with real responsibility for planning and budgetary control throughout the construction period. [33]

In November, Belch welcomed Philip Hares, the Managing Director of Finance at BS onto the Scott Lithgow Board as a non-executive Director. Hares would be empowered to act for the firm in all matters including its banking facilities. Alike *RFA Fort Grange*, *RFA Fort Austin* had been delayed due to alterations on the former being duplicated on the latter. The drill ship, *Pacnorse 1* would be delivered in January 1979, but the three cargo liners for Ocean had been delayed by the late delivery of the stern frames and by a strike at a sub contractor, Navire, who were to supply the hatch covers. However, a new line of work had been agreed with Vickers for the manufacture of rings for the pressure hulls of nuclear submarines, which would provide work for 100 men for a period of at least five years. Belch stated that this contract had been accepted at a price that should prove to be break-even after the initial learning curve had been surmounted. Controversy continued, however, over the placing of the *HMS Oracle* submarine refit, with the decision to be made by the Secretary of State for Defence. Belch stated that this would be made on political grounds, as the Scott Lithgow estimate was still higher than a comparable bid from a Naval Dockyard. It was nevertheless essential that this refit be won to retain submarine skills in the firm until a new generation of non-nuclear submarines was introduced probably in 1982-1983. On future prospects for engine building, with the last main engine from Scotts' due to be completed early in 1979, Belch stated that there must be a recognition that the Engine Works were unlikely to obtain orders for two main engines per year. As a quarter of the workforce there were engaged in this activity, other employment had to be sought as a matter of utmost priority, The alternative was redundancy and consequent under recovery of overheads. However, *World Score* had finally been accepted by her Greek owners after a settlement of their claims amounting to £3,450,000 had been reached, of which Kincaid had paid £1,000,000. To achieve the delivery date, Lithgows had removed parts from *World Scholar*, in this light they had to be replaced before December 1978, otherwise a further penalty of £250,000 would be invoked. [34] The eventual settlement on *World Score* had resulted from a long series of meetings and legal opinions, which had to include the Bank of Scotland as signatories to the original MFC contract for the vessel. [35] On the ESV front the initial design prepared by BP was in the process of being appraised by Scott Lithgow's technical team and the Dutch consultants, Gusto. Due to delays in clarifying specifications, it was anticipated that the delivery date would be extended until May or June 1981. In light of this, consideration would have to be given to increasing technical and administrative support for the project. Moreover, a five-week strike by Boilermakers at Ferguson Brothers over parity of allowances with Govan Shipbuilders for working on Polish ships had ended with no concession, but had cost the company £100,000 in under recovery of overheads. Added to the loss for the six months to 29 September 1978 and the forecast for the year ended 31 March 1979, a loss of £7,000,000 was anticipated. [36]

Towards the end of 1978 the gloomy situation continued for Scott Lithgow, with Ocean still refusing to pay instalments amounting to £3,600,000 on the basis that the vessels were not being built in the agreed sequence, and that the instalments were not due before the indication dates in the building schedule. However, the *HMS Oracle* submarine refit had been 'won', but BS had made the decision that in future no further main engine building would be carried out at Scotts'. In this light, Belch noted that the future of the company lay in co-operation with Kincaid, with consultants already drawing up a report due in January or February 1979 on this point. At Lithgows, a director, Hugh Currie reported that both cargo liners built for Furness Withy, *Oroya* and *Orapesa* had experienced engineering problems due to the propeller failing to attain the desired revolutions. In view of the effect of the protracted Ocean dispute on working capital, Belch advised that the contract for the ESV would be signed shortly, and that Lithgows had obtained a favourable instalment that would help the cash flow position considerably. The BS Director, Philip Hares, nevertheless noted that the budget forecast for 1979-1980 showed a loss before interest of £8,000,000 and that the firm contracts for 1979 only absorbed forty-four per cent of the available labour and overheads. Even after the assumed contracts, there still remained sixteen per cent of labour and overheads under recovered. This was after a reduction of nearly 800 employees due to redundancy and retirement of employees over sixty-five. Accordingly, Hares felt that there should be a further review undertaken of the numbers employed by the firm, but he did indicate that BS had approved the necessary capital expenditure in order to build the ESV. [37] Clearly, given the inherent risks of the ESV contract, and the likelihood that if the performance on the giant tankers was anything to go by, it would in all probability result in a financial loss. Again, BS obviously had employment considerations primarily in mind. Nevertheless, the first full year of nationalisation had proven to be one of increased centralised scrutiny by BS of Scott Lithgow's activities. There was, however, absolutely no guarantee that the hard won lessons on financial scrutiny and control would be carried out with virtually the same team of directors that had been at the helm of the firm prior to nationalisation. Scott Lithgow, primarily, remained a collection of individual firms at heart. Of these, the closure of the ship repair arm, Scott Lithgow Dry Docks, which had been extensively used for new building work, had been announced in October, and the future of the Engine Works was far from certain.

For BS, charged with saving an industry that apart from the designated warship builders seemed to be in terminal decline, the situation remained critical in the worst commercial climate the industry had known since the interwar period. By 1 January 1979, however, an agreement between BS and the Confederation of Shipbuilding & Engineering Unions had come into operation, which established a radically new wages and salaries structure, together with a single negotiating date. This was a crucial breakthrough as it had replaced a system whereby 186 separate negotiations took place in the industry in any one-year.[38] This apart, alluding to the contemporary general situation in shipbuilding, Ross Belch stated that if there was any consolation in the present position, 'then things cannot get any worse'. [39] His view was at least understandable given that Scott Lithgow had made a pre-tax loss in the first nine months of nationalised trading on its consolidated accounts, again qualified by the firm's auditors, amounting to £23,809,000. [40]

These losses were clearly unsustainable, and were obviously foreseeable before nationalisation. As an academic, Dr. R.A. Bryer later noted, at Vesting Day on 1 July 1977, Scott Lithgow claimed to have assets amounting to £40,400,000 (fixed assets plus current assets) and the firm's shareholders claimed to own £5,270,000 of them (share capital plus reserves) the creditors had claims to the rest. However, in the 1978 accounts, £39.800,000 of these 'assets' were written-off. and the firm was left on balance owing £28,750,000. Therefore, the liabilities exceeded the assets. As a nationalised company, Scott Lithgow at this stage was neither technically bankrupt nor insolvent. Bryer further noted that the big write-offs in 1978 included one of asset 'revaluations' by the directors in 1973 of £12,500.000. which kept their equity interest 'positive'. A jump in the assessed provisions for both current and future provisions and a relatively large, with no explanation, provision for losses in subsidiary companies of £7,300,000. Bryer's opinion was that, 'it was too incredible to believe that these changes, causing this level of asset write-offs after nationalisation came as a surprise to the directors'. Accordingly, an inference could be made that prior to nationalisation the accounts did not reflect the true position of the company. [41] Given, however, that for most of the pre-nationalisation period. the accounting strategy at Scott Lithgow, (although significantly derailed by a period of unprecedented inflation) rested on profits on certain vessels and government grants eventually outweighing losses, and that the asset revaluation in 1973 reflected the modernisation of facilities, the Bryer view has some force. This is so not only in terms of eventual compensation for shareholders, but when it is considered that asset revaluations are subjective and are often made on the basis of a going concern. and therefore in a bankruptcy situation are almost worthless. Taken in conjunction with the Touche Ross report, therefore, there is absolutely no doubt that nationalisation saved Scott Lithgow. Moreover, any revisionist views such as those given to the author in unattributable interviews that the firm's troubles began with nationalisation are nonsensical.

Scott Lithgow had, nevertheless, for the year ended 31 March 1979 on the back of over a threefold increase in turnover, reduced its loss for the year before tax on consolidated accounts. which were again qualified in certain respects, to £12,473,000. On an analysis of trading results, Scotts' Shipbuilding and Engine Works lost £4,494,000 and £1,153,000 respectively. Lithgows Limited topped this with a loss of £6,421,000. Bowling lost £451,000. and Cowal Engineering lost £264,000. In contrast. Fergusons made a profit of £97,000, Caledonia Joinery a profit of £167,000, Newark Ferguson a profit of £28.000 and Caledonia Fabrications a profit of £18,000.[42] Clearly, by this stage, it was already apparent that Scott

Lithgow's future would increasingly stand and fall on the success or failure of its entry into the large offshore structures market. By March 1979, however, delays on the ESV had already been experienced caused by Scott Lithgow's inability to finalise sub-contractors contracts due to the delay in signing the main contract. Belch, nevertheless, had informed the Board that he had submitted a final tender to Shell for a Multi –purpose Support Vessel (MSV) at a price of £69,500,000. Echoing the Touche Ross line, Belch also informed that in his opinion, 'a substantial proportion of recent losses had been due to the rationalisation of Lithgows into a single project company'. Moreover, 'similar costs were anticipated in the closure of the Cartsdyke yard at Scotts' and the cessation of main engine building at Scotts' Engineering'. This was a clear indication that Cartsdyke had been already earmarked for closure and that its operations would be integrated into the Cartsburn facility. Scotts' Engineering Director, J. F. Robb noted that the P-E Consulting Group had completed their review on the rationalisation of marine engineering on the Lower Clyde. However, the P-E recommendations were based on the rather optimistic view that there would be a requirement for nine main engines per year and on the even more optimistic view that work would continue on building conventional submarines at Scotts'. According to Robb, a more realistic figure was four main engines per year and submarine refit work rather than new construction. However, a substantial proportion of Scotts' Engineering premises would be vacated and could be made available for the storage of heavy equipment.[43] Meanwhile, *HMS Oracle* had arrived early in March at Cartsburn for her refit. And, in April it was announced before the General Election that the contract to build the Seabed Operations Vessel (SOV) that Scott Lithgow had spent two years in designing would be formally placed in the next few months. Contemporaneously, the launch from the Cartsburn yard of the first of the Ocean cargo liners, *Maron* had taken place. [44]

In April, the Scott Lithgow Board had also decided, in line with the P-E report to recommend to BS that main engine building should be concentrated at Kincaid, and that part of Scotts' engineering works south of the railway would close to be used for heavy storage. However, it was likely that work in the heavy machine shop would soon run out some two months before BS were due to make a decision on the future of the works. It was also noted that a tender had been submitted for support tankers to MoD (N) but that Scott Lithgow had quoted the highest price.[45] Meanwhile, the award of the Shell MSV contract had been delayed until after the General Election in May, which resulted in the Conservative Party being elected to govern the country. By June, however, the MSV had been awarded to the Finnish company, Rauma Repola at a price that was a fantastical £30,000,000 below the Scott Lithgow tender. According to Shell, the Finnish tender was not only the lowest but also offered one of the shortest delivery periods. The local MP, Dick Mabon who had a series of meetings with the new Industry Secretary, Sir Keith Joseph about the MSV called the decision to award the contract to Finland, 'despicable' and alleged that the Government had done a deal with the Finns to build aircraft in Britain.[46]

By August, however, the Cartsdyke yard, formerly the Greenock Dockyard Company had launched its last ship, the second Ocean cargo liner, *Mentor*. This prompted an announcement from BS that 500 redundancies would accrue in Greenock, 300 of which would take place at Cartsdyke. Cowal Engineering was also to close, as would part of the Engine Works, and over the next eighteen months, Scott at Bowling would also be closed. This news provoked a one-day token strike in protest by Scott Lithgow employees and precipitated a ban on overtime, launches and trials. With the ESV order dependent on the completion of the last super tanker, *World Scholar* by the end of December, any ban on overtime was potentially disastrous, and despite the employees of Ferguson Brothers banning the launch of a Polish ship, the ban was eventually lifted in early September. [47]

This sensible decision was followed two weeks later by an announcement that MoD (N) had finally awarded the contract to build the SOV to Scott Lithgow, a contract that promised three years work to around a thousand employees. Indeed, the good news on employment continued in October, when it was announced that Lithgows had been awarded in conjunction with the lead yard for design and build, Swan Hunter, one of two 109,000 tonne segregated ballast oil tankers from BP. With Kincaid providing the engines, these two tankers were the first ordered by the oil major since the shipping recession of 1973. Clearly, with foreign shipbuilders also tendering, the S I F had played its part to allow BS to put together an appropriate financial package on price and credit to secure the two-vessel order at a price of over

£40,000,000. However, the precise cost remained difficult to quantify, as the price formed only a part of the overall financial package. As John Parker, for BS, commented the contracts provided a valuable contribution to the workload required ensuring the future of core yards. Although, in relation to BS as a whole he admitted that, 'it would be overstating the case to say that the tide had turned'.[48]

Meanwhile, with the mercantile market subject to increasingly fierce competition, naval profits remained crucial both for Scott Lithgow and BS. In this light, any move by the MoD Procurement Executive (MoD (PE), to insist on fixed price contracts had to be resisted. At present the requirement arising from an agreement with the Organising Committee prior to nationalisation by MoD (PE) that BS warship building subsidiaries should not liaise with one another on prices in the manner of the Warship Group had proven to be nothing more than a 'pure fiction'. The two main problems of fixed prices appeared to be MoD knowledge of individual yard man hours, costs and overheads gleaned from historical accounting control, and the fact that constant design changes to keep up with rapidly changing technology made the imposition of fixed prices difficult. In the latter case it was the experience of some yards that MoD tended to drop fixed price requirements when asked for a fixed specification. BS, had, however, informed the MoD that it wished to protect itself and that it had instructed some of its constituent yards to declare that on BS instructions they had advised BS of their price. Clearly, by liaising together, but negotiating separately on other than fixed price contracts with the MoD, the warship yards in total could maximise BS profits, particularly when other subsidiaries acted as sub contractors. Accordingly it was felt that in light of numerous factors that a standing committee should be formed within BS as a forum for liaison but not policy making.[49] This was in effect an addition to the regular meetings already carried out with warship and mixed shipbuilders chief executives that basically fulfilled the function of the old Warship Group of private builders.

On mercantile and mixed naval and mercantile construction it remained axiomatic that to secure orders and to obtain the maximum benefit from the S I F that costs of construction had to be reduced by increases in productivity. Moreover, if BS targets were to be met its employees had to be made aware of the serious situation in shipbuilding, and it was decided to do so through the medium of an audio visual presentation. Subsequently it was agreed that two presentations would be made at Scott Lithgow with all shop stewards, managers and directors present on 21 November 1979. [50] By this stage, however, it was also evident that many of the constituent companies of BS balance sheets did not provide a proper basis to measure a return on capital employed. In this regard it is worth quoting the following in full, as it provided the basis of BS plans for capital restructuring in the future.

> Some [balance sheets] show an insolvent situation and, as a result of past years' losses, some adverse current accounts are so large that the burden of paying interest to BS is likely to ensure that the subsidiaries concerned could not make an adequate return even in a good market environment. ... Since nationalisation merchant shipbuilding has operated in a price insensitive market, and if the capital restructuring had taken effect from 1 July 1977 the subsequent losses would, in many cases, have resulted again in unusable balance sheets. [51]

To counter this, BS proposed as 1980/81 was the first year of its five-year Corporate Plan based on, 'market and productivity predictions designed to make the industry viable', then in order to put constituent yards on an equal footing, capital restructuring should be undertaken at 1 April 1980. It was proposed that an equity value of firms would be established equal to the value of the fixed assets and stock, 'on the premise that this was the basic facility required to undertake the business'. Working capital would be regarded as 'nil' and would therefore provide an incentive to firms to try to finance their current assets less stock (work-in-progress, debtors etc.,) from creditors and instalments. Any imbalance would be reflected in the BS current account, and those constituent firms successful in achieving positive cash flows on working capital would receive interest. By contrast, those firms with negative flows would pay interest. [52] When re-stated in December 1979, the basic principles behind capital restructuring were, to establish a reasonable capital account based on Fixed Assets and Stock. To encourage firms to balance working capital requirements by not letting debtors exceed creditors or work in progress exceed instalments and to put firms on an equal footing at 1 April 1980 for interest receivable/payable purposes by eliminating previous profits/losses from the BS

Current Account Balance. This would also take into account the need to account for and adjust over/under estimates of creditors for capital expenditure, over under estimates of stock, over/under estimates of loss provisions and delayed payments of credit balances. [53]

By January 1980, however, Scott Lithgow's problems with delays in its building programme had continued with the three Ocean ships slipping back. However, Dexter Shipping had finally accepted the last super tanker, *World Scholar* after a payment of £4,000,000 by Lithgows Limited. [54] In addition, shortages of technical staff, and labour unrest as a result of attempting to claim an oil-related claim to work on the ESV, had also contributed to slippage as had a number of skilled workers leaving for better paid employment elsewhere. Moreover, although Yarrow was in a position to help with electrical work, the old problem of pay parity had intervened. [55] To this, Peter Milne of BS naturally expressed concern, particularly on the ESV, and also suggested that a production director responsible for the overall shipbuilding programme and the resources to meet it should be appointed. [56] Ross Belch had by this stage, after many years at the helm of Scott Lithgow, already intimated to BS his intention to retire. In February, Belch pointed out in a launch speech for the third Ocean vessel, *Myrmidon* that during the past year that Scott Lithgow had closed Cartsdyke and Bowling, and that from 1975 when Scott Lithgow employed 9,000 men, the workforce had been subsequently reduced by a third to 6,000. Although the direct labour force had contracted, overheads did not do so on a corresponding level due to the move into oil related work where owners required a high level of modern plant and equipment, and that technical departments be kept at full strength.[57] Against a background where it was already apparent that British mercantile shipbuilding was no longer internationally competitive languishing in eleventh place in the world and in danger of being overtaken by Taiwan, Belch's admonition that there would be no more launches in Greenock in 1980 was particularly apt.[58]

Belch's observation on diminishing manpower was brought into sharper focus in the following month over BS insistence that a further 895 jobs had to go at Scott Lithgow. Although he well understood the difficulty of obtaining new orders, Belch was of the opinion that Scott Lithgow as presently organised was becoming 'totally unviable' and could no longer sustain the overheads required to maintain a presence in the naval and offshore fields. Accordingly, the most positive solution advanced by Belch was for BS to load the yards with work and increase the direct labour force. Moreover, the current situation regarding employment was having a serious effect on morale throughout Scott Lithgow, and restructuring had entailed substantial losses resulting in the firm becoming less competitive. Furthermore, if the 895 men were made redundant in the coming months then according to Belch, Scott Lithgow would be unable to meet even its present contractual commitments.[59]

In the interim BS had asked John Peach, of Fergusons to undertake a study on the reorganisation of small shipyards on the Clyde. [60] Accordingly, on the completion of the Peach report, BS had decided to operate Ferguson Brothers as a direct subsidiary and therefore to separate the Newark yard where Peach would be chairman and chief executive from Scott Lithgow. Moreover, Ferguson would now have a more direct relationship with another BS small shipyard, Ailsa at Troon, where Peach would also become chairman. This was necessary as it was planned to construct on a joint basis a liquid gas carrier.[61] This order, from Gibson Brothers of Leith, a subsidiary of the Anchor Line, with Ferguson constructing the fore section and Ailsa the aft as the total length of 105 metres was too long for each yard to construct individually, was subsequently won in May, at a price of £9,000,000. Thereafter, Ferguson and Ailsa formerly merged in November 1980 under the title Ferguson Ailsa [62]

Clearly, as Belch had earlier noted in light of the now much reduced manpower requirements of what was left of Scott Lithgow, a major restructuring of its constituent companies was necessary to reduce overheads and to also reflect the reduced workload. It was likely that Scott Lithgow would now be reformed into one operating company, however, the position of the Engine Works still required clarification. Nevertheless, the composition of the Board would reflect functional managerial responsibilities rather than the operating units, and would thus cut out a great deal of duplication. As a first stage toward the overall concept, it was agreed that Caledonia Joinery and Caledonia Fabrications would be brought back into the fold and would therefore cease to operate as separate companies. [63] Subsequently, in 1981, the employees, assets, contracts and businesses of the constituent companies were transferred to Scott Lithgow Limited, which became the sole trading company. By April 1980, however, Ross Belch's successor as Scott Lithgow chief executive, Cameron Parker, formerly of Kincaid, had been appointed a Director. And in the following month it had been reported that Ocean had accepted the first of their three cargo liners, but only after a settlement for liquidated damages for late delivery of £950,000 had been negotiated. As to the remaining two, loss provisions had been made amounting to £2,000,000. However, the Cartsburn end of the operation had received another submarine refit, *HMS Orpheus*, which was of considerable help to the firm. [64]

By July, Ross Belch duly retired, and Scott Lithgow had posted a record loss after tax of £41,761,000 for the year ended 31 March 1980. This accounted for more than a third of the overall losses of BS, and was nothing short of disastrous, with accumulated losses now standing at £96,561,000. [65] However, these accounts, which were not qualified, also heralded a change in accounting policy. Until 1980, as Dr. Bryer again noted, the sales recorded were of the value of work that had been delivered during the year. In 1980 this was reported, as was the value of work completed during the year. Because the latter method (the percentage of completion method) allows the anticipation of profits and losses, it produced, 'quite different results'. That year, the sales value of deliveries was £105,300,000 the sales value of work done was only £63,300,000. [66] Uneven production, closures, under recovery of overheads, penalties for late delivery, interest payments on internal borrowing from BS, and substantial loss provisions had all contributed to this sad state of affairs. Up to this stage, Scott Lithgow had been committed to pay large amounts of internal interest on monies borrowed from BS, a situation, which if it persisted was likely to ensure that the firm could not return to profitability. To encourage Scott Lithgow, and other constituent firms to strive for viability, part of the monies borrowed from BS had been converted into non-interest bearing loans sufficient to support the fixed assets and stocks at 1 April 1980. [67]

Clearly, restructuring and re-organisation of Scott Lithgow were absolutely necessary. This was also true of BS, where a new chairman, Robert Atkinson, had assumed his responsibilities in July 1980 and had to announce a trading loss for the corporation of just under £110,000,000. By this stage, BS had closed Austin and Pickersgill's South Dock Yard, Smith's Dock Haverton Hill Yard, Sunderland Shipbuilders North Sands Yard, and Govan Shipbuilders Scotstoun Yard. At Swan Hunter, BS had placed the Walker yard on a care and maintenance basis, closed the building berths at Redheads, and integrated a berth at Hebburn with Hebburn Dock. This, in addition to shipbuilding at Bowling and Cartsdyke ceasing, in tandem with redundancies had resulted in BS mercantile workforce, which at Vesting Day amounted to 39,000 being reduced to 20,500 by March 1980. Slow speed main diesel production had ceased in the previous year at Barclay Curle, and had by this stage ceased at Scotts'. Cowal Engineering had been transferred to Kincaid, and the Greenock firm had now become the centre of BS engine building in Scotland. [68]

By August 1980, however, industrial unrest had returned to Scott Lithgow with members of the Boilermakers Society walking off the job for a period of nine days after a confrontation with management over allowances for dangerous work on the BP ESV, now named *Iolair*.[69] On 7 October, after only three months in the job, a clearly exasperated BS chairman, Robert Atkinson delivered a lengthy and wide-ranging statement to the chief executives of constituent firms at a shipbuilding seminar held in Newcastle, which is worth considering in detail. During his first three months in charge Atkinson had noticed that a poorly defined organisational structure existed at BS HQ and throughout the corporation. Muddled thinking was rampant, and there were insufficient numbers of experienced shipbuilders and engineers in charge of key areas of BS business. Moreover, extravagance was rife, and financial control systems were poor across the corporation, as was productivity. All things considered, Atkinson believed that a lack of will and determination to succeed existed. On the other hand, however, there remained a number of talented individuals at HQ and in individual yards, and there were excellent facilities in the core yards. Since Vesting Day, BS had also been subjected to a continuous process of adjustment and restructuring. Atkinson's brief was essentially to limit losses and in the longer-term to provide an adequate return on capital employed. Nonetheless, he found this to be too negative and preferred the task of making BS viable. In this respect the route to profitability lay in a policy of applied centralised financial control and decentralised operational and management control through a divisional organisational structure. Atkinson believed that BS hardly needed to be told that its financial performance had been 'appalling'. Given this, however, BS could not and would not be allowed to continue, and yards should be put on notice that full overhead recovery was now a *sine qua non*. Atkinson then addressed each and every member of BS present in the following terms:

a. There are companies, which made profits before nationalisation but have not done since.
b. There are companies where the decline is even more recent.
c. There are companies, which are making consistent losses and have done so for a long time.
d. We cannot tolerate this since cash limits will not allow it. The majority are being endangered by the minority.
e. Where there is no prospect of a reasonably clear return to profitability then the future of that entity will be questioned,
f. Where an entity consistently fails to achieve budget then a question mark must be similarly raised concerning the suitability of management.
g. Those who cannot face that style of administration may be wise to consider employment outwith the Corporation. [70]

There could be no more damning indictment of some of the BS constituent firms than this. Atkinson did not spare the BS HQ culture from criticism, however, as he remained deeply concerned over extravagance and costs. Accordingly, he had decided to relocate to Benton House in Newcastle and therefore vacate most of the Knightsbridge building in London, and also to sell the BS aeroplane to significantly cut costs. However, even greater savings would accrue in reductions in motor vehicles, canteens, travel and hotels and in staff numbers. With identical cargo liners taking six months to build in Japan and twenty months in a BS yard, and a products carrier that took twenty-two months to build in Britain being completed some nine months earlier in a continental yard the shipbuilding situation was serious. Atkinson therefore proposed to create five new divisions in BS comprising a ship repair, warship building, merchant shipbuilding, engineering, and an offshore division. On the latter, Atkinson believed that BS should become more committed. Ominously for Scott Lithgow, however, offshore status would preclude the firm from seeking S I F assistance. Nonetheless, all of the chief executives present including Cameron Parker could have been left in absolutely no doubt that Atkinson meant what he had said. The Conservative Government of June 1979 had given the industry two years to sort itself out, and as Atkinson noted that deadline expired in eight months time. Everyone present was well aware of the intransigence of the Thatcher led government on matters of economic policy, and it was therefore up to management to provide solutions to improve performance and come up with early results. What was essentially needed as Atkinson further stressed, was 'a new attitude of mind'.[71]

Contemporaneously, the possibility of the Scotts' end of the firm becoming a future contender to build nuclear submarines was discussed at Scott Lithgow Board level. It will be recalled that Scotts' were considered to be too small when the MoD chose Cammell Laird in 1963 as the follow on builder to Vickers on the Polaris programme. Parker then asked for a paper to be prepared outlining the cost implications. After discussion with BS Operations Department it was estimated that Scott Lithgow would require some £83,000,000 spent on facilities whereas Cammell Laird who already had a covered berth and floating dock, which Scotts' did not, would require £28,000,000. Parker, whilst questioning whether a floating dock was necessary, concluded that it was not worth proceeding with the project.[72] Quite who had raised the question in the first instance, BS or Scott Lithgow remains unclear, but any attempt to do so would require a great deal of capital expenditure, which by that stage was conspicuously absent in any event.

