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MONTSERRAT
PORT PRICING ANALYSIS

Prepared

by

Carl H. Plumlee

Regional Adviser in Ports and Harbours

# Montserrat Port Pricing Analysis

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Review of Existing Schedules of Port Charges at Montserrat and Recommended Revisions

#### INTRODUCTION

His Excellency, the Governor of Montserrat, by letter dated 1 May 1973, accepted the offer of the United Nations Development Programme Regional Representative (UNDP Rep.) to furnish the services of Advisers on Shipping and Ports and he indicated a need for an independent assessment of Montserrat's scale of harbour charges including the charges made for the use of port equipment. The UNDP Representative arranged for the assignment of the UN Regional Adviser in Ports and Harbours to render the desired assistance.

## TERMS OF REFERENCE

The Financial Secretary and the Chief Minister, at the outset of this study, discussed the Government's present policy with respect to the collection of revenue from seaport operations. It was indicated that the Government desires that the schedule of port charges should be such as to produce revenue equal to the cost of services supplied, including all elements of cost: capital costs; costs of operation and maintenance; and general overhead costs. It was made clear that Montserrat's present policy is that the seaport should be financially self-supporting, neither producing revenue greater than all costs nor operating at less than total cost.

Aside from the principle that the port operation should be self-supporting, the hope was expressed that a new schedule of port charges could be adopted that would simplify the administrative procedure for assessing and collecting appropriate charges. It was also indicated that in drafting new schedules of port charges it should be anticipated that the future administration of seaport operations would be independent of the administration of Customs functions, either through the inauguration of a semi-autonomous Port Authority or by means

of a Port Department of Government operating independent of the Customs Department.

The following terms of reference for the study of the schedules of port charges were deduced from the initial meeting with the Chief Minister and the Financial Secretary:

- (1) The study should be made in two phases:
  - (a) The first phase, a review of existing schedules of port charges and a recommendation for immediate revisions, if warranted by a consideration of existing conditions; and
  - (b) The second phase, a review of conditions that may exist upon completion of anticipated new port facilities, and the recommendation of suitable tariffs.

The second phase should be performed as soon as the capital investment costs for new port facilities become reasonably certain.

- (2) The study should be made on the assumption that it is Government's policy to adopt schedules of port charges that will recapture all of the direct and indirect costs of port operations, including the costs of servicing loans and of amortizing the cost of equipment and structures.
- (3) The second phase of the study should be made on the assumption that the future operation of the port and the administration of it will be completely separate from the Customs function.

#### Existing Schedules of Charges

Review of the existing port charges, in conference with the Harbour Master, who is also Collector of Customs, indicated that there has not been published any document known as the "Port Tariff"

nor any aggregation of documents known as "Harbour Rules and Regulations". There are various ordinances and regulations that provide the bases for assessing charges related to ocean shipments of cargo to and from Montserrat. The official source of most of the various port charges is "The Revised Laws of Montserrat prepared under the Authority of the Revised Edition of the Laws Ordioance, 1959". These and other sources are briefed in the following sub-paragraphs under five functional categories:

## (1) <u>Harbour Charges</u>

Chapter 237, Port, Dues, of the aforestated source document, dates from 17th January 1950. It is an ordinance that provides a schedule of charges to be paid by masters of vessels to the Comptroller in the case of all vessels of 25 tons and upward upon entering the Colony excepts any vessels belonging to the Royal Yacht Squadron; any pleasure craft which the Comptroller is satisfied has not entered the Colony for the purpose of trade or commerce; any vessel when plying coastwise. (Coastwise is bealieved to mean between ports of the Colony.)

#### Schedule

Size	<u>of Vessel</u>	Amount of Dues
(a)	from 25 tons up to 30 tons	\$0.72
(b)	30 tons up to 50 tons	1.00
(c)	50 tons up to 100 tons	2.00
(d)	100 tons up to 150 tons	4.00
(e)	150 tons up to 500 tons	8.00
(f)	500 tons up to 2,000 tons	9.00
(g)	over 2,000 tons	10,00

Chapter 242, Tonnage Duties, of the aforestated source document dates from 7th November 1939. This ordinance provides that \$0.18 per ton shall be collected on all cargo landed from or taken on board any vessel entering at or clearing from any port or place in the Colony, to be computed on weight or measurement of the goods forming such cargo in the manner provided in the Schedule: Provided that in all cases of vessels over 30 tons registered burden, a tonnage duty computed at the rate of \$0.24 per ton on the registered tonnage as shown in the certificate of registry may be paid in lieu of the foregoing rate on cargo landed from or taken on board such vessels; Provided further that in all cases of 30 tons registered

burden or under, the tonnage duty payable in respect thereof shall be computed at the rate of \$0.24 per ton on the registered tonnage of such vessels as shown in the certificate of registry and shall be paid once in each and every year on the first arrival and entry or the first outward clearance of such vessel.

Duty is paid by the ship Master or the Agent to the Comptroller before clearance is granted when paid by Ships Master, or within 48 hours after departure when paid by ship's Agent.

No duty is payable on vessels arriving in ballast only, or when carrying salt only, or on ships landing passengers and personal effects and small packages only; or on vessels not breaking bulk by disposing of any part of their cargo or taking on board any cargo; or on any cargo transhipped from one vessel to another for transfer to any place outside the Colony. Also, no duty is payable on cargoes of fruit or vegetables: empty packages imported for exportation of produce: cargoes or stores landed by vessels in distress for purpose of repairing or refitting and landing the whole or any part of their cargo or stores, provided that such cargo or stores are exported within three months after arrival of the vessel: and on any article intended for repairing or refitting of any vessel in distress, on production of certificates from the Master of the vessel that the articles in question are intended solely for repair or refitting of each vessel. (The ordinance contains other provisions including authority for the Comptroller to detain a vessel, demand shipping documents, etc.)

# (2) Wharf Charges

Chapter 149, Piers and Wharves, of the aforestated source document, contains the rules for the use of the pier of wharf and in particular it stipulates the charges to be made for the passage of cargo over the wharf. Originally dated 14th April 1906, it has been revised at different times, 1936, 1937, 1941, 1945 and most recently in 1965. The current schedule of Wharfage Charges, established in 1965, is as follows:

for Pitch Pine Lumber	\$0,24 per 1,000 board feet
for Hardwood	0.48 ** 1,000 **
for Cedar and other lumber	0.20 4 $1.000$
for all other cargo either	0.01 per cubic foot or
	0.03 per hundred pounds.

## (3) Equipment Clarge:

Minute TH/69, dated 11 February 1969, authorizes the following charges for the use of government—owned equipment engaged in the handling of cargo.

## Crave Service

When handling cargo between boats and jetty:

Between	hours 7 a.m. to 6 p.m.	\$2.30 per hr.
Be tween	6 p.m. to 7 a.m.	3.00 per ht.

