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**CORNWALL COUNCIL
ISLE OF SCILLY
VESSEL OPTIONS
REVISION 1**

Prepared for:-

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1 EXECUTIVE SUMMARY

This report outlines the options available for providing the next generation of ferry service to the Isles of Scilly and the operating costs associated with these options.

No capital costs relating to any of the options have been included in the calculations or conclusions of this report.

This report shows that a combined passenger / freight ship is the most economic to operate per annum of those that were investigated.

2 INTRODUCTION

Hart Fenton and Co. Ltd were instructed by Cornwall Council to update their vessel options study carried out for Scott Wilson Kirkpatrick in 2004, as per HF's offer HF013 / XT606. The study considers four ship types that can be used in three configurations.

3 METHOD

3.1 Ships Investigated

- Generic Passenger Ship.
- Generic Freight Ship.
- Combined Passenger / Freight Ship, (BCP design).
- SWATH Passenger Ship, (Cloud X).

3.2 Vessel Principal Particulars

Vessel Type	LOA [m]	Beam [m]	Draft [m]	GRT	Dwt [MT]	Required power [kW]
Generic Passenger	58.0	10.75	2.9	950	100	3000
Generic Freight	43.0	10.0	2.9	600	530	1600
Combined	71	14	2.9	2760	280	3600
SWATH	37.52	18.07	3.5	1010	63.5	5040

3.3 Passenger Ship Operating Profile

- The vessel is assumed to operate a summer service of a single daily round trip at 15.75 knots, six days a week, from 21st March to 30th October.
- It is anticipated that the vessel operator's will maintain a permanent core crew. During the summer schedule, March to October, additional deck ratings and cabin crew will be contracted to meet the passenger and safety requirements.
- A passenger only vessel will require an annual docking; it has been assumed that this will occur during the winter lay-up period.

- To provide the desired service it is necessary to combine the passenger ship with the year round freight service to calculate actual service costs for comparison against the combined vessel.

3.4 Freight Ship Operating Profile

- This is assumed to run a year round service of a single round trip at 12 knots, three days a week.
- A freight only vessel will require a drydocking survey once every five years.

3.5 Combined Passenger / Freight Ship Operating Profile

- This is assumed to run a year round service. In the periods January to March and November to December it operates round trips three days a week at 12 knots. Between 21st March and 30th October the ship operates round trips six days a week at 15.75 knots.
- It is anticipated that the vessel operator's will maintain a permanent crew. During the summer schedule, additional deck ratings and cabin crew will be contracted to meet the safety and passenger requirements.
- A combined passenger and freight vessel will require an annual docking. It is anticipated that a period of at least one-week is allocated in the operating schedule.
- The increased running during the summer season will provide an enhanced freight service compared to the current operation.

3.6 SWATH Passenger Ship Operating Profile

- Two options have been considered, a summer service of either one, or two round trips, six days a week between 21st March and 30th October at 27 knots service speed.
- Due to service limitations likely to be imposed on such a vessel it is assumed that 46% of scheduled sailings would be cancelled (a further estimate, assuming no cancellations, has been included for comparison).

- To provide the desired service it is necessary to combine the SWATH with the year round freight service to calculate actual service costs for comparison against the combined vessel.
- A passenger only vessel will require an annual docking; it has been assumed that this will occur during the winter lay-up period.
- The manning levels for this vessel have been determined by comparing with similar ships operating under similar MCA jurisdiction. A known large catamaran operating in UK waters has a minimum crew requirement of 20 when carrying 370 passengers. The SWATH has as a capacity of 367 passengers, therefore a crew of 18 has been assumed, the same as that on the combined vessel.

4 Calculations

- Unless otherwise noted on the calculation sheets, figures have been assumed to rise at 3% pa over the five years since our previous report, resulting in a 16% increase in figures used.
- Administrations and maintenance costs have been assumed to have risen by 30%.
- Maintenance costs for the SWATH have been estimated as for the combined ship.
- No capital costs have been included.
- All calculations and assumptions are provided on the accompanying HF spreadsheets.

4.1 Fuel & Lubricating Oil Price

- Oil prices have risen significantly in the last 5 years. The prices used reflect the current UK market rate at 10th July 2009, £472 / tonne including duty.

4.2 Power, Fuel and Lube Oil Consumption

- The power required by each vessel to achieve the required service speed has been calculated. From this typical engine selections have been made.
- Fuel and lube oil consumption figures have been taken from manufacturers' data and used to calculate the quantity of fuel & oil required to operate the ships.

- Where the service speed is significantly less than the machinery rated power this has been allowed for in the calculations (particularly for the combined vessel in winter).
- A similar exercise has been done for the generator sets required to provide hotel loads, auxiliary power to thrusters, cranes, etc. and for the lube oil consumption.

4.3 Passenger Numbers

- Passengers numbers carried for 2004 to 2008 inclusive were provided by Cornwall Council and have been used as the basis for the numbers used in the calculations.
- It is assumed that the passenger numbers given are total passenger movements, e.g. both to and from St Mary's.
- The numbers have been averaged per month to give an estimate of numbers for 2009 and a monthly passenger carrying profile.
- It has been assumed that the passenger numbers would be similar using all three passenger ship options.
- The passenger numbers vary slightly between vessels. This is due to attempting to match the average passenger numbers to the monthly operation profile of the ships.
- Assuming a 46% cancellation rate for the SWATH it is not possible to carry the estimated passenger numbers when operating the single round trip service. To achieve the greatest carrying potential it has been assumed that the vessel is full on every trip.

4.4 Freight Tonnage

- HF was provided with a figure of 12600 tonnes of freight carried per annum.
- This has been averaged over 12 months to give a monthly cost.

4.5 Port Dues

- The port dues have been calculated for both Penzance and St Mary's using information provided by Cornwall Council, 18th July 2009.

- At Penzance the passenger dues are levied on all passengers in both directions at 12p per passenger. Therefore, the total number of passengers through the port has been used to calculate the dues (total number of passenger movements as provided by Cornwall Council).
- At St Mary's the passenger dues are levied on the number of persons landing at £1.10 per passenger.
- Passenger dues are nearly identical for each option (approximately £5 variance for the reasons outlined in 4.3).
- Freight dues are levied at Penzance and St Mary's on all freight passing between them, at £1 per tonne and £6.80 per tonne respectively.
- Freight dues are identical for each option.
- Charges for waste removal and water supply are levied at Penzance (£4,000 and £2,500 pa). In the case of a two ship service these have been split between both.
- A charge of £21,500pa for quayside facilities is levied at St Mary's. In the case of a two ship service these have been split between both.
- Ship dues are levied at 73p per GRT per week at Penzance and 22p per GRT per week at St Mary's.
- It is assumed that the passenger vessels will be laid up during the winter period in Penzance. Therefore dues are only paid at St Mary's during the summer ($\frac{2}{3}$ rds of the year).

5 Results

5.1 Combined Vessel, Year Round Service

	Winter	Summer	All Year
Pax Capacity	35400	230400	265800
Pax Carried	0	88524	88524
Freight Capacity, Tonnes	16520	107520	124040
Freight Carried, Tonnes	5250	7350	12600
Service Speed, Knots	12	15.75	
Crossing Time	3:16:48	2:40:00	
Port Dues Penzance	£50,432	£137,293	£187,725
Port Dues St Mary's	£55,070	£94,683	£149,753
Port Dues Total	£105,502	£231,976	£337,478
Crew / manning	£231,097	£422,836	£653,933
Surveys / certification	£3,667	£11,933	£15,600
Maint. / consumables	£3,667	£11,933	£15,600
Annual overhaul (Accrual)	£29,335	£95,465	£124,800
Insurance	£14,668	£47,732	£62,400
Management / Admin	£110,008	£357,992	£468,000
Fuel oil	£127,241	£457,308	£584,549
Lubricant oil	£1,015	£3,646	£4,660
Shore power	£33,570	£37,862	£71,433
Total Cost	£659,769	£1,678,684	£2,338,453

- It should be noted that to allow for discharging of freight (3 hours) a round trip would take 8 hours 5 minutes at 15.75 knots.
- If this vessel was to be scheduled for two return voyages per day the vessel would have to be considered “passenger only” so that the round trip was reduced to 5 hours 35 minutes on those days.

5.2 Separate Conventional Vessels

	Pax	Freight	Pax & Freight
Pax Capacity	230400	0	230400
Pax Carried	88524	0	88524
Freight Capacity, Tonnes	0	164300	164300
Freight Carried, Tonnes	0	12600	12600
Service Speed, Knots	15.75	12	
Crossing Time	2:40:00	3:16:48	
Port Dues Penzance	£60,904	£38,279	£99,184
Port Dues St Mary's	£71,450	£105,248	£176,698
Port Dues Total	£132,354	£143,527	£275,881
Crew / manning	£585,104	£292,552	£877,656
Surveys / certification	£15,600	£10,400	£26,000
Maint. / consumables	£9,100	£9,100	£18,200
Annual overhaul (Accrual)	£93,600	£78,000	£171,600
Insurance	£46,800	£31,200	£78,000
Management / Admin	£234,000	£234,000	£468,000
Fuel oil	£404,336	£252,638	£656,974
Lubricant oil	£4,376	£2,356	£6,732
Shore power	£70,435	£76,444	£146,879
Total Cost	£1,595,705	£1,130,218	£2,725,923

5.3 SWATH Passenger, Two Round Trips, 46% Cancellation Rate & Conventional Freight

	SWATH	Freight	SWATH/Freight
Pax Capacity	153406	0	153406
Pax Carried	88502	0	88502
Freight Capacity, Tonnes	0	164300	164300
Freight Carried, Tonnes	0	12600	12600
Service Speed, Knots	27	12	
Crossing Time	1:34:12	3:16:48	
Port Dues Penzance	£63,082	£38,375	£101,456
Port Dues St Mary's	£72,097	£105,562	£177,659
Port Dues Total	£135,178	£143,937	£279,115
Crew / manning	£583,294	£292,552	£875,846
Surveys / certification	£15,600	£10,400	£26,000
Maint. / consumables	£15,600	£9,100	£24,700
Annual overhaul (Accrual)	£124,800	£78,000	£202,800
Insurance	£46,800	£31,200	£78,000
Management / Admin	£234,000	£234,000	£468,000
Fuel oil	£583,294	£252,638	£836,914
Lubricant oil	£4,627	£2,356	£6,983
Shore power	£72,222	£76,444	£148,666
Total Cost	£1,816,397	£1,130,627	£2,947,024

5.4 SWATH Passenger, Two Round Trips, Zero Cancellation Rate & Conventional Freight

	SWATH	Freight	SWATH/Freight
Pax Capacity	259836	0	259836
Pax Carried	88,480	0	88480
Freight Capacity, Tonnes	0	164300	164300
Freight Carried, Tonnes	0	12600	12600
Service Speed, Knots	27	12	
Crossing Time	1:34:12	3:16:48	
Port Dues Penzance	£63,076	£38,375	£101,451
Port Dues St Mary's	£75,337	£105,562	£180,899
Port Dues Total	£138,413	£143,937	£282,350
Crew / manning	£583,294	£292,552	£875,846
Surveys / certification	£15,600	£10,400	£26,000
Maint. / consumables	£15,600	£9,100	£24,700
Annual overhaul (Accrual)	£124,800	£78,000	£202,800
Insurance	£46,800	£31,200	£78,000
Management / Admin	£234,000	£234,000	£468,000
Fuel oil	£955,675	£252,638	£1,208,313
Lubricant oil	£6,304	£2,356	£8,660
Shore power	£72,222	£76,444	£148,666
Total Cost	£2,192,708	£1,130,627	£3,323,335

5.5 SWATH Passenger, Single Round Trip, 46% Cancellation Rate & Conventional Freight

	SWATH (Single Trip)	Freight	SWATH/Freight
Pax Capacity	75,969	0	75969
Pax Carried	75,969	0	75969
Freight Capacity, Tonnes	0	164300	164300
Freight Carried, Tonnes	0	12600	12600
Service Speed, Knots	27	12	
Crossing Time	1:34:12	3:16:48	
Port Dues Penzance	£60,169	£38,375	£98,543
Port Dues St Mary's	£125,639	£105,562	£231,201
Port Dues Total	£65,471	£143,937	£209,407
Crew / manning	£583,294	£292,552	£875,846
Surveys / certification	£15,600	£10,400	£26,000
Maint. / consumables	£15,600	£9,100	£24,700
Annual overhaul (Accrual)	£124,800	£78,000	£202,800
Insurance	£46,800	£31,200	£78,000
Management / Admin	£234,000	£234,000	£468,000
Fuel oil	£393,965	£252,638	£646,603
Lubricant oil	£3,888	£2,356	£6,244
Shore power	£70,435	£76,444	£146,879
Total Cost	£1,553,853	£1,130,627	£2,684,480

5.6 SWATH Passenger, Single Round Trip, Zero Cancellation Rate & Conventional Freight

	SWATH (Single Trip)	Freight	SWATH/Freight
Pax Capacity	140928	0	140928
Pax Carried	88,530	0	88530
Freight Capacity, Tonnes	0	164300	164300
Freight Carried, Tonnes	0	12600	12600
Service Speed, Knots	27	12	
Crossing Time	1:34:12	3:16:48	
Port Dues Penzance	£63,183	£38,375	£101,558
Port Dues St Mary's	£72,645	£105,562	£178,208
Port Dues Total	£135,829	£143,937	£279,765
Crew / manning	£583,294	£292,552	£875,846
Surveys / certification	£15,600	£10,400	£26,000
Maint. / consumables	£15,600	£9,100	£24,700
Annual overhaul (Accrual)	£124,800	£78,000	£202,800
Insurance	£46,800	£31,200	£78,000
Management / Admin	£234,000	£234,000	£468,000
Fuel oil	£595,614	£252,638	£848,253
Lubricant oil	£4,799	£2,356	£7,155
Shore power	£70,435	£76,444	£146,879
Total Cost	£1,826,772	£1,130,627	£2,957,399

6 CONCLUSIONS

- The combined passenger / freight vessel would cost over £346k less per annum to run, than any of the other options considered.
- The manning and crew costs for a combined passenger/freight vessel are approximately £220k per annum less than either of the two ship options.