Scott Lithgow and the Offshore Division

Two days on from the Newcastle meeting it had been publicly announced that Scott Lithgow would be at the centre of the BS Offshore Division. Atkinson, however, had admitted that the shipbuilding industry in general had lost fifteen years of opportunity in an area of activity that was a natural for BS. According to Cameron Parker, the decision to place Scott Lithgow in the division reflected a desire to attract more orders from offshore oil related firms. Furthermore, Parker also stated that the Lower Clyde firm had the resources to build two oil rigs or floating platform facilities in a year.[73] Although the lack of demand for drillship production had already foiled Scott Lithgow's plans to build these ships in series, the construction of two of these vessels, *Ben Ocean Lancer* and *Pacnorse 1* had at least introduced the firm to building to offshore standards. The ESV, *Iolair*, (Gaelic for Eagle) however, was another step up altogether, and more so were semi submersible platforms, which the firm also had in mind to build. In this regard, Scott Lithgow had agreed in principle in February 1975 with the French firm, CFEM who were developing a suitable design for a steel gravity based production platform. This agreement was formalised in September of that year and two joint companies were formed to design, market and construct this platform. Although £1,000,000 was spent on this project by both firms, the venture was ultimately unsuccessful, despite extensive marketing efforts. [74] Another venture, Scott Lithgow (Offshore) Limited was formed in January 1977 to co-ordinate the firm's oil related interests. And, in April an agreement was signed with Deep Oil Technology of Long Beach, California whereby Scott Lithgow gained exclusive rights to market the American company's tension leg production platform in the UK. [75] Given their experience in offshore-related activity then, Scott Lithgow's inclusion in the Offshore Division could not be derided as an aberration. Nevertheless, it also allowed BS to divest itself of its largest loss maker on the mercantile side, and as the move precluded Scott Lithgow from SIF assistance, it left those firms remaining in the new Merchant Ship Division with a better chance to access it. Moreover, with Scott Lithgow's appalling record of losses, the switch in emphasis did at least give a guarantee of continuing employment to the remaining workforce.

By November 1980, Cameron Parker, who had a successful record in managing Kincaid, but who had agreed to take the reins at Scott Lithgow in the most difficult of circumstances, had also been appointed Head of the BS Offshore Division. At this stage the Division comprised Scott Lithgow and Vickers Offshore (Design and Development) and the BS Offshore Marketing Department based at Knightsbridge. This prompted an admission that for the moment Scott Lithgow were no longer tendering for merchant ship [no S I F assistance] orders, but that the firm was still tendering for naval work and were hopeful of obtaining another submarine refit contract in the following summer. With the future of the firm now primarily in the offshore sector it was announced on 17 November that Scott Lithgow had won a

£50,000,000 order for a semi submersible platform for BP to a Sedco design, which would follow on after the construction of the ESV. *Iolair*. It later transpired, however, that the South Koreans had quoted a substantially lower price some $30,000,000 less than Scott Lithgow had. Nonetheless, according to a spokesman, BP had apparently negotiated a separate tax and financial package with the British Government; in all probability involving substantial tax write offs on North Sea work, but had refused to give details. Cameron Parker, in another sense, was more forthcoming when he admitted that the BP platform order would not be very profitable, 'at least under current levels of productivity'. Moreover, despite thirty high value semi submersible orders being placed worldwide in the past two years, Parker acknowledged that the international market was, nevertheless very difficult. Indeed, the main impact of the order was as Parker admitted, 'to provide continuity of employment for nearly everyone in the group for about a year, and give us a period of stability in which to improve our performance'.[76]

Just how the BP order had apparently been won in the face of intense international competition needs clarification. It would seem that to gain the order, the aid of the Ship Mortgage Finance Corporation had been enlisted on the basis that eighty-five per cent of the price would be repayable by half-yearly instalments over a period of 8.5 years from delivery. The first repayment would be due six months afterwards, with interest at eight per cent per annum. A price at 28 October 1980 had been set at £34,560,000 and the commercial cost of funds had been assumed to be fifteen per cent per annum, therefore the subsidy element would be equal to seven per cent per annum. In addition a discount rate of fifteen per cent per annum pertained. The calculation had been generalised on the basis of £1,000,000 of price, and then multiplied by the relevant price factor. This showed, 'a gross cost to Scott Lithgow over 10.5 years of £4,100,000 and a value discounted to delivery at fifteen per cent per annum of £1,900,000'. Obviously this was subject to a further trimming in the price to obtain the order. It transpired, however, that the subsidy would give rise to a loss for BS if it was dealt with in same way as the BP segregated ballast tanker orders now building at Swan Hunter and Scott Lithgow. Indeed, as was noted, this would be in contravention of Robert Atkinson's statements on loss contracts for offshore work. [77] Two days later, however, Atkinson wrote to the Department of

Industry regarding the Offshore Division and stressed that this diversification from mercantile work, particularly at Scott Lithgow and for Cammell Laird (the first time the Birkenhead firm had been mentioned in this light) was crucial to future employment prospects. The cornerstone of BS policy had been to secure two orders from BP, however, with one already gone to South Korea, another had to be secured by November, 'without fail'. Indeed, if this order was not secured, then in the current economic climate, particularly with the strength of sterling, the prospects were bleak. Atkinson then looked at ways to bridge the price gap between the UK and Japanese tender for the current order, which stood at $31,000,000. The Atkinson calculations included a credit package and a possible additional foreign exchange cost to BP of contracting in Yen or in US Dollars. All in all this brought the gap down to $6,000,000 and excluded other potentially favourable benefits to BP that might arise from Petroleum Revenue Tax and Corporation Tax. However, this still left an apparent gap in the order of between $6-16,000,000 depending on the view taken on currency risk. Atkinson then admitted that having reduced the price to BP on two separate occasions, he could no longer do so without running into loss in the corporation's current financial position. In other words he could not bridge the price gap, and the loss would seriously impact upon the future strategy already discussed for the industry, with the only alternative, redundancies and yard closures. Moreover, the loss of the order could prevent the Offshore Division from getting under way altogether. [78] Clearly then the Government intervened to secure the order: however, the precise details remain unknown, but probably involved a promise of tax concessions to entice BP to order in Britain.

By this stage, however, Cameron Parker had attempted to correct Scott Lithgow's past failings by announcing internally that a project management team would be set up to ensure that the BP semi submersible would be built to specification, delivery and price. This would necessarily entail the full support of the firm's technical, production and commercial departments, and marked a belated acceptance that modern methods of production and planning control were a *sine qua non* for major projects.[79] Nevertheless, only in 1981 were the planning departments of Scotts' and Lithgows combined to provide a centralised production planning function. Despite this however, the department would continue to have a poor image, was grossly overloaded with work, was short of numbers and was located miles away from the two main production centres. [80] Furthermore, any serious move into what was a highly technical field by its nature had implications for increased capital expenditure, and an increasingly cash starved BS would need convincing that this was justified. Although just how BS expected otherwise is a mystery; nevertheless, Parker had informed his Board in January 1981 that BS had expressed concern at the increasing capital expenditure needs at Scott Lithgow. Indeed, the firm had been instructed not to tender for future contracts requiring major capital expenditure without first approaching the BS Capital Expenditure Committee. On the BP semi submersible, subsequently named *Sea Explorer*, to be built at Cartsburn it had already become apparent that a shortage of planners existed, and a loss provision of £1,600,000 had already been allocated with a further provision of £1,500,000 to cover the net present value of the finance package granted to BP. However, a transfer of £1,000,000 from the contingency reserve had offset this. Meanwhile the firm had received an offer of £300,000 for the Cowal Engineering premises and Bowling had also been put up for sale.[81]

By February, however, BS had apparently authorised Scott Lithgow to spend £1,400,000 on capital expenditure to enable it to build *Sea Explorer*. [82] Nonetheless, by this stage the Admiralty had expressed its disquiet at the shortage of planners capable of handling the HMS *Orpheus* refit. [83] Planning shortages were obviously crucial, and in the following month, Parker had enquired how progress was assessed on the BP tanker, as he understood that the Touche Ross system of labour control was not being applied to this vessel. Parker also informed his Board that BS had asked the firm to remove the contingency of £4,000,000 from its budget. This was an obviously of concern as it made the firm vulnerable in the pricing of future orders, as it had been assumed that this contingency would be in line with estimated costs. Moreover, market trends made it unlikely that Scott Lithgow could achieve this.[84]

The overall situation

At March 1981, Scott Lithgow was still primarily a mixed naval and mercantile yard in outlook, even though its status had been irrevocably changed on entering the BS Offshore Division. This split personality was in many senses a distraction from concentrating solely on its offshore contracts where the penalties for late delivery were far more severe than on naval work. The firm had by this stage divested itself of the three Ocean Cargo Liners, but only after on the basis of a fifty-seven per cent basis of settlement of £2,975,000 had been paid to the owners for liquidated damages for late delivery. [85] This left the Scotts' end of the operation with *Sea Explorer*, the SOV *HMS Challenger*, refits for *HMS Oracle*, which had been returned to Scotts' for minor rectification, and *HMS Orpheus* and another refit of a Shock Test Vehicle (STV) originally built at Cartsburn for the MoD. The Lithgow end of the operation, in contrast, was left with the ESV *Iolair*, to be launched in April at the Glen yard and outfitted at Inchgreen quay, and the segregated ballast tanker, subsequently named *British Spirit* at Kingston. It remained axiomatic, however, that naval work was needed to balance out potential losses elsewhere in the firm. On *Iolair*, Scott Lithgow had already lodged *Force Majeure* claims of over 160 days, of itself an issue that BP was likely to challenge. [86]

By June, however, the extent of Scott Lithgow's losses for the year ended 31 March 1981 were known with a pre tax loss of £17,083,000 being posted. The net loss for the year was £12,358,000 after charging extraordinary items of £894,000 and crediting £5,619,000 in respect of tax losses surrendered to other BS companies. The Finance Director, Alan McNeilage then advised the Board that he thought it essential that the basis of forecasting labour loading on contracts should be common to both finance and planning, and suggested that the Boeing forecasting model should be adopted. Another Director, Ellis, thought that it remained desirable for separate financial and construction targets to be set and indicated that he preferred a system of physical measurement of progress rather than one based on a finite package. Parker then asked Ellis to recommend the system he intended to use on *Sea Explorer*. [87]

By August, the final loss for the year ending 31 March 1981 showed a pre tax loss of £17,444,000 although the figure in BS published accounts was £14,444,000. The difference of £3,000,000 was explained as a consolidation adjustment in respect of a loss provision made in the BS accounts of 1979-1980. [88] By this stage, however, it had been decided to only report the sales value of work completed and not the sales value of vessels delivered. Accordingly the firm's auditors qualified the accounts, this may have been done as there was some doubt that either Scott Lithgow would complete or could in fact not complete the vessels on order. That Scott Lithgow had reduced its loss by two-thirds from the previous year had been in part due to BS capital and organisational restructuring, which meant that the firm now operated as a single unit. Indeed, only seven constituent firms of BS had avoided restructuring, the three preferred warship firms, Vickers, Yarrow and Vosper Thornycroft, two other smaller patrol craft builders, Hall Russell and Brooke Marine, Swan Hunter Training & Safety and Yarrow Training. [89]

Bad news followed bad, as it had already been announced that an order from Occidental for its Claymore field in the North Sea on which Scott Lithgow had expended a great deal of money, time, and effort to win had failed to materialise due to changes in taxation announced in April 1981. These changes prompted the BP managing director, Roger Bexom to comment that his company had £300,000,000 less to spend that it had three months before. Parker viewed the tax changes with grave disquietude; but worse news was to follow. [90] That month, the naval dimension of Scott Lithgow's strategy had been dealt a seemingly mortal wound as a result of the Defence Secretary, John Nott's Defence Review. Nott emphasised in the White Paper that too much of the defence budget was taken up on ships, aircraft and tanks, that is, weapon platforms, and not enough on the weapons and sensors they needed to carry. [91] As a result of the Review, Vickers who already had a monopoly on nuclear submarine construction would now build all submarines, conventional and nuclear for the Royal Navy. If this was not enough the late Ross Belch had always insisted that Scott Lithgow had an 'understanding that it would be the follow-on builder to Vickers for a new conventional patrol submarine. More bad news followed when in a linked announcement it was noted that all submarine refit work would now be undertaken at the Government run Royal Dockyards. This meant that a submarine refit for the Scotts' built, *HMS Opportune*, apparently promised to Scott Lithgow would now be transferred. To further compound matters, it was announced in June that Cammell Laird, who had ran up trading losses of £10,099,000 in the two years to March 1981, had won an order worth £60,000,000 from Dome Petroleum of Canada for a semi submersible platform. This prompted Cameron Parker, in his capacity as Head of the Offshore Division, of which Cammell Laird did not yet belong, to state that Scott Lithgow were still trying to get naval orders, but were not in the Warship Division. Parker emphasised that he would not like to make it a rule that yards should stick to their divisions as this would mean Scott Lithgow giving up naval work, which, 'was not part of the plan'. On the other hand, Robert Atkinson stated that the Dome Petroleum order was, 'a major step in consolidating...[British Shipbuilders]...involvement in the vast potential offshore market'.[92] Cammell Laird was accordingly placed in the Offshore Division; thus another major loss making yard had been expunged from mercantile building, and S I F funding.

The move to gear Scott Lithgow primarily to offshore construction was strengthened when it was announced in November 1981 that the firm had won an order apparently worth £80,000,000 from Ben Odeco/British National Oil Corporation (later, Britoil) for a semi submersible platform to an Odeco supervised design to be built at the Glen yard. [93] Alike *Sea Explorer*, this order, subsequently named *Ocean Alliance* was likely to show a substantial loss as an assumption of improved productivity, something which had been sadly lacking at Scott Lithgow, had been built in order to just to break even. [94] In the interim, however, Scott Lithgow had finally won a settlement from BICC over the submarine cable disaster amounting to £5,250,000, of which £1,357,000 had been paid by the firm to Chilean underwriters. After legal fees the net settlement of £3,843,000 had been credited to trading profit-loss. Contemporaneously, work on *Sea Explorer* was eight weeks behind schedule, problems with coppersmiths, sub contract electricians and plumbers persisted on other contracts, and in general the entire programme seemed to slipping back alarmingly. [95] By December 1981, however, Cameron Parker had noted that the firm was already failing to operate within the level of the previous year's loss provisions by providing additional sums of £6,250,000 in 1981-1982 and, 'that this level of financial performance could no longer be tolerated'.[96] This gloomy prognosis implicitly recognised that the state of the art *Ocean Alliance*, which was capable of drilling in 4,500 feet of water in the harshest of ocean environments, was one of the largest and most technically difficult column stabilised, dynamically positioned semi submersible yet built, and could make or break Scott Lithgow.

Things could always get worse, however, and with *Iolair* about to go on trials, Scott Lithgow's record on industrial relations, which had resulted in fifteen unofficial disputes in the past year hit rock bottom when on 11 January 1982 a number of men walked out in a dispute over frozen toilets. Subsequently, the strike escalated with 2,000 men not at work before a settlement was reached on 3 February. With Prime Minister Thatcher's son, Mark, being found after six days lost in the Algerian desert three days later, this action had began against a background of absenteeism rates which were twice the national average for BS, low productivity, and according to Cameron Parker, the worst industrial relations in the corporation. [97] Clearly the problems of management systems, productivity, and industrial relations at the firm were interrelated, but with heavy penalties accruing by the day for late delivery this type of industrial action was suicidal. BS had at least sanctioned a further tranche of capital expenditure in February amounting to £2,972,000 in respect of essential civil engineering work to enable *Ocean Alliance* to be built. By March the segregated ballast tanker, *British Spirit* had been finally launched and by the following month 302 employees had been given written warnings on absenteeism, with a further thirty-eight receiving final warnings. [98]

As the major employer in Greenock and Port Glasgow, Scott Lithgow had at least given some hope to school leavers in the district. By July 1982, however, Careers Offices in both towns had 1,200 jobless teenagers on their books with not a single unfilled vacancy to offer them. Moreover, twenty-two per cent in Greenock and forty-five per cent in Port Glasgow had been unemployed for a year.[99] Neither were the long term prospects of those employed in Scott Lithgow enhanced when it was announced that the firm had made a loss of nearly £15,000,000 for the year ended 31 March 1982, just over half of BS losses as a whole. [100] Once again, the trading loss of £14,950,000 was dominated by a net increase in provision for losses of

£21,800,000. [101] Scott Lithgow's performance sparked a comment from Robert Atkinson that BS did not intend to put up with further losses. Atkinson's threat in turn spurred the shop stewards convenor, Duncan McNeil to comment that Atkinson should get off the workforce's back as they had made real improvements in industrial relations, productivity and flexibility in a period of transition from mercantile to offshore work. Furthermore, McNeil stated that the workforce had not been on strike since January and absenteeism had improved. Indeed, by the end of July it seemed that industrial relations had turned when the Scott Lithgow management and unions signed a joint agreement aimed at preventing unofficial strikes in future. [102]

This was but a false dawn, however, as Scott Lithgow was hit by another classic unofficial strike on 21 September, which led to one shop steward being suspended and another, Pat Clark being sacked. The strike by the firm's platers, which ended on 11 October was ostensibly caused by the completion of a Financial Times crossword puzzle by the two stewards in working time at the welding school during a break in power, and over a refusal to stop when requested to do so by management. This dispute gained notoriety as the 'Crossword Strike', particularly in the London-based *Financial Times* with its extensive international business readership and brought further unwelcome publicity elsewhere.[103] Crucially, the dispute further held up work on the last tanker to be built at Scott Lithgow, *British Spirit*, which with delivery over a year late was eventually named in December. This, in turn, prompted the Industry Secretary, Patrick Jenkin, whose wife named the vessel to comment that Scott Lithgow would have no future if it continued to deliver vessels this late. However, it was also reported that BS had already agreed to pay BP a sum in excess of £10,000,000 in penalties for late delivery of *British Spirit* and of her sister ship being built at the lead yard, Swan Hunter, which, incredibly was even later in delivery. In response to the Jenkin observation, Cameron Parker commented that this was the last tanker likely to be built at Scott Lithgow, and the firm was now determined to make its living on the offshore scene.[104]

Parker's comment should be seen in the context of the firm having completed its last two submarine refits to a satisfactory standard on *HMS Oracle* earlier in May, which had taken twenty-seven months to refit, and *HMS Orpheus* later in the year. [105] This left the firm with no apparent chance due to Government policy of receiving any further orders to keep its submarine team going. With the Shock Test Vehicle refit also completed in June to a good standard, Scott Lithgow's one remaining naval order, the SOV *HMS Challenger* was already well behind schedule, and had suffered from a shortage of quality assurance personnel. [106] With the ESV *Iolair* eventually launched from the Glen yard, and partially delivered to BP some 408 days late on 12 August, penalties for late delivery on this vessel ran at £20,000 per day up to a ceiling of £6,000,000. Moreover, from the August date interest payments thereon ran at two per cent above the Base Rate of National Westminster Bank until *Iolair* was finally delivered in March 1983. [107] The *Iolair* contract as the Touche Ross Report had already flagged up in 1978 had proven to be yet another substantial loss maker. However, the eventual amount of liquidated damages due to BP from Scott Lithgow would have to go through a lengthy period of arbitration owing to *force majeure* claims by the builders with the intent to limit damages, which began in May 1983. [108] Clearly, Scott Lithgow was in a substantial learning curve situation on *Iolair*, although a great deal of time and effort had been expended on the design of the structure, proper production and project planning were not second nature to the firm. Moreover, in the early months of the contract the lack of efficient planning was crucial. Owing to shortages of draughtsmen, and delays in design approval of prototype items from BP, slippage had occurred. Indeed, it was later noted that Scott Lithgow was to a large extent still wedded to their custom of somewhat informal client-builder relationships on contractual and financial matters. Again, in a prototype vessel of this complexity there was an obvious difficulty in properly estimating the extensive pipework and quality and quantity of welding required. During the construction period, however, Scott Lithgow did secure extra draughtsmen on secondment from other BS yards, and as well as overtime, the firm instituted a nightshift and sub contracted work to other yards. Nevertheless, *Iolair* had provided a salutary lesson over the control of prime sub contractors working on the vessel, and in the timeous rectification of defects.[109]

It has to be emphasised that although Scott Lithgow had the desire to comply with the contract, nevertheless, the 408-day delay spoke volumes. BP would get a state of the art vessel; capable of spraying a blazing platform with up to 50,000 gallons of water a minute in the event of a blow out or offshore explosion. and probably obtain substantial liquidated damages. Scott Lithgow's reputation, in contrast, would again suffer. The lessons then for the two substantive semi submersible contracts, *Sea Explorer* and the much more complex *Ocean Alliance*, were clear. The firm's already tarnished reputation would plummet still further if an adequate grip on production and project planning, labour loading, sub contractors costs and quality assurance especially on electrical, pipework and welding were not properly addressed.

The gloomy situation persisted and by March 1983, BS had announced the loss of nearly 9,000 jobs with some 2,150 to go at Scott Lithgow over the next year, although the Scott Lithgow workforce had in line with national union policy already voted to oppose compulsory redundancies. In light of this, a Convenor of Shop Stewards, Duncan McNeil (now a Member of the Scottish Parliament for Greenock) stated that, 'we are going to work on the basis that they want to close Scott Lithgow down'. By April, Cameron Parker had revealed that the firm would be allowed to tender for the new class of conventional patrol submarine, but with Vickers as the lead yard for design and build, no order would be forthcoming until 1985 at the earliest. Before the BS annual report was published in July, however, Parker, who it will be recalled had taken over in difficult circumstances had resigned and was eventually replaced by Dr. Peter Milne.[110]

Alike Parker, Milne faced an uphill task to restore the confidence of BP and Britoil-Ben/Odeco, to improve morale and to resolve the firm's internal problems. The scale of the task facing management was revealed in the BS Annual Report, where Robert Atkinson revealed that, 'unprecedented difficulties' with three major contracts had caused losses through penalties and loss provisions amounting to just under £67,000,000, over half the losses of BS. [111] Again, Scott Lithgow's auditors had severely qualified its accounts, in respect of the three contracts in hand at March 1983; these were now estimated to be substantially in excess of provisions at that date. Furthermore, owing to a continuing shortage of profitable work, there was uncertainty as to whether the extent to which the net book value of the fixed assets would be recoverable over their remaining useful lives. Accordingly, the auditors were unable to gauge whether the accounts gave a true and fair view of the state of affairs of the firm, particularly as to the extent of loss provisions.[112]

By this stage, however, a clearly incensed Robert Atkinson had publicly condemned Scott Lithgow and advised that the firm, 'was on its last chance, had 5,000 deaf men, a history of losses and late deliveries, high absenteeism and poor industrial relations'. If this were not enough, apart from the insult to the deaf, Atkinson pronounced from on high that the firm had let down BS, 'the nation and themselves'.[113] This astonishing public criticism by the head of a nationalised entity could have only one outcome, that of effectively scuppering any chance that Scott Lithgow had, as presently constituted, of gaining any future orders for offshore work. Moreover, cumulative losses of this magnitude meant that the firm faced almost certain closure unless a buyer could be found.

With *Sea Explorer* already well behind schedule, the Britoil-Ben Odeco (hereafter Britoil) semi submersible, *Ocean Alliance* was proving to be even more difficult to keep to time and budget. The *Ocean Alliance* contract, due to be completed by March 1984, which by this stage was wishful thinking indeed, gave the Odeco representative, an American, Dr. Terry Petty the final say on many of its aspects.[114] Scott Lithgow had, nevertheless, experienced a great deal of delay in obtaining approved technical drawings from New Orleans. Moreover, the platform was subjected to continual modifications that were aimed at avoiding another tragedy of the magnitude of the sinking of an Odeco owned and Japanese built semi submersible, *Ocean Ranger* which had sank with substantial loss of life of the coast of Newfoundland. As a result, Odeco were heavily criticised in a subsequent inquiry by the US National Board of Transportation.[115]

Currently, as Milne had admitted on his elevation to managing director, Scott Lithgow's problems were mainly internal. What he had omitted to mention was that shipyard standards of work, and not just at Scott Lithgow, on mercantile construction as opposed to naval had always been to do just enough and no more. This was plainly not good enough on demanding offshore contracts where project management including rigid control over material flows, sub contractors, re-training of the workforce and adherence to strict sub assembly completion dates was a *sine qua non*. Since nationalisation, Scott Lithgow's cumulative losses had already reached £160,000,000 and had finally forced the firm into considering a Survival Plan, which was subsequently revised and mooted to the workforce in July and August 1983. This, including a video entitled, 'We Can Make It' [which presumably referred to survival], was put to the workforce, and which emphasised cutting costs, boosting productivity and delivering on time. In the notes prior to the dissemination of the revised Plan to employees, 2,150 redundancies from the 5,000 strong workforce were anticipated and a call [all too late] for interchangeability of trades was included. [116] The latter had remained the Holy Grail for shipyard management for most of the postwar period. And, realistically, any movement on the part of the demarcation obsessed trade unions towards this end would only come about when the threat of losing jobs was uppermost in the minds, that is, when closure was the only other alternative.