(The minimum charge for any job is \$5.00)

When handling cargo onto consiguee's vehicles:

Duration	οť	job	up to $\frac{1}{2}$ hour	\$10.00
Duration	o f	job	$\frac{1}{2}$ hour up to one hour	20.00
Duration	o f	job	all day	50,00

### Service of Cargo Trailers

Between	hours	7 a	, m.	to	4	p.m.		per load	trailer
Between	hours	7 p	. m .	to	mi	dnight	0.75	18	I, h
Between	hours	míd	nigh	t t	o	7 a.m.	0,90	ii u	+9

Both crane and trailer rentals produced \$11,199 from 1 January to 30 June 1973, representing an increase of about 300% increase over like period of recent prior years.

## (4) Administrative Services

Chapter 143, Harbour Master, of the aforestated source document, dates from 6th March 1969. It is an ordinance that provides the rules governing the Harbour Master's functions. It sets forth the schedule of charges that may be assessed: For boarding a vessel upon arrival during hours 6 a.m. to 6 p.m. on any week-day - no charge. At other times the following rates per vessel may be charged for an Officer or a Boatman:

Period of Boarding Vessel	Officer	Boatwan
Between 6 a.m. and 6 p.m.		
Sunday or Holiday	\$1.68	<b>\$0.72</b>
Between 6 p.m. and 9 p.m. any day	1.68	0.72
Between 9 p.m. and midnight	2.40	1.20
Between midnight and 6 a.m.	2.88	1.92

For issuing bills of health the Harbour Master may charge

a	Ship	uf 50	tons or more	\$0.96 or
a	Ship	under	50 tous	0.48

except no fee shall be paid by a ship of less than 25 nons burden registered in Moutscreat, and excepting all vessels of Her Majesty's Navy or of any foreign Navy, or of any private yacht.

Chapter 146, Merchant Shipping (Agreements) Act dated January 20, 1941, of the aforestated source document, provides that the fees shall be paid to the "Shipping Master" for the engagements or discharge of (ships) Crev at various amounts for various sizes of ships as follows:

Ships under 60 tons	<b>\$0.96</b>
Ships 60 to 100 tons	1.68
Ships 100 to 200 tons	3.60
Ships 200 to 300 tons	4.80
Ships 300 to 400 tons	6,00
Ships 400 to 500 tons	7,20
Ships 500 to 600 tons	8.40
Ships 600 to 700 tons	10.80
Ships 800 to 900 tons	12.00
Ships 900 to 1,000 tons	13.20
Ships over 1,000 tons	14,40
Engagement of seamen separate	ly (see details of the law)
Discharge of seamen separately	y 0,48
Endorsing Master on register o	over
10 tons	0 • 48
Endorsing Master on register o	under
10 tons	0 。 2 4

## (5) Cargo Storage Charges

Chapter 239, Tariff Collection, of the aforestated source document dates from 10th April 1893, although there have been various revisions. This ordinance includes the Statutory Rules and Orders, 1970, No.3 (dated 5 August 1970) which establish the scale of charges for storage of cargo in the Government Warehouse, and the rules for measuring cargo and converting measurements to weight for purpose of the rent schedule.

Scale of Charges: All goods entered to be warehoused in the Government Warehouse and actually warehoused therein shall on the expiration of seven days be charged with a rent of ten cents per cubic foot for the first 14 days or part thereof, and thereafter fifteen cents per cubic foot per month or part thereof.

#### Measurement for Rent

- (a) linear measurements shall be taken to nearest foot:
- (b) one hondred paueds shall be taken to be equivalent to one and a hall cubic foot:
- (c) where goods of like kind and forming part of one consignment are stacked together or in packages of equal size the rent shall be assessed on the cubic capacity of the stack.

## EFFECT OF EXISTING PORT CHARGES

Revenue: The Montserrat Approved Estimates of Revenue and Expenditure, 1973, give the various revenues from pert charges as follows:

```
      Jetty Tonnage & Harbour Dues
      $14,006
      (functions 1&2 ρp. 3-5)

      Use of Port Equipment
      10,131
      (function 3, p.5)

      Customs Officer & Harbour Dues
      10,000
      (function 4, pp. 5-6)

      Warehouse Rent
      17,450
      (function 5, pp. 6-7)

      $51,587
```

The approved estimate of revenue from these sources was \$52,500 for 1972 and \$53,000 for 1973.

Expense: The Approved Estimates of Revenue and Expenditure 1973, also list expenses, although not explicitly linked to the revenues produced by the various schedules of port charges. The expenses listed as Customs and Excise, Vote 16, (page 62 of the Estimates) apparently embrace the port operations and the customs administration functions without distinction. A judgement has been made as to what part of the whole expense should be allocated to the Port function, relying mainly upon the advice of the Harbour Master/Customs Computable. The aggregation of part costs from total Customs and Port Costs is presented in Table 1.

TABLE 1

		1973 Esti- mates	Percent Allow cated to	1975 Esta- matas
	ITEMS		Port Function	for Port Function
Personal Emoly	omen (;			
(1) Comptre	oller	\$9,720	うら尾	<b>\$</b> 3,400
(2) Senior	Customs Officers	10,200	40%	5,080
(7) Custom	s Officers	20,160	00%	12 096
	s Clerks	7,200	50%	5,600
(2) Junior	Clerks	4,430	0	22
(1) Driver	Attendans	2,855	Ü	
(2) Custom	s Guards	4,500	10%	450
0verti:	ne Fees	11,000	75%	8,250
Cashiei	rs Allowance	120	0	;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
Sub-to	tal Personal	"materillation (clic — <u>regionary</u> beloned have already on artiferga <sub>n</sub> ing y <sub>e</sub> , with	and an analysis of the second	anne ann an Aireann ann an Aireann an Airean
emo la	iments	70,165	45.4%	31,878
Other Costs				
	d Warehouse Expenses Drawbacks of	1,700	40%	680
Customs D	ities	100	0	
Uniforms		1,200	0	0.26
Operation of	f Port Equipment	6,500	100%	6,500
Maintenance	of Vehicles	800	95%	760
Cooperage T	ools	200	100%	200
Sub-total O	ther Costs	10,500	77.5%	8,140
Special Cost		·		
Purchase New	v Motor Van	5,000	50%	2,500
Total Estim	ate	\$85,665	49,6%	44,518

Excise section of the 1973 Approved Estimates do not include the costs of maintenance and depreciation of port equipment and port structures. Furthermore, there is no allowance for general overhead costs that are associated with the direct costs. Based upon the analyst's judgement concerning the probable value of depreciation and of deferred maintenance, the estimated total cost of port operations in 197% is summarized to Table 2. The estimate is based upon the assumption that the associated general overhead costs amount to 35 percent of the direct costs for labour and materials.