	Fuel Cost	Difference to Lowest Fuel	Total Operating Cost	Difference to Lowest Operating Cost
Combined Vessel	£584,549	£0	£2,338,453	£0
SWATH Single Trip 46% Cancellation	£646,603	£62,055	£2,684,480	£346,028
Two Conventional Vessels	£656,974	£72,426	£2,725,923	£387,470
SWATH, Two Trips 46% Cancellation	£836,914	£252,365	£2,947,024	£608,571
SWATH Single Trip 0% Cancellation	£848,253	£263,704	£2,957,399	£618,946
SWATH Two Trip 0% Cancellation	£1,208,313	£623,764	£3,323,335	£984,882

It is very likely that the MCA will impose operating restrictions due to wave height on the route for a 'High Speed' craft. This will result in a likely cancellation rate for the SWATH of up to 46% of services. Therefore whilst we have included figures for a 0% cancellation rate it is our opinion that this is an unlikely operating scenario.

- The difference in fuel costs between a combined passenger/freight vessel and each of the other options considered is as follows:
 - Two conventional vessels +£72k
 - SWATH single trip, 46% cancellation rate combined with separate freight vessel +£62k
 - SWATH double trip, 46% cancellation rate combined with separate freight vessel +£252k
- Overall costs for a SWATH single trip 46% cancellation rate combined with a separate freight vessel are less than for a two conventional vessel option.

7 Appendices – Calculation Sheets

- The following sheets contain the calculations on which this report is based.
- Passenger Only (Conventional Ship), 15.75 knots summer service.
- Freight Only (Conventional Ship), 12 knots year round service.
- Combined Vessel, 12 knots, winter service.
- Combined Vessel, 15.75 knots, summer service.
- SWATH Passenger Only, 27 knots, summer service, 46% cancellation rate (Two Round Trips)
- Freight Only (Conventional Ship) 12 knots year round service, in conjunction with SWATH at 46%.
- SWATH Passenger Only, 27 knots, summer service, Zero cancellation rate (Two Round Trips).
- Freight Only (Conventional Ship) 12 knots year round service, in conjunction with SWATH at Zero cancellation rates.
- SWATH Passenger Only, 27 knots, summer service, 46% cancellation rate (Single Round Trip)
- SWATH Passenger Only, 27 knots, summer service, Zero cancellation rate (Single Round Trip).

KNOWN DATA AND ASSUMPTIONS

	2008	HF Averaged 2009
From N Yeates Email, 02/07/09	82798	88471
Scillonian pax		

Port dues St Mary's

Passenger dues (per seat)		£1.10
Goods dues (MT)		£6.80
MT / month (£)	0	£0.00
Ship dues (£/MT)		£0.22
GRT	950.00	£7,245.33
Pilot Exemption Certificate		£20.00
Quayside Facilities		£21,500.00

Port dues Penzance

Passenger dues (per seat)		£0.12
Goods dues (MT)		£1.00
MT / month (£)	0	£0.00
Ship dues (£/MT)		£0.73
GRT	950.00	£36,062.00
Water		£2,500.00
Waste Management		£4,000.00
Quayside Facilities		£0.00

Assumed Ship's compliment**Permanent Staff**

Rank	No of	Salary	Cost
Master	1	£44,080	£44,080
1st Officer	3	£38,280	£114,840
Chief Engineer	1	£40,600	£40,600
2nd Engineer	2	£31,320	£62,640
Bosun	1	£25,520	£25,520
Cook	1	£23,200	£23,200
	Total permanent		£310,880

Fuel costs (MT)	£472
Lub oil cost (MT)	£1,667

General vessel type

Passenger Capacity	600
Deadweight (MT)	100
Service speed (knots)	15.75
Required Power (kW)	3000
Crossing time (hours)	2.67

Main Engine manufacturer / data

2 X MAN 7L21/31 (kW)	1505 at 1000 rpm per engine
Fuel cons (g/kW/h)	184 at 85% MCR
Fuel cons (MT/hr)	0.235 per engine
Lub oil cons (g/kW/h)	0.800 at 85% MCR
Lub oil cons (Litre/hr)	1.023 per engine
Number of Engines operating	2.000
Fuel Relative Density	0.890
Lub Oil Relative Density	0.900

Sailing schedule (from 2009)

21 March to 30 October 1 return crossing per day,
No Sailings on Sundays

Distance

Penzance to St Mary's 38nm of which 1nm at restricted speed
Assumed restricted to 5knots

Annual Maintenance

Maint. / consumables	£9,100
Surveys / certification	£15,600
Drydock / overhaul accrual	£93,600

Vessel maintenance is an accrual cost, considered over
a 12 month cycle consummate with vessel certification.

Temporary Staff April to October

	No of	Salary	Cost
Cabin service	4	£23,200	£61,867
Deck ratings	3	£23,200	£46,400
Motorman	2	£23,200	£30,933
	Total temporary		£139,200
Crew salary costs			£450,080
Social costs 30%			£135,024
Total Crew costs per annum			£585,104

Freshwater cost per MT	£6
Consumption per voyage	1

Principal Dimensions

LOA (m)	58.00
Draft (m)	2.90
Beam (m)	10.75
GRT	950

Aux Engine manufacturer / data

3 x CAT C18 [kW]	350 at 1500 rpm
Fuel cons (litres/hr)	84
Fuel cons (MT/hr)	0.075 per engine
Lub oil cons (g/kW/h)	0.500
Lub oil cons (Litre/hr)	0.175 per engine
Number of Engines operatin	2

Annual administration costs

P&I insurance	£23,400
H&M insurance	£23,400
Management	£234,000

Finance

Vessel cost	£11,000,000
Capital financed	£0
Interest rate (per annum)	0.00%
Total repayment	£0
Fixed term (years)	1
Annual repayment	£0
Daily repayment	£0

Operating days assume geny run hours	14
Shore power unit price (kW/h)	£0.29
Power consumption (kW/hr)	40 £11.60

Assumptions

- Single round trip, 6 days a week, summer service.
- No inclusion for additional crew to cover leave, etc. has been made.
- Salaries of all ship staff increased by 3% pa (16% on 2004) from 2004.
- Fuel and LO costs correct July 2009, UK rates including duty.
- Pax numbers are an average of the last 4 years of data, as per email from N Yeates, 2nd July 2009.
- Annual maintenance costs have increased by 30%.
- Annual Administration costs have increase by 30%.
- Passenger dues & ship dues at St Mary's & Penzance are as per email from N Yeates, 18-07-09.
- Machinery & Ship Data as per previous HF report 076jh389.
- Service speed and pax capacity as per HF Offer HF013/XT606.
- Vessel uses shore power in Penzance.
- Half hour pax embarkation/disembarkation.
- Stevedoring charges excluded, mooring teams included.

	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
Service days / period	0	0	9	26	26	26	27	26	26	26	0	0	192
Additional services	0	0	0	0	0	0	0	0	0	0	0	0	0
Single services scheduled	0	0	18	52	52	52	54	52	52	52	0	0	384
Services cancelled	0	0	8	4	0	0	0	0	2	8	0	0	22
Services budgeted	0	0	10	48	52	52	54	52	50	44	0	0	362
Ave crossing time (hrs)	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	0.00	0.00	965
ME Operating Hours	0.00	0.00	26.67	128.00	138.67	138.67	144.00	138.67	133.33	117.33	0.00	0.00	965
Geny Operating Hours	0	0	126	364	364	364	378	364	364	364	0	0	2688
Fuel Cost													
Marine gas oil (MT)	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	
Ave cons in port /hr (MT)	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	
Ave cons at sea /hr (MT)	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	
Ave cons per voyage (MT)	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	0.00	0.00	
MDO costs per month	£0.00	£0.00	£14,822.63	£54,148.76	£56,519.70	£56,519.70	£58,693.54	£56,519.70	£55,334.23	£51,777.82	£0.00	£0.00	£404,336
LUB OIL COST													
Lub oil (MT)	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	
Ave cons in port /hr (litre)	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	
Ave cons at sea /hr (litre)	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	
Ave cons per voyage (litre)	6.39	6.39	6.39	6.39	6.39	6.39	6.39	6.39	6.39	6.39	0.00	0.00	
Lub oil costs per month	£0.00	£0.00	£148.05	£584.20	£616.96	£616.96	£640.69	£616.96	£600.58	£551.45	£0.00	£0.00	£4,376
CAPACITY													
Pax Numbers	0	0	571	7997	13225	15064	17428	19407	10488	4291	0	0	88,471
Load factors assumed %	0%	0%	10%	28%	42%	48%	54%	62%	35%	16%	0%	0%	
Passengers per crossing	0	0	57	167	254	290	323	373	210	98	0	0	
Total passengers carried	0	0	570	8,016	13,208	15,080	17,442	19,396	10,500	4,312	0	0	88,524
PORT DUES													
Ship dues (GRT 950)	£0	£0	£906	£906	£906	£906	£906	£906	£906	£906	£0	£0	£7,245
Passenger dues	£0	£0	£314	£4,409	£7,264	£8,294	£9,593	£10,668	£5,775	£2,372	£0	£0	£48,688
Freight Dues	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Pilot Exemption Certificate	£0	£0	£100	£480	£520	£520	£540	£520	£500	£440	£0	£0	£3,620
Quayside Facilities	£0	£0	£558	£1,611	£1,611	£1,611	£1,673	£1,611	£1,611	£1,611	£0	£0	£11,896
St Mary's Dues	£0	£0	£1,877	£7,405	£10,301	£11,331	£12,712	£13,704	£8,792	£5,328	£0	£0	£71,450
Ship dues (GRT 950)	£3,005	£3,005	£3,005	£3,005	£3,005	£3,005	£3,005	£3,005	£3,005	£3,005	£3,005	£3,005	£36,062
Passenger dues	£0	£0	£137	£1,924	£3,170	£3,619	£4,186	£4,655	£2,520	£1,035	£0	£0	£21,246
Freight Dues	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Water	£0.00	£0.00	£64.84	£187.32	£187.32	£187.32	£194.52	£187.32	£187.32	£187.32	£0.00	£0.00	£1,383
Waste Management	£0.00	£0.00	£103.75	£299.71	£299.71	£299.71	£311.24	£299.71	£299.71	£299.71	£0.00	£0.00	£2,213
Quayside Facilities	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0
Penzance Dues	£3,005	£3,005	£3,311	£5,416	£6,662	£7,111	£7,697	£8,147	£6,012	£4,527	£3,005	£3,005	£60,904
Total Dues	£3,005	£3,005	£5,187	£12,821	£16,963	£18,442	£20,409	£21,852	£14,804	£9,855	£3,005	£3,005	£132,354
OPERATING COSTS													
Mortgage repayment	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Crew / manning	£33,679	£33,679	£56,299	£56,299	£56,299	£56,299	£56,299	£56,299	£56,299	£56,299	£33,679	£33,679	£585,104
Surveys / certification	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£15,600
Maint. / consumables	£0	£0	£427	£1,232	£1,232	£1,232	£1,280	£1,232	£1,232	£1,232	£0	£0	£9,100
Annual overhaul (Accrual)	£7,800	£7,800	£7,800	£7,800	£7,800	£7,800	£7,800	£7,800	£7,800	£7,800	£7,800	£7,800	£93,600
Insurance	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£46,800
Management / Admin	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£234,000
Fuel oil	£0	£0	£14,823	£54,149	£56,520	£56,520	£58,694	£56,520	£55,334	£51,778	£0	£0	£404,336
Lubricant oil	£0	£0	£148	£584	£617	£617	£641	£617	£601	£551	£0	£0	£4,376
Shore power	£8,630	£7,795	£7,169	£4,130	£4,408	£4,130	£4,246	£4,408	£4,130	£4,408	£8,352	£8,630	£70,435
Total operating costs	£74,809	£73,974	£111,365	£148,894	£151,576	£151,297	£153,658	£151,576	£150,095	£146,768	£74,531	£74,809	£1,463,351
TOTAL OUTGOING	£77,814	£76,979	£116,552	£161,715	£168,539	£169,739	£174,067	£173,427	£164,899	£156,624	£77,536	£77,814	£1,595,705

KNOWN DATA AND ASSUMPTIONS

From N Yeates Email,30/07/09

Total Freight (tonnes) 12600

Port dues St Mary's

Passenger dues (per seat)		£1.10
Goods dues (MT)		£6.80
MT / month (£)	1050	£7,140.00
Ship dues (£/MT)		£0.22
GRT	600.00	£6,864.00
Pilot Exemption Certificate		£20.00
Quayside Facilities		£21,500.00

Port dues Penzance

Passenger dues (per seat)		£0.12
Goods dues (MT)		£1.00
MT / month (£)	1050	£1,050.00
Ship dues (£/MT)		£0.73
GRT	600.00	£22,776.00
Water		£2,500.00
Waste Management		£4,000.00
Quayside Facilities		£0.00

Assumed Ship's compliment

Permanent Staff

Rank	No of	Salary	Cost
Master	1	£38,280	£38,280
1st Officer	1	£31,320	£31,320
Engineers	2	£31,320	£62,640
Deck ratings	4	£23,200	£92,800
		Crew salary costs	£225,040
Social costs	30%		£67,512
Total Crew costs per annum			£292,552

Fuel costs (MT)	£472	Freshwater cost per MT	£6
Lub oil cost (MT)	£1,667	Consumption per voyage	0.25

General vessel type

Passenger Capacity	0
Deadweight (MT)	530
Service speed (knots)	12
Required Power (kW)	1600
Crossing time (hours)	3.28

Main Engine manufacturer / data

2 X CAT 3512B (kW)	861 at 1200 rpm per engine
Fuel cons (litres/hr)	206 at 85% MCR 206
Fuel cons (MT/hr)	0.183 per engine
Lub oil cons (g/kW/h)	0.800 at 85% MCR
Lub oil cons (Litre/hr)	0.585 per engine
Number of Engines operating	2.000
Fuel Relative Density	0.890
Lub Oil Relative Density	0.900

Sailing schedule (from 2009)

1 January to 31 December 3 crossings per week
No Sailings on Sundays

Distance

Penzance to St Mary's 38nm of which 1nm at restricted speed

Annual Maintenance

Maint. / consumables	£9,100
Surveys / certification	£10,400
Drydock / overhaul accrual	£78,000

Vessel maintenance is an accrual cost, considered over a 60 month cycle consummate with vessel certification.