Given that it had already been announced that all future submarine refit work would be undertaken in Royal Dockyards, it was therefore richly ironic that Scott Lithgow gained a three-week refit of *HMS Ocelot*, because three Royal Dockyards were too busy to repair it. The firm also gained another two port refit and sea trial support contracts on the submarines, *HMS Sealion* and *HMS Walrus*.[117] By August, the BS Director, Philip Hares had resigned from the Board of Scott Lithgow; no doubt owing to the pressures at BS headquarters at Newcastle; Hares had been absent from far more Board meetings than he had attended. However, W. Kooymans, who had substantial offshore experience elsewhere, had been appointed as the firm's Manufacturing Director. Clearly, Kooymans had a difficult task ahead of him, and as a result of an ongoing management review it was also reported that a further eight managers were receiving counselling for redundancy and two others had been moved to more suitable jobs. This was part of a general strategy, which at last seemed to address specific management failures. Indeed, the firm's Finance Director, Alan McNeilage reported that a revised budget and business plan was being prepared for the period August 1983 to March 1984 on the basis of a reduced number of employees and a revised company structure. However, persistent delays with the fitting out of the firm's last naval contract, *HMS Challenger* continued as major rewiring work had been undertaken over the failure of Raychem supplied cable. Indeed, it was further noted that the firm had lost confidence in GEC local management to control the repair programme. By this stage, however, Scott Lithgow had thus far accepted 530 redundancies mainly from the hourly paid workforce. [118]

Consequently, Kooymans had re-examined the position with regard to ceasing production at Cartsburn by early November. One exception, because of the need to use shed rolls in the West Bay, was agreed until January 1984, however, the chairman, Dr. Milne stressed the need to vacate all premises at Cartsburn where there was no work without further delay.[119] As part of the Survival Plan it was incumbent upon management to re-negotiate the delivery dates for *Sea Explorer* and *Ocean Alliance* respectively. It was by no means certain, however, from the outset that BP and Britoil would be inclined to comply in any event. Scott Lithgow could do no more than try to reform its internal procedures in the hope that they would be allowed to finish both platforms. As well as cutting labour costs, especially excessive overtime and waste, planning was now seen as a basic service to the manufacturing department, wherein the steel and outfitting trades were now the responsibility of one director where before two had been responsible. Indeed, the planning function had been split into three distinct areas. First, production engineering dealing with build strategy, design liaison, forwards planning and programmes schedules. Second, production controls to check targets and work out processes to achieve them, and last, production services to ensure that the needs of both planning and manufacturing were put into practice. [120]

The cherished hope of interchangeability, however, was to a large extent reliant on a national rather than on a local agreement. By October, the firm's shop stewards had drawn up an alternative survival plan, which included an integrated and interchangeable platers and shipwrights department, but did not concede full interchangeability. [121] Nevertheless, by this stage, *Sea Explorer* looked liked being delivered over a year late with attendant penalties and *Ocean Alliance* was already eighteen months late. Consequently, Britoil gave thirty days notice of cancellation of the thirty per cent completed *Ocean Alliance*, with its joint managing director, Malcolm Ford stating that they were still willing to re-negotiate terms if the contract could be completed by January 1985. This ultimatum brought a sharp response from Graham Day, who had by this stage replaced Robert Atkinson as BS Chairman, that Britoil should stick to the terms of its original deal with agreed financial penalties of £7,000,000 or cancelling. Britoil chose the latter by exercising a 'drop dead' clause in the contract, thus avoiding payment of an instalment of £44,000,000. [122] Accordingly, BS then instituted legal proceedings against Britoil, prompting an opposition MP to note that it was rather ironic given that one wholly owned state corporation [BS] was suing another [Britoil] that was forty-eight per cent government owned. [123] In reply, a junior Minister of State, Norman Lamont retorted that, 'since 1977, eight per cent of employment in British Shipbuilders had been accounted for by Scott Lithgow and no less than thirty-eight per cent of the accumulated losses'. Indeed, *Ocean Alliance* had been the most disastrous contract ever undertaken in a British shipbuilding yard. At March 1983, loss provisions on this contract alone stood at nearly £44,000,000. Accordingly, Lamont indicated that, 'the national interest is not to pour good money after bad'. [124] Clearly, Scott Lithgow was already drinking in the last chance saloon.

In early January 1984, Scott Lithgow shop stewards had issued a statement that they were ready to make a commitment to offshore conditions of employment if BS or the Government gave a reciprocal commitment to continuity of employment and the chance to complete *Ocean Alliance*. Such was the union feeling that the convenor, Duncan McNeil was quoted as saying that, 'we will sign any bloody thing that takes us into the construction industry'.[125] This was despite the general feeling among the workforce that BS had attempted to engineer the closure of Scott Lithgow by an orchestrated effort on behalf of the Government. To its credit, the *Greenock Telegraph* went on the offensive to expose the worst of the smears and distortions that had occurred. Mrs Thatcher's willing lieutenant in the break up of BS, Graham Day had in the previous September spoken about a Ben/Odeco platform that boys from the fields of South Korea had built on time. A comment echoed in a radio interview by the Scottish Secretary in the Thatcher Cabinet, George Younger who said that the Koreans had built a similar rig on time and on budget, 'with people who were more or less taken off a paddy field'. Both Day and Younger were economic with the truth, as the Korean rig, in comparison to *Ocean Alliance*, was primitive, being secured in position by anchors and only able to operate up to a depth of 2,000 feet. In contrast, *Ocean Alliance* was at the forefront of technology and was capable of drilling to a depth of 4,500 feet without anchors. Thereafter, bad news predominated as it was announced that unless a private buyer could be found, 3,000 jobs would go by August when *HMS Challenger* was due to be completed. [126]

By this stage, however, Day who had stated that, 'politics and social responsibility are for those who are elected…We [BS] are required to act commercially', when announcing that Scott Lithgow would close in March unless a buyer could be found, had admitted that negotiations had been going on behind the scenes to privatise Scott Lithgow with one British and one foreign company. Indeed, Day's predecessor, Robert Atkinson had begun talks with the industrial conglomerate, Trafalgar House in May 1983, and thereafter it seems that Trafalgar were the Government's favoured bidder. [127] However, references to this in the Scott Lithgow archives are conspicuous by their absence, and only in January 1984 when it was common knowledge does a reference reveal that local management were aware that a London-based conglomerate was interested in buying the entire firm.[128]

Trafalgar House, ostensibly a holding company chaired by the late Sir Nigel Broakes owned the prestigious shipping line, Cunard and ran a national newspaper, the *Daily Express,* an avid supporter of the Conservative Government. In addition to a sizeable portfolio of property and civil engineering interests, Trafalgar also owned an offshore modular construction yard, Cleveland Redpath Offshore. However, as a former Chancellor of the Exchequer, Roy Jenkins remarked in the context of Trafalgar being the preferred bidder, he found it, 'just a little peculiar that the Government should have apparently have trailed in the *Daily Telegraph* of 1 February 1984, the fact that submarine orders were to be forthcoming'. Furthermore, 'it [was] a rather curious approach to competition that, before one knows who owns the yard, before one knows what the management is, before one has thought about asking for tenders, one announces that, if the yard is privatised, one will give it submarine orders, whereas presumably there was no question of doing so when it was publicly owned'. Finally, Jenkins asked why Trafalgar was thought to be so good at running a shipyard? [129] The crucial question, however, was would Trafalgar with the aid of BS be able to renegotiate the Britoil and BP contracts, and complete them on time with substantially the same personnel as before. Nevertheless, Trafalgar could easily import industry specialists in offshore and submarine work, and project management. Irrespective of this it did seem that the Government had already made up its mind to oil the wheels of any subsequent take-over. This was confirmed when the Trade and Industry Minster, Norman Tebbit, a former airline pilot used to restrictive practices but now adept at condemning them, announced on 1 February that the Government would pay for the losses incurred thus far at Scott Lithgow. Moreover, the State would also meet the cost of future redundancies for those men who would have to lose their jobs.[130] Indeed, substantial job losses among the 3,000 plus workforce was confirmed in a visit to the yard on 3 February by Trafalgar's Nigel Broakes who announced that not more than a thousand men would be needed. This news obviously did not go down well with the Scott Lithgow workforce who subsequently staged a spontaneous walk out to express their anger and bitterness over the now what appeared to be a 'conditional' deal with Trafalgar to take over the yard. [131]

By this stage, however, Trafalgar had some competition as the British subsidiary of the American construction giant and project management specialist, Bechtel had declared its hand. Indeed, it soon became apparent that Bechtel had a far more radical plan for Scott Lithgow than Trafalgar had. This involved making the entire workforce redundant and closing the facilities for ten weeks to reassess the one-third completed Britoil contract. Bechtel maintained that this was the minimum period required to sort out the chaotic state of affairs left by the previous management. Bechtel also intended to bring the Scott Lithgow welders up to the highest offshore standards owing to their discovery that the firm possessed hardly any top rated employees. The Bechtel option would have apparently cost BS some £8.000,000 more in redundancy payments, but around 1,500 jobs could be saved, and employment could peak at 2,500 to 3,000 employees. In addition, Bechtel intended to a have a supervisory ratio of one manager to twelve workmen due to the complicated nature of the contract, rather than the pertaining ratio of one manager to twenty-five workmen. Bechtel, did however, later admit that they wanted Scott

Lithgow as a long-term offshore facility, as a week earlier its vice president, Derek Hedley had said that they were only interested in completing the Britoil *Ocean Alliance*, and not *Sea Explorer* or *HMS Challenger*. Nevertheless, another indication that Trafalgar House was the preferred bidder occurred when it announced that it been given a 28 February deadline by the MoD to declare an interest in tendering for a submarine refit. However, the day before the submarine refit deadline, BP had announced that it had cancelled *Sea Explorer*, which was allegedly ninety-six per cent completed, but BS decided nevertheless to continue to complete the contract. By 3 March Bechtel had withdrawn, as it was unable to convince Government and BS of the acceptability of its bid. By this stage, however, another offshore firm, Howard Doris had entered the fray and the Bechtel withdrawal prompted the apparently rival bidders, Trafalgar and Doris to later announce a joint bid on the basis of the former paying seventy-five per cent of it and the latter the remainder. [132]

The Scottish Affairs Committee Report

In the interim, the Scottish Affairs Committee of the House of Commons had been investigating the economic and social effects of closure at Scott Lithgow, and published their report on 23 March.[133] Predictably the Committee, which contained a Conservative majority, had split on party lines and over ninety votes had been taken on amendments. This prompted the local MP Dr. Norman Godman to describe the report as a travesty as party loyalties had been uppermost. [134] So, no change there, then! Nevertheless, in what was in fact a fair report, the fundamental point that Britoil had lost confidence in Scott Lithgow and BS was acknowledged. The saving of jobs, therefore, depended on renegotiating a new contract with whatever private enterprise that would succeed in taking over the troubled firm. The SAC did, not, however, venture an opinion on the grounds of sub judice whether much of the problems on the Britoil rig had been caused by undue delays from Odeco in New Orleans or on the performance and record of Scott Lithgow.[135] The effects on employment of closure were, however, thoroughly investigated. It was noted that ninety-two per cent of the Scott Lithgow workforce resided within the Inverclyde district, with ninety-three per cent living within four miles of the yard. Male unemployment in January 1984 in Greenock and Port Glasgow stood at just under twenty-two per cent of the total workforce resident in Inverclyde where Scott Lithgow was the largest single employer. In Port Glasgow alone, nearly eighty per cent of young adults were without a permanent job. and if Scott Lithgow were to close, the male jobless rate in Inverclyde would reach thirty-six per cent. There would also be a substantial additional indirect job loss effect on local businesses reliant on Scott Lithgow. Indeed, as the respected Fraser of Allander Institute estimated these indirect effects of closure would lead to 3,200 job losses in the short term and 3,900 in the long term. Moreover, as was estimated by the Scottish Office taking account of direct and indirect job losses the cost of closure to the state would be £10,000,000 per annum in 1984-85 and 1985-86. However. this covered only the immediate costs of state benefits and incorporated some unstated assumptions about the rate of re-employment and the proportion of people eligible for unemployment benefit. On the other hand, the Fraser of Allander Institute noted that relative to direct job losses only in the event of total closure estimated that the cost to the state over a full year would be £22,000,000 per annum. Moreover. if indirect job losses were taken into account, then this figure might have to be doubled. However. as was further noted, these figures should be set against Scott Lithgow's losses, which averaged over £30,000,000 in the past five years. Irrespective of this. the Inverclyde unemployment rate was a disturbing one as forty per cent of the unemployed had been without work for over a year, and of this percentage forty per cent were under the age of twenty-five. [136]

Given the highly damaging effects of closure the SAC noted that of the three potential bidders, Trafalgar House foresaw an ongoing market for floating production structures of at least a decade. Bechtel believed that the yard offered an ideal location for floating structures and a likely increase in demand, as did Howard Doris. Nevertheless, the SAC also noted that the Scott Lithgow workforce had acknowledged that a variety of shortcomings had contributed to the firm's poor performance, but that they were also very bitter about the comments made about the yard by BS senior management. Indeed they held that management should take the brunt of the responsibility for the situation that Scott Lithgow found itself in. Even the Conservative dominated Committee [conveniently ignoring their own Party's duplicity on this] concurred, and considered BS to be, 'gravely at fault in not ensuring that the yard was properly equipped in terms of management, training and facilities' to undertake its offshore role. The Committee did, however, recognise that the situation had improved at Scott Lithgow in the past few months. Moreover, these improvements in part stemmed from the appointment of a new Chairman, Managing Director and Manufacturing Director from the summer of 1983. Overtime had been cut, the yard's activities had been rationalised and centralised to cut overhead costs and absenteeism had been brought down to below ten per cent. [137] The priority, however, remained to attract a private buyer to complete existing contracts and to secure new contracts to maintain an adequate level of employment.

Three days after the SAC report was published the Scott Lithgow workforce had overwhelmingly voted to accept a bridging deal from BS. This included no compulsory redundancies, and provided that the BS Redundancy Scheme or an equivalent should be kept in situ for a period of two years. Additionally, during the first year of the take-over, all hourly-paid workers aged forty or over would be allowed to leave and take redundancy with timing at the discretion of management. As a further sweetener, after privatisation all Scott Lithgow employees would receive a payment of £600 repayable on redundancy or taxable after two years.[138] Accordingly, on 28 March 1984, Scott Lithgow became the first BS constituent yard to be privatised in its entirety when a bid of £12,000,000 from Trafalgar House had been [with Howard Doris expected to take up a quarter share in a few weeks], accepted. As part of the agreement a new completion date for *Ocean Alliance* of March 1986 had been agreed, with Britoil already in receipt of substantial compensation for delay. Although no agreement had yet been reached with BP on *Sea Explorer*, one was nevertheless expected, and the completion of *HMS Challenger* was also assured. With monumental chutzpah, Graham Day commented that it was, 'a most satisfactory outcome to what had earlier deteriorated into an apparently hopeless situation in the yard. The new opportunity minimises the economic and social consequences, which would have stemmed from closure'. Asked how the new owner would succeed where the old had failed, Albert Granville of Howard Doris, summed it up in one word, 'management'. [139]

Endnotes: Chapter VII

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[1] The intention to include Scott Lithgow Dry Docks Limited was mooted by Gerald Kaufman in December 1976, see House of Commons, Official Report, Vol., 992, Col., 319, 7 December 1976. Official Report, Vol., 888, Cols., 1154-1165 the firm intention was to locate the HQ of BS in an assisted area with a tradition of shipbuilding. The major shipbuilding groups nationalised with Scott Lithgow, were the Swan Hunter group of yards, Vickers, Cammell Laird (already 50 per cent owned by Government), Yarrow, Vosper Thornycroft, Austin & Pickersgill, Robb Caledon, Drypool Group, Brooke Marine, Hall Russell, Sunderland Shipbuilders (already 100 per cent owned by Government), Govan Shipbuilders (already 100 per cent owned by Government) and Appledore Shipbuilders (already 100 per cent owned by Government). Both Scott's Engine works and Kincaid were also nationalised in company with the other slow speed diesel builders, Doxford (a wholly-owned subsidiary of Sunderland Shipbuilders) , George Clark & NEM Limited, Hawthorn Leslie. and Barclay Curle.

[2] House of Commons, Official Report, Vol., 888, Col., 1151, 17 March 1975, Tony Benn, 'we do not wish to establish a highly centralised control of either shipbuilding or the aircraft industry.

[3] GD 323/1/3/52 Meting of British Shipbuilders with Chief Executives, London, 28 July 1977.

[4] GD 323/1/3/53 Scott Lithgow, Internal Memorandum from A. Belch, 1 August 1977.

[5] *Greenock Telegraph*, 19 July 1977.

[6] GD 323/1/3/56 Internal Memorandum from A. Belch, 2 August 1977.

[7] GD 323/1/3/53 Letter from Admiral Griffin to Denis Healey, 17 October 1977.

[8] GD 323/1/3/15 Memorandum from Euan Haig to Principal Naval Overseer (Clyde) enclosing copy of Haig's criticisms that had already been sent to Bath, 17 October 1977.

[9] Ibid., Letter from Ross Belch to Bill Sanders, 24 October 1977.

[10] Ibid., Letter from Sanders to Belch, 31 October 1977.

[11] Ibid., Notes on discussion between PNO (Clyde) and Scotts', 7 November 1977.

[12] GD 323/13/52 Internal Memorandum from Ross Belch, 18 October 1977.

[13] GD 323/22/3/2-4 Correspondence with Mr. Dalgleish.

[14] GD 323/1/3/53 Notes of a meeting of Chief Executives held in London, 26 October 1977.

[15] Ibid., Notes of a meeting of Chief Executives held in London, 15 December 1977

[16] *Greenock Telegraph*, 4,10, 16, 27 January and 9 February 1978.

[17] GD 323/1/3/53 Internal memorandum from Ross Belch, 1 March 1978.

[18] GD 323/1/1/57 ESV for BP, undated memorandum but probably March/April 1978.

[19] GD 323/1/1/24 Minute of Executive Committee of Scott Lithgow, 7 March 1978.

[20] Ibid., Minute of Executive Committee of Scott Lithgow, 28 March 1978.

[21] GD 323/1/3/52 Letter from Belch to Daniel, 3 May 1978.

[22] GD 323/1/1/46 Letter from Peter Milne, Managing Director, [Shipbuilding] at BS to Ross Belch, 9 May 1978.

[23] GD 323/1/1/61 Touche Ross Report on Scott Lithgow to M. Elderfield, BS 29 June 1978.

[24] Ibid.

[25] Ibid.

[26] ibid.

[27] ibid.

[28] ibid.

[29] Ibid.

[30] GD 323/1/3/53 Letter from Belch to B.W. Pomeroy, Touche Ross, 6 July 1978.

[31] *Greenock Telegraph*, 4 July and 14 August 1978.

[32] GD 323/1/1/10/15 Minute of Meeting of Executives of Scott Lithgow, 7 September 1978.

[33] Ibid.

[34] GD 323/1/4/3 Minute of a Meeting of Directors of Scott Lithgow, 13 November 1978.

[35] GD 323/1/3/50 Letter from Ross Belch to Mike Casey at BS, 18 August 1978.

[36] GD 323/1/4/3 Minute of Meeting of Directors of Scott Lithgow, 13 November 1978.

[37] GD 323/1/1/11 (1) Minute of Meeting of Directors of Scott Lithgow, 12 December 1978.

[38] BS Annual Report and Accounts for 1978-1979, Chairman's statement.

[39] *Greenock Telegraph*, 4 January 1979.

[40] GD 323/1/2/27 Scott Lithgow Limited, Consolidated Accounts and Directors Report for the year ended 31 March 1979, containing figures for the year ended 31 March 1978.

[41] GD 323/1/12/61Letter from Dr. Bryer, University of Warwick, to Duncan McNeil, Shops Stewards Convenor, Cartsburn, 6 February 1984.

[42] Ibid.

[43] GD 323/1/1/11 (4) Minute of Meeting of Directors of Scott Lithgow Limited, 13 March 1979.

[44] *Greenock Telegraph*, 8 March and 20, 26 April 1979.

[45] GD 323/1/1/11 (5) Minute of a Meeting of Directors of Scott Lithgow Limited, 19 April 1979.

[46] *Greenock Telegraph*, 20 April, 21 April and 19 June 1979.

[47] Ibid., 8,16,17,21, 28 August and 12 September 1979.

[48] GD 323/1/5/147 Telex to BP and non-attributable background notes regarding the BP tanker orders.

[49] GD 323/1/3/67 BS Minutes of a meeting of Finance Directors of Warship Builders, 2 November 1979.

[50] GD 323/1/5/147 Minutes of Meeting of Joint Monitoring Committee, Scott Lithgow, 9 November 1979.

[51] GD 323/1/3/68 Letter from BS to all Finance Directors of individual firms, 14 November 1979.

[52] Ibid.

[53] ibid., Memorandum from Reg Arnell, BS re Capital Restructuring of Subsidiaries, 29 December 1979..

[54] GD 323/1/1/12 Minute of Directors Meeting, Scott Lithgow, 20 February 1980.

[55] GD 323/1/1/46 Letter from Belch to Milne, BS, 18 January 1980.

[56] Ibid., reply from Milne to Belch, 24 January 1980.

[57] Ibid., Extract of launch speech, 19 February 1980.

[58] *Greenock Telegraph*, 20, 27 February 1980.

[59] GD 323/1/1/46 Letter from Belch to Dr. Milne, BS, 12 February 1980.

[60] GD 323/1/3/53 Letter from Milne, BS to Belch, 24 November 1978.

[61] GD 323/1/3/52 Letter from T. John Parker, BS to John Peach, Fergusons, 25 March 1980.

[62] *Greenock Telegraph*, 9 January, 20 May and 4 November 1980.

[63] GD 323/1/1/12 Minute of Directors Meeting, Scott Lithgow, 20 February 1980.

[64] Ibid., Minute of Directors Meeting, Scott Lithgow, 15 May 1980.

[65] GD 323/12/28 Scott Lithgow, Report of Directors and Consolidated Accounts for the year ended 31 March 1980.

[66] GD 323/1/12/61 Letter from Dryer to McNeil, 6 February 1984..

[67] BS Annual Report and Accounts, 1980-1981.

[68] BS Annual Report and Accounts for 1979-1980.

[69] *Greenock Telegraph*, 29 August and 5 September 1980.

[70] GD 323/4/63 Memo from A.G. McNeilage enclosing a copy of Atkinson's statement, 10 October 1980.

[71] Ibid.

[72] GD 323/1/1/1/12 Minutes of Directors Meetings, Scott Lithgow, 11 September and 20 October 1980.

[73] *Greenock Telegraph*, 9 October 1980.

[74] GD 319/25/2/12 Scott Lithgow Magazine, summer 1977.

[75] For the records of Scott Lithgow (Offshore) Limited, see GD 323/20/1/1 to GD 323/20/8/21.

[76] *Greenock Telegraph*, 17,21, and 27 November 1980.

[77] GD 323/1/12/5 Letter from C. V. Ulyatt, Treasurer, BS to Cameron Parker, Scott Lithgow, 28 October 1980.

[78] Ibid., Letter from Robert Atkinson to A. C. Russell, Shipbuilding Policy Division, Department of Industry, 30 October 1980.

[79] GD 323/1/4/68 Contract 2001, Memorandum from C. H. Parker, 12 December 1980.

[80] GD 323/1/1/73 Future Planning Organisation for Scott Lithgow, 4 February 1982.

[81] GD 323/1/1/13 Minute of Directors Meeting, Scott Lithgow, 13 February 1981.

[82] *Greenock Telegraph*, 24 February 1981.

[83] GD 323/1/1/13 Minute of Directors Meeting, Scott Lithgow, 13 February 1981.

[84] Ibid., Minute of Directors Meeting, 11 March 1982.

[85] GD 323/3/1/11 Liquidated damages, Myrmidon, 13 November 1980.

[86] GD 323/1/1/13 Minute of Directors Meeting, Scott Lithgow, 15 April 1981.

[87] Ibid., Minute of Directors Meeting, 9 June 1981.

[88] Ibid., Minute of Directors Meeting, 17 August 1981.

[89] GD 323/1/3/68 Memorandum from Reg Arnell, Capital Restructuring of BS Subsidiaries, 28 April 1980.

[90] *Greenock Telegraph*, 23 March, 6 April 1981.

[91] The United Kingdom Defence Programme. The Way Forward, Parliamentary Papers, 1981-1982 Cmnd. 8288.

[92] *Greenock Telegraph*, 12, 26 June and 2 July 1981.

[93] This contract known as Yard No. 2002 was placed through Lloyd's Leasing Limited, who in turn leased the platform to the St. Vincent Drilling Company which was jointly owned by Britoil and Ben Odeco. Ben Odeco would be responsible for the overall design and supervision during construction with a delivery date set for November 1984, and would also manage it after it had been leased in turn to Britoil.

[94] *Greenock Telegraph*, 19 November 1981.

[95] GD 323/1/1/13 Minute of Directors Meeting, Scott Lithgow, 20 October 1981.

[96] GD 323/1/1/14 Minute of Directors Meeting, Scott Lithgow, 16 December 1981.

[97] *Greenock Telegraph*, 11, 26 January and 3 February 1982.

[98] GD 323/1/1/14 Minute of Directors Meeting, Scott Lithgow, 1 February, 5 March and 22 April 1982.

[99] *Greenock Telegraph*, 9 July 1982.

[100] BS Annual Report and Accounts 1981-1982.

[101] GD 323/1/2/30 Scott Lithgow Directors Report and Accounts for the year ended 31 March 1982.

[102] *Greenock Telegraph* 21,27 and 31 July 1982.

[103] *Financial Times*, 29, 30 September, 1, 11, 12, and 28 October 1982.

[104] *Greenock Telegraph*, 22 December 1982.

[105] GD 323/1/4/115 Principal Naval Overseer Clyde HMS Oracle: Acceptance after Refit, 7 May 1982 and ditto, HMS Orpheus, 21 October 1982.

[106] Ibid., PNO, STV: Acceptance after Refit.

[107] GD 323/1/4/75 (1) Iolair, undated but probably post May 1983.

[108] *Lloyd's List*, 26 May 1983.

[109] GD 323/1/4/75 (1) Iolair.

[110] *Greenock Telegraph*, 28, 31 March, 2 April and 12 July 1983.

[111] BS Annual Report & Accounts, 1982-1983.

[112] GD 323/1/2/16 Scott Lithgow Directors Report & Accounts for the year ended 31 March 1983.

[113] *Greenock Telegraph*, 28 July 1983.

[114] GD 323/1/4/125 Shipbuilding Contract relative to one dynamically positioned column stabilised self-propelled drilling unit to be known as Yard No., 2002 between Lloyd's Leasing Limited and Scott Lithgow. The contact was to be undertaken under American Bureau of Shipping rules.

[115] *The Times*, 16, 17, 18, 20 February 1982, *Greenock Telegraph*, 27 January 1984.

[116] GD 323/1/1/76 Survival Plan; Notes for presentation to employees at Scott Lithgow 27 July 1983.

[117] GD 323/1/4/115 Sea Trials Support, Sealion and Walrus, 28 July 1983.

[118] GD 323/1/1/14 Minute of Directors Meeting, Scott Lithgow, 24 August 1983.

[119] GD 323/1/1/25 (2) Minute of Meeting of Scott Lithgow Executive, 23 October 1983.

[120] *Greenock Telegraph*, 8 September 1983.

[121] Ibid., 5 October 1983.

[122] Ibid., 1 November and 10, 19 December 1983.

[123] House of Commons Official Report, Vol., 51, Col., 282, 19 December 1983.

[124] Ibid., cols. 282-283.

[125] *Greenock Telegraph,* 11 January 1984.

