

REPORT

To: Harbour Board 27 September 2007

From: General Manager

Report No: **P&H-19-07-F**

Subject: Scalloway Harbour Dredging

Offshore Service Vessels

1 Introduction

1.1 At the last Harbour Board meeting held on 09 August 2007, Members requested that a report be brought forward on the types of vessels that could use Scalloway if the depth was increased from 7.5 m to 9.5 m or 10.0 m below chart datum.

1.2 The information contained in this report is a result of internet research and visits made to offshore supply vessel operators as part of the Council's presence at the Offshore Europe Exhibition, 4-7 September 2007.

2 Background

2.1 The largest vessels which have visited Scalloway are as follows. It should be noted that not all were loaded to their maximum draft.

<u>Name</u>	<u>Length</u>	Max. Draft	<u>Type</u>
Seaway Condor	112m	6.0m	Support
Maersk Responder	106m	9.0m	Support
Subsea Viking	103m	7.9m	Support
Maersk Defender	96m	7.5m	Support
Maersk Attender	90m	7.8m	Support
Olympic Hercules	82m	7.5m	Anchor Handler

- 2.2 Vessels larger than 100m in length are subject to pre-approval before entry, due to restricted swinging area off the Commercial Quay.
- 2.3 The deepwater berth is 120m in length.

3 Future Vessels

3.1 The next generation of offshore supply/support vessels are now being built and delivered from shipyards throughout the world.

3.2 Internet research has been undertaken and the vessels below are the largest that have been found. See appendices 1 to 5.

<u>Type</u>	<u>Length</u>	Max. Draft	<u>Type</u>
A101	82m	7.5m	Anchor Handler
AX118	102m	8.0m	Support
SX121	120m	8.0m	Support
SX122	149m	8.8m	Support
SX102	168m	8.5m	Support

- 3.3 Due to the restricted area within the inner harbour of Scalloway it is considered most unlikely that a vessel of the size of an SX122 (above) can safely be brought to and from the pier area.
- 3.4 See appendix 6 which illustrates the size of the vessel laid on to the chart of the inner harbour.
- 3.5 See Appendix 7 which illustrates the sizes of vessels alongside the quay area.
- 3.6 The proposed new West Pier is designed for vessels up to 120m in length. Any changes would increase the capital cost estimated at £4.98m in 2012/13.

4 Other Ports

- 4.1 Aberdeen Harbour gives a figure of 8.5m as the deepest draft permitted in the navigation channel.
- 4.2 The South Base at Peterhead publishes a minimum water depth alongside as 6.8m but there is deep water in the harbour entrance & alongside the breakwater.
- 4.3 The deepwater berth at Scrabster is 9.0m below chart datum. The harbour trustees have recently announced a £35m upgrade to harbour facilities.
- 4.4 Fraserburgh has 8.9m in the main entrance channel.

5 <u>Tidal Range, Scalloway</u>

- 5.1 The tidal range, at neaps, (smallest tides) is +1.3/+0.6, which means that if the channel were deepened by two metres then the predicted depth over a tide would be between 10.8m & 10.1m below chart datum.
- 5.2 For spring tides the figures would be 11.1m & 10.0m.
- 5.3 Under normal circumstances, the small ranges in Scalloway & the positive figures for low water indicate that 10m would be available in the channel & alongside if the dredged depth chosen was to be 9.5m.

6 <u>Customer Survey</u>

- 6.1 Face to face consultations with operators of offshore supply vessels in Aberdeen have indicated, in general, a maximum draft requirement of 7.5 8.5m. Two operators have vessels that are in the 8.5 9.5m range. However, it was unanimously agreed that a depth of 9.5m below chart datum would allow their current and newbuilds to safely access Scalloway Harbour.
- 6.2 The offshore operators consulted at the Offshore Exhibition in Aberdeen were; Total, Craig Group, Teekay Petrojarl, Maersk, Farstad Shipping, Chevron, Technip, Atlantic Towing, Acergy and GDV Subsea.

7 Conclusions

- 7.1 All indications as a result of market research & customer consultations have now shown that a dredged depth of 9.5m is more than adequate for the present & future generations of offshore support vessels.
- 7.2 At neap tides, predictions are depths of at least 10m in the harbour.
- 7.3 It would be unsafe to take vessels in excess of 120m in length due to the restriction of the swinging areas & the lengths of the jetties themselves.