TABLE 2

Summary of Estimated Port Operation Costs = 1973

à TEMS	Direct Costs	Depre- ciation & Deferred Mainten- ance Costs	Esti- wate Total Costs
Personal Emoluments	\$31,878	меннунган метрийг эхийн у дэг тэг гунаг, авхорийг цаасааг, с <sup>г</sup> Вг тэгт гүүл гэг	<b>\$31.</b> 878
Warehouse Operating Expenses	680	G0237	631,070 680
Port Equipment Operation	6,500	يتن	6,500
Maintenance and Replacement of Cooperage Tools	200	Lina	200
Maintenance and Depreciation of Port Crane	4,953	6,000 <sup>a</sup> /	10,953
Maintenauce and Depreciation of Cargo Trailer Tractor	419	600 <u>b</u> /	1,019
Maintenance and Depreciation of Auto Van	491	1,200 <u>b</u> /	1,691
Maintenance and Depreciation of Cargo Trailers	nil	100 <u>b</u> /	100
Maintenance and Depreciation of Jetty	3,323*	1,000	4,323
Maintenance and Depreciation of Warehouses	nil	5,000 <sup>d</sup>	5,000
Sub-total	48,444	13,900	62,344
General Overhead 35%	16,955	oue.	16,955
Total	<b>\$</b> 6 <b>5</b> , 399	13,900	79,299

<sup>\*</sup> Average of recorded direct charges, 1969-1972 inclusive.

Assumed ten-year life, straight line depreciation.

Assumed five-year life, straight line depreciation.

Assumed present value of \$25,000, 25-year life, straight line depreciation.

d/ Assumed present value of \$125,000, 25-year life, straight line depreciation.

Revenue versus Expense: It is concluded that the revenue produced by the existing schedules of charges is slightly greater than the direct cash expenditure for labour and materials to perform the port operations functions (\$53,000 per year of revenue versus \$48,444 per year of direct labour and material costs.)

However, when the costs of depreciation, deferred maintenance and general overhead are included, the revenue falls short of halancing the costs by a significant amount \$53,000 per year of revenue versus \$79,299 per year for all port costs.) In order for the port operation to be self-supporting, the overall revenue trom existing schedules of port charges would have to be increased by nearly 50 percent.

### OBJECTIVES OF A NEW SCHEDULE OF PORT CHARGES

In accordance with the terms of reference, a new schedule of port charges should yield revenue equal to the total cost of port operations, including all elements of cost. Also the structure of the new schedules of port charges should, if feasible, simplify the assessment and collection of the charges. Although not mentioned in the terms of reference, designing the schedule of port charges so as to encourage more efficient use of port facilities is a sound objective. It is convenient to consider the three aspects mentioned above in the reverse order:

- Objective (1) Designing the port charges to encourage more efficient use of improved port facilities;
- Objective (2) Designing the port charges for ease of administration; and
- Objective (3) Designing the port charges to recapture all costs.

Objective (1) - More Effective Use of Facilities: The existing schedule of charges for use of the transit shed has the opposite effect to the desired objective. After a free period of seven days the charge is 10 cents per cubic foot for a period of 14 days, and thereafter 15 cents per cubic foot per month or part of a month. This

schedule has the effect of encouraging shippers and consignees to leave cargo in the Government transit shed, because it provides no fiscal incentive for moving cargo before the end of the 14-day period. Beyond the 14-day period it provides no fiscal incentive to move cargo before the end of any one-month period. Although the total cost of storage during any period increases with time, the average cost per day remains level. The characteristics of this schedule are such as to encourage the shippers to leave cargo in the cargo shed.

In order to encourage shippers and consignees to move cargo through the transit storage facilities as rapidly as possible a fiscal incentive should be created, and this may be achieved by a schedule of escalating storage rates.

The principle discussed above is applicable as well to the charges made for a ship's time in port. If such a charge is based upon a price per day or a portion thereof, there is no fiscal incentive for the ship to vacate the jetty or the harbour any earlier than the end of a whole day, whereas if the charge is assessed per hour, an effective incentive is created for vacating the ship's beith as soon as possible.

The foregoing discussion describes two ways in which the design of the schedules of port charges can influence port effectiveness, and these may become particularly important by precluding or minimizing capital expenditures for additional facilities as the volume of traffic expands. An aspect of this particular principle, with resepect to a schedule of charges for transit shed storage, is that higher rates will be accompanied by a declining revenue. Thus, when the schedule of transit storage charges is designed to encourage rapid throughput, its benefit lies in the minimizing of the capital investment, not in producing revenue. The necessary revenue must then come from other sources.

<u>Objective (2) - Simplified Administration</u>: The existing schedules of charges seem to be unduly complex for a small port not having a dredged channel, a breakwater, nor a harbour: a port that does not require pilotage and one that currently handles about 30,000 tons

of cargo per year including bulk petroleum. It is desirable and feasible to devise schedules of charges that can be more easily administered than the present schedules, yet retaining a respect for the general relationships between costs and benefits.

The existing schedules of charges may be restructured to include four basic charges as follows:

- (a) A charge based simply upon a price per ton of gross register tonnage per hour of ships time at port. This charge would be paid by the Ship or its Agent and would be assessed against all ships calling at the port for commercial purposes, i.e. for the purpose of shipping cargo or to carry passengers for hire. This charge is referred to hereafter as "SHIP DUES";
- (b) A charge based upon a price per ton of all cargo handled, as shown on the cargo manifest, regardless of its nature. This charge is referred to hereafter as "CARGO DUES";
- (c) Charges based upon a schedule of prices per hour of regular time and of overtime for the use of distinct units of Government-owned cargo handling equipment. This charge is referred to hereafter as "EQUIPMENT DUES"; and
- (d) Charges for storage of cargo in Government transit sheds based upon prices per cubic foot of cargo space, escalating per unit of storage time. This charge is referred to hereafter as "STORAGE DUES".

<u>Objective (3) = Self-Supporting Revenue</u>: It appears necessary to devise schedules of port charges that will produce fifty percent greater revenue per year than is produced by the existing schedules, in order to achieve this objective.

Achievement of objective (1) will require substantially <u>higher</u> unit storage rates and will produce significantly <u>less revenue</u> from this source. Thus, the amount of revenue from Storage Dues should become a minor source instead of the major source, which it reflects under the present situation. Most of the required revenue must then be produced by three basic schedules of charges; Ship Dues; Cargo Dues; and Equipment Dues.

It must be recognized that in achieving objective (3), which entails the production of revenues offsetting all costs of port operation, the day-by-day cash in-flows will exceed cash out-flows to the extent of the values of amortization and deferred manutenance. Whether such temporary surpluses flow into sinking funds usable only for port purposes or are used for other current costs of operating the Government, to be offset by future specific appropriations for port purposes, should not be considered to violate the basic premise that schedules for port services should affset the entire cost of those services.

### PROPOSED NEW SCHEDULES

Schedules of port charges should be conceived as being firewish... subject to change from time to time as may become occessary to restrict the costs. However, it is neither practical nor describble to change the schedules frequently. Therefore, a new schedule should anticipate future conditions to the extent possible. Toward this end it is useful to consider the possible and probable movements of cargo and ships during the next five years.

Cargo Traffic Projection. For the purpose of this analysis it is assumed that the volume of cargo may increase over that handled in 1973 at the average annual rate of five percent, and that the proportion of bulk petroleum will remain the same as in 1973. It is assumed, further that the percentage of dry cargo that requires storage in the transit shed or open transit spaces may decline to fifty percent of total dry cargo by 1978, due to increasing amounts of containerized and unitized cargoes that would move directly to consignees? premises. Based upon the foregoing assumptions and the actual traffic in 1973, the future amounts of cargo have been estimated for each of these categories:

- (1) Bulk Petroleum;
- (2) Unitized and containerized cargo moving directly to or from inland destinations; and
- (3) Cargoes of all kinds requiring in-transit storage space.