[126] Ibid., 16 January 1984.

[127] Ibid., 18 January 1984.

[128] GD 323/1/1/26 Directors Meeting, Scott Lithgow, 23 January 1984.

[129] House of Commons Official Report, Vol. 53 cols., 304-305 1February 1984.

[130] Ibid., col., 301.

[131] *Greenock Telegraph*, 3 and 9 February 1984.

[132] Ibid., 6, 9, 15, 22, 24, 27 February, and 2, 3, 6, 8 March 1984.

[133] Parliamentary Papers, House of Commons, Second Report from the Scottish Affairs Committee, Session 1983-1984, Scott Lithgow Limited: The Economic and Social Effects of Closure, two volumes (London, HMSO 1984). Hereafter referred to as SAC 2 Report.

[134] *Greenock Telegraph*, 23 March 1984.

[135] SAC 2, paras., 7 and 8.

[136] Ibid., paras., 14, 15, 17.

[137] Ibid., paras., 19, 32, 33.

[138] *Greenock Telegraph*, 26 March 1984.

[139] Ibid., 29 March 1984.

Chapter VIII: Déjà vu all over again, Trafalgar House, 1984-1988

It had been already been made clear to BS in the run up to privatisation that Trafalgar House had been keen for some time to become a major player in the large offshore structures market. The future success of Scott Lithgow, which had become almost entirely geared to offshore construction hinged in the short term on delivering *Sea Explorer*, and crucially, the Britoil semi submersible. *Ocean Alliance* on time and to budget in the spring of 1986. Not only would this go some way to re-establish the yard's already badly tarnished reputation in the offshore community, it would also be a vindication of privatisation. From the outset, however. Trafalgar House had zero experience in either the drillship or in the complex semi submersible market and in the run up to privatisation was ultimately reliant on the BS view of Scott Lithgow's capability to complete its outstanding contracts. Nevertheless. Trafalgar did secure the technical co-operation of experienced Howard Doris staff in order to complete *Ocean Alliance* on schedule. Moreover, with the tantalising prospect of future submarine orders, combined with the Government's desire to privatise the warship firms, it would have been commercially inept had not Trafalgar considered the naval dimension of Scott Lithgow as being equally important. If, for example, the firm could either win a refit, or make a successful bid for the follow on orders for the new *Type 2400* conventional submarines, then it could re-establish its reputation in the domestic market, and become the alternative supplier to the lead yard, Vickers at Barrow. Indeed, even if Scott Lithgow failed to do so, Trafalgar House could still use the yard as a launch pad to allow it to bid for other soon to be privatised warship builders such as Yarrow or Vickers with their virtual monopolies over frigate and conventional and nuclear submarine construction respectively.

All this, however, was ultimately dependent on political considerations. Trafalgar had, nevertheless, at a price of £12,000,000 purchased Scott Lithgow rather cheaply. A statement from Howard Doris, who were expected to purchase a quarter of the shares, explained that the £12,000,000 would equate to the net asset value [the aggregate value of the share capital and reserves] of Scott Lithgow. BS. had, however, already spent £13,000,000 at Scott Lithgow in additional capital expenditure on offshore work alone.[1] In the event, an allotment of 27,500,000 Ordinary Shares in Scott Lithgow was made to BS on 28 March 1984 on a renounceable Letter of Allotment in two parts. The first part, for seventy-five per cent of the share capital was renounced in favour of a wholly owned subsidiary of Trafalgar House, Cleveland Redpath Engineering Holdings (CREH) on the same day. The remaining twenty-five per cent was left open with the intention that Howard Doris, or later, the Swedish platform builders, Gotaverken Arendal would take up the shares.[2] Just as the purchase price was favourable, the terms of payment were even more so. The terms were £3,000,000 in cash by banker's draft on Completion and the balance by three equal instalments each of £3,000,000 in cash by banker's draft on the anniversary of Completion in each of the years 1985, 1986 and 1987. Simple interest for the amount of each instalment from and including the Completion Date down to and excluding the date of payment at the rate of one per cent above Bank Rate was payable. Nevertheless, CREH could at any time repay part or all of the balance outstanding plus interest without notice or penalty, however, if on receipt of the Completion Accounts from BS relating to Scott Lithgow, the net asset value should exceed £12,000,000 CREH would pay BS the excess.[3]

In explaining the terms of privatisation in the House of Commons on 28 March, a Minister of State, Norman Lamont, informed that Trafalgar had bought the 'currently bankrupt Scott Lithgow, reconstructed so as to be able to meet its existing liabilities and the cost of essential rationalisation'. The net cost to Government, however, after taking into account the purchase price and deferred loans, which formed a part of the deal was £71,000,000 a sum that according to Lamont was broadly equal to the cost of closure of the yard to the taxpayer.[4] That day, the existing Scott Lithgow directors duly resigned and were replaced by Trafalgar House personnel, with Eric Parker, Trafalgar House Group Chief Executive as chairman and Jim Grice, a director and general manager of Cleveland Redpath Offshore as managing director. At the first meeting of the new Scott Lithgow it was noted that Trafalgar House had received from BS 'the sum of £82,000,000 by telegraphic transfer, 'by way of an interest free loan and forming part of the Waivable BS Loans'.[5]

From the outset of negotiations it had been nevertheless recognised by all parties that there would be a large shortfall between the original contract price and the actual cost of completing *Ocean Alliance*. Indeed, at 30 December 1983 Scott Lithgow had estimated that the shortfall would be almost £55,000,000. Accordingly, prior to privatisation and as a condition of purchase, Trafalgar had made it known to BS that it required that a new or amended contract with Lloyd's Leasing and Britoil should be agreed. Trafalgar also required that BS should protect it against any shortfall, and that an agreement would be negotiated with the Scott Lithgow workforce on interchangeability, on a reduction of numbers employed, and on the re-training of welders. For its part, BS required (although there was obviously a good deal of flexibility here) that Trafalgar should acquire Scott Lithgow on the proviso that the cost to BS, including the shortfall should not exceed the cost of closing down Scott Lithgow altogether. Moreover, Trafalgar, Scott Lithgow and BS should arrive at arrangements with Lloyd's Leasing and Britoil satisfactory to BS, which would enable the latter to be discharged from liability under the BS Guarantee and that the sale should be completed before the end of the financial year on 31 March 1984. By 7 February, however, BS had informed Trafalgar that the shortfall on *Ocean Alliance* would now not exceed £64,000,000. Thereafter, in the course of negotiations, Britoil informed Trafalgar that they would only concur to an agreement, which stipulated a new contractual date for delivery of *Ocean Alliance*. Britoil also required liquidated damages and or penalty provisions for late delivery, a final deadline for delivery and the replacement of the BS Guarantee with a guarantee from Trafalgar House. Accordingly, Trafalgar had to determine whether it could in fact meet these conditions and met with Britoil and Odeco representatives over a very short time-scale. [6] Nevertheless, due to its relative inexperience in this field, short of pulling out of the deal, Trafalgar had little choice but to rely on historical data and management opinions pertaining to the completion of *Ocean Alliance* before eventually purchasing Scott Lithgow. Given the yard management's past performance and failings, however, and the BS desire to offload it, this approach had to be at the very least, questionable.

Post acquisition, Scott Lithgow's new managing director, Jim Grice, who was also a former contracts and operations manager at the offshore constructors, Redpath Dorman Long at Methil, highlighted the firm's main market area. Grice informed that Scott Lithgow's marketing effort would concentrate on providing structures for the development of marginal oilfields. Such areas had lain untapped because of prohibitive costs, but tax concessions in recent budgets had helped to reduce these costs, and Scott Lithgow's experience of semi submersibles would stand them in good stead to attract further orders to exploit this potential market.[7] The priority, however, remained to complete *Ocean Alliance* on time.

Meanwhile, it will be recalled that Scott Lithgow had continued work on the almost completed BP semi submersible, *Sea Explorer* despite the oil major cancelling the contract, and by 18 April it had been announced that the order had been reinstated at an apparent cost to BS of £25,000,000. An undertaking to complete *Sea Explorer* by 31 July had been given and it was understood that BP had already received adequate compensation from BS for late delivery, and that accordingly it had terminated its civil action against BS. By this stage, however, Howard Doris, had pulled out of its potential partnership with Trafalgar House although no reason was given.[8] To speculate, it would not have been unreasonable to assume that Howard Doris may have had severe reservations that the timetable to complete both semi submersibles could be kept.

During the negotiations to acquire Scott Lithgow, Trafalgar had made it known to two senior Government ministers, the Secretary of State for Scotland, George Younger and Norman Lamont that it expected their support on selective financial assistance under the Industrial Development Act of 1974. Trafalgar proposed a total spend of £20,000,000 on re-training personnel, capital improvement and computer systems at Scott Lithgow. Although Trafalgar considered that these proposals were, 'essential for the long term success of Scott Lithgow', they would, nevertheless only be able to proceed, 'if adequate financial support by way of grants was made available by Government'. Prior to acquisition, Younger had apparently confirmed that he would do everything he could to support any application.[9] Crucially, the question of just what 'adequate financial support' meant was to be the subject of a great deal of correspondence and of meetings from the date of acquisition onwards.

From the outset officials at the Industry Department for Scotland (IDS) were keen to establish links between them and the new Scott Lithgow management. By April

1984, however, John McClellan of IDS had noted that one of the issues that required close co-operation was the suspicions already expressed in the media and in Parliament that Trafalgar House, 'may make a killing out the Scott Lithgow deal by selling land surplus to its requirements at vast profits'. Civil servants were in fact dealing with such allegations by referring to an assurance already given by Trafalgar that they would be willing to sell any surplus land, 'at an appropriate apportionment of the price paid for the land and assets'. And, 'to the discussions which are being set up between [Trafalgar's] Property Department and the Property and Environment Directorate of the Scottish Development Agency (SDA)'.[10] Beforehand, Trafalgar had been quick off the mark and had already sent a detailed application to the IDS on the day after acquisition on 29 March. Accordingly, on 4 June the IDS had offered Trafalgar a total Project Grant, including Regional Development Grant of £4,973,580 an in-plant Training Grant of £4,429,600, being eighty per cent of £5,578,000 and an exchange risk guarantee not to exceed £7,500,000 possibly re-negotiable to £10,000,000. One of the conditions attached was that there would be a claw back on grant in the event that Scott Lithgow did not continue for four years All in all, on a total spend of £20,000,000 Trafalgar was being offered £9,223,180 in grant, when it had been looking for £15,000,000. By this stage, it had transpired that Trafalgar were in fact attempting to ensure grant assistance to a similar level to that provided by the D.T.I for Redpath Offshore on Teeside.[11] By 7 June, however, Trafalgar had withdrawn its application as it was considered that the level of assistance proposed was inadequate, but it did ask the IDS to reconsider.[12] Pending another application, the IDS then placed Trafalgar's application for assistance in abeyance.[13]

In a later off the record comment by Allen of the IDS it was noted that one of the principal differences between the unsuccessful Scott Lithgow proposal and the successful Teeside proposal was that the latter, 'created "real" jobs rather than preserved or purported to create jobs'. In, 'a very off the record remark' that R.A. Wallace of Trafalgar preferred not to have quoted or used, Allen had stated that Trafalgar House, 'had done very well out of the Scott Lithgow Acquisition and from Central Government generally on the question of assistance in its capital developments'. Given this, it was time for Trafalgar, 'to put more of their money into the business'. As Wallace further noted, 'this attitude could well be the real problem we face in these negotiations and will require delicate handling'.[14] Nevertheless, although an element of brinkmanship applied, Trafalgar had by 25 June re-submitted a revised application for a smaller scale project. The revised application involving a sum of £15,626,000 had been considered by C.H. Coulthard at the Department of Industry in Glasgow and by 20 July it was anticipated that the Department would ratify the following. On a total spend of £15,626,000 Government would provide £8,130,000 in grants, which equated to fifty-two per cent.[15]

By October, however, Trafalgar had accepted an IDS formal offer of assistance of 24 August under Section 7 of the Industrial Development Act 1974. This was in relation to Regional Development Grant and Regional Selective Assistance a grant of up to £3,396,000 and an exchange risk guarantee on a direct European Coal and Steel Community loan of up to £4,855,000 in respect of the upgrading of the Glen and Cartsburn yards and of computerised facilities. In addition Trafalgar also accepted a training grant of up to £2,186,000 (or up to £4,372,000 if European Social Fund Assistance were not received) to aid a programme to re-train about one thousand employees in advanced welding techniques and specific management skills.[16] As was earlier noted at Scott Lithgow, in view of the sums of money involved in grants and other existing problems it would merit the employment of a full time member of staff with suitable support for about two years.[17]

Earlier in July the full extent of Scott Lithgow's financial position before privatisation for the financial year 1983-1984 was revealed when the BS Accounts revealed a loss of £74,584,000. Moreover, the BS overall trading loss at £161,000,000 was the highest since nationalisation. For the Corporation, Graham Day explained that £100,000,000 of this loss was attributable to just four offshore contracts. Day commented under the sub heading "Scott Lithgow", that, 'the financially ill-fated venture into the construction of complete offshore units has impacted upon [BS] in a number of ways. The financial results speak for themselves'. Day further noted that the efforts required of BS management and staff, 'to address the contractual, technical, manufacturing, industrial relations and other matters associated with Scott Lithgow and currently Cammell Laird, are such as to place much of the day to day Corporation business into the comparative background for significant periods'. BS had, nonetheless, since September 1983, divested itself by sale or closure seven constituent firms and intended to rid itself of its last two remaining ship repairing firms and general engineering interests during 1984-1985. Preparation to privatise the warship sector was already under way and only two of the previous five divisions now remained, Warship with six firms, and Merchant/Composite (mixed naval and mercantile) with fourteen. The BS position on the privatisation of Scott Lithgow was, however, made a little clearer when it was confirmed that a provisional payment of £82.000,000 had been made to Scott Lithgow. And, that on receipt of the audited Completion Accounts, (which had not yet been received) an adjustment of the provisional payment would be made dependent on the net asset value revealed. BS, did, however, remain liable for any penalties for late delivery, 'on one semi submersible' with a contract sales value of £78,000,000 [*Sea Explorer*] and in the event that the customer should become entitled to terminate the contract, BS had given an undertaking that it would purchase it.[18] The running of BS had by this stage come under increased parliamentary scrutiny, and Day had earlier been forced to hand over a copy of the BS Corporate Plan to the Trade and Industry Select Committee of the House of Commons after he had earlier refused to do so claiming that it was sensitive. [19] With losses on this scale, however, it would have stretched credulity to breaking point had not the Government interfered in the running of the Corporation. Nevertheless, Day was clearly under orders to dismantle BS. As he would later state, 'I joined BS...and moved to get rid of as much of the loss-making assets as I could, as promptly as I could'.[20]

Beforehand, the Scott Lithgow workforce had accepted in April 1984 a thirty-six-page document, which in effect offered the possibility of sweeping away much of the restrictive practices in the yard. This apparently marked a clean break from extant shipbuilding practice, by envisaging complete interchangeability between welders, platers, and caulker-burners, in addition to interchangeability in the outfit trades. By May, however, the hourly paid workforce had joined a Scottish Trade Union Council one-day stoppage in support of the National Union of Mineworkers

Strike. Despite this, Trafalgar's chairman, Sir Nigel Broakes highlighted that Scott Lithgow would win more orders in the next few months, would break even during the year and return to profit in 1985. It was also reported that Scott Lithgow was hopeful of securing a submarine refit in November 1984 and that MoD (N) had repeated their interest in new building tenders for the new *Type 2400* conventional submarines. This prompted the local MP, Norman Godman to comment that he was 'certain that the refit order would go to Scott Lithgow [and added that] he was convinced that new builds would follow'.[21]

Just how Godman was so convinced remains uncertain, but given the recent history of MoD 'promises' to Scott Lithgow his stance must have owed more to optimism than sense. Scott Lithgow did, however, appoint Graham Strachan as executive director in charge of attracting MoD work. Strachan a former deputy chairman at John Brown Engineering had at least a credible reputation in the industry. By July, Scott Lithgow had also hired on a consultancy basis Greg Mott who had been recently sacked by BS as chairman of Vickers. Mott had recent experience on the Trident project and had been bought in to offer advice on tendering for the *Type 2400* submarine follow on orders.[22] On the face of it, as Vickers was in the process of building the first of class, this seemed to be a shrewd move, as the real competition for these orders would come from either it or Cammell Laird. Both firms had already received substantial Government investment to build Polaris, and in Vickers case to build Trident nuclear submarines. However, with the recent announcement of the Government's intention to privatise seven warship firms by March 1986, which now apparently included Cammell Laird, Swan Hunter, Brooke Marine and Hall Russell in addition to the three designated warship firms, Vickers, Vosper Thornycroft and Yarrow, other bids could be expected.[23] Nevertheless, Scott Lithgow had by this stage finally completed the ill-fated Seabed Operations Vessel, HMS *Challenger*, more than a year later than scheduled primarily because of defective cabling and a defective MoD saturation diving system at a reported cost of £100,000,000.[24] It is to this contract that I now turn.

HMS *Challenger*

As the Committee of Public Accounts heard, *Challenger* was meant to improve the Royal Navy's deep diving capability and to fulfil seabed search, recovery and research roles. As such, *Challenger* was a major innovation, 'with capabilities unique in the Western World'. Although not strictly a warship, *Challenger* was nevertheless the fifth largest vessel in the Fleet. With a towed unmanned submersible and an integrated navigation and dynamic positioning system as well as a saturation diving system *Challenger* was a complex product from the beginning. Accordingly, design responsibilities were split between the MoD and four main contractors, but primarily rested with Scott Lithgow. The design of the saturation diving system (SDS) was the responsibility of the MoD, but it did sub contract to Camper and Nicholson Electrical Industries to provide assistance in finalising the SDS design. The day to day management of the project was split between the ship and weapons system areas, each with its own project team. This involved the supervision of a complex network of sub contractors although current practice would have demanded a prime contractor, but this was not the case with *Challenger*. Moreover, staff shortages on MoD project teams, and at Scott Lithgow were a feature of the contract and from the outset the project had suffered from cost escalations and delays. In September 1976 the MoD had approved the project at a cost of £35,500,000 (September 1975 prices). However, no detailed design work had taken place and a revised estimate of £71,500,000 (September 1978 prices) was approved in 1979. An increase that was primarily due to an 'underestimation of the complexity of the equipment fit', nonetheless the new estimate contained contingencies for weapon systems and for the vessel itself. MoD committees were accordingly assured that no major development problems were foreseen. By early 1983, however, the estimated cost had soared to £133,000,000 (constant July 1982 prices) mainly due to weapons systems. Moreover, due to faults in wiring and in the SDS discovered in 1983 additional costs had been incurred and the latest estimated costs at July 1983 constant prices was £153,000,000 (approved in January 1985). This represented a real cost increase of around seventeen per cent over the 1979 estimate again primarily due to weapons systems, which had had increased as a proportion of the total estimated cost from thirty-eight per cent in 1979 to forty-eight per cent at current prices. Clearly, given what had already occurred, much could be learned from the handling of this project.[25] Subsequently, after acceptance from Scott Lithgow in July 1984, improvements in the SDS were required in 1986 when after a competitive tendering exercise, Thorn-EMI were awarded the contract which it in turn sub-contracted to Humber Shiprepairers.[26]

Post *Challenger*, any hope of further naval orders now rested entirely on either a submarine refit or new build work coming to a yard essentially geared to the offshore sector. To the latter end in October 1984, Trafalgar House Offshore (THO) had become one of the largest offshore players in the UK, when with *Sea Explorer* due to go on trials, it had been given the go ahead by Government to purchase the RGC offshore construction yard at Methil.[27] RGC was purchased from the British Steel Corporation for £15,000,000 and gave Trafalgar a facility for heavy jacket construction, as well as a large fabrication hall. With Scott Lithgow concentrating on semi submersibles, and Cleveland Offshore and Redpath Offshore on Teeside, where the Redpath yard was undergoing a major upgrading, including three module assembly halls at a cost of £9,000,000 THO had now a wide ranging capability. A capability enhanced by Trafalgar Davy Offshore, which provided design, management and construction services for oil and gas field projects.[28] Despite this expansion, by November, productivity on *Ocean Alliance* was reported to be 'too low' and the repair rate, 'unacceptably high'.[29] Nevertheless, Scott Lithgow had by this stage at least won its first order since privatisation, as Gotaverken Arendal had placed an order in October worth £2,000,000 to construct pontoons and deck units for a platform under construction in Sweden. [30]

Whilst the Gotaverken order was no doubt welcome, it was hardly a major contract, which could justify the considerable overheads at Scott Lithgow. Moreover, by this stage the naval dimension had suffered a considerable setback when it was announced that the inexperienced Humber Graving Dock Company had won the submarine refit order, *HMS Otter* that Scott Lithgow had tendered for. This contract, for which Vickers and Cammell Laird had also tendered, had been awarded in line with the Government's stated intention to extend competition to warship refit work. If Scott Lithgow had hoped that expertise would outweigh straight cash considerations then they were sadly disabused as Humber had underbid them, 'to the tune of several million pounds'. On the loss of the refit, a management spokesman at Scott Lithgow apparently professed to be 'amazed' and to be 'extremely disappointed'. With male unemployment in Greenock at just under eighteen per cent and in Port Glasgow at 31.5 per cent, 300 more jobs were at risk, mostly in outfit over the loss of the refit. Scott Lithgow's managing director Jim Grice admitted by this stage that owing to the high rate of voluntary redundancies that had already taken place, the yard had a lopsided labour force in terms of its requirements. [31] Clearly this situation would test the firm's determination to remain in the submarine market, but if it wished to be a serious contender for the forthcoming *Type 2400* orders, more money would have to be spent.

By December 1984, Syd Fudge of RGC Offshore in his capacity as an 'observer' had informed Scott Lithgow management that the decision had been taken to mothball Scotts' Engine Works, pending the decision to award a contract for the *Type 2400* submarines. Fudge also pointed out that production management in particular should look into productivity instead of increasing manpower. Moreover, on *Ocean Alliance* the head of quality assurance had highlighted that production management still did not have the quality under control. [32] This brought a sharp response from the manager responsible for production, Kooymans, who pointed out to Fudge [the latter believed that production found productivity targets to be impractical], that information regarding productivity had to be accurate. Furthermore, Kooymans believed that up until now it appeared to be impossible for the Scott Lithgow organisation to provide accurate information. Fudge had also pointed out that that the overall estimated man-hours did not compare with job cards. To this, Kooymans suggested a solution, which he had apparently mooted some months beforehand. Namely, to use the job card system as the basis of the reporting system, 'to the full extent by allocating the man-hours to the job card number, so that [he could] single out those who are not performing'. Kooymans also suggested that the present Quality Assurance system on *Ocean Alliance* was holding back production.[33] Clearly, with the *Ocean Alliance* programmes slipping back, tensions within the management structure were becoming apparent. Indeed, in a response to a memorandum of 20 December 1984 from Graham Strachan regarding the danger of losing submarine experienced foremen. Kooymans pointed out that the firm had too many outfitters. Strachan had heard that the new 'Blueprint is based on a reduction of our electrical foremen from seven down to two and our mechanical foremen from fourteen down to six'. If correct, Strachan thought that this in addition to senior personnel already lost would be, 'even more alarming in the context of our bidding for three submarines with a work content. spread over six years. of some nine million man hours'. Kooymans, obviously frustrated, replied that Scott Lithgow had no submarine contracts, no definitive plan to retain submarine 'know how', that the impracticality of using outfit foremen to supervise steelwork trades remained, and that restrictions placed on the firm by Trafalgar House did not help. Kooymans clearly believed that in the event of redundancies that Scott Lithgow could reinstate the 'know how' through sub contractors or short term contracts, or could buy the 'know how', if and when it was required. Nevertheless, he was fully aware of first class supervision for every job, but the present imbalance in the workforce did not help and the sooner that [Scott Lithgow] 'could bring down the numbers to an acceptable level', the better it would be for the firm in general. Kooymans was, in essence, reflecting the inherent uncertainty of Scott Lithgow attaining MoD contracts.[34]

Tensions persisted and in discussing the future of outfit departments at Scott Lithgow in January 1985, Neil MacFarlane pointed out that although Trafalgar had taken the decision to bid for the new *Type 2400* submarines 'enthusiastically', the Production Services Department now found itself investigating the cost of transfer from the Engine Works; the minimum outfit needs of *Ocean Alliance*: and another exercise based at Cartsburn to accommodate the manufacturing needs for the submarines. MacFarlane tellingly commented that, 'in the past this type of fragmented approach was costly in terms of staff supervision and uneconomical in terms of plant and labour utilisation'. Plainly, if no submarine orders were won then the retention of such a large complex as the Engine Works could not be cost justified, although an alternative manufacturing site could be found within Scott Lithgow. MacFarlane also pointed out that by far the greatest proportion of outfit manufacturing hours were spent on the production of non-proprietary components by personnel who had acquired the necessary custom made skills in-house over many years. Thus, if subcontracted, man-hours would increase, as would supervision costs not least through adequate control over the multiplicity of parts needed for submarine work. [35]

This all served to highlight the dilemma facing Scott Lithgow; however, *Ocean Alliance* not yet thirty per cent completed, remained, 'significantly in delay, even with the borrowed labour'. Moreover, the expected loss on this contract alone now stood at the end of January 1985 at £7,740,000.[36] Clearly, suggested productivity improvements were still not yet filtering through on this contract and overall productivity remained poor. By the end of February, however, Kooymans had resigned, 'for personal reasons' after *Sea Explorer* had been officially handed over to BP earlier in the month. By March, construction had began on a new road at a cost of £500,000 within Scott Lithgow to allow the passage of modules completed at Cleveland Redpath Offshore to be transported and fitted to *Ocean Alliance*. In the interim, Malcolm Ford of Britoil presenting his company's annual report, noted that *Ocean Alliance* due for delivery in May 1986, would miss next summer's drilling season and would not now be ready until September 1986.[37]