8 <u>Financial Implications</u>

8.1 There are no direct financial implications as a result of this report.

9 <u>Links to Corporate Priorities</u>

9.1 Improving harbour facilities and services at Scalloway would make a contribution to the Council's priorities of strengthening rural areas and supporting the local economy.

10 Policy and Delegated Authority

- 10.1 The Harbour Board has full delegated authority for the oversight and decision making in respect of the management and operation of the Council's Harbour undertakings in accordance with overall Council policy and the requirements of the Port Marine Safety Code as described in section 16 of the Council's Scheme of Delegation
- 10.2 However, only the Council can approve matters relating to the Capital Programme.

11 Recommendations:

I recommend that the Harbour Board recommend to the Council;

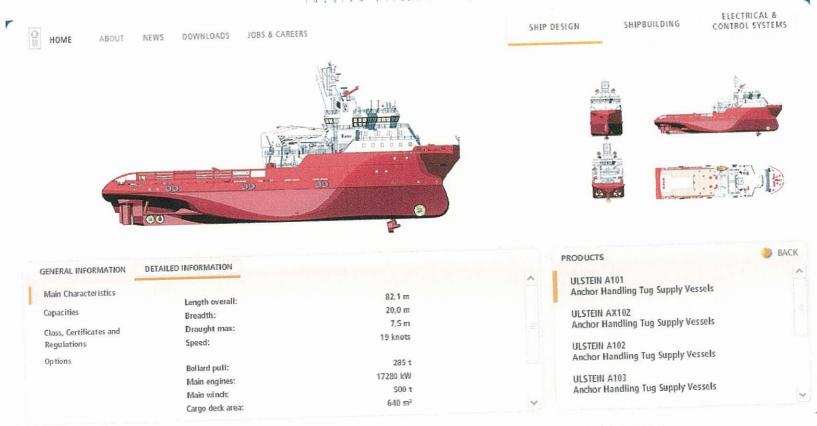
11.1 Should a new capital project be approved to deepen the entrance to Scalloway harbour then the dredged depth should be not less than 9.5m below chart datum.