The results are presented in Table 3.

Ship Traffic Projection. For the purpose of this analysis it is assumed that the forecast of cargo movements made in the preceding section will be carried in ships tending to carry more cargo per ship and therefore tending to involve fewer ships. Specifically, it is assumed that the average amount of rargo per ship will increase at an annual rate of five percent, based on the traffic in 1973, as presented in Appendix A. Further, it is assumed that the average size of cargo ships will tend to be larger. increasing at an annual rate of one percent. It is also produced that passenger ships and combined cargo-passenger ships trailed will remain at the 1973 levels. Based upon the aforestated assumetions, the estimated numbers of various sizes of ships that may (a)) at Montserrat is presented in Table 4. The significance of the assumed rates of cargo growth and of the changes in ship sizes to that these combine to produce only a small increase in the aggregate of gross register tonnage of all commercial ships (0.8 percent annual growth), although the amount of cargo handled is assumed to increase at an annual rate of 5.0 percent.

TABLE 3

PROJECTED MOVEMENT OF CARGO TO YEAR 1978

	Projected Total Through- put	Projected Through- put of Petroleum in Bulk	Projected Through- put of Cargo less Petroleum	Projected Through- put Con- tainers and Unit Loads not requiring in-transit	Projected Througher put re- quiring tu-transit Storage
Year	(ions)	(tons)	(tons)	Storage (tons)	(1005)
1973	31,674	8,433	23, 241	1114	23,130
1974	33,258	8,855	24,403	295	24,108
1975	34,921	9,297	25,624	786	24,838
1976	36,667	9,762	26,905	2,093	24,812
1977	38,500	10,250	28,250	5,572	22,678
1978	40,425	10,763	29,662	14,831	14,831

Source: CARIFTA Forms MT-1; MT-2 and MT-3.

<sup>\*</sup> JAIMITO discharged 74 tons on 13 December 1973. Assumed to have loaded 37 tons.

TABLE 4
SHIP MOVEMENT PROJECTIONS

Actual 1973 and Forecast for 1974-1978 inclusive

одинентический по се се се се дапровани довери	Cargo Traffic	Average Tons Cargo per Ship	Number of Ships	Average Size of Ships	Aggregate Size of Ships
Year	(tons)	(tone)	(each)	(GRT ea)	(GRT)
FREIGHT	ERS SMALLER	THAN 100 GRT	ito-mail, 201, 200 (and the short hand a manufacture and a short an additional expension of the short and a short		<b>тин ком</b> держине дому в менения держине (1966/19 1994 год. 1967
1973*	2,309	16.9	137	41.5	5,685
1974	2,424	17.7	1.37	41.9	5,740
1975	2,545	18,6	1 37	42.3	5,795
1976	2,672	19.6	1 37	42.8	7.864
1977	2,807	20.5	1 37	43.2	5,918
1978	2,947	21.6	1 37	43,6	5,973
FREIGHT	ERS SIZES 10	0 GRT TO 500	GRT		<del>mana pamangan ng sagata sa sagat ng sagat ng distinch di kabula sa sa sa sa sa</del>
1973*	11,287	124.0	91	309.7	28,182
1974	11,851	130.2	91	312.8	28,465
1975	12,444	136.7	91	315.9	28,747
1976	13,066	143.5	91	319.1	29,038
1977	13,719	150.7	91	322.3	29 <sub>5</sub> 329
1978	14,405	158.3	91	325.5	29,621
1973*	5,625	216.3	26	2,251,9	58,548
1974	5,906	227.1	26	2,274,4	59,134
1975	6,202	238,5	26	2,297,2	59,727
1976	6,512	250.4	26	2,320.1	60,323
1977	6,837	262.9	26	2,343.3	60,926
1978	7,179	276.1	26	2,366.8	61,537
2300-1700 930-004 - 2000 1-1 21 21 200-00-					
1973*	3,265	$272 \cdot 1$	12	6,471.6	77,659
1974	3,428	285.7	12	6,536.3	78,437
1975	3,600	300.0	12	6,601.7	79,220
1976	3,780	315 <sub>0</sub> 0	12	6,667.7	80,012
1977	3,969	330.7	12	6,734,4	80,813
1978	4,167	347 - 3	12	6,801.7	81,620

Source: Montserrat Quarterly Summaries.

<sup>\*</sup> Actual traffic in 1973.

# TABLE 4

TANKERS							
1973*	8,433	248.0		34	2,184.0	74,260	
1974	8,855	260,4		34	2,205.8	74,997	
1975	9,297	273.4		34	2,227.9	75,749	
1976	9,762	287.1		34	2,250.2	76,507	
1977	10,250	301.4		34	2,272.7	77,272	
1978	10,763	316.5		34	2,295.0	78,030	
CRUISERS	Passen-	Pass/	Statement County year to Pr	CMCM-1994 Sefetaberrasifiseera e	nut militarian ang an ito i taon ang antik balang a usani <mark>ti SiMpatan</mark> na metero	mentendende ersteller upgang medikakkan kental ini sertisi ini selah di selah di selah di selah di selah di se	Mile 4 minutes
VID SOOMMOREMAN CONTRACTOR COLUMN AND AND SET SET	gers	Ship					
1973*	2,249	83.3		27	2,161.2	58, 353	
1974)		-			*		
1975)	Assumed	no change	£ 0.70	f i m	V// 0 77 0		
1976)	Assumeu	no change	TOI	live	years.		
1977)							
1978)							
FREIGHT &	PASSENGE	RS COMBINEI	)	AND STATE OF THE PERSON THAT STATE SERVING ST	der (1944 Amerikan (1994) (1964) Anner Ander Schwerze (1944) — 1954 (1964) (1964) (1964) (1964) (1964) (1964)	MM Wildeland Sampringunggapus ya Marininga Kalanda asa asa a a a a a a a a a a a a a a a	**
1973*	755	37 - 7		20	3.170	63,400	
1974)	• • •				2,4-,-	<i>- - - - - - - - - -</i>	
1975)							
1976)	Assumed	no change	for	five	years,		
1977)		-			•		
1978)							
YACHTS				The second secon	and the early Teleb personal professor, also is experience. The expense personal article is to con-	Сем перечина почения по	PROGRESSES
THE RESIDENCE OF THE PARTY OF T				100	20. (	A AA**	
1973*				128	22,6	2,897	
1974) 1975)							
1975)	Assumed	no change	for	five	years.		
1970)							
1978)							
17101			_				

SUMMARY	ESTIMATED	GROSS	REGISTER	TONNAGE (	$0  \mathrm{F}$	VISITING	K-K-2QTH2
DUMIALL	BOLLIALDD	arross	TUDGISTER	TOWN AUTS A	V.L	V 1 D 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	DILLED

Year	Freighters Smaller Than 100 GRT	Freight- ers 100- 500 GRT	Freight- ers 500- 5,000 GRT	Freight- ers over 5,000 GRT	Tankers	Crui- sers	Total Commer- cial Ships
1973* 1974 1975 1976 1977 1978	5,684 5,740 5,795 5,864 5,918 5,973	28,182 28,465 28,747 29,038 29,329 29,621	58,548 59,134 59,727 60,323 60,926 61,537	77,659 78,437 79,220 80,012 80,813 81,620	74,260 74,997 75,749 76,507 77,272 78,030	58, 353 58, 353 58, 353 58, 353 58, 353	302,686 305,126 307,591 310,097 312,611 315,134

<sup>\*</sup> Actual traffic in 1973.

