

PORTLAND NAVAL BASE

Seafish Report No.437

February 1994

Sea Fish Industry Authority

Seafish Technology



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Summary

Portland Naval Base and harbour provide an interesting opportunity for a range of possible investments when MOD vacate the site in 1996. Deepwater berthage allied to a limited tidal range adjacent to vessel support facilities and general services are located within a man made outer harbour. High sea water quality makes the area attractive to aquaculturists and shellfishermen alike.

However the provision of these facilities is dependent upon the maintenance of hundreds of metres of quays and more significantly breakwaters with an estimated annual maintenance spend of £¼m.

Both the electrical supply and the fresh water supply are reported to need expensive upgrading before they could be "adopted" by regional authorities.

The local fishing industry could utilise berthage and cold storage facilities and there are buildings which could house vivier tanks, congestion at Weymouth would be relieved. Itinerant beam trawlers and scallop dredgers could land catches to road transport when these vessels are fishing locally.

The pelagic fishing fleet could use sheltered berthage and repair facilities more conveniently than in Weymouth.

The question however is raised as to who will lease or purchase this expensive facility with all its ongoing costs. It is outwith the means of the prospective fishery users to contemplate unless in collaboration with other interests.

A range of legal decisions as to ownership and possible transfer of ownership remain to be taken and presumably a Harbours Act laid before Parliament before investors will be able to proceed.

Contents

	Page No
1. Introduction	1
2. Background	2
3. Existing Facilities	3
3.1 Piers	3
3.2 Onshore	3
3.3 Services	3
4. Potential Fishery Usage	5
4.1 Local Fishing Fleet	5
4.2 Itinerant Fleets	6
5. Fish and Molluscan Farming	7
6. Management of the Development	8

Figures
Portland Naval Base

1. Introduction

Portland is best known for the quarrying of an attractive stone, for its penal establishments, and naval base. It is, however, ecologically unique with the great sweep of Chesil beach to the West creating a scientifically interesting saline lagoon, the Fleet and with the great manmade defensive breakwaters to the East creates an offshore lagoon similar in some ways to the reef and atoll configuration more typical of Pacific seas. In this case providing a harbour of refuge but also an area of relatively sheltered unusually pollution free coastal water. The impending withdrawal of the principal tenant MOD creates an interesting situation for widely divergent development proposals. Clearly as the fishing industry have been knocking on the door for a long time, the question is not so much is there a place for them in Portland, but what size and type of facility will they require.

The financial situation within which fishing interests would operate will depend very much on decisions as to where responsibility will eventually lie for the upkeep of the harbour including breakwaters.

2. Background

Consultants, Drivers Jonas, prepared a report for Weymouth and Portland Borough Council on future use of the "base" area.

The terms of reference are not spelt out in their report but clearly the emphasis is on re-development of the land, buildings and port facilities currently occupied by MOD. The other laudable aim is to find alternative employment for some 3,000 people presently employed locally by the Navy. There is superficial reference to the local fishing industry and a positive proposal to develop a tank (tanker) cleaning facility within the harbours with oil residue burned in an associated power station. This is in an area renowned for its high quality seawater and designated in part for molluscan shellfish farming or ranching. There are also physical constraints on the size of super tankers able to use Portland in all weather conditions. In addition to the small fleet of crabbers operated from Castletown pier just outside the dockyard and Ferry Bridge between Portland and Weymouth, there is a large fleet of small fishing craft based in Weymouth. These include some offshore crabbers of up to about 17m in length. Seasonally, deep sea fishing vessels use Portland Bay (outside the breakwaters) as a transshipment anchorage for mackerel transferred to Russian and East European factory ships (klondykers).

At the time of writing there are four factory ships anchored between the two harbours and being supplied by a fleet of six Scottish trawlers. These trawlers will land some of their catch to more lucrative shore based markets on demand. They have, in the past used the ferry piers at Weymouth for onshore landings but demand has now accelerated due to the availability of the klondyker outlets. Previously MOD had not permitted East European vessels to anchor near the naval base.

Portland is about halfway between Brixham and Portsmouth, both bases for large circa 30m beam trawlers and as such could be a convenient landing place for both West Country and Continental markets.