Our Reference: RO-O P&H-19-07-F JTD/SM Date: 18 September 2007

11.44



INTALER AISTORNA IRAB BANILLA



ALL PIGHTS RESERVED BY THE ULSTEIN SPOUP 7006

- 5 -



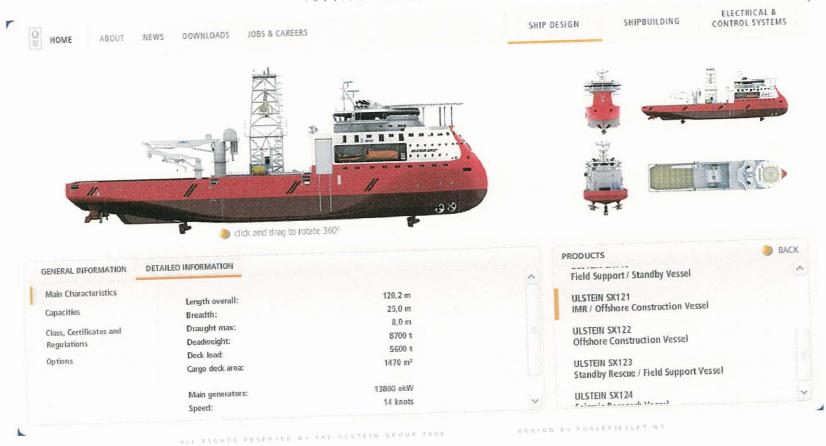




- 6 -







Page 1 of 1 UISTEIN: UISTEIN SAIZZ



THEST OF WISHOURS IN THE STRILL WE



ALL BIGHTS RESERVED BY THE ULSTEIN GROUP 2006

-8-

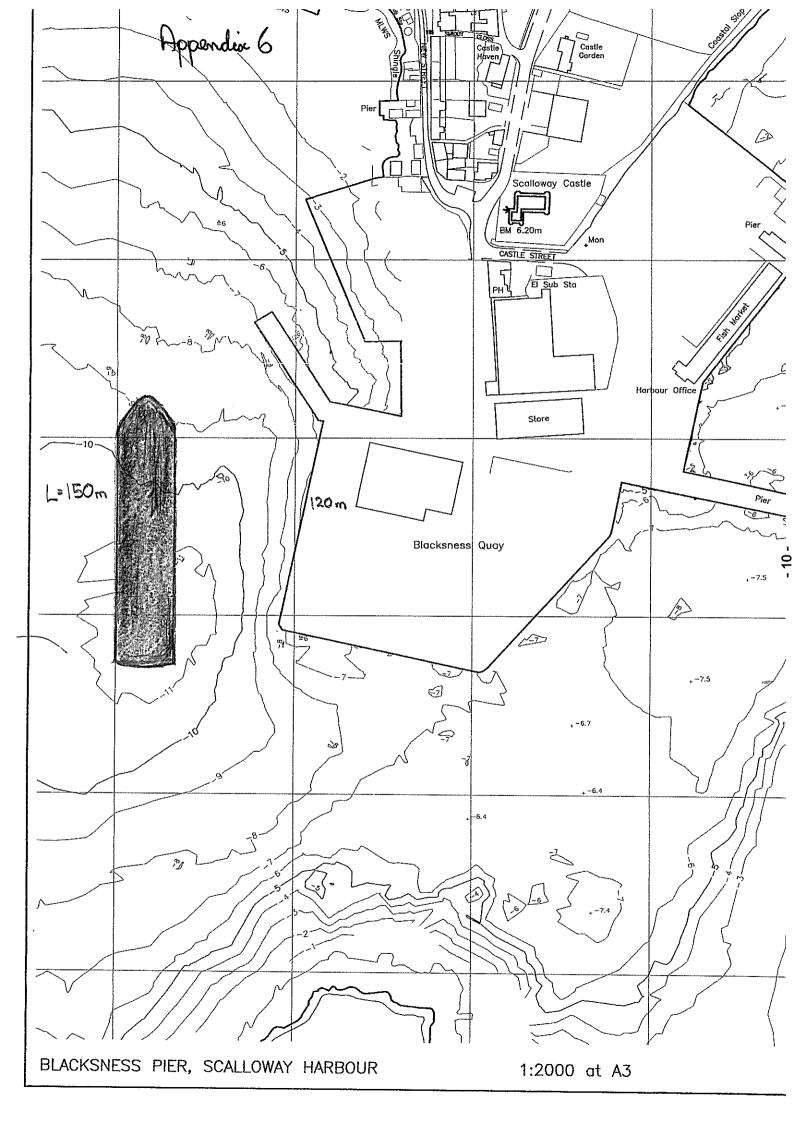
DESIGN BY FUGLEFIELLET NO





ALL RIGHTS RESERVED BY THE ULSTEIN GROUP 2006

DESIGN BY FUGLEFJELLET NO



7

SCALLOWAY HARBOUR—Appendix 7



Maersk Attender, 90m length, on Commercial Quay West

Anglian Sovereign, 66m length on West Pier

Grampian Clansman, 50m length on Commercial Quay South



REPORT

To: Harbour Board 27 September 2007

From: General Manager

Report No: **P&H-18-07-F**

Subject: Weather Radar Coverage for Shetland

1 <u>Introduction</u>

1.1 Shetland is the only area of the United Kingdom, which is not within range of weather radar. The nearest radar is situated near Stornoway and extends as far as Fair Isle. See Appendix 1.

- 1.2 Two attempts have been made in the past to request the Met Office to install a weather radar in Shetland but were turned done as the Scottish Executive were unwilling to contribute to the capital and running costs on the grounds that Shetland has no main trunk roads.
- 1.3 It is suggested that, with the change of administration in Holyrood, another request should be made in order to secure weather radar coverage for Shetland.