Scott Lithgow's situation with effectively only one contract [and a major loss making one at that] in hand, was serious, and management continued to seek candidates for redundancy. In this regard, Graham Strachan noted to Scott Lithgow's future general manager, Harry Nicholas on 30 April 1985 that he had just heard that a key manager with submarine experience, David Scott was a candidate for redundancy. Strachan commented that if the firm lost Scott, 'on top of all the others that had gone, we are virtually down to one man, namely Neil MacFarlane, in the whole area of manufacturing and outfitting'. Given this, Strachan then reminded Nicholas that the latter had agreed to try to retain all submarine personnel in any forthcoming redundancy situation. [38] With Trafalgar having already lost out to GEC over the Yarrow privatisation, 620 compulsory redundancies were announced at Scott Lithgow on 1 May unless voluntary redundancies were accepted by 7 May. This moved the chairman of the Scott Lithgow shop stewards, Bart Monaghan to comment that, 'we have co-operated with everything they have asked us to do on work practices...now they have stabbed us in the back'. Compulsory redundancies had prompted an earlier one-day walkout by the workforce on 2 May. By 14 May, however, with an extra payment of £2,000 available to new applicants under the age of forty years for redundancy, a total of 415 manual workers and 184 staff had volunteered. This brought the hourly-paid workforce at Scott Lithgow down to 1,600. A situation given further focus with the news that the submarine order situation had taken an entirely new twist when it was announced that the still nationalised Vickers, prior to privatisation, had taken over their nationalised submarine rivals, Cammell Laird at Birkenhead for the derisory sum of £1.[39] Cammell Laird had already been 'saved' by the award of a type 22-frigate contract in January, which as the Committee of Public Accounts later noted had been placed their to ensure the Birkenhead firm's survival as a major warship builder at an extra cost of £7,000,000.[40]

By this stage, however, the deal by which GEC had bought Yarrow, who it will be recalled that Scott Lithgow had withdrawn from purchasing in 1970, had been made public. The reported purchase price of just under £34,000,000 comprised: £17,000,000 payable in cash by GEC for the Yarrow shares. A loan to be repaid by Yarrow Shipbuilders to BS on completion of sale of £3,080,000. The dividend declared by Yarrow Shipbuilders to BS prior to completion of £10,000,000 and an estimated payment to be made by Yarrow Shipbuilders by March 1986 to BS for group tax relief of £3,700,000.[41] As Johnman has noted, once the profitable warship sector had been privatised then by definition the rump of BS, the mercantile yards, would be unprofitable. Indeed, between 1980-1981 and 1983-1984 the cosseted warship sector of BS had made a profit of £185,000,000 in stark contrast to the mercantile sector losses of £525,000,000. Clearly, as Johnman has further noted, the privatisation of the warship yards was intended to foster a long held ambition of the MoD to have realistic competitive tendering, even though this involved the deliberate creation of over-capacity in the sector in relation to likely naval demand.[42]

Throughout 1985 the ramifications of the real cost to Government of the Trafalgar House take-over had rumbled on and on 17 June, Norman Lamont revealed that the respective auditors of BS and Trafalgar House had failed to reach agreement on the Scott Lithgow Completion Accounts. Accordingly, the matter had been referred to an independent expert for determination. In the interim, BS had agreed to make a payment principally for the cost of completing *Sea Explorer*, which was not in dispute [43] However, the BS Accounts for the year 1984/1985 were more revelatory. BS had paid to Trafalgar House on 19 June, £30,649,000 of which, £26,000,000 was attributable to *Sea Explorer* for which BS was liable to complete following the privatisation of Scott Lithgow. Taken together with interest thereon of £4,509,000 and professional fees, dilapidations, plus further liquidated damages and subcontract costs in respect of the two drilling rigs of £18,298,000 this comprised a grand total to BS of £53,456,000. This left an amount remaining in dispute in the Completion Accounts amounting to £49,618,000 plus interest from March 1984.[44] Clearly, taking into account the original Waivable BS loan to Trafalgar of £82,000,000 the further payment of £53,456,000 and the disputed Completion Accounts, the cost to the taxpayer of saving Scott Lithgow, potentially in excess of £180,000,000 had to exceed the cost of closing it down in March 1984. By September 1985, however, with Scott Lithgow still in effect in a one-order situation, the MoD had announced that it was delaying the placing of contracts for the *Type 2400*-class submarines until November [subsequently delayed to January 1986]. Scott Lithgow had also announced that it was axing one thousand jobs and had declined to tender for two frigates and two RFA oil replenishment vessels as they were too complex, involving missile and helicopter pads as well as ammunition stores. Tellingly, the firm no longer had the design capacity to deal with new design work on this type of vessel.[45] Just how it expected to cope if awarded the three *Type 2400* class submarine orders remained unclear, nevertheless, it is to the events surrounding the award of this contract that I now turn. Before doing so, however, it should be noted that Trafalgar House had already intimated [although the exact date remains unclear] to BS that owing to the losses on *Ocean Alliance* being substantially in excess of those indicated at the time of privatisation, that it intended to sue BS for misrepresentation. [46]

The Type 2400 Tender

As Wrobel has noted, as part of the 1981 Defence Review, Government had announced a reduction in the planned size of the Royal Navy's surface fleet with a continuing build up of hunter killer nuclear submarines. Moreover, it was also intended to proceed with a new class of diesel-electric powered submarines. Previously, in the mid 1970s with the *Oberon* class due to be phased out in the late 1980s, the critical choice for the planners as Wrobel saw it was whether to continue operating conventional submarines or to go all-nuclear. The decision to go ahead with a conventional submarine was, however, not based on a comparison between it and a nuclear version's capabilities, but was made on the basis that the two types could complement each other. A conventional submarine although lacking the speed and endurance of a nuclear alternative, was considerably cheaper over time, quieter and better suited for covert operations in shallow waters. Indeed, a mixed submarine fleet had considerable advantages in the range of tasks it could perform. From a broad initial range of requirements and designs the Royal Navy eventually settled on a design with 'a very sophisticated weapon/sensor fit and a submerged displacement of 2,250 tonnes'. This was subsequently approved in 1981 and a contract for the first submarine of the *Type 2400* class was placed with Vickers two years later. [47]

Notwithstanding the late Ross Belch's insistence that MoD (N) had promised that Scott Lithgow would be the follow on yard for the *Type 2400* submarine project, and the undue delay in beginning the project, the situation had materially changed with the onset of privatisation of the warship firms from BS control. That Scott Lithgow were allowed to tender at all owed much to the commitment of Vickers to the Trident programme, and an all too belated attempt by MoD (N) to introduce an element of 'real' competitive tendering into warship procurement, rather than the hollow sham that had hitherto persisted. In tandem with the Trident nuclear submarine decision, the slow build up of resources had also marked the *Type 2400* submarine programme. In November 1982, however, the Government had approved a modernisation project at the lead yard for design and development, Vickers at Barrow, including a construction hall to facilitate the building of modern warships including the Trident programme. The project was likely to take five years to complete at a cost of £220,000,000. Part of the reason given to the Committee of Public Accounts (CPA) for this government largesse was that improvements in productivity would accrue, as Vickers would become more efficient and competitive than hitherto. This did not necessarily follow, particularly as Vickers was already the monopoly supplier of nuclear submarines, and more realistically amounted to a pious hope rather than anything more concrete. Given the amount of taxpayer monies already expended, however, the CPA were nevertheless very concerned at the low rate of productivity in the warship yards in general and in particular it had cause to regret that MoD (N) had allowed Vickers to exploit its monopoly position in nuclear submarine procurement. On warships in general the builders had, 'found it easy to make profits in the past and the taxpayer [had] not received value for money'.[48] This was hardly an earth shattering conclusion as other committees beforehand had arrived at the same conclusion and as the author has consistently pointed out over the course of this thesis in relation to collusion, the warship firms, despite their self-appointed reputation for efficiency, were at heart fundamentally inefficient.

As Vickers were already heavily committed to Trident and the lead *Type 2400* boat, BS and MoD Procurement Executive had established a joint working party to recommend other suitable BS yards for the remaining *Type 2400* work. Accordingly, Scott Lithgow, along with four other BS companies attended a presentation at Barrow on 25 January 1983. There, the working party outlined the criteria against which individual firm's would be judged, and invited them to respond to this in their submissions. The essential criteria were management structure and organisation; industrial skills and resources; shipyard facilities; production methods; quality assurance; dockside test organisation and facilities; planning/production control organisation; follow yard services and support; and training and financial implications. It was also understood that in many areas the *Type 2400* class would be built to nuclear standards. By this stage, however, it was evident that the majority of the Cartsburn yard was already doomed as Scott Lithgow wished to concentrate its offshore and submarine construction in its Port Glasgow shipyard at Kingston and at the adjacent Inchgreen Dockyard site in Greenock. Of the three alternatives put forward, Cartsburn would need capital expenditure of £1,500,000 and would be made available if the MoD wanted a dedicated site; Kingston would require £2,500,000 and Kingston/Inchgreen, £1,500,000.[49]

It will be recalled that in an earlier BS exercise to ascertain the costs of establishing the capacity for nuclear submarine construction at Cammell Laird and Scott Lithgow, the cost at Scott Lithgow alone would have exceeded £68,000,000. In this light, the firm's bid to build the *Type 2400* which would require nuclear standards of construction whilst still a part of BS and suffering huge losses on offshore construction was nothing more than *ersatz*. To be really economical, submarines are best constructed under cover; indeed Scotts' had built this way in the Great War, but had not done so since. Although the firm's plans made it clear that it would seek approval from BS to concentrate its production facilities at the Kingston and Glen yards and at Inchgreen, no under cover facility was planned owing to cost and time considerations. In short, with additional plant and equipment, Scott Lithgow intended to build the *Type 2400* much as it had done in the past with the *Oberon* class. Nonetheless, to be fair to Scott Lithgow, the firm had eventually been entrusted by Vickers and MoD (N) to ensure quality standards on the fabrication of approximately thirty per cent of the pressure hull units complete with internal stiffeners and bulkheads for three nuclear powered submarines between 1980 and 1982.[50]

It was later alleged, however, that from the date of Cameron Parker's departure in June 1983 that BS top management had 'actively encouraged the experienced submarine workforce both shipyard and workshop to volunteer for redundancy despite protests from local management as to the damage this would cause'.[51] This may have been done in line with the wish to concentrate production in Port Glasgow and as an acknowledgement that the Cartsburn yard was unlikely to receive any further orders. Indeed, Scott Lithgow had already been dealt a crushing blow as a result of the Nott defence cuts and the wish to concentrate refits in the Royal Dockyards and thereafter to put these refits out to competitive tender. However, in the past five years only two major and a number of minor refits submarines had been carried out as part of a, 'planned programme of six major refits which MoD considered would keep Scotts' submarine building specialist team together until the *Type 2400* could go into series production'. These hopes were cruelly dashed when the MoD, 'abruptly terminated this programme in 1981-1982 after the first of two refits, principally as a result of the Nott defence cuts'. [52]

By 19 April 1984, however, Trafalgar House through Scott Lithgow were asked to confirm their interest in being invited to tender to build the second and third of what had now become known as the *Upholder* class of patrol submarines, either singularly or together. Trafalgar House, in response, offered an updated version of the Scott Lithgow response of February 1983 for the first round of tenders in November. By this stage Trafalgar had omitted the Kingston/Inchgreen option and it was the firm intention to develop the Cartsburn site for the construction and outfitting of submarines, with dry docking being carried out at the Inchgreen site.[53] However, as alternative build strategies developed, Scott Lithgow again moved towards concentrating its submarine effort at the Kingston yard, as it ran down the Cartsburn activities.[54] Nevertheless, the Vickers take-over of Cammell Laird of June 1985 must have thrown a metaphorical spanner in the works, but gave Trafalgar a potential get out of jail clause. The conglomerate could and subsequently did bid for Vickers/Cammell Laird when the Barrow and Birkenhead firms were put up for sale by BS, although after losing out to GEC on the Yarrow privatisation, a successful Trafalgar House bid was by no means guaranteed.

Subsequently, by September 1985 in what was an iterative tendering process, Trafalgar had submitted its third tender for the *Upholder* class in direct competition with Vickers/ Cammell Laird and the now GEC owned, Yarrow Shipbuilders. Clearly, Vickers/Cammell Laird held all the aces in the tendering process, but could still be trumped on the final selling price. As the lead yard for the design and build of the first of the *Type 2400* [*Upholder*] class, and the monopoly supplier of nuclear powered submarines, Vickers either on its own or through its surrogate, Cammell Laird could tender with a high degree of accuracy due to its detailed knowledge already gained. By December, however, Trafalgar House had officially entered the race to buy Vickers/Cammell Laird, which offered it the possibility of getting the contract by the back door in any event. All effort expended in securing the three *Upholder* class follow-on orders was to no avail, as in January 1986 it was officially announced that Cammell Laird had won the £300,000,000 contract.[55] Nonetheless, in what was clearly a consolation gesture, the MoD had apparently 'promised' to award Scott Lithgow a £10,000,000 contract for the design and build of a range mooring vessel later in the year and two powered mooring lighters subject to the satisfactory negotiation of appropriate terms and design conditions. In addition, Scott Lithgow would also be allowed to tender for all new MoD construction and refit orders and for steelwork on the Trident programme on a sub contract basis. [56] On hearing of the loss of the *Upholder* contracts and the MoD offer of the three small vessels the Trafalgar House Offshore-managing director, Syd Fudge publicly commented that 'if this was not a sop he did not know what is'. Furthermore, Fudge was 'appalled and if MoD thought that this would keep Scott Lithgow alive, they could forget it'. On the range mooring vessel Fudge pointed out that with all the problems at two other yards, Ferguson Ailsa and Hall Russell all that Scott Lithgow would be doing was 'taking the bread out of their mouths. The effect on employment would be nil and would eventually mean a further rundown'. Moreover, Fudge also stated that as Scott Lithgow was to design the vessel then no benefit would accrue for a year. This arrangement was also considered by the local MP Norman Godman as 'bloody awful'. However, in relation to the *Upholder* bid, the Scottish Secretary George Younger prior to taking up a promotion as Minister of Defence informed that the Scott Lithgow bid was not sufficiently competitive in price terms.[57] Later, in the House of Commons, John Lee informed that the Cammell Laird bid was £20,000,000 less than MoD had expected to pay. About half of the saving was due to ordering all three vessels together and half was due to competitive pressures. [58]

At least Trafalgar could still play its get out of jail card by winning the bid to purchase Vickers/Cammell Laird. By March, however, it had been revealed that the conglomerate had lost out to a management led consortium, VSEL Employee Consortium plc. The Consortium offered a downpayment of £60,000,000 allied with a profit sharing arrangement for the period 1986 to 1992, which would provide BS with further payments of up to £40,000,000 in 1992 and 1993. Part of the deal was that the Consortium would undertake to complete and fund the remainder of the work on the submarine facilities project began under BS control in order to be able to complete the Trident programme to MoD requirements. Moreover, the Consortium gave a further undertaking to the MoD that that it would renegotiate the contract for the first Trident submarine, 'on terms, price, programme and conditions which represents a significant improvement to the MoD on the terms previously negotiated with Vickers under BS control'. [59] This announcement prompted a local Liberal politician, Ross Finnie, now a Minister of the Scottish Parliament to comment that the decision was a scandal. He noted that in recent months, Trafalgar had lost out on submarine orders because the Government had only considered the cheapest bid. Now, Government, 'had let Vickers go to a management bid of £100,000,000 despite Trafalgar House bidding tens of millions of pounds more'. Moreover, according to Finnie, the Government 'had overruled a recommendation from British Shipbuilders that Vickers should be sold to Trafalgar House'. [60] Even by the non-standards of the Thatcher led administration this appeared to be a perverse decision, and indeed, Finnie's comments seemed to have considerable substance. Indeed, this was substantially confirmed by the Secretary of State at the Department of Trade and Industry, Paul Channon, in the House of Commons. Channon revealed that BS and its financial advisors had judged the commercial terms of the [Trafalgar House] bid 'in so far as they affected BS, to be superior to the Consortium's bid'. However, Channon, falling back on the cloak of commercial confidentiality, revealed that that there was a further term in the Trafalgar bid that he found very difficult to accept, and one that he would not disclose without the permission of the bidders. Moreover, BS had also acknowledged that other interests beyond its remit had been involved in the sale. Accordingly, Channon had decided to declare the Consortium the winner over Trafalgar House. It then transpired that the Government had demanded that the bids contained theoretical, but not firm terms for the construction of Trident with the entire process being squeezed into a matter of days to enable a firm price to be registered. Even so, Trafalgar had been allowed to submit its terms after the deadline.[61]

Nevertheless, the entire tendering process in the nether world of MoD procurement bids as the Scott Lithgow Board later noted 'left very much to be desired'. Assuming that their bid was second (that is, £20,000,000 lower) to that of Vickers/Cammell Laird the Scott Lithgow board surmised that the latter had bid £10,000,000 less than it had for the three vessel order. Scott Lithgow had apparently been penalised by another £10,000,000 due to its refusal to accept clause 41. 2 (c) of the MoD contract, which required the firm to accept all changes without compensation. This was in all likelihood the term that Channon had refused to disclose to the House of Commons.

Moreover, MoD did not provide equality of information to the two follow on builders, Scott Lithgow and Yarrow and the policy of iterative tendering, whereby four tenders were submitted between March and November 1985, inevitably gave rise to a significant risk of a breach of confidentiality in the intervening period. As a Scott Lithgow director had earlier noted, the following points were worth recording. However, although these points should be viewed with the proviso that they could be considered to be one-sided, they are still worth considering in detail due to their content.

1. Scott Lithgow's response to the problem of the lead boat's design being incomplete was to tender on the basis of bills of quantity with extras or rebates to be negotiated if final drawings showed variations. This was rejected by the MoD as it did not have staff qualified to assess bills of quantity, and although Scott Lithgow offered to accept arbitration by MoD this was also rejected.
2. Vickers as the design authority, and latterly Cammell Laird were in possession of full design data and know how and with the lead boat already two years in construction knew or could better anticipate costs arising from design changes.
3. Although Trafalgar had met the Chief of Defence Procurement, Peter Levene who was apparently sympathetic to the inequality of tendering information and allegedly promised to investigate the provision of further information, none was forthcoming. Neither was a further meeting agreed to allow Trafalgar to remove its qualification. Trafalgar thought that this implied that the view prevailed within MoD that Cammell Laird should be awarded the contract.
4. During the period from March 1985 to January 1986 (first tender submission to order), the ownership of Yarrow changed from BS to GEC. Cammell Laird became a subsidiary of Vickers. The Director General Submarines retired and was appointed as a consultant to Vickers. Various personnel left one Company and joined another who could have been in possession of price sensitive information. The Prime Minister, Margaret Thatcher informed two MPs Norman Godman and Anna McCurley that Scott Lithgow was £4,000,000 too high and that this was subsequently reported in the press in October 1985. [62]

In view of the above it was the opinion of Trafalgar that, 'one must question the whole ethics of the MoD's competition policy, which smacks of manipulation to meet a political end'. Given Scott Lithgow's position the firm had asked if the 'consolation prize' of the range mooring vessel and two lighters could be brought forward. However, the MoD had informed that this would not be possible, unless Scott Lithgow could make an unofficial approach to the new Defence Secretary, George Younger to do so. [63]

Subsequently, in February 1986, Graham Strachan and Syd Fudge visited MoD (N) at Bath to discuss with T. L. Cork the Director of Contracts/Submarines and Nuclear and his staff at the MoD why the *Upholder* tender had been unsuccessful. From the outset the Scott Lithgow representatives informed Cork that they were now aware of the Cammell Laird price and estimate as a result of the Trafalgar House review of Vickers/Cammell Laird accounts prior to privatisation. The Scott Lithgow tender was given a financial weighting of £3,000,000 (total for three submarines) on the following basis. On the follow-on builder interface contract MoD would have to pay Vickers a fee of £2,000,000 for lead yard services, documents, drawings, etc, to either Scott Lithgow or Yarrow if either won the bid. However, if Cammell Laird won, Vickers would give these services to the Birkenhead firm at no cost to the MoD. Accordingly, MoD added the £2,000,000 to the Scott Lithgow tender to take the latter into account. Moreover, the Cammell Laird estimate included a sum of £1,500,000 for lead yard services from Vickers. Tenderers were also required to list in Schedule 8 any exclusions to their tender, and in this regard Scott Lithgow had more exclusions than Cammell Laird did with the relative sum assessed for weighting being £1,000,000 which was also added to the Scott Lithgow tender price. At this stage, however, Scott Lithgow's basic price for the three submarines which was lower than the basic price of Cammell Laird by £2,500,000 had now exceeded Cammell Laird's price by £500,000 as a result of the £3,000,000 of weighting. Although MoD had reservations over non-compliant areas of the Scott Lithgow tender, these were not costed as 'it would have only made [Scott Lithgow's] position worse'. These reservations included clause 41.2 (c) Documents and Drawings as the MoD did not know how to cost this and admitted that; 'it could be anything from 0 – £15 million'. Nevertheless, Scott Lithgow had not been given an opportunity to discuss this. Other MoD reservations included price variation clauses in regard to labour costs and overheads, both of which on Scott Lithgow's estimation would have added another £1,800,000 to their bid weighting. The MoD also informed that it would not have accepted a Scott Lithgow amendment to the Default and Determination of Contract clauses as these were cast in stone nor would they have accepted Scott Lithgow's limitation of liability to ten per cent.[64] Throughout this process, although hidden in the background, the wider strategic imperative in relation to the Trident programme had to have been a factor in the award of the *Upholder* class contracts to Vickers/Cammell Laird. It certainly made the latter a far more attractive prospect for privatisation. And post privatisation, the MoD on the re-negotiation of the price for the first Trident submarine as the Public Accounts Committee later noted, had secured a price reduction of £25.000.000. [65] Moreover, as previously stated, Trafalgar House intended to make a case for misrepresentation against BS over *Ocean Alliance* from March 1984 and its Board considered a paper on the subject in August 1985. [66] Given that either Trafalgar had either informed BS of this (and by association, Government), or the information had leaked out beforehand it is likely that BS had become aware of this already got wind of this before the Vickers/Cammell Laird privatisation. As Trafalgar House intended to pursue BS for damages at least equal to the conglomerate's expenditure on Scott Lithgow since acquisition, what was to stop Trafalgar doing the same if it was successful with the Vickers/Cammell Laird bid, and a similar situation arose?

Contemporaneously with the *Upholder* bids, Scott Lithgow were pursuing a possible order from Algeria for a refitted *Oberon* class submarine although the deal rested on the firm being able to purchase a second hand submarine from the MoD. By March 1986, however, the Scott Lithgow Board had decided to enlist the aid of the Scottish Office to intervene with the MoD over the latter's refusal to allow the disposal of a surplus *Oberon* to allow the project to go ahead. Moreover, the Cartsburn Drawing Office had been relocated to the Kingston yard in Port Glasgow and the whole area beyond Inchgreen on the Greenock side had bee closed. As this was less than four years after Regional Development Grant aid had been granted, repayment in relation to Cartsburn was being sought. Although this had previously been provided for, the provision had in fact been released to profit and loss account. By this stage it was plain that *Ocean Alliance* would not be delivered as promised in the restated contract on 26 May 1986, with liquidated damages running from the following day. With progress on *Ocean Alliance* at sixty-six per cent. the launch had now been targeted to take place in July.[67]

Earlier in April, 275 sub contract workers, mainly pipefitters and electricians had been dismissed for apparently attending an unauthorised union meeting. but Scott Lithgow employees were told by their union convenors to cross picket lines. Subsequently, the sub contract workers many of whom belonged to a Trafalgar House subsidiary, Lawrence Allison Services were reinstated. [68] That the Scott Lithgow workforce had refused to cross picket lines having lost some 1,333 men in the past two years to redundancies, was at least indicative that the climate of industrial relations within the firm had substantially changed. Moreover, the unions had co-operated in the recruitment of 1,800 sub contract steelworkers and the down-manning of that number when the balance of trades needed had shifted to outfit sub contractors. [69] By 22 July, however, *Ocean Alliance* had been finally launched without ceremony with reported penalties running at £40,000 per day to a limit of £12,000,000. [70]

The Lithgow fight for compensation for nationalisation.

It will be recalled that Sir William Lithgow had resigned from the Board of Scott Lithgow shortly after nationalisation to concentrate his attentions on the Lithgow Group of companies. By December 1985, Sir William had also stepped down as Chairman of Lithgows Limited to devote his time to prepare a case for compensation for nationalisation to be presented in the European Court of Human Rights at Strasbourg. [71] Subsequently, in July1986 the European Court had adjudicated on the merits of cases brought by Sir William Lithgow and others [which at one stage included Sir Eric Yarrow and a French national, Mrs Monique Augustin-Normand] over what the former shareholders had alleged was grossly inadequate and discriminatory compensation for nationalisation. At no stage did Sir William, who was primarily concerned with the amount of compensation for his ordinary shares in Kincaid, contest the principle of nationalisation itself. [72]

It will be recalled that compensation was to be fixed on 1973/1974 average share values to the six months ending on 28 February 1974. although the shares did not vest in the Government until July 1977. However. some payments were delayed until 1981, by which stage the Conservative Government had finalised the compensation to be paid. By then, the British Government argued that the compensation paid met the international standard of prompt, adequate and effective compensation. An argument that the Court concurred with and also held that it was reasonable to make no allowance for developments in the companies during the compensation period to 1 July 1977. Indeed, why would shareholders further invest in a company that was about to be nationalised in any event? The Court also held that it was reasonable for the Government not to make allowance for inflation. which had been considerable, and in essence that it would respect the Government's judgement in the matter of compensation unless that judgement was manifestly without foundation. Moreover, although the Court accepted that the taking of property without payment of an amount reasonably related to its value would normally constitute a violation of Article 1 Protocol 1 of the European Convention on Human Rights, it qualified this by holding that Article 1 did not guarantee a right to compensation in all circumstances. In nationalisation cases in particular, Governments had a wide discretion to fix terms and in this respect the Court recognised that the standard of compensation may be different, in effect lower than in other cases. In the case of Kincaid, in which it will be recalled that Sir William Lithgow held a substantial preference shareholding, these shares being quoted on the London Stock Exchange, he was also the largest ordinary shareholder in what were unquoted shares in the Greenock firm. From 1974 to July 1977 a total of £513,000 was paid in dividends on the ordinary shares, but, according to Sir William, Government imposed dividend restraint resulted in £1,953,000 being added to company funds between the Reference Period and Vesting Day. In the six years ending 31 December from 1971 to 1976 Kincaid's profits before tax averaged £1,032,666, and in the half-year to June 1977 pre tax profits were approximately £700,000. Kincaid's net assets at June 1977 totalled £5.998.096 and Sir William declared that Kincaid had cash reserves at that time of £5,058.000 that he described as being surplus to requirements. Nevertheless, counsel for Sir William, despite the fact that net assets at 31 December 1973 were £3,7623,528 contended that that during the Reference Period, Kincaid had net assets of approximately £9,500,000. The latter figure was based on a recent valuation undertaken on behalf of Sir William indicating that the value of the company at 28 February 1974 in accordance with the 1977 Act on the basis of a hypothetical Stock Exchange quotation, was in the region of £8,750,000 to £10,250,000. In addition, Sir William had estimated that the net assets attributable to ordinary shareholders as at Vesting Day were worth at least £18,000,000. These figures all took account of a revaluation of Kincaid's premises and plant, which indicated that they were worth substantially, more than was shown on the firm's balance sheet. For the Government, the chartered accountants, Messrs Whinney Murray's valuation report on Kincaid had been submitted in February 1978 and was based on earnings.[73]

The Whinney Murray report took no account of a revaluation of fixed assets, effected after the end of the Reference Period. Agreement on the original valuation of the unquoted ordinary shares after some haggling towards a mid-price was eventually secured with the Stockholders' Representative. Accordingly, by November, a figure of £3,809,000 was put to the vote of nine ordinary shareholders, including Sir William who abstained on the grounds that the settlement was insufficient and that it did not represent the true value of the firm. However, the eight other shareholders unanimously accepted the settlement, and in the event Sir William received a total of £1,071,340 for his ordinary shareholding. Sir William stated that he spent this sum on trading assets, in which he sustained a liability to capital gains tax of £207,752. [74] This aside, in the matter of the £5,000,000 in cash surplus to the firm's requirements, the Government had nonetheless made an immediate profit of £1,191,000, which it could be argued represented a good deal to the taxpayer but not to the shareholders.