<sup>\*\*</sup> Excluding yachts.

## Projected Future Costs

Based upon the existing situation, assuming no new capital investment will be made for new facilities (the basis of phase ) of this study), it is estimated that the Government's annual cost to operate the port will increase at an annual rate of 5 percent. Thus the estimated cost of \$79,299 for year 1973 would rise as shown below for the succeeding five years:

1973	\$79,299
1974	83,264
1975	87,427
1976	91,799
1977	96, 388
1978	101,208

#### Revenue Targets

It is reasonable to plan a schedule of charges that would produce revenues balancing costs at the mid-point of the next five-year
period, that is in year 1976. If actual costs and volumes of traffic
should enfold precisely as have been estimated the costs would exceed
revenues somewhat during 1974 and 1975, but thereafter providing a
compensating balance for the remainder of the five-year period. However, the costs and revenues will certainly not evolve precisely as
projected and it must be planned that the effect of the new schedule
of charges will be monitored and revised as may be required. However,
for the basis of determining a new schedule the costs and traffic
projected for year 1976 may be taken as a reasonable basis. The
relevant data are therefore:

Revenue required		\$91,799	
Tons of Petroleum o	cargo (Table 3)	9,762	tons
Tons of dry cargo	(Table 3)	26,905	tons
Aggregate tonnage of	of tankers (Table 4)	76,507	GRT
Aggregate tonnage of	of freighters Table 4)	175,237	GRT
Aggregate tonnage of	of cruisers (Table 4)	58,353	GRT

Allocation of Projected Revenue. Based upon the objectives discussed earlier in this analysis, the target for revenue from intransit storage of cargo is allocated ten percent of total revenue

required and the remainder of revenue required is allocated equally between ship dues, cargo dues and equipment dues. Thus, the targets for revenue in year 1976 became:

(a)	Ship Dues	\$27,540
(b)	Cargo Dues	27,540
(c)	Equipment Dues	27,554
(a)	Storage Dues	9,180

### Ship Dues Schedule

In is proposed that all commercial ships should pay the two rate per gross register ton per hour of time in port. It is assumed that when given a fiscal incentive for a more rapid turnaround. cargo ships time in port will be reduced by twenty percent from the 1973 experience, while the turnaround time for cruisers would comain the same as in 1973. Thus, the estimated aggregate of ships tonnage—hours in port in 1976 becomes:

Tankers Freighters	. ,	x 26.5 x 0.8 x 39.17 x 0.8	= 1,621,948 GRT-HRS. = 5,491,227 GRT-HRS.
Cruisers		x 21.5	$\approx 1,254,590$ GRT-HRS.
		Total	= 8,367,765 GRT-HRS.

In order to produce the target revenue of \$27,540 an uniform rate per GRT-hour of \$0.0032912, (say \$0.0033) would be required. This may be expressed as \$3.30 per thousand GRT per hour. Thus, for example, the Ship Dues on a 24-hour visit of a cargo ship such as the BIRK (1,730 GRT) would be  $3.3 \times 1.73 \times 24 = \$137$ ; or of a one 16-hour visit by a tanker such as the ESSO ANTILLES (591 GRT) would be  $3.3 \times 0.591 \times 16 = \$31$ ; or of a 12-hour visit by a cruiser such as the FANTOME (1,637 GRT) would be  $3.3 \times 1.637 \times 12 = \$65$ .

#### Cargo Dues Schedule

It is proposed that all cargo discharged or loaded for any purpose should be charged a rate per ton of cargo according to the shipping manifest, the same being the tons of cargo calculated by weight or the tons of cargo calculated by space measurement, whichever produced the greatest revenue, regardless of the kind of commodity, form of package, or direction of movement. Thus, it is proposed that the same rate be charged for each manifest ton of cargo whether it be petroleum pumped through a pipeline, containerized cargo rolled on or off the ship, or of break-bulk cargoes handled by lighterage or otherwise.

In order to produce the target revenue of \$27,540 the rate per ton needs to be \$27,540/36,667 tons = \$0.751 per ton (sav \$0.75 per ton.)

### Equipment Dues Schedule

Since the Government does not now have equipment capable of moving containers it is assumed for purpose of determining our schedules, that the movement of containerized cargo will be achieved by privately-owned equipment. Therefore, a schedule of rates for the rental of port equipment should be based upon the estimated amount of cargo less petroleum and containerized cargo in year 1976, which is 24,812 tons, and it should be applicable to the use of the existing equipment.

The existing schedule of equipment rental rates is reported to have produced \$11,199 in revenue during the first half of 1973, when the amount of dry cargo put through the port was 16,958 tons, representing \$0.66 per ton. The same schedule would produce estimated revenue in 1976 of \$0.66 x 24,812 tons which is \$16,376. This amount falls short of the allocated \$27,540 revenue target. The equipment rental rates would produce the required revenue if increased by a ratio of 27,540/16,376 = 1.68 (or say an increase of two-thirds.) Therefore the proposed equipment rental rates become:

## Crane Service on the Jetty

Hours 7 a.m. to 6 p.m. Hours 6 p.m. to 7 a.m.

\$4.17 per hour 5.00 per hour

#### Crane Service at the Transit-Shed

Jobs of duration less than $\frac{1}{2}$ -hour	\$16.77	per	job
Jobs of duration over $\frac{1}{2}$ -hour less then one hour	33, 33	ų V	0.6
Jebs of duration all day, not ex-	118 11		
ceeding 8 hours	83, 33	e ŧ	44

## Cargo Trailer Services

Hours 7 a.m. to 4 p.m.	0.85 per mailer loss
Hours 7 p.m. to midnight	1.25
Hours midnight to 7 a.m.	1.50

#### Storage Dues Schedule

Based upon the objective that the storage dues schedule should encourage the rapid removal of cargo, the revenue target of ten percent of estimated total cost was arbitrarily assigned. This target amounts to \$9,180 in year 1976, when it is estimated the amount of cargo requiring instransit storage will be 24,812 manifest tons. Considering that the stowage factor for this cargo may be about 60 cubic feet per ton by weight or about 40 cubic feet per manifest ton, the gross storage space required in year 1976 would be about 40 x 24,812 = 992,480 cubic feet or nearly 1,000,000 cubic feet.