2 Background

- 2.1 Weather radar detects precipitation providing continuous, real-time information on rainfall.
- 2.2 It is very useful for forecasts in areas, such as Shetland, where there is little observable data. In our case to the north and west of Shetland there is very little in the way of observation sites and a polar low can descend on the islands with little or no warning.
- 2.3 The radar network is linked to a central computer at the Met Office headquarters in Exeter where the data assists the forecasters to improve the accuracy and timing of the forecast, especially in the short term.
- 2.4 A consortium of agencies owns each radar with the Met Office providing the technical and operational support. Hence the need for support from the Scottish Executive.
- 2.5 Weather radar is expanding and four new sites are being installed and scheduled to be in operation by the end of 2008. Stirling, Glenrothes, Attleborough (Norfolk) and Durham.

- 2.6 Satellites cannot do the work of weather radar. They are complementary to each other.
- 2.7 There are at least two potential sites for weather radar in Shetland. Saxa Vord and Fitfull Head. These sites have all the services required.

3 Proposals

- 3.1 It is proposed that the Harbour Board seek support from companies, associations and groups within and out with Shetland in order to approach the Met Office and the Scottish Executive to re-examine the provision of weather radar coverage for Shetland. This could include
 - Shetland Fishermen's Association
 - Seafood Shetland
 - Sullom Voe Terminal
 - United Kingdom Offshore Operations Association
 - Highlands and Islands Airport Ltd
 - National Air Traffic Service (NATS)
 - Allister Carmichael MP/Tavish Scott MSP
 - HM Coastguard
 - SERCO, Scatsta
 - Northlink Ferries
 - Scottish and Southern Hydro Electric
 - Scottish Water
 - LPA

4 Links to Corporate Priorities

4.1 Better short term forecasting will assist in sustaining and supporting the local economy.

5 Financial Implications

5.1 There are no financial implications as a result of this report.

6 **Delegated Authority**

6.1 The Harbour Board has full delegated authority for the oversight and decision making in respect of the management and operation of the Council's Harbour undertakings in accordance with overall Council policy and the requirements of the Port Marine Safety Code as described in section 16 of the Council's scheme of Delegation

7 Recommendations

7.1 I recommend that the Harbour Board note the contents of this report and delegated authority to the General Manager, Ports and Harbours Operations, in consultation with the Chairperson, to proceed as detailed in Section 3.

Our Reference: P&H-18-07-F JTD/SM Date: 29 August 2007



More about rainfall radar

Radar works by sending out electromagnetic pulses and measuring how long they take to return from a target, often an aircraft or a ship. It has been known for many years that other objects can also create a return, e.g. flocks of birds or precipitation. It was soon decided that being able to 'see' precipitation would be of great value, so much investigation was done to perfect this method. In simple terms, a radar sends out a pulse at a wavelength of 5.6 cm which is reflected by precipitation. This is compared to a number of rain gauges and adjusted accordingly.

By the end of 2008, the Met Office hopes to have a total of 19 weather radars operating in the UK, Jersey and Republic of Ireland*, each with a range of approximately 250 km. Each radar completes a series of scans about the vertical axis at different elevation angles every five minutes.

Data from the radars are sent to the Met Office for processing and a composite picture of the precipitation over the British Isles is produced. This picture is displayed using colours to denote different intensities, with a resolution of 5 km.

The weather radars show rain, hail and snow, but drizzle can be hard to detect because the droplets are so small.

Processing at the Met Office normally removes:

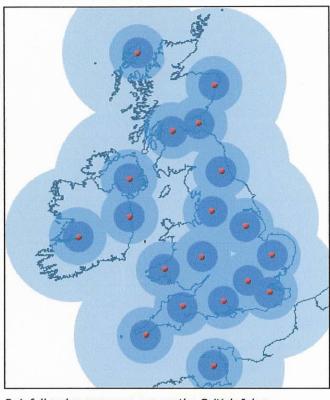
- permanent echoes or reflections from hills and buildings:
- anomalous propagation (anaprop) which often occurs in anticyclonic conditions;
- the strong echoes produced when falling snow starts to melt to rain.

*Radar data for the Republic of Ireland is supplied by <u>Met Éireann</u> in accordance with the regulations of ECOMET.