With *Ocean Alliance* finally launched in July 1986, and with the collapse in world oil prices already evident from the beginning of the year and likely to continue for some time, the future for any upturn in demand for semi submersible exploration platforms was particularly bleak. Taken together with the failures to secure the *Upholder* submarine orders, and Vickers/Cammell Laird on privatisation, further redundancies at Scott Lithgow seemed inevitable. By September, with the emphasis now on outfit of *Ocean Alliance*, 195 employees mostly sub contract steelworkers had been paid off, but following the launch there had been 'disappointing production for the following three weeks', with the main problem encountered being the pulling of continuous electrical cables throughout *Ocean Alliance*. Such was the size and complexity of this vessel that it required 391,000 metres of electrical cabling. By this stage it had also transpired that the submarine for Algeria had been put in abeyance due to the Algerian Navy putting the project to the back of its programme. However, a marketing visit on *Oberon* submarines had been authorised to Saudi Arabia, after preliminary work had been done in London, 'at as low a cost as possible'.[75] In the interim the arbitration of a third party expert over the Completion Accounts of Scott Lithgow had continued, and a draft report had been issued in September. This had resulted in Trafalgar receiving an additional payment of £10,000,000 but its directors did not accept the contents of the report, and allotted a further additional provision for the completion of *Ocean Alliance* charged directly to reserves of £54,900,000. [76]

With the problems of keeping to programme on *Ocean Alliance* continuing, disciplinary action against employees and sub contractors by Scott Lithgow had increased, and in November four employees were suspended who were found locked in a howf [cabin] away from their jobs. This action prompted a 24-hour stoppage of work by the firm's hourly-paid workforce, who had been up to this point, remarkably restrained. [77] Nevertheless, owing to Trafalgar House involvement, Scott Lithgow had that month 'won' a £12,000,000 contract from Cunard to extend a container vessel; *Atlantic Conveyor* originally built by Swan Hunter. With eighteen firms tendering throughout the world, a contract to extend four similar vessels had gone to Hyundai of South Korea. The *Atlantic Conveyor* contract did not mark a return by Scott Lithgow to shipbuilding and repair, as under the terms of the privatisation agreement Scott Lithgow was precluded from receiving S I F monies from the European Community as it had been designated an offshore yard. [78] Had not the *Atlantic Conveyor* contract been the subject of much advanced publicity, it is likely that all five vessels would have gone to Hyundai on price alone. Realistically, even if it were so inclined, Scott Lithgow with its high offshore overheads was highly unlikely to be successful in winning a substantial shipbuilding contract. The yard remained in a one-order situation and by December 1986 only thirty-three employees had volunteered for redundancy. accordingly. it was therefore proposed that compulsory redundancies would ensue before Christmas. Progress on *Ocean Alliance* continued to be patchy and as the structure neared completion in some areas the owners' attitude to signing off work had hardened. [79] By January 1987. Scott Lithgow's workforce comprised 1,847 employees and 690 sub-contractors. However, no new hiring was envisaged as a result of the *Atlantic Conveyor* contract. which would need only a maximum of 350 men to complete the various stages of construction. By this stage another 225 manual grades and twenty supervisors were to be made redundant with effect from 30 January. Again the remaining workforce took no action over these compulsory redundancies, and yet another completion date had been negotiated on Ocean Alliance with delivery expected in November, almost four years later than originally agreed with BS. [80] This would inevitably involve a further payment for late delivery, a far cry from Trafalgar House boss, and one of Prime Minister Margaret Thatcher's favourite businessman, Sir Nigel Broakes unwise comment that *Ocean Alliance* would be delivered before Christmas 1985.[81] In the interim, Scott Lithgow had doggedly persisted in trying to win submarine contracts to compensate for its poor prospects in the offshore sector and it to these efforts that I now return to.

The search for naval contracts continues.

It will be recalled that Scott Lithgow had intended to tender for a submarine order from Saudi Arabia, and in this regard Graham Strachan had visited the country in November 1986. Strachan noted that the Saudis were interested in a bid before 15 December, a deadline that he believed was clearly not possible. Strachan's considered view was that three alternatives existed, first, update the *Oberon* design: second, adjust the design for known changes: or last, scale down the *Upholder* design. [82] By the 15 December deadline, however. Scott Lithgow had at least submitted an indicative price letter to the Royal Saudi Naval Forces for an improved *Oberon Mark 6* submarine in a joint venture wit the defence contractors. Ferranti. Moreover, in what was apparently a breach of protocol the Scott Lithgow letter did not go through the British Embassy in Saudi Arabia, an indication that the British

Government favoured a bid by Vickers. By this stage, however, the Scott Lithgow/Ferranti bid apparently hinged on the former being able to purchase two second hand decommissioned *Oberon* submarines from the Royal Navy, *HMS Oberon* and the Scotts' built *HMS Walrus* that had put up for sale either for scrap or for further usage. As was noted this marked a change in MoD policy as previously MoD would only offer these submarines on a further usage basis on a Government to Government basis to foreign navies. Indeed, Scott Lithgow had earlier hoped to obtain an option on one submarine for a possible contract with the Algerian Ministry of Defence, but MoD policy precluded this. Moreover, the submarines were being offered for sale without MoD assistance on manpower, training or design and with no guarantees on the availability of spare parts. As such, Scott Lithgow/Ferranti were very much dismayed by the way the sale was being handled as completion by January 1987 left little or no time to interest potential foreign buyers for re-designed *Oberon* submarines. Strachan then estimated the scrap value of an *Oberon* at between £75,000 to a £100,000 with the added value of spare part sales to interested customers. However, the resale value promised to be much higher as the MoD had apparently offered an *Oberon* to Malaysia for £2,500,000 representing the submarine's value, 'as a going concern, with a potential re-sale value after refurbishment of £10/13m subject to the vessel's condition'. Nonetheless, Strachan found it difficult to recommend that Scott Lithgow should tender for these vessels and welcomed the Board's views on the subject. [83]

By January 1987, however, the Scott Lithgow Board had protested to the Head of Defence Sales about the way the sale had been handled, and it was clear that by this stage both submarines would be sold for scrap. In these circumstances and in the belief that Vickers had presented the Saudis with a better deal Scott Lithgow declined to tender.[84] In the interim an exploratory discussion had taken place in December with MoD over the 'promised' range mooring vessel, where it was noted that the Scott Lithgow design was too large for MoD requirements on grounds of cost, and that a vessel of single screw design would be preferable. In this regard Scott Lithgow agreed to submit a revised tender by 31 January 1987 with a tender clarification meeting to take place in February, and a final tender in March in the hope that the contract would be awarded by the end of April. Already, this represented a delay in the original programme of three months, and on the attendant powered lighters, MoD had again cavilled on the grounds of cost. [85]

At a later meeting in January 1987 attended by Strachan at the MoD, the Project Director arrived and stated that Scott Lithgow's prices for the range mooring vessel and the two powered lighters were far too high. Moreover, the Project Director was only prepared to place the three contracts at the original price of £11,000,000 with payment deferred to the end of the project split into £4,500,000 for the range mooring vessel and £6,500,000 for the two lighters. To this, Strachan pointed out that it would cost £2,900,000 to purchase the materials for one lighter alone, and this in turn prompted the MoD representative to reply that Scott Lithgow should submit a revised price that would show how the offshore rates applicable at the firm exceeded the standard BS rates. [86] Clearly by announcing the price, [at that stage £10,000,000] before the contract was awarded, the MoD had to a large extent tied the hands of Scott Lithgow. With its large offshore overheads and with a one-order situation, Scott Lithgow's tender was likely to be on the high side in any event.

By March 1987, however, *Janes Defence Weekly* had reported that Scott Lithgow had made a last minute tender for ten *Oberon Mk 6* submarines for the Saudis, and also that the tender had undercut Vickers tender for the provision of ten *Upholder* submarines. Moreover, it was also reported that MoD were 'upset, by the Scott Lithgow bid, which seemed to consist of building new *Oberon* hulls with updated electronics and weapons systems'.[87] In due course neither firm was successful, an indication that the MoD preferred *Upholder* submarine was not a suitable vessel for export purposes, and that the *Oberon* had had its day. Indeed, the whole process surrounding the establishment of the *Type 2400* later *Upholder* class submarine and the subsequent tendering process, in addition to the decision to again incorporate a conventional element into Royal Navy submarine strategy left much to be desired. In the event, only four *Upholder* class submarines were built at a total programme cost of nearly £1,000,000,000 with the class proving unsuitable for export purposes. Moreover, by 1994, all four submarines had been mothballed at the end of the Cold War without ever becoming operational and were eventually sold in 1999 on an eight-year option basis to the Royal Canadian Navy at a price of £226,000,000. [88]

By March 1987, Trafalgar House had sold land surplus to its requirements to the SDA, including 10.24 acres comprising Scotts' Engine Works, 21.80 acres of the Cartsburn shipyard, and 2.70 acres comprising the Cartsdyke Canteen. Moreover, Scott Lithgow also sold two leased subjects, 7.50 acres of the Cartsdyke shipyard and 5,20 acres of the Garvel Dry Dock at an undisclosed price, which was in fact for £1,000,000.[89] On later reporting this news, but not the price paid, the local newspaper lamented that, 'Greenock no longer builds ships'.[90] With a General Election due in June, the Labour Party spokesman, Roy Hattersley on a visit to Greenock promised that if elected his party would award the range mooring, two lighter contract to Scott Lithgow. [91] It remains a moot point whether in fact Labour would have done so as they lost the election in any event. Earlier the Defence Secretary, George Younger who later left politics to take up a directorial position in a leading Scottish bank, stated that Scott Lithgow would get the order if they lowered their price. However, with the Conservatives again elected, the only option left open to Scott Lithgow seemed to be a substantial reduction in price. With the MoD preferred price being £11,000,000 it had been reported that Scott Lithgow had stipulated a revised price of £16,000,000. By the end of July, however, both parties had failed to agree and the Government had announced that the three-vessel order would be put out to competitive tender in mid-August, by which stage Scott Lithgow had cut its price to £12,300,000. This was not enough to secure the order, and amid much indignation, an MoD spokesman claimed that the Scott Lithgow design for the range mooring vessel was unacceptable and that the firm did not re-submit one despite MoD requests to do so. Moreover, no 'promise' was apparently made, only an opportunity to bid without competition.[92] This news coming some eighteen months after the original 'promise' had been made, yet again showed the snail's pace of procurement decisions. The MoD, as usual, were being disingenuous as they had in the past always been willing to back a political decision on contracts when it suited their purpose and were equally willing to fall back on the market forces argument when it did not.

Nevertheless, the implications for employment of the workforce of 1,800 at Scott Lithgow were stark, with *Ocean Alliance* nearing completion, together with the

Atlantic Conveyor extension no other orders were in sight in a yard totally geared for offshore construction in a market that had remained in a very depressed state. Indeed, this point was re-iterated to the General Secretary of the CSEU, Alex Ferry in August 1987, when Sid Fudge intimated the obvious that if no orders were secured by the end of the year then the position would be serious. [93] By November, by which stage the MoD three-vessel order was effectively lost, senior union officials again met Scott Lithgow management to discuss the firm's future. For the unions' the Chairman of the CSEU, Jim McFaul opened the discussion by stating that at privatisation there was a fair amount of optimism, however, commitments promised in 1984 had never been fulfilled and neither the employees nor the firm's expectations had been met. Moreover, the workforce had gone out of its way to be flexible, even during periods of large-scale redundancies. It had therefore come, 'as a big bombshell when they were faced with the current situation. The workforce is the only party to suffer and the social consequences in the area are immense'. Accordingly, the unions were looking for certain commitments from Trafalgar and in particular desired assurances that the yard would be viably retained, but not mothballed, however, this was 'more in hope than in expectation'. McFaul further pointed out that unless a design and marketing team were kept together, a care and maintenance basis of operation was worthless. In response, Trafalgar's Victor Grundy stated that it had bought Scott Lithgow to make it a success, and since then a number of strategies had been tried including placing the contract for *Atlantic Conveyor* at a loss. Moreover, MoD (N) had been pressed, 'without success and at no little cost'. However, with the present downturn in the market and without the prospect of more orders, there was no alternative other to go on to a care and maintenance basis, 'not with a view to closure but to continue to look for work and re-establish Scott Lithgow'. At this point, Grundy also presented an undertaking given to MoD (N) to keep the yard open into the 1990s. For the unions, Alec Ferry stated that he was in no doubt that the state of Scott Lithgow on privatisation was much worse than anyone thought, and that this 'had resulted in the Yard being unable to perform satisfactorily and obtain more work'. Ferry noted that in spite of all the disappointment about work failing to materialise, the workforce had agreed to many changes in an attempt to salvage their future. However, the firm now faced a care and maintenance situation, which if the late 1970s and early 1980s were anything to go by, was a prelude to closure or disposal. Ferry, therefore, echoed McFaul's sentiments that a design and maintenance team should be kept on in anticipation of an upturn in demand, but also that former employees should be given assurances that they would be re-employed. The Scott Lithgow Convenor, Duncan McNeil then pointed out that he had to sell an agreement to the workforce by the end of the week, and that the workforce had not tried to take advantage of Trafalgar's position on *Ocean Alliance*, 'and did not wish to do so now'. In short, the workforce needed a proper and an acceptable run-down agreement. It was then agreed to approach this at the local level and that a prospective agreement should include a proper care and maintenance and not a closure agreement with the exact numbers of people employed under it to be made known. Additionally, it was mooted that there should be a policy of recruiting former Scott Lithgow employees if new work was obtained and that a severance package should be given to those employees who had to be made redundant. If in the event that no agreement was reached then it was agreed that the meeting including national officials would be re-convened. [94]

Two days later, Trafalgar House intimated to the staff of Scott Lithgow that they intended to retain it as a viable company to take advantage of any upturn in the market and that following the completion of *Ocean Alliance* the yard would be placed on a care and maintenance basis if no further orders were secured. Thereafter, the numbers employed would include a strong estimating and technical team to actively pursue new orders and if successful redundant workers would be re-recruited. Trafalgar House would not sell off the assets of Scott Lithgow for re-development, and would allow other companies to lease its premises for construction purposes, and the company would also give every assistance to other firms such as Vickers who wished to recruit redundant employees. Subject to the acceptance of this deal, a lump sum payment of £400 would be paid to all redundant employees with the first compulsory redundancies taking effect from Friday 13 November 1987.[95] This was all well and good, but those employees, manual and staff, given the lack of work at Scott Lithgow who were able to travel to other yards to gain employment were likely to do so. Moreover, union fears that care and maintenance was merely a prelude to complete closure, which were based on hard won previous experience, must also have taken into account that Scott Lithgow, post *Ocean*

Alliance had no realistic prospect of obtaining another major offshore order in a depressed market.

Throughout this period, Scott Lithgow had persisted in trying to win shipbuilding contracts against specialist yards, which were geared accordingly. In June 1987, the firm lost out on a £8,000,000 ferry contract to Appledore Ferguson. [96] The latter had been merged a year earlier by BS and as a result the Ailsa yard at Troon was eventually sold to a private buyer in January 1987. [97] By November, Scott Lithgow again lost out on an Overseas Development Agency order to the privatised Hall Russell for a £15,000,000 ferry for St. Helena. And, by December, Scott Lithgow had also failed to persuade the Government to give it SIF status to help it obtain a £40,000,000 order for two ferries, which would have provided 400 jobs for two years.[98] By this stage, the firm's last hopes seemed to rest on obtaining an order worth £50,000,000 from the MoD for a covered floating jetty for the latter's Coulport establishment, and a floating hotel for Antigua. Earlier in June, however, the position over the third party expert's report on the Scott Lithgow Completion Accounts had become clearer as both parties had been able to agree, 'a full and final settlement of all disputes arising out of the sale agreement'. This had resulted in BS sustaining a further loss in the profit and loss account of £21,000,000 and after adjustment, a cash outflow of £29,000,000. However, it was also noted that Trafalgar intended to submit a claim for misrepresentation, with BS of the opinion that no liability could arise. [99]

Ocean Alliance

With *Atlantic Conveyor* successfully delivered and payment received, Scott Lithgow's remaining contract, *Ocean Alliance* was by October 1987, ninety-four per cent complete and preparations had begun to move it offshore. Some 200 sub-contract electricians had been released and specialist firms brought in their place, which had led to a significant improvement in performance. Previous problems with the engines had now been mostly overcome, the majority of the cables had been re-installed, but difficulties in the drill area persisted and this had led to arguments with the design authority and supervisory firm, Odeco. [100] Nevertheless, yet again, Scott

Lithgow was still unable to deliver the vessel in time under the re-negotiated contract. In this regard it is worth reconsidering this contract in some detail, not only because it had proven to be the most disastrous ever undertaken in a British shipyard, but also because the problems with the structure had persisted post privatisation. It will be recalled that *Ocean Alliance*, the largest dynamically position semi submersible ordered at the time was originally due for delivery on 31 March 1984. Previously, at a meeting between BS and Britoil in December 1982, by which stage it had become clear that the programme had substantially slipped, a joint working party was instituted to review the date of delivery. A report on the situation was completed in January 1983 with Britoil indicating a completion date of October 1985, whereas BS indicated a delivery date of September 1984. After a meeting between the principals, it was agreed that the erection period was paramount and that a programme of six critical events or milestones would be instituted against which the performance of Scott Lithgow would be measured and monitored. On 19 April 1983, Malcolm Ford of Britoil met Scott Lithgow representatives and was given an assurance by the latter that no redundancies would take place among its workforce if they could be productively employed on *Ocean Alliance*. By May, however, Scott Lithgow had indicated to Britoil that the first three milestones had been missed, and by August, Britoil had requested that a full re-negotiation of the contract should take place in terms of damages for late delivery. Accordingly, BS reserved its position. Britoil nevertheless commissioned an independent report, which was passed to BS in October, which concluded that the then Scott Lithgow delivery date of January 1985 was not achievable and that a less optimistic date for delivery would be in the autumn of 1986. By this stage, BS had concluded that re-negotiation of the contract was not feasible. Ben Odeco with the authority of Lloyd's Leasing intimated that in their opinion that the vessel would not be delivered within 300 days of the delivery date as defined in the contract, that is by 19 February 1985. Ben Odeco then gave Scott Lithgow thirty days notice on 19 December 1983 of their intention to cancel the contract unless Scott Lithgow could give an assurance, which they did not, that *Ocean Alliance* would be delivered according to the contractual terms. Without prejudice Scott Lithgow then advised Ben Odeco that they believed that they had a valid reason for seeking an extension by as much as ten months to the contract delivery date because of external causes of delay. These causes turned out to be the time taken to obtain Odeco approval of drawings from New Orleans and the nature of the on site supervision by the American team. Predictably, Ben Odeco did not accept that they had caused a delay in the progress of construction, but Scott Lithgow responded by re-affirming that they had. Thereafter, Scott Lithgow maintained that *Ocean Alliance* would be delivered within 300 days of the delivery date, and produced a report by the consultants A & P Appledore which criticised the earlier Britoil report. Subsequently, Ben Odeco with the authority of Lloyd's Leasing issued a notice of cancellation on 19 December 1983, however, Scott Lithgow claimed that this was invalid and issued a writ to Lloyd's Leasing the next day to that effect. Thereafter, most but not all of the work on *Ocean Alliance* was stopped by BS and resources were transferred to completing the BP rig *Sea Explorer* and *HMS Challenger*. [101] On the cancellation of *Ocean Alliance* actual progress was assessed at just over thirty two per cent against a planned progress of nearly thirty-seven per cent, and this was the situation that apparently existed prior to privatisation and the re-instatement of the contract. [102]

What had gone so badly wrong with *Ocean Alliance* would later be the subject of a writ issued by Trafalgar House against BS alleging negligence and negligent misstatements prior to privatisation. In the writ, Trafalgar cited fundamental weaknesses in Scott Lithgow's planning organisation as had been found as a result of a BS internal audit on or around February 1983. By this stage the auditor had noted that many systems were still in the development stage such as work evaluation, project control and materials listing and were consequently of little use at that time. Moreover day-to-day labour resourcing was non-existent and there was no procedural manual to provide an overall framework for control. [103] By May 1983, Scott Lithgow's auditors in a work appraisal report on *Ocean Alliance* had identified various weaknesses in systems and controls for forecasting outstanding work such that it was not possible to forecast accurately the labour requirements to complete the contract or to ascertain the quantity of steelwork already fabricated. If this was not enough, labour outcome forecasts varied substantially on a month by month basis and such information that was available suggested that there would be a major overrun in man-hours, costs and in the programme for delivery. Moreover, a similar situation persisted on the less complex, *Sea Explorer*. [104]

Clearly there were fundamental weaknesses in the Scott Lithgow system of contract assessment hanging over from the firm's move from traditional shipbuilding techniques mostly based on a historical cost accounting basis to the far more demanding standards of offshore construction. The firm had in particular a lack of knowledge at the tendering stage of the work content involved and the standards of quality required for such complex structures as state of the art semi submersible rigs. Accordingly, Trafalgar House alleged that prior to privatisation Scott Lithgow had failed to correct its deficiencies and therefore that the information provided to it relating to the state of construction and the cost and the time required to complete both *Ocean Alliance* and *Sea Explorer* was inherently unreliable, and that it was susceptible to substantial error and/or misleading. In short, Trafalgar contended that both BS and Scott Lithgow knew or ought to have known that this was the case. [105]

Throughout the period prior to privatisation Scott Lithgow had experienced problems in retaining labour and consequently the numbers of sub contract workers had risen accordingly. This was a common enough situation, but it was also one that required strict control over costs, design development and modifications, work content, supervision and general direction within an agreed planning framework. On privatisation, under new management, Scott Lithgow suffered the hangover from its previous failures, *Sea Explorer*, far from being almost complete, required extensive modifications to the stability and secondary de-ballasting systems. However, problems with *Ocean Alliance* were far more pronounced owing to the complexity of the vessel, which required huge amounts of cabling and complicated pipework, and the rigorous attitude of Odeco to dimensional control, approval of drawings and design modifications. Although Scott Lithgow complaints over delays by Odeco in approving drawings and over zealous supervision have some validity, in a strictly contractual sense Odeco had the absolute right to do so in any event. The old shipbuilding attitude of considering work 'good enough for its purpose', an attitude prevalent in the industry as a whole, did not pass muster in the demanding world of offshore construction. The other common argument put to the author in interviews that in time of recession owners would inevitably stall on delivery by making life difficult in not approving work on vessels also has some validity, particularly after the collapse in the price of oil at the beginning of 1986. Semi submersibles being primarily costly exploration vessels were particularly vulnerable to downturns in the oil market, but conversely when oil prices were high these vessels were more cost effective. However, given the penalty clauses for late delivery on *Sea Explorer* and *Ocean Alliance* both in the original and re-negotiated contracts, the owners, BP and Britoil were substantially compensated for delay in any event. Nevertheless, the story of semi submersible construction at Scott Lithgow, alike the move into giant tanker construction in the 1970s was a sorry one, particularly for the damaging effect it had on the firm's reputation. A reputation that Trafalgar House despite attempts to win new work was not able to recover. Given the failure of the British shipbuilding industry in general in the offshore structures market, an intelligent observer might ask why these structures were successfully completed elsewhere by foreign shipbuilders. Indeed, in the other country to share North Sea oil, Norway, the shipbuilding firm, Aker had moved into offshore work with no prior experience in 1965 and continued despite the first OPEC price hike and thereafter increased its exposure to the sector as its traditional shipbuilding markets declined. By 1975, Aker had under construction twenty-four semi submersibles, with half being built under licence in Finland and in Japan. [106] Moreover, the success of the Finnish shipbuilding firm, Rauma Repola, which it will be recalled had won the Shell MSV order in competition with Scott Lithgow, was even more remarkable. In addition to its shipbuilding programme, Rauma had re-adjusted its manufacturing capabilities to take advantage of the offshore market. Such was the success of this firm that between 1974 and 1986 it had delivered fourteen semi submersibles, three drill ships, two MSVs and two jack up drilling rigs for customers in France, Norway, the Soviet Union, the UK and the USA. [107] Without even considering American, Japanese or Korean constructors, this level of performance closer to home paints a stark picture, even when complexity of product is taken into account, of Scott Lithgow's performance in the offshore structures market.

The end is nigh.