It is proposed that the schedule of storage charges should be such that the average amount charged per 100 cubic feet per week would be zero at the end of the first week; \$"x" at the end of the second week; \$2x at the end of the third week; \$4x at the end of the fourth week; \$8x at the end of the fifth; \$16x at the end of the sixth week; cargo remaining beyond the end of the sixth week to be confiscated and sold for storage charges. Such an escalating schedule is intended to encourage removal of cargo from transit storage. It is assumed that approximately eighty percent of cargo entering transit storage will have been removed within the first week free period and that approximately ninety percent of the amount remaining will be removed during the second week, and similarly for the third, fourth and fifth week, reducing to a negligible amount in the sixth week. The effect of this schedule on annual revenue to be produced by the Storage Dues is tabulated below, based upon "x" having a value of \$3.50 and there being one million cubic feet of transit storage during a year:

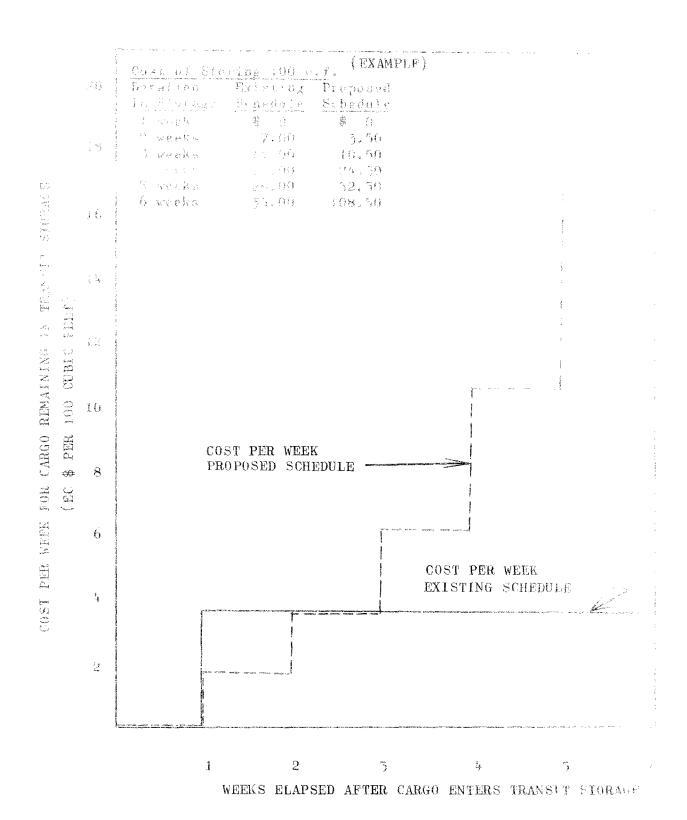
Weeks Elapsed After Cargo Enters Transit Storage	Amount of Cargo Remaining in Storage after the Free Week (cubic feet)	Storage Charge per 100 cubic feet this Week	Annual Revenue Produced by Successive Weeks of Storage
184	0	0	2019
2nd	200,000	<b>3.</b> 50	7,000
37°d	20,000	7,00	1,400
ath	2,000	14,00	280
5th	200	28,00	56:
6th	20	56,00	1 1
Estima	ted approximate an	nual revenue	\$8,747

It is not possible to predict the effects of an escalating schedule of charges precisely. If the recommended schedule should produce substantially less revenue than is predicted, the action required would be an upward adjustment of other classes of dues, rather than a relaxing of the storage dues escalation principle.

Figure 1 illustrates the average cost per week for cargo remaining in storage under the existing schedule as compared with the recommended schedule.

FIGURE 1

EXISTING VERSUS PROPOSED TRANSIT STURAGE DEED REPORTED



## EFFECT OF THE RECOMMENDED SCHEDULES

The existing schedules of port charges produced revenue of \$51,587 in 1973. The proposed new schedules are designed to produce a revenue of \$91,799 in 1976, although the revenue would have been approximately \$79,300 in 1973, had the new schedules then have been in effect. Thus, the effect of the proposed new schedule is to increase the amounts paid to the Government as periodes by about 54 percent. However, the impact on the total cost to put cargo through the port is much less oncrous.

Considering that existing schedules produced revenue amounting to \$2.28 per ton of dry cargo in 1973, the proposed as schodules would produce about \$3.50 per ton. Landing costs were reported by one importer to have been \$21.83 per ton excluding dues paid to the Government. The impact of new higher port dues in that instance amounts to an increase of about five percent on the whole cost ai landing and storing the cargo. Another importer indicated the cost of landing cargo, excluding port dues, was \$15.86 per ton. In this latter case the impact of the new high port dues would be an increase of about seven percent. The foregoing indicated that adoption of self-supporting port dues at Montserrat would have the effect of increasing the landing and storage costs by 5 to 7 percent, and it must be expected that the increased cost will reflect increased prices for goods sold to consumers. However, since the schedules are designed only to recapture the actual costs incurred by Government, costs which have not been covered by port revenues heretofore, there will be no change in the overall effect on the whole economy, the greater port revenue being offset by reduced Government expenditure.

(How the port costs could be reduced is a subject outside the scope of this first phase of the port pricing analysis. Whenever new facilities may be acquired which would result in more efficient handling of cargo, as is contemplated to require the second phase of the port pricing analysis, the schedules of charges should be

revised again, involving further increases in the rates in order to recover capital costs for new facilities, the higher dues being more than offset by reduced cargo-handling costs.)

The recommended new schedules have certain advantages:

- (1) Making the port function self-supporting focuses attention on the true costs and thereby provides an improved basis for planning Government's expenditures;
- (2) Providing strong incentives for more rapid handling of cargo and earlier removal of cargo from transit storage should result in more effective use of available facilities; and
- (3) Elimination of redundant dues and simplification of the structure of new dues eases the administration of port functions.

Adoption of the proposed new schedules is recommended.

Plymouth, Montserrat Summary of Port Traffic - 1973

## CARGO TRAFFIC

	Bulk Petro- leum	Dry Cargo in Ocean- going Ships	Dry Cargo in Schooners & Small Ocean- going Ships	Total of All Cargo
Nombre at Strife	34	68	161	263
Ship-Hours in Port	900	2,278	6,691	9,869
Hours per Ship	26.5	33.5	41.6	37.5
Tons of Cargo	8,831	9,814	12,553	51,198
Tons Cargo per Ship	259.7	144.3	78.0	118,6
Tons Cargo per Ship Hour	9,8	4.3	1.9	3.2
Cargo Ships Without Cargo	<b>a</b> a	<b>4</b> 5	38	38
PASSENGER TRAFFIC			MISCELLANEOUS TRAI	FFIC
Number of Ships	113		Additionally some	93 ships
Ship-Hours in Port	2,413		and boats of all l	
Ship Turnaround Hours	21.5		either cargo or pa	
Passengers in- transit	3,712		called at Montser	rat.
Passenger Ships without Passengers	19			

SOURCE: CARIFTA Forms MT-1; MT-2 and MT-3.