<u>Download Fact Sheet</u> (PDF, 1.9 Mb)

Key to rainfall radar imagery



Rainfall radar coverage across the British Isles

©Crown copyright

www.metoffice.gov.uk



REPORT

To: Harbour Board 27 September 2007

From: Operations Manager-Ports

Report No: **P&H-20-07-F**

Subject: Mussel Farm Landing Dues

1 Introduction

1.1 Mussel Farm Landing Dues were introduced with effect from 1999.

1.2 The level of landing dues was based on that which is applicable to salmon farm landing dues.

2 Link to Council Priorities

2.1 Ensuring we manage our financial resources so we can sustain the services we want to provide and help develop.

3 Background

- 3.1 The level of dues for mussels landed across Council piers is set as 0.5% ad valorum, which is the level set by Council for farmed salmon (Min Ref 5/97).
- 3.2 Prior to November 2006 all mussel farmers paid landing dues in accordance with the published Table of Dues.
- 3.3 In November 2006 Blueshell Mussels Limited commenced landing mussels at Scalloway calculating the amount of the dues on an assumed value of £500 per tonne rather than 0.5% ad valorem as required by the Table of Dues. The assumed value is less than the actual values being reported by other mussel farmers which range from £762 to £1010 per tonne.
- 3.4 This assumed value is an arbitrary value used for the mussel farmer's own ease of administration and has no link to actual value.
- 3.5 On hearing the actions of Blueshell Mussels Limited a second mussel farmer, Shetland Mussels Limited, decided to use the same assumed value which is lower than the ad valorem value..

4 Current Situation

- 4.1 The Shetland Islands Council's Table of Dues published annually on 1st April states, inter alia, that "Goods dues shall apply to all goods discharged or loaded over one of the Council's piers".
- **4.2** The Table of Dues sets the rates on goods for "Farmed Fish and Farmed Shellfish per £1.00 value" at £0.005. As a consequence of using an assumed value for mussels landed there has been a shortfall of 34 50% in dues received by the Council.
- 4.3 The current level of landing dues was reached after lengthy negotiations with the Salmon Farming industry and was believed by the industry to be fair.
- 4.4 The landing charge for live mussels at Lerwick Harbour and at Comhairle ports is £0.025, at Ullapool the charge is £0.015. This shows that other ports where shellfish is landed charge between three and five times that of the Council's rates.

5 Financial Implications

5.1 The cost to the Council in allowing mussel farms to use an assumed value to calculate the landing dues would be relatively small, circa £1000 per annum. However the Council's income from the salmon industry was in excess of £75,000 for the last financial year. It is likely that if mussel farmers were permitted to calculate the dues on the basis of assumed values then salmon farmers would seek to do likewise. The Council would face some legal difficulty in denying equal treatment to the salmon farming industry if the Council accepts assumed values for the mussel farming industry unless there is an objective justification for the different treatment of the two industries. In my opinion there is no such objective justification. The potential for considerable reduction in landing dues paid to the Council in this situation cannot not be ignored.

6 Policy & Delegated Authority

6.1 The Harbour Board has full delegated authority for oversight and decision making in respect of the management and operation of the Council's harbour undertaking in accordance with overall Council policy and the requirements of the Port Marine Safety Code, as described in Section 16 of the Council's Scheme of Delegation. Authority to approve the harbour charges and Table of Dues remains with the Council.

7 Conclusions

7.1 The rates charged at comparable ports show that the current level of landing dues set by the Shetland Islands Council for shellfish is fair and it is the usual practice to base the dues on the actual value of the shellfish landed.

- 7.2 Allowing the shellfish industry to adopt an arbitrary figure to calculate their landing dues is likely to lead to a request from the aquaculture industry for a similar arrangement. This is likely to lead to a decrease in the amount of landing dues paid.
- 7.3 A reduction in income could make it more difficult to develop a business case for future harbour/pier improvements.

8 Recommendations

I recommend that the Harbour Board recommends;

- 8.1 That the Council approves the Table of Dues and the level of charges contained within.
- 8.2 That the Council authorises the General Manager of Ports and Harbours, or his nominee, to take such steps as are necessary to recover the landing dues properly due in terms of the Table of Dues, and to withdraw services from those who have not paid the properly due landing dues.

Our Reference: RO-O JBE/SM P&H-20-07-F Date: 18 September 2007



REPORT

To: Harbour Board 27 September 2007

From: General Manager

Report No: P&H-21-07-F

Subject: Ports Project Monitoring Report

1 Introduction

- 1.1 The most up to date information on all projects is incorporated in this report.
- 1.2 Budget Information is attached as Appendix A.