3. Existing Facilities

3.1 Piers

The Drivers Jonas report lists the various piers at the base. Depths at Mean Low Water Springs generally vary from about 2m to about 4 metres with the latter available at some part of nearly all the jetties. Greater depths of 7 to 11.5 metres are available to the larger piers. The latter at the recently constructed deep water berth. A general depth of over 10 metres is available in the harbour immediately East and North of the dockyard. All together some 2.5km of quayside berthage is available. Clearly, for small vessels the area East and South of the Coaling Pier is the most attractive with adequate depth for this type of vessel and more sheltered from the West than the deeper berths at Q pier and the Deep Water berth. All the main piers are connected to the oil fuel supply and fresh water mains. Oil can be transferred to quays from the tank farm at the heli base and from underground reservoirs South of the base. There is a 40 tonne shiplift facility and two slips capable of taking 300 tonne vessels. 6 tonne rail mounted cranes are available at the deepwater jetties. There is a 50 tonne crane on the inner breakwater immediately East of the main base.

3.2 Onshore

Portland is the main victualling base for RN, RFA ships and as such is well equipped with both dry storage rooms and cold stores. These are situated adjacent to the "inner harbour" mentioned in the previous paragraphs indeed they are right alongside the heads of the small vessel jetties. Refrigerated storage of about 400m³ is available together with chill storage and dry stores.

There are several administration buildings, recreational halls, training areas. These generally occupy a fairly narrow strip 150 to 300m wide area between the quayside and the steep cliff to the South. The widest flat area is at the West end of the base adjacent to the slipways. Various "trades" workshops are located in this vicinity connected with the maintenance of the harbour and near waters service vessels operated by Royal Naval Auxiliary Service e.g. tugs, personnel and range vessels. These trades also support the vehicle fleet and ground equipment at the helicopter base (HMS Osprey). There are substantial accommodation blocks outside the dockyard some quite new. It is understood that these are to be retained by MOD for the foreseeable future. There is severe limitation on development outside the 25 acres of the base. The land to the South is fronted by unstable cliffs and the land itself is designated as an SSSI.

3.3 Services

The electrical supply is provided by the bases own transformer substation connected to a Southern Electric substation. SE are not keen on adopting the local distribution system under new ownership but would manage it.

Gas supply is purely domestic and unsuitable for heavy duty industrial use. Water is supplied from MOD owned reservoirs on Portland. Wessex Water are similarly reluctant to adopt the system. There is adequate mains drainage.

Presumably if Southern Electric and Wessex Water were to adopt or even manage these services they would demand that these are to their standards and this could involve potential investors in major expense.

It is evident that any constraints in these departments to potential new owners could, however, include a requirement to maintain the harbour breakwaters. Estimated annual maintenance is of the order of £250,000 and it is unclear at the time of writing as to where this commitment will finally rest.

4. Potential Fishery Usage

4.1 Local Fishing Fleet

99 fulltime and 60 part time vessels operate from Weymouth and Portland. Part of the "Portland" fleet operate from Weymouth and some from other South coast landing places. The great majority of the fleet are however of under 12m length. The majority of the larger boats i.e. over 10m are engaged in the crab fishery. The full time crabbers form part of a fleet of about 120 such vessels on the Devon and Dorset coasts. Various disparate groupings or associations have recently joined South Devon Shellfishermen the main body of English or indeed UK shell fishermen. Recent moves by that body have included discussion on the possibility of setting up a crab processing facility in the region. Portland must be included in the discussion of possible sites. Official (MAFF) statistics which are notoriously understated for a variety of reasons record landings at Weymouth and Portland valued at about £1.5m annually. A figure of £3m is probably more accurate. Another £3.5m to £4.0m value of crab is landed in South Devon annually.

For some considerable time the problems of harbour congestion at Weymouth have been discussed and indeed Seafish presented a report in 1988 (TR 323) considering some development options. These mainly examined possibilities at Weymouth as opportunities at Portland were very limited owing to the MOD tenure there. The proposal by Her Majesty's Government to vacate the base, however, puts a whole new complexion on the question.