Plymouth, Montserrat

Cargo Carried by Ocean-going Ships - 1973

	PETR	PETROLEUM PRODUCTS		DR	managaran da	
MONTH	No. of Ships	Hours in Post	Tons of Cargo	No. of Ships	Hours in Port	Tons of Cargo
\$ 12 <b>11</b> 2	5	66	1,276	7	570	1,776
Service of the servic	3	48	984	6	144	71)7
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	1	12	348	6	132	1. 1. 4.
Apr.	Žį.	57/4	947	5	7 7	F & E & B
Мар	14	48	686	5	96	586
June'		54	779	T.	180	1,466
July	3	156	684	6	180	556
Aug.	3	192	1,177	6	264	507
Septa	3	72	533	4	96	540
() : to .	1.	24	17	4	96	527
Nov.	3	101	1,037	6	186	1,074
Dec.	1	73	363	6	360	888
TOTAL	34	900	8,831	68	2,278	9,814
Port Perform- ance Index	9.8	tons per	ship/hr.	4	4.3 tons	per ship/hr.
Ship turn- around	26,5	hours		3:	3.5 hours	
Cargo per Ship	259.7	tons		14	4.3 tons	

SOURCE: CARIFTA Forms MT-1 and MT-2.

Plymouth, Montserrat

Cargo Carried by Schooners and Small Ocean-going Ships - 1973

GENERAL CAI
-------------

MONTH	No. of Ships	Hours in Port	Tons of Cargo	Ship with- out Cargo
Jøu,	10	606	1,409	2
Feb.	8	396	734	73
Mar.	13	768	1,116	¥.
APT v	1. 4	414	882	5
May	15	7c80	1,468	ing ,
June	10	480	736	5
July	1.7	660	1,162	6
Aug.	12	384	417	2
Sept.	14	612	1,317	1
0 c t .	12	201	630	3
Nov.	19	1,042	1,185	.1.
Dec.	1.7	648	1,497	The second second section of the second section of the second section
TOTAL	161	6,691	12,553	38

PPI = 12553/6691 = 1.88 tons per ship-hour.

Ship Turnaround = 41.6 hours (excluding ships without cargo)

Cargo per Ship = 12,553/161 = 78.0 tons

SOURCE: CARIFTA Form MT-2.

Plymouth, Montserrat
Passenger Traffic by Ships - 1973

PASSENGERS No. Hours Number of of in Em-Dis-Ships without MONTH Ships Port Carried barked embarked Passenger= of die 1.4 Feb. Marya Apr. May June July Ą Aug. Sept.  $0 \, \mathrm{ct}_{\, \bullet}$ Nov。 Dec. 1,391 TOTAL2,431 3,712 1,201 1,257

Ship turnaround = 2431/113 = 21.5 hours.

SOURCE: CARIFTA Form MT-3.

Plymouth, Montserrat

Distribution of Ship Visits by Ship Size

12 months ending 30 Sept. 1973

Ship Size (G.R.T.)	TENKETS	Dry Cargo Ships*	Passenge: Ship-
More than 1,000	29	59	28
500 to 999	Ţ)	11	4 3
100 to 499	ģ Ž	112	4.9
less than 100	0	161	87
Size not given	4	13	222
TOTAL	The state of the s	356	145

SOURCE: Harbour Master's Register.

<sup>\* 19</sup> visits by the combination cargo and passengers ship FEDERAL MAPLE, is shown in both categories.

Plymouth, Montserrat
Cargo Ships Called during 12 months ending 30 Sept. 1973

Name of Ship	G.R.T.	Number of Calls
ADIER	920	I
AEGEAN DOLPHIN	8,835	į
ANA MARIA	162	7
ANDARIA	1,210	v.E.
INTERA	46	73
ANTILLES (T)		3
ARCHIMEDES	3,506	
ARE	4,139	′ <sub>\$</sub>
ARISTOTIES	4,206	i
ATLANTIC COMET	499	¥ a.g.
ATLANTIC TREPID	499	esco
ATLANTIC MERCHANT		3
ATLANTIC PEARL	643	2
ATLANTIC SKY	499	3
ATLANTIC STAR	499	$I_{\mathbf{k}}$
ATLANTIC SUN	499	$t_{\mathbf{i}}$
BAARN	6,551	2
BAHAMAS BIG DIPPER (T)	147	1
BAHAMAS DEVELOPER	288	1
BALTIC PROCTOR	299	5
BANSHEE	6	1
BARRISTER	8,366	.1
BENNEKOM		2
BIRGIT	568	1
BIRK	1,730	1
BRATHINGSBORG (T)	1,399	8
BREDA	6,551	2
BRENDA CRISTOBAL	23	1
BRIGITTSKON	7,178	1
CAROL ANN	97	1.
CAMBRI DGE	200	6
CURTIS MATHES	396	4
DAERWOOD	189	8
DAPA	238	13
DARLENE R.	84	<i>!</i> 4
DELIGHT B.	48	1.
DEFIANCE	153	1
DILIGAFF	20	1

SOURCE: Harbour Master's Register.

Name of Ship	G.R.T.	Number of Calls
FMBLEM	38	7
ENDEAVOUR	20	$\xi_{\mathbf{p}}$
ESSO ANTILLES (T)	591	7
EVA THOLSTRUP (T)	2,242	- Alakara
EVELYN	100	Źŧ
EUTOM		i,
EXPLORER	4,907	1.
FAY	1,276	1
FAITHFUL STAR	1	Ÿ
FLORENCE EMMANUEL	46	* \$ \$
FLORA MERCY	30	
FORKE DE JONG	400	() "}
PRIARS CRAIG	306	9
FRIENDSHIP PANGLUBAL (T)	<i></i>	1
GHANLIM	113	2
HAWTHORNE ENTERPRISE	579	2
HARBINGER	56	<u></u>
HERCULES	4,203	.1
HERMES	4,205	1,
INTREPID	159	1
JAIMITO	145	2
J.E. BLEW	21	$l_{\pm}$
JENS ALBO	499	2
JOHANNE REGINA	54	1
JOLANTIS	7	1
JOHNNY WALKER	100	1
KANALOA	71	1
KANUK	19	1
KIRSTENSKOU	4,529	1
KAISER		1
KETHILAN		1
KAYASO-TOO		1

Name of Ship	G.R.T.	Number of Calls
LADE OF FLEET	21	1
LADY BONITA	49	
LADY BERNETTA	57	2
LADY BERNITA	49	
LADY LAUREL	52	*
LADY SEPT	9	1
LADY SORCHA	344	28
LADY SQUINTA		į
LINGUI ST	3,291	book
(UCRY STAIRE		₹.
LUMCA GA		\$ .
MARIANNE THOLSTRUP (T)	2,242	ya.
MAPLE	3,170	19
MERCHANT	5,349	2 2
MISTRESS	15	· · · · · · · · · · · · · · · · · · ·
MONICA	10	a call
J. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	.s. V	τ.
NANTIK	10	1
NATURALIS	1,614	<b>,</b>
NOVELIST	3,584	\$ 2
NYALA	.10	1
NEW LONDON		L
ОТТО	1,291	3
PALMEDES	4,206	1
PATTY ANN	6	2
PAULOUD	16	1
PAROCLETTE	31	$1\overline{4}$
PERSEVERANCE	72	1
RING ANDERSON	107	1
RING ANDERSON ROMANY	103 10	1 1
ROSE MILLICENT	50	6
CO CALL LIANA CHAPTA	,)0	U
SACRED DOVE	56	4
SCHOLAR	7,606	1
SCOTT FREE	21	1
SEA BIRD	18	1
SEA CHALLENGE	876	5
CEA DDIMO	106	4
SEA PRIMO SEA SAGA	196 1,015	1 3