Assume vessel to use shore power when in Penzance

Operating days assume geny run hours	14
Shore power unit price (kW/h)	£0.29
Power consumption (kW/hr)	40 £11.60

Annual administration costs

P&I insurance	£15,600
H&M insurance	£15,600
Management	£234,000

Finance

Vessel cost	£9,500,000
Capital financed	£0
Interest rate (per annum)	0.00%
Total repayment	£0
Fixed term (years)	1
Annual repayment	£0
Daily repayment	£0

Assumptions

- a) Three round trips per week. Year round service.
- b) No inclusion for additional crew to cover leave, etc. has been made.
- c) Salaries of all ship staff increased by 3% pa (16% on 2004) from 2004.
- d) Fuel and LO costs correct July 2009, UK rates including duty.
- e) Annual maintenance costs have increased by 30%.
- f) Annual Administration costs have increase by 30%.
- g) Passenger dues & ship dues at St Mary's & Penzance are as per email from N Yeates, 18-07-09.
- h) Machinery & Ship Data as per previous HF report 076jh389.
- i) Service speed and freight capacity as per HF Offer HF013/XT606.
- j) Vessel uses shore power in Penzance.
- k) Freight numbers are based upon 12600 Tonnes PA (N Yeates email, 30th July 2009) This has been averaged over the year.
- l) 3 Hours freight load/unload.
- m) Stevedoring charges excluded, mooring teams included.

Principal Dimensions

LOA (m)	43.00
Draft (m)	2.90
Beam (m)	10.00
GRT	600.00

Aux Engine manufacturer / data

3 x CAT C18 [kW]	350 at 1500 rpm
Fuel cons (litres/hr)	84
Fuel cons (MT/hr)	0.075 per engine
Lub oil cons (g/kW/h)	0.500
Lub oil cons (Litre/hr)	0.175 per engine
Number of Engines operatir	1

	January	February	March	April	May	June	July	August	September	October ²⁶	November ²⁵	December ²⁵	TOTAL	
Service days / period	13	12	13	13	13	13	14	13	13	13	13	12	155	
Single services scheduled	26	24	26	26	26	26	28	26	26	26	26	24	310	
Services cancelled	0	0	0	0	0	0	0	0	0	0	0	0	0	
Services budgeted	26	24	26	26	26	26	28	26	26	26	26	24	310	
Ave crossing time (hrs)	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.28		
ME Operating Hours	85.28	78.72	85.28	85.28	85.28	85.28	91.84	85.28	85.28	85.28	85.28	78.72	1017	
Geny Operating Hours	182	168	182	182	182	182	196	182	182	182	182	168	2170	
Engines Only	31.2704704	28.8650496	31.2704704	31.2704704	31.2704704	31.2704704	33.6758912	31.2704704	31.2704704	31.2704704	31.2704704	28.8650496	372.840224	2.405421
FUEL COSTS														
Marine gas oil (MT)	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472		
Ave cons in port /hr (MT)	0.07	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15		
Ave cons at sea /hr (MT)	0.44	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59		
Ave cons per voyage (MT)	1.45	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94		
MDO costs per month	£21,189.03	£19,559.10	£21,189.03	£21,189.03	£21,189.03	£21,189.03	£22,818.95	£21,189.03	£21,189.03	£21,189.03	£21,189.03	£19,559.10	£252,638	£56.29
LUB OIL COST														
Lub oil (MT)	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667		
Ave cons in port /hr (litre)	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18		
Ave cons at sea /hr (litre)	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35		
Ave cons per voyage (litre)	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41		
Lub oil costs per month	£197.60	£182.40	£197.60	£197.60	£197.60	£197.60	£212.80	£197.60	£197.60	£197.60	£197.60	£182.40	£2,356	
CAPACITY														
Load factors assumed %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Passengers per crossing	0	0	0	0	0	0	0	0	0	0	0	0		
Total passengers carried	0	0	0	0	0	0	0	0	0	0	0	0	0	
PORT DUES														
Ship dues (GRT 600)	£572	£572	£572	£572	£572	£572	£572	£572	£572	£572	£572	£572	£6,864	
Passenger dues	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	
Freight Dues	£7,140	£7,140	£7,140	£7,140	£7,140	£7,140	£7,140	£7,140	£7,140	£7,140	£7,140	£7,140	£85,680	
Pilot Exemption Certificate	£260	£240	£260	£260	£260	£260	£280	£260	£260	£260	£260	£240	£3,100	
Quayside Facilities	£805	£744	£805	£805	£805	£805	£867	£805	£805	£805	£805	£744	£9,604	
St Mary's Dues	£8,777	£8,696	£8,777	£8,777	£8,777	£8,777	£8,859	£8,777	£8,777	£8,777	£8,777	£8,696	£105,248	
Ship dues (GRT 600)	£1,898	£1,898	£1,898	£1,898	£1,898	£1,898	£1,898	£1,898	£1,898	£1,898	£1,898	£1,898	£22,776	
Passenger dues	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	
Freight Dues	£1,050	£1,050	£1,050	£1,050	£1,050	£1,050	£1,050	£1,050	£1,050	£1,050	£1,050	£1,050	£12,600	
Water	£93.66	£86.46	£93.66	£93.66	£93.66	£93.66	£100.86	£93.66	£93.66	£93.66	£93.66	£86.46	£1,117	
Waste Management	£149.86	£138.33	£149.86	£149.86	£149.86	£149.86	£161.38	£149.86	£149.86	£149.86	£149.86	£138.33	£1,787	
Quayside Facilities	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0	
Penzance Dues	£3,192	£3,173	£3,192	£3,192	£3,192	£3,192	£3,210	£3,192	£3,192	£3,192	£3,192	£3,173	£38,279	
Total Dues	£11,969	£11,868	£11,969	£11,969	£11,969	£11,969	£12,070	£11,969	£11,969	£11,969	£11,969	£11,868	£143,527	
OPERATING COSTS														
Mortgage repayment	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	
Crew / manning	£24,379	£24,379	£24,379	£24,379	£24,379	£24,379	£24,379	£24,379	£24,379	£24,379	£24,379	£24,379	£292,552	
Surveys / certification	£867	£867	£867	£867	£867	£867	£867	£867	£867	£867	£867	£867	£10,400	
Maint. / consumables	£763	£705	£763	£763	£763	£763	£822	£763	£763	£763	£763	£705	£9,100	
Annual overhaul (Accrual)	£6,500	£6,500	£6,500	£6,500	£6,500	£6,500	£6,500	£6,500	£6,500	£6,500	£6,500	£6,500	£78,000	
Insurance	£2,600	£2,600	£2,600	£2,600	£2,600	£2,600	£2,600	£2,600	£2,600	£2,600	£2,600	£2,600	£31,200	
Management / Admin	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£234,000	
Fuel oil	£21,189	£19,559	£21,189	£21,189	£21,189	£21,189	£22,819	£21,189	£21,189	£21,189	£21,189	£19,559	£252,638	
Lubricant oil	£198	£182	£198	£198	£198	£198	£213	£198	£198	£198	£198	£182	£2,356	
Shore power	£6,519	£5,846	£6,519	£6,241	£6,519	£6,241	£6,357	£6,519	£6,241	£6,519	£6,241	£6,682	£76,444	
Total operating costs	£82,515	£80,138	£82,515	£82,237	£82,515	£82,237	£84,056	£82,515	£82,237	£82,515	£82,237	£80,974	£986,690	
TOTAL OUTGOING	£94,484	£92,007	£94,484	£94,206	£94,484	£94,206	£96,126	£94,484	£94,206	£94,484	£94,206	£92,842	£1,130,218	

KNOWN DATA AND ASSUMPTIONS

From N Yeates Email, 02/07/09	2008	2009
Scillonian pax	82798	88471
From N Yeates Email, 30/07/09		
Total Freight (tonnes)		12600

12 knots Sailing schedule (from 2009)

1 January to 20 March	3 crossing per week	12 Knots
1 November to 31 December	3 crossing per week	12 Knots
No Sailings on Sundays		

Annual administration costs

P&I insurance	£31,200
H&M insurance	£31,200
Management	£468,000

Port dues St Mary's

Passenger dues (per seat)		£1.10
Goods dues (MT)		£6.80
MT / month (£)	1050	£7,140.00
Ship dues (£/MT)		£0.22
GRT	2760.00	£31,574.40
Pilot Exemption Certificate		£20.00
Quayside Facilities		£21,500.00

Port dues Penzance

Passenger dues (per seat)		£0.12
Goods dues (MT)		£1.00
MT / month (£)	1050	£1,050
Ship dues (£/MT)		£0.73
GRT	2760	£104,770
Water		£2,500.00
Waste Management		£4,000.00
Quayside Facilities		£0.00

Assumed Ship's compliment**Permanent Staff**

Rank	No of	Salary	Cost
Master	1	£44,080	£44,080
1st Officer	3	£38,200	£114,600
Chief Engineer	1	£40,600	£40,600
2nd Engineer	2	£31,320	£62,640
Bosun	1	£25,520	£25,520
Deck rating	3	£23,200	£69,600
Motorman	2	£23,200	£46,400
Cook	1	£23,200	£23,200
	14	Total permanent	£426,640

Fuel costs (MT)	£472
Lub oil cost (MT)	£1,667

General vessel type

Passenger Capacity	600
Deadweight (MT)	280
Service speed (knots)	12
Required Power (kW)	3600
Crossing time (hours)	3.22

Main Engine manufacturer / data

	1800kw at 1000RPM
Warsila 9L20	1235 at 750 rpm per engine
Fuel cons (g/kW/h)	196 at 50% MCR
Fuel cons (MT/hr)	0.242 per engine
Lub oil cons (g/kW/h)	0.500 at 85% MCR
Lub oil cons (Litre/hr)	0.525 per engine
Number of Engines operating	2.000
Fuel Relative Density	0.890
Lub Oil Relative Density	0.900

Distance

Penzance to St Mary's 38nm of which 1nm at restricted speed

Annual Maintenance

Maint. / consumables	£15,600
Surveys / certification	£15,600
Drydock / overhaul accrual	£124,800
Vessel maintenance is an accrual cost, considered over a 12 month cycle consummate with vessel certification.	

Assume vessel to use shore power when in Penzance

Operating days assume geny run hours	14
Shore power unit price (kW/h)	£0.29
Power consumption (kW/hr)	40 £11.60

Temporary Staff April to October

	No of	Salary	Cost
Cabin services	4	£23,200	£61,248
Crew salary costs			£487,888
Social costs 30%			£146,366
Total Crew costs per annum			£634,254

Freshwater cost per MT	£6
Consumption per voyage	1

Principal Dimensions

LOA (m)	71.00
Draft (m)	2.90
Beam (m)	14.00
GRT	2760.00

Aux Engine manufacturer / data

	688 at 1500 rpm
3 x CAT C32 Acert	
Fuel cons (litres/hr)	120.6
Fuel cons (MT/hr)	0.107 per engine
Lub oil cons (g/kW/h)	0.500
Lub oil cons (Litre/hr)	0.344 per engine
Number of Engines operating	1

Assumptions

- Three round trips per week.
- No inclusion for additional crew to cover leave, etc. has been made.
- Salaries of all ship staff increased by 3% pa (16% on 2004) from 2004.
- Fuel and LO costs correct July 2009, UK rates including duty.
- Annual maintenance costs have increased by 30%.
- Annual Administration costs have increase by 30%.
- Passenger dues & ship dues at St Mary's & Penzance are as per email from N Yeates, 18-07-09.
- Machinery information is modified in light of further research.
- 3 Gen sets fitted, only one is assumed to operate at any one time.
- Service speed and freight capacity as per BCP information.
- Vessel uses shore power in Penzance.
- Freight numbers are based upon 12600 Tonnes PA (N Yeates email, 30th July 2009) This has been averaged over the year.
- 3 Hours freight load/unload.
- Stevedoring charges excluded, mooring teams included.