The high quality of seawater at Portland makes it an ideal location for live shellfish holding facilities. Copines have operated there for several years. Traditionally fishermen have kept crabs and lobsters alive for the market in floating cages or "keep pots". There are a number of attractions to holding crustacea in shore based tanks viz security, control of water quality and accessibility for onward transport. Ample floor space typically in excess of 200m² is required for the average installation. It should preferably be as near as is practicable to a high quality seawater supply and of course be housed in a secure building with three phase power supply. Ideally such a facility would be operated by a group of fishermen selling through their own "vivier" company or an agent.

Crustacean fishermen depend upon a ready supply of good quality bait for charging their pots. Clearly, fish of an acceptable type from the point of view of attracting the crustacea and available in volume at a relatively low price is what is required. The late winter fishery off Dorset and Devon for horse mackerel provides such a supply. Much of this catch is frozen off these coasts in East European klondykers or factory ships or shipped direct to Holland for freezing. Ironically much of it is shipped back to the West Country as frozen bait. Fishermen could buy this fish directly from Scottish trawlers operating in the SW and freeze and cold store it, if cold storage were available. Alternatively it could be purchased after being frozen from the klondykers. In either event the existing cold storage at Portland Naval base would be an invaluable asset.

Typically, a large crabber could use some £50,000 worth of bait annually. A fleet of six large boats could be using 3,000 tonnes per annum. The larger, full time boats operating at Weymouth could be offered alternative berthage probably with far superior facilities and far less congested than they are presently using. This would in turn release additional space at Weymouth for the ever increasing demands of the yachting fleet.

Weymouth clearly offers a much more attractive situation for this type of trade, geared as it is to the tourist industry. It is acknowledged that some of the smaller local fishing boats may choose to remain at Weymouth, but it is believed that the bulk of the larger boats would move particularly if vivier (live shellfish holding) facilities were available at the former naval base. The problems at Weymouth not only include those of berthage and access to boats, but also the greater problem of road transport access particularly in the summer. Such transport now includes 30 tonne articulated vehicles which are completely out of place in the centre of a tourist town.

It is, of course, true that at present these vehicles would have to negotiate the gradients out of Weymouth towards the Chesil beach causeway, but there would be no requirement for them to stop and manoeuvre in the town itself. Access to the base piers could be straightforward. Already such trucks access Castletown pier. Portland where Copines, shellfish merchants have been located for a number of years. The other major fishing activity in this area is scallop dredging which demands access to piers by large insulated trucks.

A typical larger crabber is similar in size to some of the RNAS auxiliary craft presently using the smaller jetties and these vessels could remain afloat at all times alongside the outer sections of these piers.

4.2 Itinerant Fleets

Seasonally a small fleet of Scottish trawlers lands mackerel and horse mackerel into Weymouth and to mainly East European factory ships (klondykers) anchored off the town.

Large volumes of fish, typically several hundred tonnes are landed or transhipped daily during the early spring season. Whilst these vessels including the klondykers demand the usual supplies of fuel, provisions and fresh water they also require engineering and boilermaker skills for repairs. These vessels would require to lay either at the coaling piers or the Q jetty owing to depth restrictions and loading restrictions at the smaller piers, if indeed they required to come alongside.

There is an increasing trend for the onshore processing of these (pelagic) oily fish species to attract benefits from added value within the UK rather than the near Continental markets therefore increasing quantities are landed rather than transhipped although the latter outlet is still dominant. A major constraint on further processing in the South West is the restriction on mackerel (*scomber scombrus*) fishing in a huge area from Swanage to Fishguard. Only a small by-catch is permitted with catches such as horse mackerel or pilchards and the latest scientific advice is that owing to the fact that a high proportion of immature fish are present, the restriction should remain.

It is, therefore, unlikely that oily fish processing will develop further (there is a large processor at Plymouth) in the immediate future. However, ship service facilities and indeed berthage for this fleet with easy access to road transport would be in seasonal demand (mid winter season) .