Name of Ship	$\underline{G.R.T}$ .	Number of Calls
SEA TERN (T)	1,339	1.
SKY ADVENTURE	270	.3
SKANGULA	6	7
SPECIALIST	6, 330	2
ST. ANDREWS	61	2 5 7
STELLA REGAL (T)	1,596	7
TEXACO COLON (T)	3,554	de service de la constitución de
TRADER	6,448	4 .a.
TROPIC MERCHANT	150	ŧ
ULIST	8,961	2
UNBOUND	18	C C C C C C C C C C C C C C C C C C C
UNITY	8	
UPTITE	6	4
VANGUARD	22	* .
VIVIA G.	70	1
VOYAGER	3	1
WESTKUST	447	2
WOLANDE	113	1
WERRA		1
YANKEY CLIPPER	236	1
SWEVER II	70	2

Plymouth, Montserrat

Passenger Ships and Yachts Called during
twelve months ending 30 Sept. 1973

Name of Ship or Yacht	G.R.T.	Number of Calls
ANANDA	37	3
ANNIE LAURIE ARTFUL DODGER	23 6	
ARIFUL DUDGER	· ·	ŧ
BABY SCOTT	9	24
BAROKA	40	a de
BON HOMME RICHARD	11	<u> </u>
BRAZENBITCH BUENA VIDA	22 22	1
BON VIVRINT	24	1 1
BRASS RING		k. Viet.
CAPRI CE	9	1
CARIBBEAN QUEEN	52	1
CARIB RANGER	4	1
CHRISTINA	1,652	1
CLOTUEA		1
CARDEL		1
DANISH MAID	11	2
DRAC II	25	1.
DREAM GIRL	10	1
EILAND HOPPER	9	2
FANTOME	1,637	8
FLYING CLOUD	399	5
FREELANCE	83	1
GITANA IV	85	1
GRISBY	4	2
GIVE ODI	4	2

SOURCE: Harbour Master's Register.

Name of Ship or Yacht	G.R.T.	Number of Calls
HAPPY HOLLOW	20	1
HEW-ME	24	
HONEY BEA II	1 30	3
HOPE	7	- (*) - (*)
HORNPIPE	Į.O	1
HOMBOG	Ž <sub>t</sub>	l l
3 NG	3	1
ISLA MADERA	3 8	?
SIANDER	43	1.
i AMBO	6	Ĭ
KETCH	35	3
KITTIWAKE	12	Ţ
SIARA	8/4	7
LADY OF ATLANTIS		l
LADY SOVEREIGN		1
MAT CA	6	1
MAPLE	3,170	19
MARAKESH	, · · · ·	2
MARGIE	52	1
MISTREL	8	1
MY MULLION II	46	1
NEJERSIK		1.
NEW WORLD	1.4	1. 1
NIGHT WIND	<b>.</b> .	1
NOSEGAY	68	1

,

	ua <b>3</b> uu	
Name of Ship or Yacht	G.R.T.	Number of Calls
ODIN	10	1
DAT AMAS:	LO.	ā
PALAWAN	40	s s
PALUMEDES	Ö	now,
PATIENCE PIERROT	8 1.	. <u>\</u>
POLE STAR	1. 11	2
ERIOE STAM	52	
PRIMROSA	, , , , , , , , , , , , , , , , , , ,	
PRINCESS PAT 11		<b>!</b>
PROMISE	1 30 26	
PAVLOVA XI	20	3°
	weetj	
PSI 18	7	** 2 ****
SAFADI		¥
SAG) T00	10	· Votes
SANSCACABE	8	Tricks.
SARALEM		* * * * * * * * * * * * * * * * * * *
SPRAY	7	ž
STAR SONG	18	l.
ST. JEAN		*
SUDWIND	11	.1
SVALA	11	9
STATENDAM		1.
TAMBOURINE		1
TANTARA	9	1 1
TAWAN	56	1
TIGER 45	19	1.
TONTIRN		1
TWILIGHT		1
HI VCCE	0	4
ULYSSE UNDA VON KAPPLAN	$9\\40$	1 1
VEENDAM		1
WANDERLUST	235	2
WENDY 2	16	$\tilde{2}$
WHITE MAGIC	12	1
WINDI GO	_	1
H. YORKY	8	1
ZIG ZAG	7	3
ZUGROGEL	ı. <del>=</del>	1
ZURA	45	2

# SUMMARY OF SHIPS AND CARGO MOVEMENT - 1973

# FREIGHTERS LESS THAN 100 GRT

	1ST QTR	2ND QTR	3RD QTR	4TH GTR	NL YEAR	
Nember of Serpa aggregate GRT Aggregate Toos Gargo Number of Paysnogers	25 1,472 402 43		32 1,195 493 2	34 1.403 707	147 3,084 2,366 90	3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
FREIGHTERS 100-500 GRT						
<ul> <li>Number of Ships</li> <li>Aggregate GRT</li> <li>Aggregate Tons Cargo</li> <li>Number of Passengery</li> </ul>	19 5,878 2,928 5		26 7,352 2,602 125		9) 28,182 11,287 138	309.09 (24.0 (25.3
FIGEIGHTERS 500-5000 GRT						
Number of Ships Aggregate GRT Aggregate Tons Cargo Number of Passengers	$   \begin{array}{r}     7 \\     12,249 \\     992 \\     12   \end{array} $		5 10,257 1,044 5	$6 \\ 11,435 \\ 1,247 \\ 4$	58,548	2,251.85 216.5 1.42
FREIGHTERS OVER 5000 GRT						
Number of Ships Aggregate GRT Aggregate Tons Cargo Number of Passengers	5 34,340 1,512 8	1 5,348 242	19,121			6,471.58 272 0.67
YACHTS						
Number of Ships Aggregate GRT Cargo and Passengers	34 719 nil	37 645 ni 1	35 1,095 nil	22 438 nil	128 2,897 nil	22.63 nil

# CRUISERS

	1ST QTR	2ND QTR	3RD QTR			AV. PER SHIP
Number of Ships Aggregate GRT Number of Passengers	6,256		545		58, 553	
TANKERS  Number of Ships Aggregate GRT Aggregate fone Cargo	() 18,480	11. 10,214	9 15,678	5 14,210	34 74,260	
FEDERAL SHIPS  Number of Ships Aggregate GRT Aggregate Tons Cargo Number of Passengers	5 15,850 182	$\frac{4}{12,680}$ $\frac{220}{220}$	$6 \\ 19,020 \\ 120$	5 15,850 233	20 63,400 755	5, 170 57. 7

SOURCE: Montserrat Statistical Office Quarterly Summaries.