	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
Service days / period	13	12	9	0	0	0	0	0	0	0	13	12	59
Additional services	0	0	0	0	0	0	0	0	0	0	0	0	0
Single services scheduled	26	24	18	0	0	0	0	0	0	0	26	24	118
Services cancelled	2	0	0	0	0	0	0	0	0	0	0	0	2
Services budgeted	24	24	18	0	0	0	0	0	0	0	26	24	116
Ave crossing time (hrs)	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	3.22	
ME Operating Hours	77.28	77.28	57.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.72	77.28	374
Geny Operating Hours	182	168	126	0	0	0	0	0	0	0	182	168	826
FUEL COSTS													
Marine gas oil (MT)	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	
Ave cons in port /hr (MT)	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	
Ave cons at sea /hr (MT)	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	
Ave cons per voyage (MT)	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	
MDO costs per month	£26,888.37	£26,178.87	£19,634.15	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£28,360.44	£26,178.87	£127,241
LUB OIL COST													
Lub oil (MT)	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	
Ave cons in port /hr (litre)	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	
Ave cons at sea /hr (litre)	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	
Ave cons per voyage (litre)	5.52	5.52	5.52	5.52	5.52	5.52	5.52	5.52	5.52	5.52	5.52	5.52	
Lub oil costs per month	£215.64	£208.42	£156.31	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£225.78	£208.42	£1,015
CAPACITY													
Load factors assumed %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Passengers per crossing	0	0	0	0	0	0	0	0	0	0	0	0	
Total passengers carried	0	0	0	0	0	0	0	0	0	0	0	0	0
PORT DUES													
Ship dues (GRT 2760)	£2,631	£2,631	£2,631	£0	£0	£0	£0	£0	£0	£0	£2,631	£2,631	£13,156
Passenger dues	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Freight Dues	£7,140	£7,140	£7,140	£0	£0	£0	£0	£0	£0	£0	£7,140	£7,140	£35,700
Pilot Exemption Certificate	£240	£240	£180	£0	£0	£0	£0	£0	£0	£0	£260	£240	£1,160
Quayside Facilities	£1,114	£1,028	£771	£0	£0	£0	£0	£0	£0	£0	£1,114	£1,028	£5,054
St Mary's Dues	£11,125	£11,039	£10,722	£0	£0	£0	£0	£0	£0	£0	£11,145	£11,039	£55,070
Ship dues (GRT 2760)	£8,731	£8,731	£8,731	£0	£0	£0	£0	£0	£0	£0	£8,731	£8,731	£43,654
Passenger dues	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Freight Dues	£1,050	£1,050	£1,050	£0	£0	£0	£0	£0	£0	£0	£1,050	£1,050	£5,250
Water	£129	£120	£90	£0	£0	£0	£0	£0	£0	£0	£129	£120	£588
Waste Management	£207	£191	£143	£0	£0	£0	£0	£0	£0	£0	£207	£191	£940
Quayside Facilities	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Penzance Dues	£10,117	£10,092	£10,014	£0	£0	£0	£0	£0	£0	£0	£10,117	£10,092	£50,432
Total Dues	£21,242	£21,131	£20,736	£0	£0	£0	£0	£0	£0	£0	£21,262	£21,131	£105,502
OPERATING COSTS													
Mortgage repayment	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Crew / manning	£46,219	£46,219	£46,219	£0	£0	£0	£0	£0	£0	£0	£46,219	£46,219	£231,097
Surveys / certification	£808	£746	£559	£0	£0	£0	£0	£0	£0	£0	£808	£746	£3,667
Maint. / consumables	£808	£746	£559	£0	£0	£0	£0	£0	£0	£0	£808	£746	£3,667
Annual overhaul (Accrual)	£6,464	£5,967	£4,475	£0	£0	£0	£0	£0	£0	£0	£6,464	£5,967	£29,335
Insurance	£3,232	£2,983	£2,237	£0	£0	£0	£0	£0	£0	£0	£3,232	£2,983	£14,668
Management / Admin	£24,239	£22,375	£16,781	£0	£0	£0	£0	£0	£0	£0	£24,239	£22,375	£110,008
Fuel oil	£26,888	£26,179	£19,634	£0	£0	£0	£0	£0	£0	£0	£28,360	£26,179	£127,241
Lubricant oil	£216	£208	£156	£0	£0	£0	£0	£0	£0	£0	£226	£208	£1,015
Shore power	£6,519	£6,682	£7,169	£0	£0	£0	£0	£0	£0	£0	£6,519	£6,682	£33,570
Total operating costs	£115,393	£112,104	£97,791	£0	£0	£0	£0	£0	£0	£0	£116,875	£112,104	£554,267
TOTAL OUTGOING	£136,635	£133,235	£118,527	£0	£0	£0	£0	£0	£0	£0	£138,138	£133,235	£659,769

KNOWN DATA AND ASSUMPTIONS

From N Yeates Email, 02/07/09	2008	2009
Scillonian pax	82798	88471
From N Yeates Email,30/07/09		
Total Freight (tonnes)		12600

Port dues St Mary's

Passenger dues (per seat)		£1.10
Goods dues (MT)		£6.80
MT / month (£)	1050	£7,140.00
Ship dues (£/MT)		£0.22
GRT (MT)	2760.00	£31,574.40
Pilot Exemption		£20.00
Quayside Facilities		£21,500.00

Port dues Penzance

Passenger dues (per seat)		£0.12
Goods dues (MT)		£1.00
MT / month (£)	1050	£1,050
Ship dues (£/MT)		£0.73
GRT	2760	£104,770
Water		£2,500.00
Waste Management		£4,000.00
Quayside Facilities		£0.00

Assumed Ship's compliment**Permanent Staff**

Rank	No of	Salary	Cost
Master	1	£44,080	£44,080
1st Officer	3	£38,200	£114,600
Chief Engineer	1	£40,600	£40,600
2nd Engineer	2	£31,320	£62,640
Bosun	1	£25,520	£25,520
Deck rating	3	£23,200	£69,600
Motorman	2	£23,200	£46,400
Cook	1	£23,200	£23,200
		Total permanent	£426,640

Fuel costs (MT)	£472
Lub oil cost (MT)	£1,667

General vessel type

Passenger Capacity	600
Deadweight (MT)	280
Service speed (knots)	15.75
Required Power (kW)	3600
Crossing time (hours)	2.67

Main Engine manufacturer / data

	1800kw at 100RPM
<i>Warsila 9L20</i>	<i>1764 at 980 rpm per engine</i>
Fuel cons (g/kW/h)	192 at 100% MCR
Fuel cons (MT/hr)	0.339 per engine
Lub oil cons (g/kW/h)	0.500 at 85% MCR
Lub oil cons (Litre/hr)	0.750 per engine
Number of Engines operating	2.000
Fuel Relative Density	0.890
Lub Oil Relative Density	0.900

12 knots Sailing schedule (from 2009)

21 March - 30 Oct 1 crossing per day
No Sailings on Sundays

Distance

Penzance to St Mary's 38nm of which 1nm at restricted speed

Annual Maintenance

Maint. / consumables	£15,600
Surveys / certification	£15,600
Drydock / overhaul accrual	£124,800

Vessel maintenance is an accrual cost, considered over a 12 month cycle consummate with vessel certification.

Assume vessel to use shore power when in Penzance

Operating days assume geny run hours	14
Shore power unit price (kW/h)	£0.29
Power consumption (kW/hr)	40 £11.60

Temporary Staff April to October

	No of	Salary	Cost
Cabin services	4	£23,200	£61,248

Crew salary costs		£487,888
Social costs 30%		£146,366
Total Crew costs per annum		£634,254

Freshwater cost per MT	£6
Consumption per voyage	1

Principal Dimensions

LOA (m)	71.00
Draft (m)	2.90
Beam (m)	14.00
GRT	2760.00

Aux Engine manufacturer / data

	688 at 1500 rpm
<i>3 x CAT C32 Acert</i>	
Fuel cons (litres/hr)	120.6
Fuel cons (MT/hr)	0.107 per engine
Lub oil cons (g/kW/h)	0.500
Lub oil cons (Litre/hr)	0.344 per engine
Number of Engines operating	1

Annual administration costs

P&I insurance	£31,200
H&M insurance	£31,200
Management	£468,000

Finance

Vessel cost	£23,000,000
Capital financed	£0
Interest rate (per annum)	0.00%
Total repayment	£0
Fixed term (years)	1
Annual repayment	£0
Daily repayment	£0

- a) Single round trip, 6 days a week.
b) No inclusion for additional crew to cover leave, etc. has been made.
c) Salaries of all ship staff increased by 3% pa (16% on 2004) from 2004.
d) Fuel and LO costs correct July 2009, UK rates including duty.
e) Annual maintenance costs have increased by 30%.
f) Annual Administration costs have increase by 30%.
g) Passenger dues & ship dues at St Mary's & Penzance are as per email from N Yeates, 18-07-09.
h) Machinery information is modified in light of further research.
i) 3 Gen sets fitted, only one is assumed to operate at any time
j) Service speed and freight capacity as per BCP information.
k) Vessel uses shore power in Penzance.
l) Freight numbers are based upon 12600 Tonnes PA (N Yeates email, 30th July 2009) This has been averaged over the year.
m) 3 Hours freight load/unload.
n) Stevedoring charges excluded, mooring teams included.

	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
Service days / period	0	0	9	26	26	26	27	26	26	26	0	0	192
Additional services	0	0	0	0	0	0	0	0	0	0	0	0	0
Single services scheduled	0	0	18	52	52	52	54	52	52	52	0	0	384
Services cancelled	0	0	8	0	0	0	0	0	0	0	0	0	8
Services budgeted	0	0	10	52	52	52	54	52	52	52	0	0	376
Ave crossing time (hrs)	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	
ME Operating Hours	0.00	0.00	26.70	138.84	138.84	138.84	144.18	138.84	138.84	138.84	0.00	0.00	1004
Geny Operating Hours	0	0	126	364	364	364	378	364	364	364	0	0	2688
FUEL COSTS													
Marine gas oil (MT)	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	
Ave cons in port /hr (MT)	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	
Ave cons at sea /hr (MT)	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	
Ave cons per voyage (MT)	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	
MDO costs per month	£0.00	£0.00	£14,924.99	£62,852.27	£62,852.27	£62,852.27	£65,269.66	£62,852.27	£62,852.27	£62,852.27	£0.00	£0.00	£457,308
LUB OIL COST													
Lub oil (MT)	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	
Ave cons in port /hr (litre)	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	
Ave cons at sea /hr (litre)	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	
Ave cons per voyage (litre)	5.95	5.95	5.95	5.95	5.95	5.95	5.95	5.95	5.95	5.95	5.95	5.95	
Lub oil costs per month	£0.00	£0.00	£125.09	£500.19	£500.19	£500.19	£519.43	£500.19	£500.19	£500.19	£0.00	£0.00	£3,646
CAPACITY													
Pax Numbers	0	0	571	7997	13225	15064	17428	19407	10488	4291	0	0	88,471
Load factors assumed %	0%	0%	10%	26%	42%	48%	54%	62%	34%	14%	0%	0%	
Passengers per crossing	0	0	57	154	254	290	323	373	202	83	0	0	
Total passengers carried	0	0	570	8,008	13,208	15,080	17,442	19,396	10,504	4,316	0	0	88,524
PORT DUES													
Ship dues (GRT 2760)	£0	£0	£0	£2,631	£2,631	£2,631	£2,631	£2,631	£2,631	£2,631	£0	£0	£18,418
Passenger dues	£0	£0	£314	£4,404	£7,264	£8,294	£9,593	£10,668	£5,777	£2,374	£0	£0	£48,688
Freight Dues	£0	£0	£0	£7,140	£7,140	£7,140	£7,140	£7,140	£7,140	£7,140	£0	£0	£49,980
Pilot Exemption Certificate	£0	£0	£100	£520	£520	£520	£540	£520	£520	£520	£0	£0	£3,760
Quayside Facilities	£0	£0	£771	£2,227	£2,227	£2,227	£2,313	£2,227	£2,227	£2,227	£0	£0	£16,446
St Mary's Dues	£0	£0	£1,184	£16,923	£19,783	£20,812	£22,217	£23,186	£18,295	£14,892	£0	£0	£137,293
Ship dues (GRT 2760)	£0	£0	£0	£8,731	£8,731	£8,731	£8,731	£8,731	£8,731	£8,731	£0	£0	£61,116
Passenger dues	£0	£0	£137	£1,922	£3,170	£3,619	£4,186	£4,655	£2,521	£1,036	£0	£0	£21,246
Freight Dues	£0	£0	£0	£1,050	£1,050	£1,050	£1,050	£1,050	£1,050	£1,050	£0	£0	£7,350
Water	£0	£0	£90	£259	£259	£259	£269	£259	£259	£259	£0	£0	£1,912
Waste Management	£0	£0	£143	£414	£414	£414	£430	£414	£414	£414	£0	£0	£3,060
Quayside Facilities	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Penzance Dues	£0	£0	£370	£12,376	£13,624	£14,073	£14,666	£15,109	£12,975	£11,490	£0	£0	£94,683
Total Dues	£0	£0	£1,554	£29,299	£33,407	£34,886	£36,883	£38,295	£31,271	£26,382	£0	£0	£231,976
OPERATING COSTS													
Mortgage repayment	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Crew / manning	£0	£0	£52,855	£52,855	£52,855	£52,855	£52,855	£52,855	£52,855	£52,855	£0	£0	£422,836
Surveys / certification	£0	£0	£559	£1,616	£1,616	£1,616	£1,678	£1,616	£1,616	£1,616	£0	£0	£11,933
Maint. / consumables	£0	£0	£559	£1,616	£1,616	£1,616	£1,678	£1,616	£1,616	£1,616	£0	£0	£11,933
Annual overhaul (Accrual)	£0	£0	£4,475	£12,927	£12,927	£12,927	£13,425	£12,927	£12,927	£12,927	£0	£0	£95,465
Insurance	£0	£0	£2,237	£6,464	£6,464	£6,464	£6,712	£6,464	£6,464	£6,464	£0	£0	£47,732
Management / Admin	£0	£0	£16,781	£48,478	£48,478	£48,478	£50,343	£48,478	£48,478	£48,478	£0	£0	£357,992
Fuel oil	£0	£0	£14,925	£62,852	£62,852	£62,852	£65,270	£62,852	£62,852	£62,852	£0	£0	£457,308
Lubricant oil	£0	£0	£125	£500	£500	£500	£519	£500	£500	£500	£0	£0	£3,646
Shore power	£0	£0	£7,169	£4,408	£4,408	£4,408	£4,246	£4,408	£4,408	£4,408	£0	£0	£37,862
Total operating costs	£0	£0	£99,685	£191,716	£191,716	£191,716	£196,725	£191,716	£191,716	£191,716	£0	£0	£1,446,708
TOTAL OUTGOING	£0	£0	£101,240	£221,015	£225,123	£226,602	£233,608	£230,011	£222,987	£218,098	£0	£0	£1,678,684

KNOWN DATA AND ASSUMPTIONS

		HF Averaged
From N Yeates Email, 02/07/09	2008	2009
Scillonian pax	82798	88471

Port dues St Mary's

Passenger dues (per seat)		£1.10
Goods dues (MT)		£6.80
MT / month (£)	0	£0.00
Ship dues (£/MT)		£0.22
GRT (MT)	1010.00	£7,702.93
Pilot Exemption		£20.00
Quayside Facilities		£21,500.00

Port dues Penzance

Passenger dues (per seat)		£0.12
Goods dues (MT)		£1.00
MT / month (£)	0	£0.00
Ship dues (£/MT)		£0.73
GRT	1010.00	£38,339.60
Water		£2,500.00
Waste Management		£4,000.00
Quayside Facilities		£0.00

Assumed Ship's compliment**Permanent Staff**

Rank	No of	Salary	Cost
Master	1	£44,080	£44,080
1st Officer	3	£38,280	£114,840
Chief Engineer	1	£40,600	£40,600
2nd Engineer	2	£31,320	£62,640
Bosun	1	£25,520	£25,520
Cook	1	£23,200	£23,200
		Total permanent	£310,880

Fuel costs (MT)	£472
Lub oil cost (MT)	£1,667

General vessel type

Passenger Capacity	367
Deadweight (MT)	63.5 Approx
Service speed (knots)	27
Required Power (kW)	5040
Crossing time (hours)	1.57

Main Engine manufacturer / data

2 X Textron Lycoming TF 40	2570 at 15400 rpm per engine
Fuel cons (g/kW/h)	299
Fuel cons (MT/hr)	0.768 per engine
Lub oil cons (g/kW/h)	0.500
Lub oil cons (Litre/hr)	1.092 per engine
No Engines	2.000
Fuel Relative Density	0.890
Lub Oil Relative Density	0.900

Tank Capacity	14.320 Tonnes
Voyages between Fills	0.469

Sailing schedule (from 2009)

21 March to 30 October 2 return crossing per day
No Sailings on Sundays

Distance

Penzance to St Mary's 38nm of which 1nm at restricted speed

Annual Maintenance

Maint. / consumables	£15,600
Surveys / certification	£15,600
Drydock / overhaul accrual	£124,800

Vessel maintenance is an accrual cost, considered over a 12 month cycle consummate with vessel certification.