The other principal Channel fishery is the beam trawler effort on soles, turbot and plaice. These vessels many based in Brixham and Newlyn and a few at Portsmouth fish in particular the Lyme Bay grounds West of Portland and would find that harbour convenient for landing dependent on the particular area fished. Their main requirement would be for easy access to insulated transport vehicles. Some of this catch would go to SW markets and some direct to the Continent. For vessels consigning, landing fish at Portland could considerably reduce the transport time and cost to the ferry ports further East. There are about 80 vessels of this type varying in length from 20m to 30m, based in Brixham and Portsmouth. There would be sufficient depth at MLWS at the extremities of the smaller piers to allow beam trawlers to remain afloat. This is an important consideration where refrigeration machinery requires to be operated with catch on board.

It is, therefore, apparent that three main considerations should be borne in mind when looking at possible fishing interest. Bait cold storage and vivier or live holding tanks are of special interest.

1. Local South coast vessels particularly the larger ones including the larger crabbers are now very mobile and less dependent on local markets. There has emerged recently interest from representatives of some 120 south coast boats to establish a crab processing plant in the area.

2. The itinerant Scottish trawling fleet and their accompanying factory ships already locate to Weymouth for a season of a couple of months early in the year and would be infinitely better served by facilities in Portland harbour than off Weymouth.

3. The beam trawler fishery is again extremely mobile and at times dependent on road transport links from a nearby harbour to avoid expensive "steaming time" to link with auction markets scores of miles to hundreds of miles distant.

5. Fish and Molluscan Farming

Portland harbour, as mentioned in the introduction, is an almost unique manmade lagoon in almost an open sea situation. Probably one of the few parallels is Scapa Flow in Orkney, with a similar history.

As a result of its situation, relatively deep water and regular tidal movement, the sea water quality is high. In fact it is one of very few areas in the UK designated as grade "A" under the recent molluscan shellfish legislation. There are some small areas of grade "B" near the base, it is understood.

The tidal regime is such that the best water quality is found in the western and northern parts of Portland Harbour.

As a result, the harbour is of great interest for aquaculture purposes.

A co-operative of Portland fishermen obtained a "Several Order" (exclusive rights) to part of the seabed, effectively part of the sea within the harbour some years ago with the intention of using it for the on-growing of scallops on hanging ropes.

Other parties are utilising parts of the harbour without several orders, but with the permission of the Queens Harbourmaster for floating cage culture.

The Fleet behind Chesil beach is owned by the local estate and oyster cultivation is carried out there. Clearly with the increasing demand for farmed fish there will be great interest in the further acquisition of sites no doubt secured through several orders though to obtain S.O's is a notoriously lengthy process (several years usually). One of the likely interests would undoubtedly be in the on-growing of species reared in the pure but cold waters in North and West Scotland where growth rates of several finfish species are uneconomically low. The development of more intensive farming in the harbour will undoubtedly conflict with industrial interest in base facilities and may become a major issue in the allocation of licenses and possible support funding. EC grants are available of around 30% for aquaculture development.

6. Management of the Development

There are clearly a number of interested parties, some mentioned in Drivers Jonas report and some previously in this document. Interest will be diverse and interests will conflict. What is presently unclear is where the final responsibility will lie in making somewhat controversial decisions in respect to permission to invest. Weymouth and Portland Borough Council, MOD and Crown Estates presently all have some direct or indirect involvement. Decisions on financial assistance for development will, of course, influence interest certainly in the fisheries sector and bodies such as MAFF and DoE with Dorset TEC will come into the frame at that stage. Disparate groups of environmentalists will also be active in the planning stage on such a unique site. (See also 3.2).

This part of Dorset has recently been allocated special Rural Development Area status and in this situation it is normal to have the central stage taken by "a development company". Seafish are presently working with several such bodies in harbour development in the North of England. These "companies" have wide powers but they do call upon a range of expertise by contractual agreement to advise them as to the various options open, whether they be business, industrial or leisure orientated. They also have access to considerable funds particularly in areas rundown from a historical coal and steel background. Matching funding has to be found from private investment. It is possible that some similar arrangement for ex MOD sites could be available ?

In the absence of such an arrangement and owing to WPBC not being in a position to find the kind of financial support necessary to back major investors, it is difficult to foresee a solution being reached on competing investment interests which will be seen to be fair and rational.

The question must be raised at appropriate Government level, sooner rather than later certainly for the benefit of local people and indigenous industry and ultimately for the interests of those who may choose to bring new industry to the harbour.