By December 1987, redundancies in the workforce were proceeding at an agreed steady rate with a care and maintenance level to be reached by the end February

1988. Beforehand, in November 1987, Vickers had held a series of interviews with 171 redundant Scott Lithgow welders, platers, caulkers and a number of technical staff. [108] The last BS engine builder, Clark Kincaid at Greenock had taken on one apprentice welder and three apprentice steelworkers to allow them to finish their apprenticeships. All other Scott Lithgow apprentices had opted for voluntary redundancy. From December, Scott Lithgow with the assistance of the Inverclyde Enterprise Trust were organising four information days for redundant employees to take place in January and February 1988. [109] With the three vessel MoD contract lost to Hall Russell on competitive tender, and with no real hope of gaining any further submarine orders, the firm moved inexorably towards care and maintenance status by the end of March 1988. By this stage, labour on the sole remaining contract, *Ocean Alliance* was virtually down to care and maintenance level, and by June only eighty-two staff members remained in employment, including sixteen working on the misrepresentation claim against BS. Of the sixty six remaining employees, thirteen staff remained on care and maintenance, sixteen on *Ocean Alliance* support, [reducing to nil by the end of July], eight administrative staff, nine for transfer, and four apprentice draughtsmen who it was hoped would transfer to John Brown Engineering. In addition, sixteen staff mainly in the accounts departments, had all been given dates to leave by the middle of June.[110] Earlier, in April it had been publicly announced that *Ocean Alliance* would be completed in the Cromarty Firth with Scott Lithgow picking up the bill. Work on this contract had virtually ceased by the end of February and Britoil had received liquidated damages for delays. [111] The move to the Cromarty Firth had been sealed in a Glasgow public house with a Scott Lithgow representative, a Britoil executive and Dr Terry Petty of Odeco in attendance. [112] This enabled the yard to be put on a care and maintenance basis from which it never really recovered, despite providing employment for 350 employees on a number of relatively small contracts in 1991. Earlier, on 29 April 1988, Trafalgar House had at last issued its threatened writ for alleged misrepresentation against BS for £191,046,000 this being the net loss to Trafalgar since buying Scott Lithgow for £12,000,000 in March 1984. BS had continued to fight its case and denied liability up to March 1991, by which stage a cash settlement of £17,000,000 was reached in favour of Trafalgar, with BS foregoing their counterclaim of £8,000,000. [113]

There ended the long running saga of claim and counterclaim that had been a feature of Trafalgar House involvement with Scott Lithgow. Not only had volume shipbuilding effectively disappeared on the Lower Clyde before privatisation, where, under BS control, Scott Lithgow had cost the taxpayer some £234,000,000 mostly from losses on offshore construction. Moreover, these losses had continued to be borne partly by the long-suffering taxpayers' in the brave new world of privatisation. Indeed, this level of state subsidised losses, which Sir James Lithgow abhorred in relation to the money pit of Harland & Wolff surely would also have frankly astonished his contemporaries. In the cradle of Clyde shipbuilding this left only the still surviving former Scott Lithgow Newark yard of Ferguson Brothers, which first as Ferguson Ailsa and latterly as Ferguson Appledore had accumulated trading losses in excess of £33,000,000 up to 1986-1987. Taken together with SIF monies of £12,000,000 the Newark yard alone had £45,000,000 of taxpayers' support. [114] Scott Lithgow designated as an offshore yard from privatisation could not access such SIF support, but nevertheless Trafalgar House did receive substantial sums of public money from BS and other sources. However, the figures speak for themselves to a large extent, with the estimated loss at the end of 1988 on *Ocean Alliance*, the most disastrous single contract ever undertaken in a British shipyard, at a whopping £211,000,000. [115] In the light of the Touche Ross observations prior to this contract being undertaken one can only conclude that no sensible management would have undertaken it in the first place under such onerous terms and with no clear idea of its eventual cost. By that stage, however, employment considerations were paramount and hard commercial sense was sadly missing. Nationalisation had undoubtedly saved Scott Lithgow, and privatisation at least preserved a modicum of employment, where there would have otherwise been none. Trafalgar House had taken on BS largest loss maker with considerable help from the Government in the hope that it could transform Scott Lithgow's prospects. In the event, despite trying to break even by litigation, it failed. That *Ocean Alliance* left the Lower Clyde some four years later than originally anticipated from a firm that had once been the district's largest employer and which eventually closed down for good post 1990 was really a case of déjà vu all over again.

Endnotes: Chapter VIII

[1] *The Scotsman*, 29 March 1984.

[2] GD 323/1/5/46 Internal Memorandum to J. P. Grice, Scott Lithgow Share Capital from J.E. Eggleton, CREH, 17 August 1984.

[3] GD 323/24/3/1 Trafalgar House PLC Acquisition of Scott Lithgow.

[4] House of Commons, Official Report, Vol.. 57 cols., 289-290 28 March 1984.

[5] GD 323/24/3/1 Minute of Meeting of Board of Directors of Scott Lithgow Limited, present J.D. Milne and A.G. McNeilage, Knightsbridge, London 28 March 1984. And Meeting of the new Board of Directors of Scott Lithgow Limited, Knightsbridge on the same day, present, E.W. Parker. A Morris and I.R. Scott.

[6] Chancery Division, CH. 1988-t-No. 3327. The author has extracted this information from an Amended Statement of Claim in the High Court of Justice, Chancery Division on 29 April 1988 between the plaintiffs, Trafalgar House plc and CREH and the defendants, BS.

[7] *Greenock Telegraph*, 30 March 1984.

[8] Ibid., 18 April 1984.

[9] GD 323/1/3/70 Letter from Eric Parker, Trafalgar House to George Younger, Secretary of State for Scotland, 18 June 1984.

[10] Ibid., Letter From John McClellan, IDS to John Fletcher, Trafalgar House, 25 April 1984.

[11] Ibid., Letter from J.W.S. Fletcher, Trafalgar House to T.W. West, Trafalgar House Construction Holdings, 4 June 1984.

[12] Ibid., Letter from T.W. West to Mr. Coulthard, IDS 7 June 1984.

[13] Ibid., Letter from C.H. Coulthard, IDS, to T.W. West, 12 June 1984.

[14] Ibid., Internal Memorandum from R.A. Wallace Cleveland Redpath Offshore Limited to T.W. West, 14 June 1984.

[15] Ibid., From R.A. Wallace to J.W.S. Fletcher, Trafalgar House, 20 July 1984.

[16] Ibid., Letter from J.W.S. Fletcher, Trafalgar House to Mr. Scullion, IDS, 10 October 1984.

[17] Ibid., Internal Memorandum from J.F. Kirby, Scott Lithgow to A. Morris, Trafalgar House, 5 October 1984.

[18] British Shipbuilders Annual Report and Accounts, 1983-1984.

[19] *Greenock Telegraph*, 19 July 1984.

[20] Parliamentary Papers, Vol., 37 Session 1985-1986, Committee of Public Accounts, Department of Trade and Industry Assistance to British Shipbuilders, Minutes of Evidence, 13 February 1985. For an in-depth discussion of the privatisation process, see L. Johnman, 'The Privatisation of British Shipbuilders', *International Journal of Maritime History*, Vol., 8 1996.

[21] *Greenock Telegraph*, 26 April, 9, 10 and 24 May 1984.

[22] Ibid., 24 May and 26 July 1984.

[23] House of Commons, Official Report, Vol., 64, col., 1000 25 July 1984.

[24] *The Naval Architect*, October 1984, *HMS Challenger's* main role was as a vessel for the deployment and support of the saturated diving system and towed seabed inspection equipment. Special features included a submersible compression chamber, a triangular moon pool, dynamic positioning (three bow thrusters plus twin Voith Schneider propellers), over-stern facilities for deploying underwater search and inspection equipment and a helicopter flight deck.

[25] Parliamentary Papers, Session 1984-85 Vol., 42, 35th Report from the Committee of Public Accounts, session 1984-85 Design and Procurement of Warships, Ministry of Defence, and Session 1985-86 CPA forty-third Report, DTI Assistance to BS..

[26] House of Commons, Official Report, Vol., 89 Col., 641, 16 January 1986.

[27] *Greenock Telegraph*, 29 September 1984.

[28] Trafalgar House, Directors Report and Accounts for the year ending 30 September 1984.

[29] GD 323/1/1/47 Minutes of Management Meeting, Scott Lithgow, 13 November 1984.

[30] *Greenock Telegraph*, 11 October 1984.

[31] Ibid.,. 23, 24 October and 7 November 1984,

[32] GD 323/1/1/47 Minutes of Management Meeting, Scott Lithgow, 6 December 1984.

[33] Ibid., Memorandum from Kooymans to Fudge, cc. Grice, 11 December 1984.

[34] GD 323/1/3/75 Memorandum from Strachan to Kooymans, Submarine Experienced Foremen, 20 December 1984, and Memorandum from Kooymans to Strachan, 8 January 1985.

[35] Ibid., Internal Memorandum, Future of Manufacturing (Outfit Departments0 within Scott Lithgow, from MacFarlane to Kooymans, Strachan and Robb, 11 January 1985.

[36] GD 323/1/1/17 (1) Notes to Scott Lithgow Contract 2002 to 26 January 1985.

[37] *Greenock Telegraph*, 7, 27, February and 4, 25 March 1985.

[38] GD 323/1/3/73 Memorandum from Strachan to Nicholas, 30 April 1985.

[39] *Greenock Telegraph*, 26 March, 1, 2, 4, 8, 9, 10 and 14 May, 20 June 1985.

[40] Parliamentary Papers, CPA 35TH Report, Session 1984-85, Design and Procurement of Warships.

[41] House of Commons, Official Report, Vol., 77, col., 21 15 April 1985.

[42] L. Johnman, 'The Privatisation of British Shipbuilders', *International Journal of Maritime History*, Vol., 8, 1996.

[43] Ibid., Official Report, Vol., 81 cols., 26-27 17 June 1985.

[44] British Shipbuilders Report and Accounts, 1984-1985.

[45] *Greenock Telegraph*, 9, 17 September 1985.

[46] Trafalgar House, Report and Accounts, year ended 30 September 1985

[47] P. G. Wrobel, 'Design of the Type 2400 Patrol Class Submarine', *Transactions of the Royal Institution of Naval Architects*, 10 April 1984.

[48] CPA 35TH Report, Session 1984-85 Design and Procurement of Warships, MoD.

[49] GD 323/1/4/114 Scott Lithgow, Type 2400 Tender Submission, February 1983.

[50] GD 323/1/4/115 Updated version of GD323/1/4/114, May 1984.

[51] GD 323/1/1/79 Submarine Refit Contracts dated 26 April 1984, unsigned.

[52] Ibid.

[53] GD 323/1/4/115 Updated Version of GD 323/1/4/114, May 1984.

[54] GD 323/1/6/2 (4) Crouch and Hogg, Consulting Civil and Structural Engineers, Scott Lithgow Proposal for Building Submarines at Kingston Yard, 29 August 1985.

[55] *Greenock Telegraph*, 3 January 1986.

[56] House of Commons, Official Report Vol., 89 col., 642 16 January 1986.

[57] *Greenock Telegraph*, 3 January 1986.

[58] House of Commons, Official Report, Vol., 89 col., 911 14 January 1986.

[59] Official Report, Vol., 93 col., 594-7 March 1986.

[60] *Greenock Telegraph*, 10 March 1986.

[61] House of Commons, Official Report, Vol., 93 cols., 594-598 7 March 1986.

[62] GD 323/1/18 (2) Report of Director, MoD Contracts, *Upholder* class Submarines, January 1986.

[63] Ibid.

[64] GD 323/1/1/18 (3) Report of Director, MoD Contracts, *Upholder* class submarines, February 1986.

[65] Parliamentary Papers, Vol., 37 Session 1985-1986, Committee of Public Accounts, D.T.I. Assistance to British Shipbuilders.

[66] GD 323/1/1/17 (6) Minutes of Board Meeting of Scott Lithgow, London 14 August 1984.

[67] GD 323/1/1/18 (4) Minutes of Meeting of Board of Directors of Scott Lithgow, 19 March 1986.

[68] GD 323/1/1/18 (5) and (6) Minutes of Meeting of Board of Directors of Scott Lithgow, 17April and 14 May 1986.

[69] GD 323/1/4/128 Internal Memorandum from N.H. McCloy to Harry Nicholas, Possible points to be raised by Trade Unions, 2 June 1986.

[70] *Greenock Telegraph*, 19, 22 July 1986.

[71] Ibid., 14 December 1984.

[72] Publications of the European Court of Human Rights: Series A, Vol., 102 Case of Lithgow and Others, Judgement of 8 July 1986.

[73] Ibid., Earnings were calculated on the basis of the company's historic and prospective post tax earnings as at the Reference Period, and applying thereto an appropriate multiplier [price/earnings ratio] assessed with by comparison to listed companies.

[74] Ibid.

[75] GD 323/1/1/19 (4) Minutes of Board Meeting, Scott Lithgow, 18 September 1986 and General Manager's Report.

[76] Trafalgar House, Report and Accounts, year ending 30 September 1986.

[77] GD 323/1/1/19 (6) Minutes of Board Meeting, Scott Lithgow, 19 November 1986.

[78] *Greenock Telegraph*, 5,6,17 and 21 November 1986.

[79] GD 323/1/1/120 (1) Minutes of Board Meeting, 11 December 1986.

[80] GD 323/1/1/20 (2) Minutes of Board Meeting, Scott Lithgow, 21 January 1987.

[81] *Greenock Telegraph*, 30 January 1987, for Broakes comment.

[82] GD 323/1/1/19 (6) Minutes of Board Meeting, Scott Lithgow, 19 November 1986.

[83] GD 323/1/1/20 (1) Report of Director-MoD (N) Contracts, 15 January 1987.

[84] GD 323/1/1/20 (2) Minutes of Board Meeting, Scott Lithgow, 21 January 1987.

[85] GD 323/1/1/20 (1) Report Of Director, MoD (N) Contracts, 15 January 1987.

[86] GD 323/1/1/20 (2) Minutes of Board Meeting, Scott Lithgow, 21 January 1987.

[87] *Greenock Telegraph*, 24 March 1987.

[88] *The Mail on Sunday*, 10 January 1999.

[89] GD 323/1/5/153 SDA letter to Maclay Murray & Spns Solicitors, 5 March 1987.

[90] *Greenock Telegraph*, 10 April 1987.

[91] Ibid., 4 June 1987.

[92] Ibid., 1 June, 7 July and 14 August 1987.

[93] GD 323/1/3/73 Meeting with Alex Ferry at Scott Lithgow, 12 August 1987.

[94] Ibid., Meeting between the CSEU National Officials, representatives of the Scott Lithgow workforce and Trafalgar House, 3 November 1987.

[95] Ibid., Scott Lithgow Limited, Points agreed by the company in an overall run-down agreement and arrangement, 5 November 1987.

[96] *Greenock Telegraph*, 30 June 1987.

[97] British Shipbuilders, Annual Report and Accounts 1986-1987.

[98] *Greenock Telegraph*, 28 November and 4 December 1987.

[99] British Shipbuilders, Annual Report and Accounts, 1986-1987.

[100] GD 323/1/1/31 (1) Minutes of Board Meeting, Scott Lithgow, 27 October 1987.

[101] Commercial Report, Appendix 1 Contract 2002 *Ocean Alliance*, undated and referenced, but probably January, or February 1984.

[102] Ibid., Project Report.

[103] High Court of Justice, Chancery Division, Writ issued on 29 April 1988 by Trafalgar House and CREH against BS, Amended Statement of Claim.

[104] Ibid.

[105] ibid.

[106] D. MacKay & G. MacKay, *The Political Economy of North Sea Oil* (London, 1975) p.81.

[107] S. Silvonen, 'Trends of Offshore Industry in Rauma-Repola Oy', in A. Slaven & F. Walker, (eds.) *The Fourth International Shipbuilding & Ocean Engineering Conference*, Helsinki (Gothenburg, 1986).

[108] GD 323/1/1/22 (4) Scott Lithgow, General Manager's Report, December 1987.

[109] Ibid.

[110] GD 323/1/1/21 (3) & (4), Board Meetings, Scott Lithgow, 29 March & 1 June 1988.

[111] *Greenock Telegraph*, 27 April 1988.

[112] Private interview in possession of author.

[113] House of Commons, Official Report, Vol., 188, col., 434, 27 March 1991.

[114] Ibid., Official Report, Vol., 135, col., 638, 27 May 1988.

[115] Trafalgar House Writ against BS, Amended Statement of Claim, 8 December 1989.

Chapter IX: Conclusion

This thesis has been undertaken in an attempt to place the growth and decline of the two major shipbuilding firms on the Lower Clyde, Scotts' and Lithgows, in context and in historical perspective. Although the bulk of this work has concentrated on the history of the two firms in the post-1945 period, separately and merged, their story prior to 1945 is no less important. In this regard it is fortunate that the earlier history of Scotts' is relatively well documented in an unpublished thesis covering the years 1820-1920 and in the post-1945 period in a book published in 1961 celebrating 250 years of what was then the world's senior shipyard. [1] In stark contrast, the history of Lithgows has been less well served as no proper company history exists, although the career of the leading shipbuilder of his generation, Sir James Lithgow, is better known.[2]

Whilst noting the generally uncritical nature of most company-inspired histories, of which the history of Scotts' is an excellent example, I have attempted to analyse the development of both Lithgows and Scotts' and latterly Scott Lithgow by the use of a wider range of primary sources. In particular, I have extensively used yard records, SRNA material and the records of Government departments that have shared responsibility for the shipbuilding industry over the twentieth century. In so doing, my intention was to cast a more critical eye on the events; internal and external that shaped the history of these giants of the Lower Clyde through to their eventual demise. Accordingly, what has transpired is neither a standard business history nor a work of general reference, but a holistic treatment of a complex subject by way of a micro study. Through this approach it is hoped that the reader will have gained a better perspective in which to judge whether or not certain inferences and parallels can be drawn that will enhance our knowledge of cause and effect in the overall decline of the British shipbuilding industry in the twentieth century.

In the earlier chapters of this thesis I have concentrated more on Lithgows rather than on Scotts' but have supplemented the history of both firms through reference to yard and subsidiary firm records, although the latter are decidedly patchy in content. Throughout the period under consideration, Scotts' was by far the more sophisticated and technically innovative builder, particularly after the firm's initial success in supplying engines to the Admiralty in the late nineteenth century. Indeed, by this stage the success of the shipyard was indivisible from the success of the Engine Works and remained so throughout the twentieth century. Supplying engines to the Admiralty gave Scotts' sufficient impetus early in the twentieth century to go on to build and engine the cruiser, *HMS Argyll*. From there, the firm then entered the submarine market, and also went on to build a set of steam turbines for the Admiralty. This experience enabled the firm to later build and engine two battleships, *HMS Colossus* and *HMS Ajax*. Taken in tandem with the fundamental importance of Scotts' bespoke links with Holt, and in particular with Swire that had grown through mutual respect and trust from the 1860s onwards, the later combination of mercantile and naval work proved invaluable to counteract lack of demand in either sector.

Through two World Wars, Scotts' concentrated almost exclusively on naval construction and contributed significantly to the salvation of their country on both occasions. During the Great War, Scotts' links with Holt and Swire were cemented further when Ocean took a third of the Greenock firm's Ordinary shares. After the somewhat predictable speculative post-war boom had led to over capacity in domestic and world shipbuilding, Scotts' survived the equally predictable slump in both naval and mercantile demand by relying on bespoke linkages and laying off labour, and through the judicious use of reserves. Understandably, when the very survival of the firm was at stake, significant investment to modernise the shipyard facilities, particularly to extend the berths and cranage during the interwar period was notable by its absence. Despite gaining a continuous river frontage through the Cartsdyke shipyard deal with the Greenock Dockyard Company in this period, Scotts' remained a small to medium sized firm that prized both its bespoke linkages and naval status. Although the firm had built two battleships prior to the First World War, as the tonnage and sophistication of warships grew after the lifting of treaty restrictions, it would never again build capital ships. A signatory, alike Lithgows, to NSS, Scotts' survived the nadir of the interwar period, mostly due to bespoke linkages until naval rearmament arrived to boost its profits. In the Second World War, Scotts' concentrated exclusively on naval construction, with production being severely hampered by *Luftwaffe* bombing in 1941.

With the downturn in naval demand in the aftermath of war as Britain sought to redefine its world role in the light of economic, strategic and political realities, Scotts' again returned to bespoke mercantile construction. By this stage, much of the entrepreneurial spirit that had once characterised the firm had been dissipated. The author advances no specific reason for this assertion other than the observation that Scotts' no longer seemed inclined to innovate, either in engine design or in ship types. One can point to generational shifts in management and in attitudes as being symptomatic of declining competitive instincts, but this takes us only so far and tends to the subjective. Contemporaneously, the firm kept its submarine experienced team together first by a succession of refits, and thereafter on the construction of *Porpoise* and then *Oberon* class submarines. Under the respective chairmanships of Douglas Phillips and Michael Sinclair Scott, Scotts' put the issue of the firm going public to the vote of its shareholders. Nevertheless, with, Swire, through its subsidiary, the Taikoo Dockyard taking over Ocean's one third share in Scotts' as a lock-up investment, and family ties remaining important, the firm was always likely to remain a private concern. Scotts' did, however, increase its share capital by incremental stages and consequently the amount of dividends paid to family interests. Throughout the 1950s Scotts' remained a profitable concern, yet by the early 1960s mercantile construction had become less profitable as the buyers market for tonnage intensified. It was also clear by this stage that Scotts' future as a warship builder was under threat as too many warship firms existed to satisfy likely future demand. The MoD as always hedged its bets, and to a large extent relied upon natural selection to take its toll. Scotts' did, however, despite its lack of capitalisation, at least attempt to win orders to build nuclear-powered submarines. Nonetheless, the Admiralty conclusion that the firm was in fact too small to undertake such a programme, despite a willingness to involve John Brown's in their bid and given the investment needed, to a large extent came as a relief. Indeed, the earlier stimulus to modernise the firm's shipyards and Engine Works was fuelled by the realisation that if it did not do so then the firm would have in all likelihood been unable to survive the onslaught of international competition. However, Scotts' modernisation was completed just as the international market for ships had irrevocably changed. Not only were ship types getting bigger, owners were also demanding increasingly sophisticated tonnage, tied to advantageous owner-orientated credit terms. By this stage then, the retention of profitable naval work was a *sine qua non* to Scotts' continued existence as an independent shipbuilder.

In stark contrast to Scotts' the thrust of Lithgows policy, first through Russell and Company aided and abetted by the entrepreneurial talent of William Todd Lithgow, was the construction of standardised volume cargo tonnage in good times to order, and in bad, by building speculatively. On his death, his sons, James and Henry Lithgow who were left financially secure by their father continued his policies with the aim of developing to perfection the ocean-going tramp steamer. Nevertheless, James Lithgow's wider talent was soon recognised beyond Port Glasgow in employers organisations, at the Admiralty and in other industrial sectors as he first consolidated then expanded the legacy of his father. Throughout, James Lithgow was undoubtedly the driving force of the firm, however, the significant contribution of his brother, Henry to its growth should not be underestimated. The purchases of first the Bay yard of their father's old partner, Anderson Rodger, followed by the agreed purchases of the East yard of Robert Duncan and the Inch yard of Dunlop Bremner all contributed to the consolidation of the Lithgow brothers hold on the local labour supply in their unlikely power base of Port Glasgow. These acquisitions were essentially conservative and defensive by nature. As Russell and Company were finally consigned to history and Lithgows Limited formed, that power base was further consolidated by the purchase of a half share in the Glen yard of William Hamilton. James Lithgow, even by this stage an enormously wealthy man [not least through his substantial shipping investments] soon reacted to the post-war speculative boom and the danger of outside interests impinging on his personal fiefdom by purchasing the coal, iron and steel masters, James Dunlop. Moreover, Lithgows also consolidated their interests in the Clydeside marine engine building sector through their substantial shareholdings in the Glasgow firm of David Rowan, and the Greenock firms of J.G. Kincaid and Rankin and Blackmore.

Knighted by Stanley Baldwin in 1925, Sir James Lithgow then went on to play a central role in the rationalisation of his own interests and those of the shipbuilding industry as a whole. As the leading light in NSS, and much else besides, he was the subject of a barrage of vitriolic criticism from certain quarters, much of it ill-informed, that stayed with him until his death. Nonetheless, Sir James Lithgow's links and influence with the financial and industrial establishments were virtually unparalleled and owing to his wealth he was beholden to no one. In the rationalisation of the Scottish steel industry he was ruthless, and would undoubtedly have been equally ruthless in shipbuilding if given the chair at the money pit of Harland & Wolff. However, in both the steel and shipbuilding sectors significant rationalisation, given lack of demand and excess capacity would have probably occurred in any event.

The Lithgow brothers were financially sophisticated and always paid for the best advice they could get; both were, however, implacably opposed to any form of nationalisation. A factor, which could explain their decision to 'transfer' the share capitals of Lithgows and Robert Duncan to Canada, and again explains the later purchase of Beardmore subsidiaries before the nationalisation of the coal, iron and steel industries. By 1935, however, the acquisition of the virtually bankrupt Fairfield, not only saved thousands of jobs at Govan in the long run, but also gave Sir James Lithgow what he had hitherto lacked, access to naval orders. There, and later at Beardmore, Lithgow brought his essentially conservative style of management to bear by again building up reserves, but he also encouraged new talent to emerge.

For a substantial period in the interwar years, Lithgows Limited had nevertheless struggled on through self-imposed rationalisation, declining demand and market uncertainty. With the exceptions that it did not carry substantial naval overheads until the Fairfield purchase or an engine works, no significant investment in modernising Lithgows core Port Glasgow shipyards took place and up to the Second World War these yards had remained much as they had been beforehand. During the War the Lithgow yards again concentrated on what they did best, the construction of economical standard tramp ships, with Fairfield turning to naval construction and Beardmore to armaments. Again, Sir James Lithgow served his country with distinction, but his public position militated against any overt modernisation of his shipyards at Port Glasgow, where Henry Lithgow once again held the fort. Given the enormous demands of wartime production it is evident that Sir James and Henry

Lithgow's demanding schedules would have taxed much younger men. Thereafter, the early, and therefore unexpected death of Henry Lithgow in May 1948, followed in February 1952 by that of Sir James Lithgow was a devastating blow to what had become by that stage the largest privately owned shipyard group in the world.