Assume vessel to use shore power when in Penzance
Operating days assume geny run hours 14
Shore power unit price (kW/h) £0.29
Power consumption (kW/hr) 40 £11.60

Temporary Staff April to October

	No of	Salary	Cost
Cabin service	4	£23,200	£61,248
Deck ratings	3	£23,200	£45,936
Motorman	2	£23,200	£30,624
		Total temporary	£137,808
Crew salary costs			£448,688
Social costs 30%			£134,606
		Total Crew costs per annum	£583,294

Freshwater cost per MT	£6
Consumption per voyage	1

Principal Dimensions

LOA (m)	37.52
Draft (m)	3.50
Beam (m)	18.07
GRT	1010.00

Aux Engine manufacturer / data

2 x CAT 3306B TA 165kW	350 at 1500 rpm
Fuel cons (litres/hr)	70
Fuel cons (MT/hr)	0.062 per engine
Lub oil cons (g/kW/h)	1.000
Lub oil cons (Litre/hr)	0.35 per engine
No Engines	2
Oil Change every 250hrs (38l)	

Annual administration costs

P&I insurance	£23,400
H&M insurance	£23,400
Management	£234,000

Finance

Vessel cost	£7,000,000
Capital financed	£0
Interest rate (per annum)	3.00%
Total repayment	£0
Fixed term (years)	20
Annual repayment	£0
Daily repayment	£0

Assumptions

- Two round trips per day, 6 days a week. 46% Cancellation rate.
- No inclusion for additional crew to cover leave, etc. has been made.
- Salaries of all ship staff increased by 3% pa (16% on 2004) from 2004.
- Fuel and LO costs correct July 2009, UK rates including duty.
- Annual maintenance costs have increased by 30%.
- Annual Administration costs have increase by 30%.
- Passenger dues & ship dues at St Mary's & Penzance are as per email from N Yeates, 18-07-09.
- Service speed and capacity as per HF Offer HF013/XT606.
- Vessel uses shore power in Penzance.
- GRT from Fast Ferry Article
- Machinery Details from Fast Ferry/Vericor Website
- Half hour pax embarkation/disembarkation.
- Stevedoring charges excluded, mooring teams included.

	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
Service days / period	0	0	8	23	26	26	27	26	26	19	0	0	181
Additional services	0	0	0	23	26	26	27	26	26	19	0	0	173
Single services scheduled	0	0	16	92	104	104	108	104	104	76	0	0	708
Services cancelled	0	0	2	46	46	46	48	46	52	40	0	0	326
Services budgeted	0	0	14	46	58	58	60	58	52	36	0	0	382
Ave crossing time (hrs)	0.00	0.00	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	0.00	0.00	
ME Operating Hours	0.00	0.00	21.98	72.22	91.06	91.06	94.20	91.06	81.64	56.52	0.00	0.00	600
Geny Operating Hours	0	0	112	322	364	364	378	364	364	266	0	0	2534
FUEL COSTS													
Marine gas oil (MT)	£472.16	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	
Ave cons in port /hr (MT)	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	
Ave cons at sea /hr (MT)	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	
Ave cons per voyage (MT)	0.00	0.00	30.52	82.85	93.32	93.32	96.81	93.32	93.32	68.90	0.00	0.00	
MDO costs per month	£0.00	£0.00	£22,538.74	£71,349.62	£87,491.66	£87,491.66	£90,593.82	£87,491.66	£80,656.09	£56,662.47	£0.00	£0.00	£584,276
LUB OIL COST													
Lub oil (MT)	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	
Ave cons in port /hr (litre)	0.70	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	0.70	0.70	
Ave cons at sea /hr (litre)	2.88	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23	2.88	2.88	
Ave cons per voyage (litre)	0.70	1.05	6.13	6.13	6.13	6.13	6.13	6.13	6.13	6.13	0.70	0.70	
Lub oil costs per month	£0.00	£0.00	£189.66	£574.86	£680.72	£680.72	£705.71	£680.72	£649.84	£464.59	£0.00	£0.00	£4,627
CAPACITY													
Load factors assumed %	0%	0%	10%	44%	57%	65%	73%	84%	51%	30%	0%	0%	
Passengers per crossing	0	0	41	174	228	260	291	334	202	119	0	0	
Total passengers carried	0	0	574	8,004	13,224	15,080	17,460	19,372	10,504	4,284	0	0	88,502
PORT DUES													
Ship dues (GRT 1010)	£0	£0	£963	£963	£963	£963	£963	£963	£963	£963			£7,703
Passenger dues	£0	£0	£631	£4,402	£7,273	£8,294	£9,603	£10,655	£5,777	£2,356	£0	£0	£48,992
Goods dues	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Pilot Exemption Certificate	£0	£0	£140	£460	£580	£580	£600	£580	£520	£360	£0	£0	£3,820
Quayside Facilities	£0	£0	£512	£1,472	£1,664	£1,664	£1,728	£1,664	£1,664	£1,216	£0	£0	£11,582
St Mary's Dues	£0	£0	£2,246	£7,297	£10,480	£11,501	£12,894	£13,861	£8,924	£4,895	£0	£0	£72,097
Ship dues (GRT 1010)	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£38,340
Passenger dues	£0	£0	£138	£1,921	£3,174	£3,619	£4,190	£4,649	£2,521	£1,028	£0	£0	£21,240
Freight Dues	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Water	£0	£0	£60	£171	£193	£193	£201	£193	£193	£141	£0	£0	£1,347
Waste Management	£0	£0	£95	£274	£310	£310	£321	£310	£310	£226	£0	£0	£2,155
Quayside Facilities	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Penzance Dues	£3,195	£3,195	£3,487	£5,561	£6,872	£7,317	£7,908	£8,347	£6,219	£4,591	£3,195	£3,195	£63,082
Total Dues	£3,195	£3,195	£5,734	£12,858	£17,351	£18,818	£20,801	£22,208	£15,143	£9,486	£3,195	£3,195	£135,178
OPERATING COSTS													
Mortgage repayment	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Crew / manning	£33,679	£33,679	£56,072	£56,072	£56,072	£56,072	£56,072	£56,072	£56,072	£56,072	£33,679	£33,679	£583,294
Surveys / certification	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£15,600
Maint. / consumables	£0	£0	£690	£1,982	£2,241	£2,241	£2,327	£2,241	£2,241	£1,638	£0	£0	£15,600
Annual overhaul (Accrual)	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£124,800
Insurance	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£46,800
Management / Admin	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£234,000
Fuel oil	£0	£0	£22,539	£71,350	£87,492	£87,492	£90,594	£87,492	£80,656	£56,662	£0	£0	£584,276
Lubricant oil	£0	£0	£190	£575	£681	£681	£706	£681	£650	£465	£0	£0	£4,627
Shore power	£8,630	£7,795	£7,331	£4,617	£4,408	£4,130	£4,246	£4,408	£4,130	£5,545	£8,352	£8,630	£72,222
Total operating costs	£77,409	£76,574	£121,922	£169,696	£185,994	£185,715	£189,045	£185,994	£178,849	£155,482	£77,131	£77,409	£1,681,219
TOTAL OUTGOING	£80,604	£79,769	£127,655	£182,554	£203,345	£204,533	£209,846	£208,202	£193,992	£164,967	£80,326	£80,604	£1,816,397

KNOWN DATA AND ASSUMPTIONS

	HF Averaged	
From N Yeates Email, 02/07/09	2008	2009
Scillonian pax	82798	88471

Port dues St Mary's

Passenger dues (per seat)		£1.10
Goods dues (MT)		£6.80
MT / month (£)	0	£0.00
Ship dues (£/MT)		£0.22
GRT (MT)	1010.00	£7,702.93
Pilot Exemption		£20.00
Quayside Facilities		£21,500.00

Port dues Penzance

Passenger dues (per seat)		£0.12
Goods dues (MT)		£1.00
MT / month (£)	0	£0.00
Ship dues (£/MT)		£0.73
GRT	1010.00	£38,339.60
Water		£2,500.00
Waste Management		£4,000.00
Quayside Facilities		£0.00

Assumed Ship's compliment**Permanent Staff**

Rank	No of	Salary	Cost
Master	1	£44,080	£44,080
1st Officer	3	£38,280	£114,840
Chief Engineer	1	£40,600	£40,600
2nd Engineer	2	£31,320	£62,640
Bosun	1	£25,520	£25,520
Cook	1	£23,200	£23,200
		Total permanent	£310,880

Fuel costs (MT)	£472
Lub oil cost (MT)	£1,667

General vessel type

Passenger Capacity	367
Deadweight (MT)	63.5 Approx
Service speed (knots)	27
Required Power (kW)	5040
Crossing time (hours)	1.57

Main Engine manufacturer / data

2 X Textron Lycoming TF 40	2570 at 15400 rpm per engine
Fuel cons (g/kW/h)	299
Fuel cons (MT/hr)	0.768 per engine
Lub oil cons (g/kW/h)	0.500
Lub oil cons (Litre/hr)	1.092 per engine
No Engines	2.000
Fuel Relative Density	0.890
Lub Oil Relative Density	0.900

Tank Capacity	14.320 Tonnes
Voyages between Fills	0.469

Sailing schedule (from 2009)

21 March to 30 October 2 return crossings per day
No Sailings on Sundays

Distance

Penzance to St Mary's 38nm of which 1nm at restricted speed

Annual Maintenance

Maint. / consumables	£15,600
Surveys / certification	£15,600
Drydock / overhaul accrual	£124,800

Vessel maintenance is an accrual cost, considered over

a 12 month cycle consummate with vessel certification.

Temporary Staff April to October

	No of	Salary	Cost
Cabin service	4	£23,200	£61,248
Deck ratings	3	£23,200	£45,936
Motorman	2	£23,200	£30,624
		Total temporary	£137,808
Crew salary costs			£448,688
Social costs 30%			£134,606
Total Crew costs per annum			£583,294

Freshwater cost per MT	£6
Consumption per voyage	1

Principal Dimensions

LOA (m)	37.52
Draft (m)	3.50
Beam (m)	18.07
GRT	1010.00

Aux Engine manufacturer / data

2 x CAT 3306B TA 165kW	350 at 1500 rpm
Fuel cons (litres/hr)	70
Fuel cons (MT/hr)	0.062 per engine
Lub oil cons (g/kW/h)	1.000
Lub oil cons (Litre/hr)	0.35 per engine
No Engines	2
Oil Change every 250hrs (38l)	

Annual administration costs

P&I insurance	£23,400
H&M insurance	£23,400
Management	£234,000

Finance

Vessel cost	£7,000,000
Capital financed	£0
Interest rate (per annum)	3.00%
Total repayment	£0
Fixed term (years)	20
Annual repayment	£0
Daily repayment	£0

Assume vessel to use shore power when in Penzance

Operating days assume geny run hours	14
Shore power unit price (kW/h)	£0.29
Power consumption (kW/hr)	40
	£11.60

Assumptions

- Two round trips per day, 6 days a week. 0% Cancellation rate.
- No inclusion for additional crew to cover leave, etc. has been made.
- Salaries of all ship staff increased by 3% pa (16% on 2004) from 2004.
- Fuel and LO costs correct July 2009, UK rates including duty.
- Annual maintenance costs have increased by 30%.
- Annual Administration costs have increase by 30%.
- Passenger dues & ship dues at St Mary's & Penzance are as per email from N Yeates, 18-07-09.
- Service speed and capacity as per HF Offer HF013/XT606.
- Vessel uses shore power in Penzance.
- GRT from Fast Ferry Article
- Machinery Details from Fast Ferry/Vericor Website
- Half hour pax embarkation/disembarkation.
- Stevedoring charges excluded, mooring teams included.