There is no way that fishing industry involvement could justify a major role in funding the costs of operating and maintaining the port. Equally the future role of MOD is uncertain as a potential port operator.

What is important to stress is that whatever landlord or grouping of interests finally emerges as operator, a Harbour Act will surely be required and this procedure will take a considerable time to become law even in the most uncontentious of circumstances.

Portland Naval Base

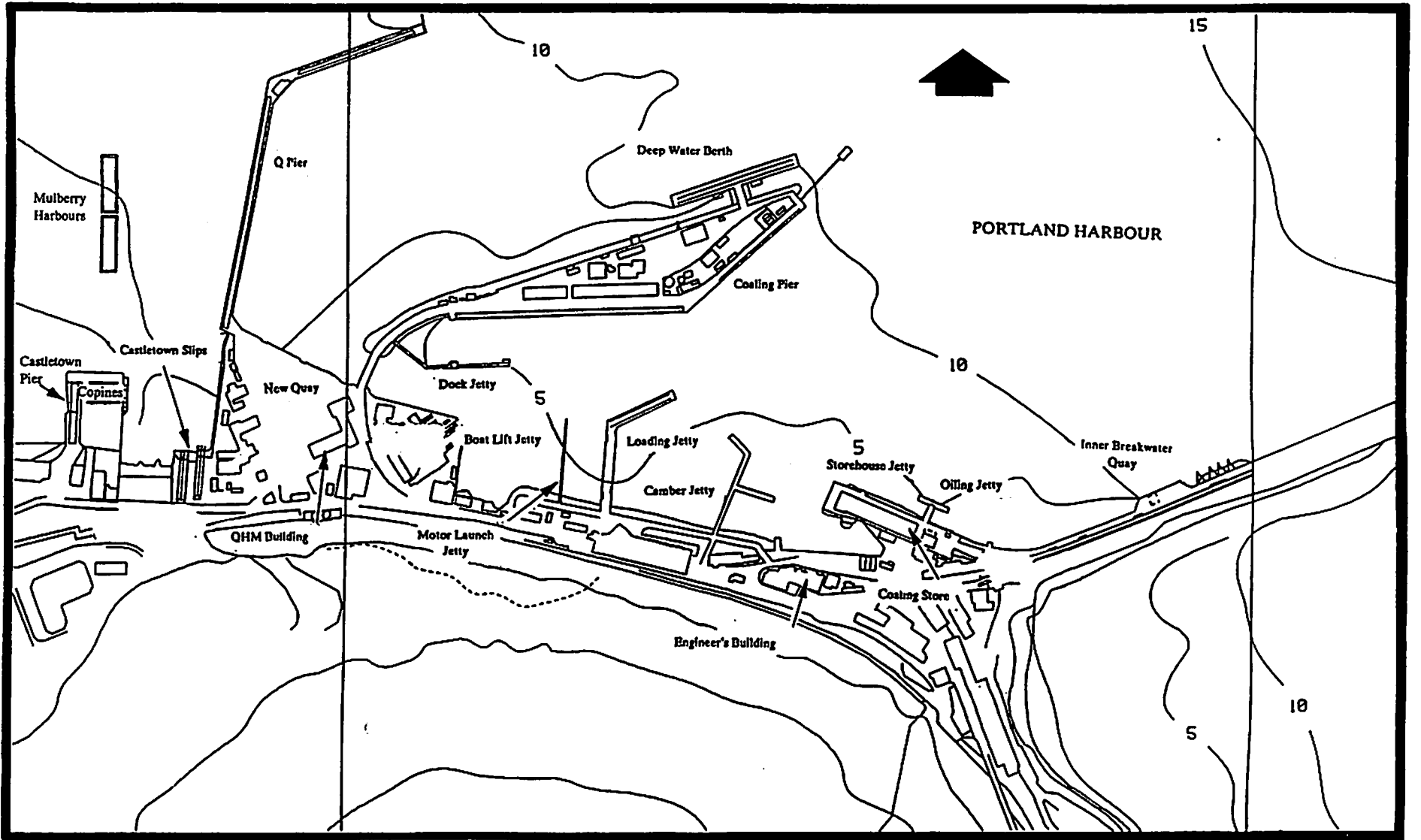


Fig. 1