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ST. MAARTEN The Yachting Sector

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SECTION 1: COUNTRY BACKGROUND

Introduction

St. Maarten's uniqueness pertains to the fact that two jurisdictions share a small island with open borders. This means that any review of the marine business on one side of the border is invariably affected by what transpires on the other side of the (invisible) border.

This review is about a marine leisure industry that has grown from nothing to a quite substantial industry in the last 25 years and may even be considered to be leading the comparable Caribbean destinations in the field. Inevitably as we review the industry we will be looking to find what it was that allowed this fast growth to occur. Some of the answers are going to be encountered in the economic climate that exists in the surrounding islands rather than what is present on St. Maarten/Saint Martin.

The growth of the yachting sector on St. Maarten is not consistent with the development of the rest of the economy. The growth of the economy, as a whole, has been at a consistent pace for the majority of the last 25 years with small hiccups after the major hurricanes. Only in the last few years has the particular growth of the marine business become conspicuous.

1.1 Country description

The island of St. Maarten/Saint Martin is only 34 square kilometers (13 square miles) and is divided into two political entities. (Source: Statistical Yearbook of the Antilles 2000). The northern section is a part of the Republic of France and resorts under the "department" of Guadeloupe for local government purposes.

The southern part, which is the subject area of this study, is part of the Kingdom of the Netherlands. The Caribbean parts of the Kingdom functions autonomously from the European part and consists of Aruba and the Netherlands Antilles. Dutch St. Maarten is a one of the five island territories of the Netherlands Antilles.

The "Federal" Government in Curacao takes care of a range of government functions such as police and justice. The local government is responsible for another range of responsibilities like roads, tourism promotion and some education. In areas like education and labor there are both federal and local government departments. The Kingdom Government is responsible for defense and foreign relations.

The most recently published population statistics (as measured in 1999) show the registered population of Dutch St. Maarten being 41,718 persons. (Source: Statistical Yearbook 2000). There is reason to believe that the actual number is substantially greater as a result of undocumented immigrants.

The population of the island has grown dramatically since the tourist boom that started in the early 1980s. In 1980, for instance, the total registered population of Dutch St. Maarten was only 13,156 (Source: Statistical Yearbook 2000). This has resulted in the situation where the percentage of the population whose parentage originates in St. Maarten is very low. Immigrant populations from territories like Dominica, Saint Lucia, St Kitts/Nevis, Anguilla, Dominican Republic, the other islands of the Netherlands Antilles and Haiti combined with persons from the European and American metropolis make up a very large part of the balance of the population. The 1997 census showed, for instance, that of the 32,221 persons on the island at that time only 12,268 had been born on the Netherlands Antilles. The rapid growth of the economy and the population, combined with limited planning capacities, has resulted in the public sector and public infrastructure lagging behind private investment.

Investment in education is relatively high, but the actual increase of educational level in the workforce is limited by the substantial emigration to other countries, especially the Netherlands to which access is unrestricted.

1.2 Current data available

The marine industry does not appear to have been a consideration in the make up of almost all-statistical data. In the National Statistical Yearbook of the Netherlands Antilles, the sector cannot be distinguished from any of the sector categories. In the National Statistics the movements of vessels do not separately count non-piloted vessels and therefore exclude the majority of marine leisure vessels by far.

In the review of establishments in the statistical yearbook there is a figure for the number of establishments whose main activity is "water transport" and for St. Maarten in 1998 this figure is 8. The exact form of water transport is however not known.

In 1997 a Tourism Expenditure Survey was done in St. Maarten which reviewed the patterns of cruise tourism (such as national origin, occupational status and size of ships) as well as their expenditure patterns. In the study there is an analysis of the expenditures of tourists by region of origin, which was conducted at the island's major airport, as they left the island. It would appear from the study that nobody was accommodated on a boat, which is patently unlikely. One of the investigations of this study was the activity of land based tourists. The results show that a little less than 20% took a boat trip. It is not clear from the study, however, whether this was a boat trip with or without accommodations. This study could well have included marine tourism without extra cost and with a clear advantage to the accuracy of the reporting.

Statistics are collected in St. Maarten by the Federal government primarily (Centraal Bureau voor de Statistiek) which collects data for the entire country. The local government has a Department of Economic Affairs whose interest is far more in the specific matters that relate to Dutch St Maarten, but here, too, there has been no data collection up to now.

Both agencies do intend to proceed with introducing categories that will reflect activity in this sector in the future. They are highly interested and motivated to include this sector in the future.

However, they have little or no experience with the industry so the definition of categories to organize the statistical data is going to require guidance from agencies with resources in that field.

The common denominator amongst all statistical material that is available is the lack of recognition by the compilers that the marine leisure industry is significant or potentially significant. Indications from informal contacts are that there is the beginning of a shift in this perception, which in a shorter or longer period converts into the commencement of data collection that is useful to the industry.

1.3 Yachting compared to Cruise Ships

This study will draw some conclusions about the total economic impact of the industry. Inevitably comparisons may be made with other significant tourist industries and the cruise ship industry is one that is obvious

The 1997 expenditure survey shows that there were a total or 885,956 cruise tourists arriving on the island in that year. The estimate on expenditure per tourist was \$120.00 per tourist on the Dutch side of the island and US\$7.00 on the French side. This would suggest a total figure of US\$106 million as being the total expenditure of cruise ship passengers.