	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
Service days / period	0	0	8	23	26	26	27	26	26	19	0	0	181
Additional services	0	0	0	23	26	26	27	26	26	19	0	0	173
Single services scheduled	0	0	16	92	104	104	108	104	104	76	0	0	708
Services cancelled	0	0	0	0	0	0	0	0	0	0	0	0	0
Services budgeted	0	0	16	92	104	104	108	104	104	76	0	0	708
Ave crossing time (hrs)	0.00	0.00	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	0.00	0.00	
ME Operating Hours	0.00	0.00	25.12	144.44	163.28	163.28	169.56	163.28	163.28	119.32	0.00	0.00	1112
Geny Operating Hours	0	0	112	322	364	364	378	364	364	266	0	0	2534
FUEL COSTS													
Marine gas oil (MT)	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	
Ave cons in port /hr (MT)	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	
Ave cons at sea /hr (MT)	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	
Ave cons per voyage (MT)	0.00	0.00	30.52	82.85	93.32	93.32	96.81	93.32	93.32	68.90	0.00	0.00	
MDO costs per month	£0.00	£0.00	£24,817.26	£123,755.62	£139,897.66	£139,897.66	£145,278.34	£139,897.66	£139,897.66	£102,232.90	£0.00	£0.00	£955,675
LUB OIL COST													
Lub oil (MT)	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	
Ave cons in port /hr (litre)	0.70	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	0.70	0.70	
Ave cons at sea /hr (litre)	2.88	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23	2.88	2.88	
Ave cons per voyage (litre)	0.70	1.05	6.13	6.13	6.13	6.13	6.13	6.13	6.13	6.13	0.70	0.70	
Lub oil costs per month	£0.00	£0.00	£199.95	£811.56	£917.41	£917.41	£952.70	£917.41	£917.41	£670.42	£0.00	£0.00	£6,304
CAPACITY													
Load factors assumed %	0%	0%	9%	22%	32%	36%	41%	47%	25%	14%	0%	0%	
Passengers per crossing	0	0	35	87	127	145	162	187	101	55	0	0	
Total passengers carried	0	0	560	8,004	13,208	15,080	17,496	19,448	10,504	4,180	0	0	88,480
PORT DUES													
Ship dues (GRT 1010)	£0	£0	£963	£963	£963	£963	£963	£963	£963	£963	£0	£0	£7,703
Passenger dues	£0	£0	£616	£4,402	£7,264	£8,294	£9,623	£10,696	£5,777	£2,299	£0	£0	£48,972
Goods dues	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Pilot Exemption Certificate	£0	£0	£160	£920	£1,040	£1,040	£1,080	£1,040	£1,040	£760	£0	£0	£7,080
Quayside Facilities	£0	£0	£512	£1,472	£1,664	£1,664	£1,728	£1,664	£1,664	£1,216	£0	£0	£11,582
St Mary's Dues	£0	£0	£2,251	£7,757	£10,931	£11,961	£13,393	£14,363	£9,444	£5,238	£0	£0	£75,337
Ship dues (GRT 1010)	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£38,340
Passenger dues	£0	£0	£134	£1,921	£3,170	£3,619	£4,199	£4,668	£2,521	£1,003	£0	£0	£21,235
Freight Dues	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Water	£0	£0	£60	£171	£193	£193	£201	£193	£193	£141	£0	£0	£1,347
Waste Management	£0	£0	£95	£274	£310	£310	£321	£310	£310	£226	£0	£0	£2,155
Quayside Facilities	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Penzance Dues	£3,195	£3,195	£3,484	£5,561	£6,868	£7,317	£7,916	£8,365	£6,219	£4,566	£3,195	£3,195	£63,076
Total Dues	£3,195	£3,195	£5,735	£13,318	£17,799	£19,278	£21,310	£22,728	£15,663	£9,803	£3,195	£3,195	£138,413
OPERATING COSTS													
Mortgage repayment	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Crew / manning	£33,679	£33,679	£56,072	£56,072	£56,072	£56,072	£56,072	£56,072	£56,072	£56,072	£33,679	£33,679	£583,294
Surveys / certification	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£15,600
Maint. / consumables	£0	£0	£690	£1,982	£2,241	£2,241	£2,327	£2,241	£2,241	£1,638	£0	£0	£15,600
Annual overhaul (Accrual)	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£124,800
Insurance	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£46,800
Management / Admin	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£234,000
Fuel oil	£0	£0	£24,817	£123,756	£139,898	£139,898	£145,278	£139,898	£139,898	£102,233	£0	£0	£955,675
Lubricant oil	£0	£0	£200	£812	£917	£917	£953	£917	£917	£670	£0	£0	£6,304
Shore power	£8,630	£7,795	£7,331	£4,617	£4,408	£4,130	£4,246	£4,408	£4,130	£5,545	£8,352	£8,630	£72,222
Total operating costs	£77,409	£76,574	£124,210	£222,339	£238,636	£238,358	£243,976	£238,636	£238,358	£201,258	£77,131	£77,409	£2,054,295
TOTAL OUTGOING	£80,604	£79,769	£129,945	£235,656	£256,435	£257,636	£265,286	£261,365	£254,021	£211,062	£80,326	£80,604	£2,192,708

KNOWN DATA AND ASSUMPTIONS

From N Yeates Email,30/07/09

Total Freight (tonnes) 12600

Sailing schedule (from 2009)1 January to 31 December 3 crossings per week
No Sailings on Sundays**Annual administration costs**P&I insurance £15,600
H&M insurance £15,600
Management £234,000**Port dues St Mary's**

Passenger dues (per seat)		£1.10
Goods dues (MT)		£6.80
MT / month (£)	1050	£7,140.00
Ship dues (£/MT)		£0.22
GRT	600.00	£6,864.00
Pilot Exemption Certificate		£20.00
Quayside Facilities		£21,500.00

Port dues Penzance

Passenger dues (per seat)		£0.12
Goods dues (MT)		£1.00
MT / month (£)	1050	£1,050.00
Ship dues (£/MT)		£0.73
GRT	600.00	£22,776.00
Water		£2,500.00
Waste Management		£4,000.00
Quayside Facilities		£0.00

Assumed Ship's compliment**Permanent Staff**

Rank	No of	Salary	Cost
Master	1	£38,280	£38,280
1st Officer	1	£31,320	£31,320
Engineers	2	£31,320	£62,640
Deck ratings	4	£23,200	£92,800
		Crew salary costs	£225,040
Social costs	30%		£67,512
Total Crew costs per annum			£292,552

Fuel costs (MT)	£472
Lub oil cost (MT)	£1,667

General vessel type

Passenger Capacity	0
Deadweight (MT)	530
Service speed (knots)	12
Required Power (kW)	1600
Crossing time (hours)	3.28

Main Engine manufacturer / data

	7800
2 X CAT 3512B (kW)	861 at 1200 rpm per engine
Fuel cons (litres/hr)	206 at 85% MCR
Fuel cons (MT/hr)	0.183 per engine
Lub oil cons (g/kW/h)	0.800 at 85% MCR
Lub oil cons (Litre/hr)	0.585 per engine
Number of Engines operating	2.000
Fuel Relative Density	0.890
Lub Oil Relative Density	0.900

Distance

Penzance to St Mary's 38nm of which 1nm at restricted speed

Annual Maintenance

Maint. / consumables	£9,100
Surveys / certification	£10,400
Drydock / overhaul accrual	£78,000

Vessel maintenance is an accrual cost, considered over a 60 month cycle consummate with vessel certification.

Assume vessel to use shore power when in Penzance

Operating days assume geny run hours	14
Shore power unit price (kW/h)	£0.29
Power consumption (kW/hr)	40 £11.60

Finance

Vessel cost	£9,500,000
Capital financed	£0
Interest rate (per annum)	0.00%
Total repayment	£0
Fixed term (years)	1
Annual repayment	£0
Daily repayment	£0

Assumptions

- Single round trip per day.
- No inclusion for additional crew to cover leave, etc. has been made.
- Salaries of all ship staff increased by 3% pa (16% on 2004) from 2004.
- Fuel and LO costs correct July 2009, UK rates including duty.
- Annual maintenance costs have increased by 30%.
- Annual Administration costs have increase by 30%.
- Passenger dues & ship dues at St Mary's & Penzance are as per email from N Yeates, 18-07-09.
- Machinery & Ship Data as per previous HF report 076jh389.
- Service speed and freight capacity as per HF Offer HF013/XT606.
- Vessel uses shore power in Penzance.
- Freight numbers are based upon 12600 Tonnes PA (N Yeates email, 30th July 2009) This has been averaged over the year.
- 3 Hours freight load/unload.
- Stevedoring charges excluded, mooring teams included.

Freshwater cost per MT	£6
Consumption per voyage	0.25

Principal Dimensions

LOA (m)	43.00
Draft (m)	2.90
Beam (m)	10.00
GRT	600.00

Aux Engine manufacturer / data

3 x CAT C18 [kW]	350 at 1500 rpm
Fuel cons (litres/hr)	84
Fuel cons (MT/hr)	0.075 per engine
Lub oil cons (g/kW/h)	0.500
Lub oil cons (Litre/hr)	0.175 per engine
Number of Engines operatin	1

	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
Service days / period	13	12	13	13	13	13	14	13	13	13	13	12	155
Single services scheduled	26	24	26	26	26	26	28	26	26	26	26	24	310
Services cancelled	0	0	0	0	0	0	0	0	0	0	0	0	0
Services budgeted	26	24	26	26	26	26	28	26	26	26	26	24	310
Ave crossing time (hrs)	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.28	
ME Operating Hours	85.28	78.72	85.28	85.28	85.28	85.28	91.84	85.28	85.28	85.28	85.28	78.72	1017
Geny Operating Hours	182	168	182	182	182	182	196	182	182	182	182	168	2170
FUEL COSTS													
Marine gas oil (MT)	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	
Ave cons in port /hr (MT)	0.07	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	
Ave cons at sea /hr (MT)	0.44	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	
Ave cons per voyage (MT)	1.45	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	
MDO costs per month	£21,189.03	£19,559.10	£21,189.03	£21,189.03	£21,189.03	£21,189.03	£22,818.95	£21,189.03	£21,189.03	£21,189.03	£21,189.03	£19,559.10	£252,638
LUB OIL COST													
Lub oil (MT)	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	
Ave cons in port /hr (litre)	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	
Ave cons at sea /hr (litre)	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	
Ave cons per voyage (litre)	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	
Lub oil costs per month	£197.60	£182.40	£197.60	£197.60	£197.60	£197.60	£212.80	£197.60	£197.60	£197.60	£197.60	£182.40	£2,356
CAPACITY													
Load factors assumed %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Passengers per crossing	0	0	0	0	0	0	0	0	0	0	0	0	
Total passengers carried	0	0	0	0	0	0	0	0	0	0	0	0	0
PORT DUES													
Ship dues (GRT 600)	£572	£572	£572	£572	£572	£572	£572	£572	£572	£572	£572	£572	£6,864
Passenger dues	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Freight Dues	£7,140	£7,140	£7,140	£7,140	£7,140	£7,140	£7,140	£7,140	£7,140	£7,140	£7,140	£7,140	£85,680
Pilot Exemption Certificate	£260	£240	£260	£260	£260	£260	£280	£260	£260	£260	£260	£240	£3,100
Quayside Facilities	£832	£768	£832	£832	£832	£832	£896	£832	£832	£832	£832	£768	£9,918
St Mary's Dues	£8,804	£8,720	£8,804	£8,804	£8,804	£8,804	£8,888	£8,804	£8,804	£8,804	£8,804	£8,720	£105,562
Ship dues (GRT 600)	£1,898	£1,898	£1,898	£1,898	£1,898	£1,898	£1,898	£1,898	£1,898	£1,898	£1,898	£1,898	£22,776
Passenger dues	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Freight Dues	£1,050	£1,050	£1,050	£1,050	£1,050	£1,050	£1,050	£1,050	£1,050	£1,050	£1,050	£1,050	£12,600
Water	£96.73	£89.29	£96.73	£96.73	£96.73	£96.73	£104.17	£96.73	£96.73	£96.73	£96.73	£89.29	£1,153
Waste Management	£154.76	£142.86	£154.76	£154.76	£154.76	£154.76	£166.67	£154.76	£154.76	£154.76	£154.76	£142.86	£1,845
Quayside Facilities	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0
Penzance Dues	£3,199	£3,180	£3,199	£3,199	£3,199	£3,199	£3,219	£3,199	£3,199	£3,199	£3,199	£3,180	£38,375
Total Dues	£12,003	£11,900	£12,003	£12,003	£12,003	£12,003	£12,107	£12,003	£12,003	£12,003	£12,003	£11,900	£143,937
OPERATING COSTS													
Mortgage repayment	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Crew / manning	£24,379	£24,379	£24,379	£24,379	£24,379	£24,379	£24,379	£24,379	£24,379	£24,379	£24,379	£24,379	£292,552
Surveys / certification	£867	£867	£867	£867	£867	£867	£867	£867	£867	£867	£867	£867	£10,400
Maint. / consumables	£763	£705	£763	£763	£763	£763	£822	£763	£763	£763	£763	£705	£9,100
Annual overhaul (Accrual)	£6,500	£6,500	£6,500	£6,500	£6,500	£6,500	£6,500	£6,500	£6,500	£6,500	£6,500	£6,500	£78,000
Insurance	£2,600	£2,600	£2,600	£2,600	£2,600	£2,600	£2,600	£2,600	£2,600	£2,600	£2,600	£2,600	£31,200
Management / Admin	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£234,000
Fuel oil	£21,189	£19,559	£21,189	£21,189	£21,189	£21,189	£22,819	£21,189	£21,189	£21,189	£21,189	£19,559	£252,638
Lubricant oil	£198	£182	£198	£198	£198	£198	£213	£198	£198	£198	£198	£182	£2,356
Shore power	£6,519	£5,846	£6,519	£6,241	£6,519	£6,241	£6,357	£6,519	£6,241	£6,519	£6,241	£6,682	£76,444
Total operating costs	£82,515	£80,138	£82,515	£82,237	£82,515	£82,237	£84,056	£82,515	£82,237	£82,515	£82,237	£80,974	£986,690
TOTAL OUTGOING	£94,518	£92,038	£94,518	£94,240	£94,518	£94,240	£96,163	£94,518	£94,240	£94,518	£94,240	£92,874	£1,130,627

KNOWN DATA AND ASSUMPTIONS

From N Yeates Email,30/07/09

Total Freight (tonnes) 12600

Port dues St Mary's

Passenger dues (per seat)		£1.10
Goods dues (MT)		£6.80
MT / month (£)	1050	£7,140.00
Ship dues (£/MT)		£0.22
GRT	600.00	£6,864.00
Pilot Exemption Certificate		£20.00
Quayside Facilities		£21,500.00

Port dues Penzance

Passenger dues (per seat)		£0.12
Goods dues (MT)		£1.00
MT / month (£)	1050	£1,050.00
Ship dues (£/MT)		£0.73
GRT	600.00	£22,776.00
Water		£2,500.00
Waste Management		£4,000.00
Quayside Facilities		£0.00

Assumed Ship's compliment**Permanent Staff**

Rank	No of	Salary	Cost
Master	1	£38,280	£38,280
1st Officer	1	£31,320	£31,320
Engineers	2	£31,320	£62,640
Deck ratings	4	£23,200	£92,800
		Crew salary costs	£225,040
Social costs	30%		£67,512
Total Crew costs per annum			£292,552

Fuel costs (MT)	£472
Lub oil cost (MT)	£1,667

General vessel type

Passenger Capacity	0
Deadweight (MT)	530
Service speed (knots)	12
Required Power (kW)	1600
Crossing time (hours)	3.28

Main Engine manufacturer / data

	7800
2 X CAT 3512B (kW)	861 at 1200 rpm per engine
Fuel cons (litres/hr)	206 at 85% MCR
Fuel cons (MT/hr)	0.183 per engine
Lub oil cons (g/kW/h)	0.800 at 85% MCR
Lub oil cons (Litre/hr)	0.585 per engine
Number of Engines operating	2.000
Fuel Relative Density	0.890
Lub Oil Relative Density	0.900

Sailing schedule (from 2009)

1 January to 31 December 3 crossings per week
No Sailings on Sundays

Distance

Penzance to St Mary's 38nm of which 1nm at restricted speed

Annual Maintenance

Maint. / consumables	£9,100
Surveys / certification	£10,400
Drydock / overhaul accrual	£78,000

Vessel maintenance is an accrual cost, considered over a 60 month cycle consummate with vessel certification.