Despite sizeable death duties, Lithgows Limited survived the death of its founders. At this point perhaps a break with the past was justified, but family interests remained sacrosanct and the firm carried on, but lacked the dynamism and ruthlessness that it had once been known for. No successor to Sir James Lithgow had been appointed, save that his son, William, would eventually come of age after his mother had led the family firm in the interim, before leaving it to her son as its largest shareholder. It is beguiling to compare generations in business, but ultimately unsatisfactory. The conditions that had propelled Sir James Lithgow to industrial dominance in the West of Scotland, were barely applicable to his son, and by the time the latter had taken over the firm its Port Glasgow yards were in dire need of modernisation. Moreover, the dual character of much of the Lithgow businesses after the demise of the founders meant that decision making, in light of the beneficial interests concerned, was apt to err on the side of caution. The management situation at Fairfield after the death of Sir James Lithgow also left much to be desired, and the hard decisions that needed to be taken to modernise what had always been a major shipyard before the onslaught of international competition began, were not taken. Later modernisation, both at Fairfield and Port Glasgow was extensive, but again erred on the side of caution, was too late, and took far too long to complete. Lithgows remained under-capitalised throughout its existence, and by the early 1960s the policy brought forward by Sir William Lithgow of consolidation of Lithgows marine engine building subsidiary companies at no little cost was spectacularly unsuccessful. In this regard, Lithgows practice of devolved decision making has to be called into question. Even at Port Glasgow, with the purchase of the Brocklebank interest in William Hamilton's Glen yard, it has to be borne in mind that by the time of the SIC Inquiry the yard was virtually being used as a dump. Indeed, the prior modernisation of Lithgows flagship Kingston yard to build larger ships was nothing less than a recognition that the firm could no longer rely on its staple market. International competitors such as Japan and Sweden had moved into the big ship league quicker, had more efficient labour practices and utilised more capital intensive equipment in two and three-shift working, and both favoured the building dock method of construction. In this light, with the disappearance of its long Order Book of the 1950s the survival of Lithgows was already at stake, a recognition that resulted in far less money being spent on the East yard. By the early 1960s, Fairfield was also in deep trouble as was Fairfield Rowan, but Lithgows did at least come to terms earlier than most with the growing importance of credit terms in the market by forming, in conjunction with the Bank of Scotland, Kingston Financial Services (Clyde) Limited. By the onset of the SIC Inquiry, however, the writing was on the wall for much of the Lithgow shipbuilding and marine engine building interests, and it is to this period that I now turn.

Prior to the publication of the SIC Report, Scotts' had bought Scott & Sons of Bowling, and had been involved in extensive negotiations leading to the successful purchase of the Greenock Dockyard Company. There is no doubt that these acquisitions were undertaken to strengthen Scotts' position in any subsequent merger talks, either with Lithgows or with the Upper Clyde firms. Given the collapse in mercantile demand, however, and the intensification of both domestic and international competition, the naval dimension at Scotts' remained of paramount importance to the firm's future prospects. Scotts' had already modernised just to survive, and in the scramble to group in the light of the SIC Report, survival remained the pre-eminent objective. Lithgows, on the other hand were in a far worse position, particularly with Fairfield and Fairfield Rowan, and the subsequent implosion of these firms was fairly and squarely due to management failures. Primarily, the Lithgow insistence on local accountability, although that had been somewhat diluted by Lithgows Limited representation on the Boards of both companies had had its day. Lithgows, on its own did not have the resources nor the inclination to rescue Fairfield and Fairfield Rowan, and thereafter the rescue of the former but not of the latter was undertaken by Government. [3] By 1966, therefore, Lithgows core shipbuilding interests were making losses. The firm was now left with its East and Kingston shipyards and the virtually derelict Glen yard at Port Glasgow, and the smaller Ferguson Brothers yard at Newark. With Lithgows already committed to building larger ships, it remained to be seen if the management lessons consequent upon the collapse of Fairfield would in fact be learnt?

Although the SIC Inquiry was essentially an exercise in confidence building, for Scotts', its recommendation that main engine building should be rationalised and divorced from shipbuilding, must have come as a severe blow. A blow compounded by the recommendation that warship building up to frigate and destroyer classes should be concentrated on three firms. [4] The portents, therefore, for both main engines building and warship building were not good, and with the decision made by the Royal Navy to go all nuclear in submarine construction, Scotts' hopes rested on export orders for *Oberon* class vessels. By this stage, however, it was virtually certain that the rather bleak outlook for shipbuilding on the Lower Clyde would be bleaker on the Upper Clyde. With even the SIB's own consultants warning that the Upper Clyde merger would not be viable, all business sense went out the window as political considerations, particularly the preservation of employment, predominated. That Government allowed this sorry situation to happen and compensated what in effect were failed industrialists beforehand, and also allowed them to stay on the Board of UCS afterwards speaks volumes for its ad hoc approach to industry in general and shipbuilding in particular. Moreover, it hardly required the services of consultants to figure out that such a disparate group, including the already rescued and virtually state-owned Fairfield, would fail, not least through the overwhelming self-interest of the constituent firms and personalities involved. Given that the possibility of merging with this child of political expediency was always on the cards, certainly if the Government and the SIB had its way, it was always likely that Scotts' and Lithgows would collaborate defensively to frustrate this. Both of these private firms were geographically isolated, had co-operated on labour matters, particularly in resisting calls for wage parity with the Upper Clyde, and had long traditions of family control. However, Scotts' and Lithgows bloody mindedness whilst being a source of strength in resisting both the Upper Clyde and Government preferences for a single Clyde group, was ultimately a source of weakness because of it. Consequently, both firms were far too conservative in taking an age to merge their respective shipbuilding interests. In this regard, it seems that Lithgows were the more reticent partner, essentially because Scotts' naval status remained unresolved throughout most of the merger negotiations. The strategy that evolved in the course of merger negotiations was unnecessarily complex, but was undertaken primarily to preserve the shareholders' ultimate interests, that is, beyond their shipbuilding interests. In this, self-interest was paramount, a situation that the SIB was all too conscious of as it attempted to nudge both firms towards a meaningful merger, whilst retaining the largely uncosted belief in the economies of scale and scope that had characterised the SIC Report. It remains difficult, however, to determine with any real sense of certainty how much of a role family tradition played, short of innate conservatism, in the eventual decision to undertake a merger of sorts. It would be safe to say that neither Michael Sinclair Scott nor Sir William Lithgow wished to be the first of their respective families to preside over the end of volume shipbuilding on the Lower Clyde. Both were, however, apparently happy with retaining the individual identities and traditions of the constituent firms, when it was arguable that this approach to running a modern group of shipyards was already outmoded. Nevertheless, it remains evident that both Scotts' and Lithgows were unwilling to commit significant amounts of working capital to give the newly merged Scott Lithgow an adequate chance of success. The marriage of convenience that resulted at least served as a solution of sorts to eventually divest the respective family shipbuilding and engine building interests.

With Scotts' in imminent danger of losing its naval status and Lithgows already committed to the big ship market, a merger of sorts eventually did take place by February 1970, but the respective firms basically carried on much as before. From the outset this marriage of convenience was under capitalised and was also fatally flawed in that management techniques were not sufficiently evolved or indeed recognised as being fundamental to the success of Scott Lithgow as a whole. Planning was deficient, as was the crucial function of effective control over costs and overhead recovery across the group. The extant management philosophy was by this stage already well past its sell by date as it had remained stubbornly individualistic when it should have been recognised [certainly at Lithgows in the wake of the Fairfield debacle] that the sum of the whole was in the end more important than the individual parts. Even the chance, albeit an inherently risky one to purchase Yarrow was foregone as conservatism and the unwillingness to commit substantial capital was essentially missing. This was also the case with the decision to build giant tankers in two halves as part of an intermediate scheme of expansion and forego the more expensive building dock method of construction. The assertion that Scotts' and Lithgows were unwilling to commit large sums to Scott Lithgow to strengthen liquidity is further evidenced in that both firms had to go to the SIB for loans for working capital, but only after the SIB insisted that each firm would also have to contribute by way of loans.

Although, as it turned out, Scotts' and Lithgows had been vindicated in not joining a single Clyde group despite Government and SIB pressure to do so, the possibility of purchasing Yarrow had forced a re-think, as had the probability of mounting losses on fixed price tanker construction in a period of unprecedented inflation. Lithgows had no previous experience in building tankers of this size and of the method [that they had after all chosen themselves] required, and this eventually showed, although the late delivery of the giant Goliath crane certainly had an impact. However, well before the collapse of the tanker market in the wake of the first OPEC price hike, the Lithgow tanker strategy was already in ruins. That the firm did formulate an alternative strategy, based on the offshore market was to be commended and showed considerable initiative. Nevertheless, fundamental management failings were just as likely to re-surface in this equally risky market, as had been the case with the disastrous giant tanker strategy where Lithgows had essentially become a one product firm. Moreover, as a result of this no real entry into the larger offshore structures market could be undertaken until the firm divested itself of its remaining giant tanker contracts. What then was the alternative for the Lithgow end of Scott Lithgow apart from entering the offshore structures market? It would seem that short of limping past the post of eventual nationalisation to gain a measure of shareholder compensation, whilst at the same time being fundamentally opposed to the concept, the only other course of action open to the shareholders was closure. To do so at that stage would not only have been an admission of utter failure, it would also have severely jeopardised family finances.

Up to this stage, the Scotts' end of Scott Lithgow had fared a little better, but its former source of strength in the submarine market was shrinking towards refits as the *Oberon* was getting a little long in the tooth. The experiment of building one gas carrier, *Gas Lion*, was apparently just that as no real attempt, in part owing to the increasing size and complexity of these vessels, was made to build another. Instead Scotts' skills were used to build two drill ships, but the intention to build these vessels in series was never realised. Even at the profitable [at that stage] Ferguson Brothers yard, with its shorter Order Book, losses were sustained on offshore supply vessel construction. By the two General Elections of 1974, however, it was clear that the victorious Labour Party Government would nationalise the shipbuilding industry in any event. The case for nationalisation was a strong one as the industry up to that point had grossly under-performed and was already in danger of being completely marginalised in the world market. By this stage the overall Scott Lithgow strategy that Government grants and future profits would outweigh losses sustained on fixed priced contracts, particularly on tankers, was already in tatters. Moreover, the productivity assumptions made on increasing the labour force to facilitate tanker construction had been inherently flawed from the beginning. One must nevertheless ask, given the millions of pounds poured into UCS and its successor, the state owned Govan Shipbuilders, due to the greater political clout of Glasgow-based politicians, and the millions of pounds poured into the money pit of Harland & Wolff what incentive at this stage, short of pride, was there to limit losses on the Lower Clyde in any event? Such losses that were borne at Scott Lithgow were clearly unsustainable even in the medium term, and as such there is absolutely no doubt whatsoever that nationalisation saved the firm from the ignominy of liquidation. Moreover, long before nationalisation, Scott Lithgow's future as a warship builder had been in considerable doubt. Warship Group status had initially allowed the firm to punch above its relative weight in this protected market, but by 1974 this was patently no longer the case. At least nationalisation offered the hope, if not an entirely realistic one, that the firm might be allowed to continue in the conventional submarine market in the hope that it would be in a position to tender for any future orders of this type.

The establishment of British Shipbuilders after a protracted period of parliamentary opposition may have brought to an end a period of ad hoc intervention by Government in the British shipbuilding industry, but it did not alter the ad hoc mentality. Up to this stage, the cloak of private anonymity had masked the scale of past, present and likely future losses at Scott Lithgow. It was always likely, however, that control of the industry would increasingly be centralised, as the state of the constituent firms' finances became known. It nevertheless soon became clear that management failings at Scott Lithgow, which in large part had resulted in huge losses on tanker construction, were in all likelihood apt to be repeated in the move into the large offshore structures market. Indeed, this was implicitly recognised by consultant's reports, and moreover, by local management in that the contracts were expected to be loss makers from the very beginning. Such assumptions that were made on increasing productivity to limit losses were flawed *ab initio*. Even if less workers worked harder than ever before, an unlikely scenario given the high rate of institutionalised absenteeism in Scott Lithgow among certain parts of its workforce, fundamental failings in production planning and control would negate this in any event. Moreover, manpower assumptions had been proven to be disastrously wrong in relation to giant tanker construction, and on such complex structures as semi submersibles undertaken with little experience of their true costs and complexity of construction, were likely to be more so. The overall lack of manpower owing in large part by employees leaving for better paid jobs elsewhere particularly in offshore related construction, placed an even greater premium on production planning and control. That this proved to be the case was evident in that by taking manpower from one job to another on a fire-fighting basis losses were sustained on a wider range of vessels than would probably have been the case if sufficient manpower had been available in the first place.

In the interim, the naval dimension had altered significantly in that Scott Lithgow could no longer rely upon naval work to compensate for losses elsewhere. The cable disaster although not the fault of Scott Lithgow radically altered the firm's hard won reputation on submarines. Yet, by this stage, problems elsewhere had impacted on RFA work too. Cartsdyke, which had built two drill ships, *Ben Ocean Lancer* and *Pacnorse I*, Scott of Bowling, and Scotts' Engine Works were the first casualties of a BS inspired rationalisation of the firm's productive capacity. A belated recognition that what had been previously still a collection of individual firms under the umbrella of Scott Lithgow was no longer a viable shipbuilding entity. Indeed, the enforced move into the BS Offshore Division was nothing less than recognition by Government that Scott Lithgow, the State Corporation's largest loss-maker, was effectively on its last chance. By this stage, however, much of the old guard of Scott Lithgow senior management had retired, and responsibility for the future performance of the rationalised firm lay much more with BS appointees than had hitherto been the case. Ultimately centralised, and also increasingly subject to stringent Government financial controls and targets, it would have been somewhat akin to remarkable if British Shipbuilders had turned Scott Lithgow's prospects around

Indeed, as it turned out, like the previous management, the new BS management was unable to solve the internal problems of the firm to effectively stem losses, which were mounting by the day. Industrial relations in this climate, just when they needed to be focused on increasing productivity on the basis of a joint management workforce effort, were more likely to deteriorate into sectionalised strife as redundancies took their toll on morale. Nevertheless, even when survival was at stake, demarcation still held sway long after it should have been consigned to history and strikes including the inherently stupid frozen toilets and crossword disputes were particularly damaging. By this stage, however, the previous warnings voiced by the consultants Touche Ross, which had on the whole went unheeded by senior BS management at both the local and national levels had come back to haunt the Scott Lithgow efforts in the semi submersible field. Although there is little doubt that over-zealous supervision by Odeco had a deleterious effect on production, the lack of a primary planning approach of project control in production planning on such complex products as *Sea Explorer* and *Ocean Alliance* and management's inability to deliver it, hastened the beginning of the end.

Even though Government policy regarding the rationalisation of the warship sector on the back of both the SIC and Booz Allen and Hamilton Reports had taken its toll at Scotts' it had still not yet holed the firm below the water line. However, the Nott Defence Review of 1981, effectively provided the *coup de grace*. Scott Lithgow could no longer rely on either RFA or promised submarine refit work to keep the firm going until it could bid for the new class of conventional submarine. With the focus of production shifting to the Lithgow end of the operation and with the closure of the Engine Works, Cartsburn was effectively doomed. All too late, the events surrounding the eventual privatisation of what had become BS biggest loss maker did move the workforce to a recognition that it had to change its internal dynamics towards interchangeability of labour rather that separation of trades. Even then, in any event it was arguable that this was too late a conversion, albeit a reluctant one.

That Trafalgar House were able to secure such a good deal on the first BS constituent yard, and its largest loss maker to be privatised owed much to the Government's desire to offload it. Indeed, in this respect, previous statements in public castigating Scott Lithgow by senior BS management and Government ministers were nothing short of disgraceful. In attempting to divest itself of an industry that was already in danger of being a statistical irrelevance in terms of world competition, the Government through BS then embarked upon the thoroughly dubious method of privatising its most profitable elements, the three protected warship firms, Vickers, Vosper Thornycroft and Yarrow. This cherry-picking formula was all too symptomatic of the Conservative approach to privatisation in general, in that formerly favoured firms were more easily sold as they offered the potential to substitute private monopoly for public. More cynical still, was the inclusion of under-capitalised smaller firms such as Brooke Marine and Hall Russell in the warship category for privatisation. From then on, by definition, the unprofitable rump in the mercantile-only sector, which was left on the whole to face crippling international competition, despite Shipbuilding Intervention Fund assistance, was effectively doomed.

Had not Trafalgar House 'saved' Scott Lithgow, then BS under the chairmanship of Graham Day who had left the Organising Committee before nationalisation, and had belatedly returned to dismantle it, undoubtedly would have closed it down. Just how Trafalgar House intended to resurrect the prospects of a yard whose reputation in the offshore structures sector lay in shreds, albeit ignoring unconvincing noises on proper management, virtually beggars belief. Given what eventually happened then it would seem that the Bechtel option of closing down the yard immediately to re-assess the *Ocean Alliance* contract before re-employing some of the workforce would have been far better. Nevertheless, Trafalgar House always had the inside track with the Conservative Government, and at least did attempt to rectify what had previously been regarded as a hopeless situation at the yard. Unable to secure any further major offshore contracts and with the *Ocean Alliance* programme inexorably slipping back, Trafalgar adopted a twin pronged strategy of trying to resurrect the yard's submarine capability, but more convincingly attempted to purchase Yarrow and Vickers/Cammell Laird as this would have virtually guaranteed future profits. That Trafalgar's previous supporters in Government had grown weary of it was evident in the wake of the failure to secure the *Upholder* class submarine follow on orders and in the failures to purchase Yarrow and Vickers/Cammell Laird, despite apparently being the highest bidder for the latter. In this regard, given Trafalgar's consistent pursuit of reparations from BS alleging misrepresentation over its original purchase of Scott Lithgow, Government was obviously wary that this pattern of behaviour would be repeated if Trafalgar was successful in taking over Britain's premier submarine builder, Vickers at Barrow. Throughout this thesis I have attempted to shed some light on the nether world of naval procurement, and in doing so it has not been difficult to observe that the MoD has been on the whole little better than a supine servant of Government throughout. Presumably, both the defensive and offensive capabilities of the Royal Navy were to be enhanced when it had been initially decided to re-introduce a conventional submarine element in the form of the *Type 2400* to the fleet. As it turned out, however, that element was eventually sold off without ever becoming operational. That this was allowed to occur speaks volumes, but it nevertheless remains highly problematic to come to any firm conclusions about the role of the MoD in the demise of Scott Lithgow as a whole. However, that demise was assured when *Ocean Alliance*, undoubtedly the most disastrous contract in the history of British shipbuilding left the Clyde some four years later than anticipated. Accordingly, with no real prospect held out of securing further large-scale contracts, the yard inexorably slipped into a care and maintenance basis in 1988 from which it never really recovered.

Returning to the introduction of this work, if one can draw inferences and parallels that would aid our understanding of the decline of the British shipbuilding industry from it, then the primary conclusion in the case of Scott Lithgow has to be one of fundamental management failure. That this was the case in private hands, then under State control and finally in private hands again is not in doubt. Moreover, at the local and national levels, no amount of post hoc gloss such as blaming the trade unions holds water, and would only do so if owners and management alike had totally abandoned responsibility for the running of their businesses, which they did not. Management, after all, is supposed to manage. As to Governments, bearing in mind the notoriously short attention spans of ministers, no long term strategy for Britain maritime industries has existed throughout the period under consideration. Ad hoc solutions predominated, and deteriorated at one stage before nationalisation into little better than outdoor relief schemes for industrialists and employees alike. Employment and political considerations provided the motor for State intervention but not for efficiency and nationalisation in 1977 only saved the inefficient rump [including the cosseted warship builders] of what had been before the Great War the greatest shipbuilding nation in the world. By the nationalisation stage, however, the descent into also ran status had well and truly begun, a descent that privatisation failed to halt. That the industry now is insignificant in world terms is beyond doubt, at the national level the three warship building firms (Vickers, Vosper Thornycroft and Yarrow) identified by the SIC Report and by Booz Allen still survive, as do the past recipients of massive Government largesse, Harland & Wolff and Govan Shipbuilders. Although management failure had primarily resulted in the demise of Scott Lithgow, this is not put forward as a monocausal reason as other external factors intervened. It does not necessarily follow, however, that this is true of all firms in the industry, although one might strongly suspect that this would be the case. Indeed, this is why micro studies like this are important, and indeed more are needed if we are fully to understand the underlying reasons for the decline of the British shipbuilding industry.

By way of epitaph, a stranger walking along what had been the two and a half-mile length of Scott Lithgow would now be hard pressed to recognise that shipbuilding had once flourished there. This is particularly the case in the Greenock end of the operation, where new service orientated firms now predominate. In the Port Glasgow end of Scott Lithgow, one can still see some of the former sites and distinguish the Lithgow end of the operation. At Newark, Ferguson Brothers, now a niche shipbuilder, remains in business, albeit against the odds, long after volume shipbuilding in the cradle of Clyde shipbuilding has disappeared.

Endnotes Chapter IX

[1] Robb, Scotts' of Greenock', and *Two Hundred and Fifty Years of Shipbuilding*

[2] Reid, *James Lithgow.*

[3] For the Fairfield rescue, see L. Johnman & H. Murphy *What Really did Happen at Fairfields!* (forthcoming, 2002)

[4] SIC 1965-1966 Report, chapters, 18 and 24.

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List of Ships Built by Scott Lithgow Limited, 1970-1987

Year	Name	Type	Country of Registration	Gross Reg Tons/ Stand. Disp. Tons*	Firm
1970	*Ingeren*	B/C	Norway	12,636	S
	Whitehead	Exp/Trial	Royal Navy	3,308*	S
	Grecian Spirit	B/C	Liberia	22,992	S
	Bulknes	B/C	UK	13,325	S/C
	Binsnes	B/C	UK	13,240	S/C
	Sugar Transporter	B/C	UK	13,907	L
	Brooknes	B/C	Norway	13,098	L
	Gold Star	O/T	Korea	73,201	L
	Granuaile	Lt T	Eire	2,003	FB
	Marinex V	Dred	UK	2,825	FB
	Westondyke	Co	UK	696	SB
	Fendyke	Co	UK	696	SB
1971					
	Cumbria	B/C	UK	18,570	S
	Banbury	Cargo	UK	11,381	S
	Geesttide	R/C	UK	5,871	S/C
	Geestcrest	R/C	UK	5,871	S/C
	Blidnes	B/C	Norway	13,116	L
	Sugar Refiner	B/C	UK	13,907	L
	King Star	O/T	Korea	73,729	L
	Scotia	F/R	UK	1,521	FB
	Gilbert J. Fowler	S/B	UK	2,548	FB
	Brasilia	Dred	Brazil	885	FB
	Saint Bedan	Co	UK	1,251	SB
1972					
	British Avon	P/T	UK	15,540	S

British Kennet	P/T	UK	15.540	S
O'Brien	Sub	Chile	1.610*	S
Geestland	R/C	UK	5.871	S C
Geeststar	R/C	UK	5,671	S C
Brimnes	B/C	UK	22.908	L
Bernes	B/C	UK	22.901	L
Bravenes	B/C	UK	22.906	L
Consortium 1	S/B	UK	2.549	FB
Saint Benedict	T	UK	1.454	FB
1973				
British Forth	P/T	UK	15.540	S
Hyatt	Sub	Chile	1.610*	S
Jag Prakash	P/T	India	15.849	S
British Tweed	P/T	UK	15,540	S/C
Sugar Carrier	B/C	UK	17,775	S/C
Nordic Clansman	O/T	UK	138,702	L
British Spey	P/T	UK	15.540	L
Cambrae	Dred	UK	3,366	FB
Goth	T	UK	1,448	FB
Roman	T	UK	1.448	FB
Grampian Monarch	T	UK	480	SB
1974				
Orion	Sub	Australia	1,610*	S
Sugar Trader	B/C	UK	17.779	S/C
Jhansi-Ki-Rani	B/C	India	42,141	L
Sand Weaver	D	UK	3.366	FB
Norse	T	UK	1,448	SB
Mateus De Cordova	FPV	Mexico	-	SB
Jose Maria Izaziga	FPV	Mexico	-	SB

1975

Newton	UWR	Royal Navy	4,510*	S
Otama	Sub	Australia	1,610*	S
Jag Priya	B/C	India	20,416	S C
Kasturba	B/C	India	43,141	L
Nordic Commander	O/T	UK	138,651	L
Seaforth Jarl	OSV	UK	1,376	FB
Seaforth Highlander	OSV	UK	1,376	FB
Leon Guzman	FPV	Mexico	-	SB
Felix Romero	FPV	Mexico	-	SB
Pastor Rouaix	FPV	Mexico	-	SB
Grampian Glen	T	UK	127	SB
Grampian Monarch	T	UK	127	SB

1976

Fort Grange	RFA	MoD	15,049*	S
Ben Ocean Lancer	DS	UK	10,823	S/C
Jalahivar	B/C	India	42,141	L
World Scholar	O/T	Liberia	126,239	L
Gardyloo	SB	UK	1,952	FB
M.S.C. Ince	Dred	UK	427	FB
Thames	SB	UK	2,663	FB
Greatham Cross	Tug	UK	193	SB
Skelton Cross	Tug	UK	193	SB

1977

Clydedenes	Cargo	UK	2,351	S/C
Pacnorse I	DS	Liberia	10,820	S/C
Oroya	Cargo	UK	9,015	L
World Score	O/T	Liberia	126,260	L

Clarknes	Cargo	UK	2,351	FB
1978				
Fort Austin	RFA	MoD	16,053*	S
Orapesa	Cargo	UK	9,015	L
Lady Chilel	Ferry	Gambia	702	FB
M.S.C. No.51	Barge	UK	340	FB
M.S.C. No.52	Barge	UK	340	FB
M.S.C. No.53	Barge	UK	340	FB
Pinewood	Cargo	UK	1,599	SB
Shannon Willow	Car Ferry	Eire	360	SB
1979				
Maron	Cargo	UK	16,482	S
Mentor	Cargo	UK	16,482	S/C
Mlawa	B/C	Poland	2,996	FB
Auricala	TST	MoD	982	FB
Zgorzelec	B/C	Poland	2,992	FB
Holmgarth	Tug	UK	204	SB
Hallgarth	Tug	UK	204	SB
Carron	Tug	UK	204	SB
Laggan	Tug	UK	204	SB
1980				
Myrmidon	Cargo	UK	16,482	S
Sulisker	FPV	UK	1,177	FB
Donald Redford	Dred	UK	595	FB
1981				
HMS Challenger	SOV	Royal Navy	6,907*	S
Iolair	ESV	UK	11,019	L
1982				
British Spirit	O/T	UK	66,024	L

1983					
Sea Explorer	S/Sub	UK		9,086	S
1984					
None					
1985					
None					
1986					
None					
1987					
Ocean Alliance	S/Sub	UK		15,517	L

Key to Ship Type: B/C-Bulk Carrier, Cargo-Cargo Ship, Co-Coaster, D-Dredge, DS-Drill Ship, ESV-Emergency Support Vessel, Exp/Trials-Experimental Trials Vessel, FPV-Fishery Protection Vessel, F/R-Fishery Research Vessel, OSV-Offshore Supplies Vessel, O/T-Oil Tanker, P/T-Products Tanker, R/C-Refrigerated Cargo Ship, S/B-Sludge Boat, SOV-Seabed Operations Vessel, Semi/Sub-Semi Submersible, Sub-Submarine, T-Trawler, TST-Trials Sonar Tender, Tug-Tug-boat, UWR-Underwater Research Vessel.

Key to Firm: FB-Ferguson Brothers, L-Lithgows, S-Scotts', SB-Scott Bowling, and SC-Scotts-Cartsdyke