2 Links to Corporate Plan

2.1 Projects in this report would make contributions to the Council's priorities of strengthening rural areas and supporting the local economy.

3 Reserve Fund Programme Areas

3.1 Dock Symbister – RCM 2309

Despite efforts to progress, the status remains unchanged. The Port Engineer will provide a verbal update to the Harbour Board

4 Harbour Account

4.1 Plant, Vehicles and Equipment – PCM 2101

Three vehicles have been ordered as planned.

Three expressions of interest have been received with regard to the replacement of the standby generation system for the Port Administration Building.

The budget will be fully utilized by the completion of the financial year.

4.2 Navigational Aids, Sullom Voe – PCM 2104

Engineers are considering the best option to link Scalloway Harbour Office to VTS, Sullom Voe.

5 Revenue Projects

5.1 Sullom Voe Terminal Jetty Maintenance Contract

Following approval of the Harbour Board, the current jetty maintenance contract with Malakoff Ltd has been extended by one year. The maintenance contract is running on schedule and to budget.

6 Other Business

6.1 Walls Pier

Capital Programme Service met with stakeholders on 2 August 2007 to review a number of indicative options and to select a preferred layout. This layout formed part of a presentation to the community, organised by Frank Robertson, on 28 August 2007. This option, with a derived budget cost, will form part of the Feasibility Study to CPRT, which is presently being drafted. It is hoped that this can be presented to CPRT during September/ October.

6.2 Extension to Sella Ness pier, Sullom Voe – RCM 2315

The project remains on the Capital Programme but is not included in the 07 / 08 budgets due to its position on the prioritisation list.

6.3 Tug Replacement Programme - RCM 2313

A meeting is scheduled with the yard for early October at Sella Ness to discuss the results of the model tests, finalise the General Arrangement plan and view the existing tugs to show the yard the high standard of outfitting required of the new tugs.

6.4 Uyeasound – RCM 2314

The creation of the new Harbour Area at Uyea Sound by way of a Harbour Jurisdiction Order under the terms of the Zetland County Council Act 1974 is still underway. Once the Scottish Government concludes the process, planning and other statutory consents can then be applied for.

Land purchase has been concluded.

Due to slippage in the Capital Programme, funding is now available to begin works on site. Tender documents were issued on 6 August 2007, with a return date of 28 September 2007.

6.5 <u>Scalloway – RCM 2312</u>

The new warehouse is now erected and is available for storage. Final electrical installations and fittings are being progressed and are due to be completed shortly.

6.6 Scalloway Dredging – RCM 2208

Funds have been vired to allow application for the consents to dredge. This is now being actioned by Capital Projects.

7 Financial Implications

7.1 This report is for information only. There are no financial implications arising from this report.

8 Policy and Delegated Authority

8.1 Harbour Board has full delegated authority for the oversight and decision making in respect of the management and operation of the Council's harbour undertakings in accordance with the overall Council policy, revenue budgets and the requirements of the Port Marine Safety Code, as described in Section 16 of the Council's Scheme of Delegations. However, this report is for information only and there are no Policy and Delegated Authority issues to be addressed.

9 Recommendations

9.1 I recommend that the Harbour Board note the areas of progress.

Our Ref: RO-PP RM/SM P&H-21-07-F 17 September 2007



REPORT

To: Harbour Board 27 September 2007

From: General Manager

Report No: P&H-22-07-F

Subject: Port Operations Report

1 Introduction

1.1 This report provides an overview of port operations since the issue of the last Port Operations Report.

2 Pilotage

2.1 Sullom Voe

- 2.1.1 Since the issue of the last Port Operations Report, pilotage operations have been mainly routine with no major incidents.
- 2.1.2 There are twelve first class authorised pilots for Sullom Voe

2.2 Scalloway

- 2.2.1 During August there were 6 acts of Pilotage.
- 2.2.2 There are thirteen authorised pilots for Scalloway including the twelve duly authorised for Sullom Voe.
- 2.2.3 Since the last report, there has been one incident when a pilot was injured whilst disembarking at the South entrance in heavy weather.
- 2.2.4 Details of ship visits to Scalloway are shown in Appendix A. Up to date figures will be provided to the next meeting.