Assume vessel to use shore power when in Penzance

Operating days assume geny run hours	14
Shore power unit price (kW/h)	£0.29
Power consumption (kW/hr)	40 £11.60

Annual administration costs

P&I insurance	£15,600
H&M insurance	£15,600
Management	£234,000

Finance

Vessel cost	£9,500,000
Capital financed	£0
Interest rate (per annum)	0.00%
Total repayment	£0
Fixed term (years)	1
Annual repayment	£0
Daily repayment	£0

Assumptions

- Single round trip per day.
- No inclusion for additional crew to cover leave, etc. has been made.
- Salaries of all ship staff increased by 3% pa (16% on 2004) from 2004.
- Fuel and LO costs correct July 2009, UK rates including duty.
- Annual maintenance costs have increased by 30%.
- Annual Administration costs have increase by 30%.
- Passenger dues & ship dues at St Mary's & Penzance are as per email from N Yeates, 18-07-09.
- Machinery & Ship Data as per previous HF report 076jh389.
- Service speed and freight capacity as per HF Offer HF013/XT606.
- Vessel uses shore power in Penzance.
- Freight numbers are based upon 12600 Tonnes PA (N Yeates email, 30th July 2009) This has been averaged over the year.
- 3 Hours freight load/unload.
- Stevedoring charges excluded, mooring teams included.

Principal Dimensions

LOA (m)	43.00
Draft (m)	2.90
Beam (m)	10.00
GRT	600.00

Aux Engine manufacturer / data

3 x CAT C18 [kW]	350 at 1500 rpm
Fuel cons (litres/hr)	84
Fuel cons (MT/hr)	0.075 per engine
Lub oil cons (g/kW/h)	0.500
Lub oil cons (Litre/hr)	0.175 per engine
Number of Engines operatin	1

	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
Service days / period	13	12	13	13	13	13	14	13	13	13	13	12	155
Single services scheduled	26	24	26	26	26	26	28	26	26	26	26	24	310
Services cancelled	0	0	0	0	0	0	0	0	0	0	0	0	0
Services budgeted	26	24	26	26	26	26	28	26	26	26	26	24	310
Ave crossing time (hrs)	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.28	
ME Operating Hours	85.28	78.72	85.28	85.28	85.28	85.28	91.84	85.28	85.28	85.28	85.28	78.72	1017
Geny Operating Hours	182	168	182	182	182	182	196	182	182	182	182	168	2170
FUEL COSTS													
Marine gas oil (MT)	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	
Ave cons in port /hr (MT)	0.07	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	
Ave cons at sea /hr (MT)	0.44	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	
Ave cons per voyage (MT)	1.45	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	
MDO costs per month	£21,189.03	£19,559.10	£21,189.03	£21,189.03	£21,189.03	£21,189.03	£22,818.95	£21,189.03	£21,189.03	£21,189.03	£21,189.03	£19,559.10	£252,638
LUB OIL COST													
Lub oil (MT)	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	
Ave cons in port /hr (litre)	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	
Ave cons at sea /hr (litre)	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	
Ave cons per voyage (litre)	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	
Lub oil costs per month	£197.60	£182.40	£197.60	£197.60	£197.60	£197.60	£212.80	£197.60	£197.60	£197.60	£197.60	£182.40	£2,356
CAPACITY													
Load factors assumed %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Passengers per crossing	0	0	0	0	0	0	0	0	0	0	0	0	
Total passengers carried	0	0	0	0	0	0	0	0	0	0	0	0	0
PORT DUES													
Ship dues (GRT 600)	£572	£572	£572	£572	£572	£572	£572	£572	£572	£572	£572	£572	£6,864
Passenger dues	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Freight Dues	£7,140	£7,140	£7,140	£7,140	£7,140	£7,140	£7,140	£7,140	£7,140	£7,140	£7,140	£7,140	£85,680
Pilot Exemption Certificate	£260	£240	£260	£260	£260	£260	£280	£260	£260	£260	£260	£240	£3,100
Quayside Facilities	£832	£768	£832	£832	£832	£832	£896	£832	£832	£832	£832	£768	£9,918
St Mary's Dues	£8,804	£8,720	£8,804	£8,804	£8,804	£8,804	£8,888	£8,804	£8,804	£8,804	£8,804	£8,720	£105,562
Ship dues (GRT 600)	£1,898	£1,898	£1,898	£1,898	£1,898	£1,898	£1,898	£1,898	£1,898	£1,898	£1,898	£1,898	£22,776
Passenger dues	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Freight Dues	£1,050	£1,050	£1,050	£1,050	£1,050	£1,050	£1,050	£1,050	£1,050	£1,050	£1,050	£1,050	£12,600
Water	£96.73	£89.29	£96.73	£96.73	£96.73	£96.73	£104.17	£96.73	£96.73	£96.73	£96.73	£89.29	£1,153
Waste Management	£154.76	£142.86	£154.76	£154.76	£154.76	£154.76	£166.67	£154.76	£154.76	£154.76	£154.76	£142.86	£1,845
Quayside Facilities	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0.00	£0
Penzance Dues	£3,199	£3,180	£3,199	£3,199	£3,199	£3,199	£3,219	£3,199	£3,199	£3,199	£3,199	£3,180	£38,375
Total Dues	£12,003	£11,900	£12,003	£12,003	£12,003	£12,003	£12,107	£12,003	£12,003	£12,003	£12,003	£11,900	£143,937
OPERATING COSTS													
Mortgage repayment	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Crew / manning	£24,379	£24,379	£24,379	£24,379	£24,379	£24,379	£24,379	£24,379	£24,379	£24,379	£24,379	£24,379	£292,552
Surveys / certification	£867	£867	£867	£867	£867	£867	£867	£867	£867	£867	£867	£867	£10,400
Maint. / consumables	£763	£705	£763	£763	£763	£763	£822	£763	£763	£763	£763	£705	£9,100
Annual overhaul (Accrual)	£6,500	£6,500	£6,500	£6,500	£6,500	£6,500	£6,500	£6,500	£6,500	£6,500	£6,500	£6,500	£78,000
Insurance	£2,600	£2,600	£2,600	£2,600	£2,600	£2,600	£2,600	£2,600	£2,600	£2,600	£2,600	£2,600	£31,200
Management / Admin	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£234,000
Fuel oil	£21,189	£19,559	£21,189	£21,189	£21,189	£21,189	£22,819	£21,189	£21,189	£21,189	£21,189	£19,559	£252,638
Lubricant oil	£198	£182	£198	£198	£198	£198	£213	£198	£198	£198	£198	£182	£2,356
Shore power	£6,519	£5,846	£6,519	£6,241	£6,519	£6,241	£6,357	£6,519	£6,241	£6,519	£6,241	£6,682	£76,444
Total operating costs	£82,515	£80,138	£82,515	£82,237	£82,515	£82,237	£84,056	£82,515	£82,237	£82,515	£82,237	£80,974	£986,690
TOTAL OUTGOING	£94,518	£92,038	£94,518	£94,240	£94,518	£94,240	£96,163	£94,518	£94,240	£94,518	£94,240	£92,874	£1,130,627

KNOWN DATA AND ASSUMPTIONS

		HF Averaged
From N Yeates Email, 02/07/09	2008	2009
Scillonian pax	82798	88471

Port dues St Mary's

Passenger dues (per seat)		£1.10
Goods dues (MT)		£6.80
MT / month (£)	0	£0.00
Ship dues (£/MT)		£0.22
GRT (MT)	1010.00	£7,702.93
Pilot Exemption		£20.00
Quayside Facilities		£21,500.00
Port dues Penzance		£107,000
Passenger dues (per seat)		£0.12
Goods dues (MT)		£1.00
MT / month (£)	0	£0.00
Ship dues (£/MT)		£0.73
GRT	1010.00	£38,339.60
Water		£2,500.00
Waste Management		£4,000.00
Quayside Facilities		£0.00

Assumed Ship's compliment**Permanent Staff**

Rank	No of	Salary	Cost
Master	1	£44,080	£44,080
1st Officer	3	£38,280	£114,840
Chief Engineer	1	£40,600	£40,600
2nd Engineer	2	£31,320	£62,640
Bosun	1	£25,520	£25,520
Cook	1	£23,200	£23,200
		Total permanent	£310,880

Fuel costs (MT)	£472
Lub oil cost (MT)	£1,667

General vessel type

Passenger Capacity	367
Deadweight (MT)	63.5 Approx
Service speed (knots)	27
Required Power (kW)	5040
Crossing time (hours)	1.57

Main Engine manufacturer / data

2 X Textron Lycoming TF 40	2570 at 15400 rpm per engine
Fuel cons (g/kW/h)	299
Fuel cons (MT/hr)	0.768 per engine
Lub oil cons (g/kW/h)	0.500
Lub oil cons (Litre/hr)	1.092 per engine
No Engines	2.000
Fuel Relative Density	0.890
Lub Oil Relative Density	0.900

Tank Capacity	14.320 Tonnes
Voyages between Fills	0.421

Sailing schedule (from 2009)

21 March to 30 October 1 return crossing per day
No Sailings on Sundays

Distance

Penzance to St Mary's 38nm of which 1nm at restricted speed

Annual Maintenance

Maint. / consumables	£15,600
Surveys / certification	£15,600
Drydock / overhaul accrual	£124,800

Vessel maintenance is an accrual cost, considered over a 12 month cycle consummate with vessel certification.

Assume vessel to use shore power when in Penzance
Operating days assume geny run hours 14
Shore power unit price (kW/h) £0.29
Power consumption (kW/hr) 40 £11.60

Temporary Staff April to October

	No of	Salary	Cost
Cabin service	4	£23,200	£61,248
Deck ratings	3	£23,200	£45,936
Motorman	2	£23,200	£30,624
		Total temporary	£137,808
Crew salary costs			£448,688
Social costs 30%			£134,606
Total Crew costs per annum			£583,294

Freshwater cost per MT	£6
Consumption per voyage	1

Principal Dimensions

LOA (m)	37.52
Draft (m)	3.50
Beam (m)	18.07
GRT	1010.00

Aux Engine manufacturer / data

2 x CAT 3306B TA 165kW	350 at 1500 rpm
Fuel cons (litres/hr)	70
Fuel cons (MT/hr)	0.062 per engine
Lub oil cons (g/kW/h)	1.000
Lub oil cons (Litre/hr)	0.35 per engine
No Engines	2
Oil Change every 250hrs (38l)	

Annual administration costs

P&I insurance	£23,400
H&M insurance	£23,400
Management	£234,000

Finance

Vessel cost	£7,000,000
Capital financed	£0
Interest rate (per annum)	3.00%
Total repayment	£0
Fixed term (years)	20
Annual repayment	£0
Daily repayment	£0

Assumptions

- One round trip per day, 6 days a week. 46% Cancellation rate.
- No inclusion for additional crew to cover leave, etc. has been made.
- Salaries of all ship staff increased by 3% pa (16% on 2004) from 2004.
- Fuel and LO costs correct July 2009, UK rates including duty.
- Annual maintenance costs have increased by 30%.
- Annual Administration costs have increase by 30%.
- Passenger dues & ship dues at St Mary's & Penzance are as per email from N Yeates, 18-07-09.
- Service speed and capacity as per HF Offer HF013/XT606.
- Vessel uses shore power in Penzance.
- GRT from Fast Ferry Article
- Machinery Details from Fast Ferry/Vericor Website
- Half hour pax embarkation/disembarkation.
- Stevedoring charges excluded, mooring teams included.
- Passenger numbers assumed to be full on all trips to accomodate maximum number of passengers (as close to historical data on passengers carried as possible).

	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
Service days / period	0	0	9	26	26	26	27	26	26	26	0	0	192
Additional services	0	0	0	0	0	0	0	0	0	0	0	0	0
Single services scheduled	0	0	18	52	52	52	54	52	52	52	0	0	384
Services cancelled	0	0	8	24	24	24	25	24	24	24	0	0	177
Services budgeted	0	0	10	28	28	28	29	28	28	28	0	0	207
Ave crossing time (hrs)	0.00	0.00	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	0.00	0.00	
ME Operating Hours	0.00	0.00	15.70	43.96	43.96	43.96	45.53	43.96	43.96	43.96	0.00	0.00	325
Geny Operating Hours	0	0	126	364	364	364	378	364	364	364	0	0	2688
FUEL COSTS													
Marine gas oil (MT)	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	
Ave cons in port /hr (MT)	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	
Ave cons at sea /hr (MT)	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	
Ave cons per voyage (MT)	0.00	0.00	34.01	93.32	93.32	93.32	96.81	93.32	93.32	93.32	0.00	0.00	
MDO costs per month	£0.00	£0.00	£18,805.33	£53,313.84	£53,313.84	£53,313.84	£55,276.73	£53,313.84	£53,313.84	£53,313.84	£0.00	£0.00	£393,965
LUB OIL COST													
Lub oil (MT)	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	
Ave cons in port /hr (litre)	0.70	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	0.70	0.70	
Ave cons at sea /hr (litre)	2.88	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23	2.88	2.88	
Ave cons per voyage (litre)	0.70	1.05	6.13	6.13	6.13	6.13	6.13	6.13	6.13	6.13	0.70	0.70	
Lub oil costs per month	£0.00	£0.00	£183.78	£526.35	£526.35	£526.35	£546.20	£526.35	£526.35	£526.35	£0.00	£0.00	£3,888
CAPACITY													
Load factors assumed %	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	0%	0%	
Passengers per crossing	0	0	367	367	367	367	367	367	367	367	0	0	
Total passengers carried	0	0	3,670	10,276	10,276	10,276	10,643	10,276	10,276	10,276	0	0	75,969
PORT DUES													
Ship dues (GRT 1010)	£0	£0	£963	£963	£963	£963	£963	£963	£963	£963			£7,703
Passenger dues	£0	£0	£4,037	£5,652	£5,652	£5,652	£5,854	£5,652	£5,652	£5,652	£0	£0	£43,801
Goods dues	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Pilot Exemption Certificate	£0	£0	£100	£280	£280	£280	£290	£280	£280	£280	£0	£0	£2,070
Quayside Facilities	£0	£0	£558	£1,611	£1,611	£1,611	£1,673	£1,611	£1,611	£1,611	£0	£0	£11,896
St Mary's Dues	£0	£0	£5,658	£8,506	£8,506	£8,506	£8,779	£8,506	£8,506	£8,506	£0	£0	£65,471
Ship dues (GRT 1010)	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£38,340
Passenger dues	£0	£0	£881	£2,466	£2,466	£2,466	£2,554	£2,466	£2,466	£2,466	£0	£0	£18,233
Freight Dues	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Water	£0	£0	£65	£187	£187	£187	£195	£187	£187	£187	£0	£0	£1,383
Waste Management	£0	£0	£104	£300	£300	£300	£311	£300	£300	£300	£0	£0	£2,213
Quayside Facilities	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Penzance Dues	£3,195	£3,195	£4,244	£6,148	£6,148	£6,148	£6,255	£6,148	£6,148	£6,148	£3,195	£3,195	£60,169
Total Dues	£3,195	£3,195	£9,902	£14,654	£14,654	£14,654	£15,034	£14,654	£14,654	£14,654	£3,195	£3,195	£125,639
OPERATING COSTS													
Mortgage repayment	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Crew / manning	£33,679	£33,679	£56,072	£56,072	£56,072	£56,072	£56,072	£56,072	£56,072	£56,072	£33,679	£33,679	£583,294
Surveys / certification	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£15,600
Maint. / consumables	£0	£0	£731	£2,113	£2,113	£2,113	£2,194	£2,113	£2,113	£2,113	£0	£0	£15,600
Annual overhaul (Accrual)	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£124,800
Insurance	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£46,800
Management / Admin	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£234,000
Fuel oil	£0	£0	£18,805	£53,314	£53,314	£53,314	£55,277	£53,314	£53,314	£53,314	£0	£0	£393,965
Lubricant oil	£0	£0	£184	£526	£526	£526	£546	£526	£526	£526	£0	£0	£3,888
Shore power	£8,630	£7,795	£7,169	£4,130	£4,408	£4,130	£4,246	£4,408	£4,130	£4,408	£8,352	£8,630	£70,435
Total operating costs	£77,409	£76,574	£118,062	£151,255	£151,533	£151,255	£153,435	£151,533	£151,255	£151,533	£77,131	£77,409	£1,488,383
TOTAL OUTGOING	£80,604	£79,769	£127,963	£165,909	£166,187	£165,909	£168,469	£166,187	£165,909	£166,187	£80,326	£80,604	£1,614,022

KNOWN DATA AND ASSUMPTIONS

		HF Averaged	
From N Yeates Email, 02/07/09	2008	2009	
Scillonian pax	82798	88471	

Port dues St Mary's

Passenger dues (per seat)		£1.10
Goods dues (MT)		£6.80
MT / month (£)	0	£0.00
Ship dues (£/MT)		£0.22
GRT (MT)	1010.00	£7,702.93
Pilot Exemption		£20.00
Quayside Facilities		£21,500.00
Port dues Penzance		£107,000
Passenger dues (per seat)		£0.12
Goods dues (MT)		£1.00
MT / month (£)	0	£0.00
Ship dues (£/MT)		£0.73
GRT	1010.00	£38,339.60
Water		£2,500.00
Waste Management		£4,000.00
Quayside Facilities		£0.00

Assumed Ship's compliment**Permanent Staff**

Rank	No of	Salary	Cost
Master	1	£44,080	£44,080
1st Officer	3	£38,280	£114,840
Chief Engineer	1	£40,600	£40,600
2nd Engineer	2	£31,320	£62,640
Bosun	1	£25,520	£25,520
Cook	1	£23,200	£23,200
		Total permanent	£310,880

Fuel costs (MT)	£472
Lub oil cost (MT)	£1,667

General vessel type

Passenger Capacity	367
Deadweight (MT)	63.5 Approx
Service speed (knots)	27
Required Power (kW)	5040
Crossing time (hours)	1.57

Main Engine manufacturer / data

2 X Textron Lycoming TF 40	2570 at 15400 rpm per engine
Fuel cons (g/kW/h)	299
Fuel cons (MT/hr)	0.768 per engine
Lub oil cons (g/kW/h)	0.500
Lub oil cons (Litre/hr)	1.092 per engine
No Engines	2.000
Fuel Relative Density	0.890
Lub Oil Relative Density	0.900

Tank Capacity	14.320 Tonnes
Voyages between Fills	0.421

Sailing schedule (from 2009)

21 March to 30 October 1 return crossing per day
No Sailings on Sundays

Distance

Penzance to St Mary's 38nm of which 1nm at restricted speed

Annual Maintenance

Maint. / consumables	£15,600
Surveys / certification	£15,600
Drydock / overhaul accrual	£124,800

Vessel maintenance is an accrual cost, considered over

a 12 month cycle consummate with vessel certification.

Temporary Staff April to October

	No of	Salary	Cost
Cabin service	4	£23,200	£61,248
Deck ratings	3	£23,200	£45,936
Motorman	2	£23,200	£30,624
		Total temporary	£137,808
Crew salary costs			£448,688
Social costs 30%			£134,606
Total Crew costs per annum			£583,294

Freshwater cost per MT	£6
Consumption per voyage	1

Principal Dimensions

LOA (m)	37.52
Draft (m)	3.50
Beam (m)	18.07
GRT	1010.00

Aux Engine manufacturer / data

2 x CAT 3306B TA 165kW	350 at 1500 rpm
Fuel cons (litres/hr)	70
Fuel cons (MT/hr)	0.062 per engine
Lub oil cons (g/kW/h)	1.000
Lub oil cons (Litre/hr)	0.35 per engine
No Engines	2
Oil Change every 250hrs (38l)	

Annual administration costs

P&I insurance	£23,400
H&M insurance	£23,400
Management	£234,000

Finance

Vessel cost	£7,000,000
Capital financed	£0
Interest rate (per annum)	3.00%
Total repayment	£0
Fixed term (years)	20
Annual repayment	£0
Daily repayment	£0

Assume vessel to use shore power when in Penzance

Operating days assume geny run hours	14
Shore power unit price (kW/h)	£0.29
Power consumption (kW/hr)	40 £11.60

Assumptions

- One round trip per day, 6 days a week. 0% Cancellation rate.
- No inclusion for additional crew to cover leave, etc. has been made.
- Salaries of all ship staff increased by 3% pa (16% on 2004) from 2004.
- Fuel and LO costs correct July 2009, UK rates including duty.
- Annual maintenance costs have increased by 30%.
- Annual Administration costs have increase by 30%.
- Passenger dues & ship dues at St Mary's & Penzance are as per email from N Yeates, 18-07-09.
- Service speed and capacity as per HF Offer HF013/XT606.
- Vessel uses shore power in Penzance.
- GRT from Fast Ferry Article
- Machinery Details from Fast Ferry/Vericor Website
- Half hour pax embarkation/disembarkation.
- Stevedoring charges excluded, mooring teams included.
- The passenger numbers have been 'profiled' to match as closely as possible the known data on passenger numbers.

	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
Service days / period	0	0	9	26	26	26	27	26	26	26	0	0	192
Additional services	0	0	0	0	0	0	0	0	0	0	0	0	0
Single services scheduled	0	0	18	52	52	52	54	52	52	52	0	0	384
Services cancelled	0	0	0	0	0	0	0	0	0	0	0	0	0
Services budgeted	0	0	18	52	52	52	54	52	52	52	0	0	384
Ave crossing time (hrs)	0.00	0.00	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	0.00	0.00	
ME Operating Hours	0.00	0.00	28.26	81.64	81.64	81.64	84.78	81.64	81.64	81.64	0.00	0.00	603
Geny Operating Hours	0	0	126	364	364	364	378	364	364	364	0	0	2688
FUEL COSTS													
Marine gas oil (MT)	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	£472	
Ave cons in port /hr (MT)	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	
Ave cons at sea /hr (MT)	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	
Ave cons per voyage (MT)	0.00	0.00	34.01	93.32	93.32	93.32	96.81	93.32	93.32	93.32	0.00	0.00	
MDO costs per month	£0.00	£0.00	£27,919.42	£80,656.09	£80,656.09	£80,656.09	£83,758.25	£80,656.09	£80,656.09	£80,656.09	£0.00	£0.00	£595,614
LUB OIL COST													
Lub oil (MT)	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	£1,667	
Ave cons in port /hr (litre)	0.70	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	0.70	0.70	
Ave cons at sea /hr (litre)	2.88	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23	3.23	2.88	2.88	
Ave cons per voyage (litre)	0.70	1.05	6.13	6.13	6.13	6.13	6.13	6.13	6.13	6.13	0.70	0.70	
Lub oil costs per month	£0.00	£0.00	£224.95	£649.84	£649.84	£649.84	£674.84	£649.84	£649.84	£649.84	£0.00	£0.00	£4,799
CAPACITY													
Load factors assumed %	0%	0%	14%	42%	69%	78%	89%	100%	54%	23%	0%	0%	
Passengers per crossing	0	0	52	155	255	285	325	367	200	85	0	0	
Total passengers carried	0	0	936	8,060	13,260	14,820	17,550	19,084	10,400	4,420	0	0	88,530
PORT DUES													
Ship dues (GRT 1010)	£0	£0	£963	£963	£963	£963	£963	£963	£963	£963	£0	£0	£7,703
Passenger dues	£0	£0	£1,030	£4,433	£7,293	£8,151	£9,653	£10,496	£5,720	£2,431	£0	£0	£49,206
Goods dues	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Pilot Exemption Certificate	£0	£0	£180	£520	£520	£520	£540	£520	£520	£520	£0	£0	£3,840
Quayside Facilities	£0	£0	£558	£1,611	£1,611	£1,611	£1,673	£1,611	£1,611	£1,611	£0	£0	£11,896
St Mary's Dues	£0	£0	£2,730	£7,527	£10,387	£11,245	£12,828	£13,590	£8,814	£5,525	£0	£0	£72,645
Ship dues (GRT 1010)	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£3,195	£38,340
Passenger dues	£0	£0	£225	£1,934	£3,182	£3,557	£4,212	£4,580	£2,496	£1,061	£0	£0	£21,247
Freight Dues	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Water	£0	£0	£65	£187	£187	£187	£195	£187	£187	£187	£0	£0	£1,383
Waste Management	£0	£0	£104	£300	£300	£300	£311	£300	£300	£300	£0	£0	£2,213
Quayside Facilities	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Penzance Dues	£3,195	£3,195	£3,588	£5,616	£6,864	£7,239	£7,913	£8,262	£6,178	£4,743	£3,195	£3,195	£63,183
Total Dues	£3,195	£3,195	£6,318	£13,143	£17,251	£18,484	£20,741	£21,852	£14,992	£10,268	£3,195	£3,195	£135,829
OPERATING COSTS													
Mortgage repayment	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0	£0
Crew / manning	£33,679	£33,679	£56,072	£56,072	£56,072	£56,072	£56,072	£56,072	£56,072	£56,072	£33,679	£33,679	£583,294
Surveys / certification	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£1,300	£15,600
Maint. / consumables	£0	£0	£731	£2,113	£2,113	£2,113	£2,194	£2,113	£2,113	£2,113	£0	£0	£15,600
Annual overhaul (Accrual)	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£10,400	£124,800
Insurance	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£3,900	£46,800
Management / Admin	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£19,500	£234,000
Fuel oil	£0	£0	£27,919	£80,656	£80,656	£80,656	£83,758	£80,656	£80,656	£80,656	£0	£0	£595,614
Lubricant oil	£0	£0	£225	£650	£650	£650	£675	£650	£650	£650	£0	£0	£4,799
Shore power	£8,630	£7,795	£7,169	£4,130	£4,408	£4,130	£4,246	£4,408	£4,130	£4,408	£8,352	£8,630	£70,435
Total operating costs	£77,409	£76,574	£127,217	£178,721	£178,999	£178,721	£182,045	£178,999	£178,721	£178,999	£77,131	£77,409	£1,690,943
TOTAL OUTGOING	£80,604	£79,769	£133,535	£191,864	£196,250	£197,204	£202,786	£200,851	£193,712	£189,267	£80,326	£80,604	£1,826,772