2.3 <u>Small Piers and Harbours</u>

2.3.1 Appendix B shows the current actual income for small piers and harbours.

3 Staffing – Port Operations

3.1 Appendix C gives the staffing position as at 31 August 2007 showing a total of 136 staff.

4 Port Operations

4.1 Sullom Voe

- 4.1.1 Appendix D shows the exports and imports at the Port of Sullom Voe.
- 4.1.2 Appendix E is an abstract of weather delays for August and the cumulative totals for 2007.

4.2 Scalloway

- 4.2.1 Appendix F shows the fish landing statistics for Scalloway.
- 4.2.2 Appendix G shows the cargo statistics for Scalloway.
- 4.2.3 Appendix H shows the summary management accounts for Scalloway.

4.3 Small Piers and Harbours

4.3.1 Appendix I shows the summary management accounts for other small piers and harbours.

5 Shipping Standards

The following incidents have occurred since the last report.

- 5.1 Ship Incidents
 - 5.1.1 There were no incidents during this period.
- 5.2 Pollution Incidents
 - 5.2.1 There were no incidents during this period.

6 Financial Implications

6.1 There are no financial implications arising from this report.

7 Policy and Delegated Authority

7.1 The Harbour Board has full delegated authority for oversight and decision making in respect of the management and operation of the Council's harbour undertaking in accordance with overall Council policy and the requirements of the Port Marine Safety Code (Minute References 19/03, 70/03 and 86/03). The purpose of this report is to inform members on port operations which fall within the responsibility of the General Manager of Ports & Harbours Operations and does not seek any decision. However, this report is for information only and there are no Policy and Delegated Authority issues to address.

8 Recommendation

8.1 This report is for noting.

Our Reference: RO-PO JBE/SM Date: 19 September 2007

Harbour Board Appendix C

Staffing Position – 31 August 2007

<u>Post</u>	Established Posts	<u>Actua</u>	al Comments
General Manager	1	1	
Marine Officer/Pilots	12	12	
Operations Manager – Ports	1	1	
Operations Manager – Marine	1	1	
Port Safety Officers	2	2	
Launch Crew Skippers	9	9	
Launch Crew Deckhands	13	13	
Tug - Masters	12	12	
Tug - Chief Engineers	12	12	
Tug - 2 nd Engineers	9	9	
Tug - Mates	12	12	2 Temporary contract
Tug - GPRs'	3	3	1 Temporary contract
Assistant Pier Masters (Scalloway)	2	2	
Engineering Assistant (Scalloway)	1	1	
Full Time Harbour Assistant	1	1	
Part Time Harbour Assistants	9	8	
Administration Manager	1	1	
Finance Assistants	4	4	1 Temporary Contract
Clerical Assistant	5	5	-
Cook	1	1	

Superintendent Engineer – Marine	1	1	
Superintendent Engineer – Ports	1	1	
Maintenance Planning Engineer	1	0	
Engineering Supervisor	1	1	
Electrical Engineer	3	3	
Marine Engineer	3	3	
Welder/Fabricator	2	2	
Maintenance Engineer	1	1	
Engineering Assistant	4	4	
Apprentice – Electrical	1	1	
Apprentice – Mechanical	1	1	
General Assistant	2	2	
Store Keeper	1	1	
Senior Stores Assistant	1	1	
Stores Assistant	2	2	
Driver	1	1	
Total	138	136	

Ports & Harbours Operations

Abstract of Weather Caused Delays at 31 August 2007

	Monthly Totals			Cumulative Totals		
	Days	Hours	Mins	Days	Hours	Mins
Berthing Suspension	01	22	30	26	06	12
Unberthing Suspension	00	00	00	00	00	00
Loading Suspension	00	00	00	00	20	00
Boatwork Suspension	00	00	00	03	03	36
Pilotage Suspension	00	00	00	00	00	00
Helicopter Usage	00	00	00	00	00	00
Tug/Pilot Standby	00	00	00	00	00	00
Total Disruption - all Causes	01	03	30	32	17	48
Actual Delays Due to Weather	00	07	36	01	19	24