SECTION 2: DESCRIPTION OF THE YACHTING SECTOR

2.1 Historical Background

In 1980 the marine industry in St Maarten consisted of:

- A small slipway and short dock at Bobby's Marina, Great Bay (approx 12 slips)
- A small dock at Great Bay Marina (approx 10 slips)
- A small dock at Island Water World (approx 15 shallow water slips)
- A catamaran construction company next to the Lagoonies Restaurant location today

At that time the charter and cruising boats that halted in St Maarten considered it a stop at one of the quieter islands as they traveled between the Virgin Islands and Antigua, which were the yachting hubs of the Caribbean.

By 2002 the marine cruise industry in St Maarten has grown at a faster pace than most of the other comparative destinations in the Eastern Caribbean. In 1980 the marine industry was practically non-existent but is today in some respects the leader in the Caribbean.

Areas in which St Maarten has excelled:

- 1. Trading of marine equipment at a level that is not seen elsewhere.
- 2. Provision of high quality marine technical services, especially electronics rigging and fabrication.
- 3. Level of investment of marinas and related infrastructure.

It may be of value to assess what the critical factors were that allowed this growth to occur. A polling of the members of the Marine Trades Association resulted in the following opinions:

- 1. There is not one single cause but a combination of conditions and inputs.
- 2. The strong tourist boom on the island created a cash spin off that made it financially possible to establish many of the businesses.
- 3. The great variety in products, services, cultures and travel systems strongly contributed.
- 4. The lesser quality of the immediate cruising area did not negatively impact growth.
- 5. The investment by various parties was critical.

- 6. The investment as a result of the "Loi Pons" (A programme of tax advantages called "defiscalization in France that provided tax advantages for investments made in tourist infrastructure in the French overseas departments) on the French side was a strong boost over a certain period.
- 7. The local government never stood in the way of the industry.
- 8. The lack of restrictions to settle here made it possible for expatriates with skills to set up businesses and an entrepreneurial climate. The fact that certain nationalities that were restricted from other territories were able to settle on St Maarten was mentioned as a factor
- 9. The competitive position as a result of the duty free status.

2.1.1 The fleet profile has changed strongly over the years

In the 1970s the majority of boats in the Caribbean were still wooden and a 50-foot vessel was considered very large. There were only very few bareboats and these were mainly in Tortola and St Thomas. Only in the late 1970s were these boats seen in the Leeward and Windward Islands. In the 1980s the first fleets of bareboats were seen in St Maarten and they were small 34 footers. These boats were soon followed by larger ones and boats more dedicated and designed for chartering. The 44 footers and 46 footers that Bahamas Yachting Services (BYS) brought were considered large. Later in the 1980s more charter boat companies followed and 40 footers became more commonplace.

When Simpson Bay Yacht Club was being designed in the late 1980s it was not considered necessary to take boats over 70 foot into account because these had not as yet frequented St Maarten and were not expected to be a significant part of the market. During the 1990s the average size of boats gradually grew and 80 to 90 footers became a more regular sight. Today in 2002 yachts over 80 foot have become an important part of the fleet that visits the island in the winter months. The entire range of yachts has continued to be present but the larger vessels are the highest profile.

This change in yacht size associates itself with the following patterns:

- 1. The larger yachts have more complete crews and the shore side services they require are less and more specialized. More yachts are power yachts. Previously the smaller yachts by and large had to be sailboats to make the trip to the Eastern Caribbean as their fuel capacities were insufficient.
- 2. The larger yachts are much more self sufficient in every respect.
- 3. The larger yachts are able to carry more guests and these guests are pre-selected as being relatively high wealth individuals, so the spending power of these guests on entertainment and services can be quite substantial.

4. When the larger yachts require services they tend to be services that require very specialized expertise or dedicated equipment.

2.1.2 Fleet profile

Bareboats

There are no bareboat fleets based on the Dutch side of St Maarten any longer. They are all on the French side and their presence there is probably a result of the favourable conditions of the French tax law. At the time of writing there are about 148 bareboats currently, mainly in the two larger bareboat company fleets (Sunsail and Moorings).

• Cruising boats

Cruising boats are those vessels that are being used for accommodation and transport for longer periods by persons who have taken a longer vacation or are retired. They consist of vessels from around 30 feet to 70 feet. The owners normally sail the boat themselves and may have minimal or substantial budgets. There is probably a little more than the "fair " share of cruising boats in St Maarten. Their stay on the island is relatively long with even some remaining in the high-risk hurricane months. St. Maarten is attractive for them because the competitive pricing on the island makes it possible to stretch their cruising funds for longer. There are no good figures on the origin of these boats. Our estimate would be that about 40% were from the United States, 40% from Europe and the balance from other countries like Australia, South Africa and South America.

• Crewed Charter yachts

There is good traffic in the medium sized charter yachts (50-80 ft) that favor the island because of its competitive pricing and good air lift. They vary between sail and power and in length from 50 feet to 170 feet.

• Super yachts

This category is to be found in relatively large numbers on the island for the shortest period, December to May, with practically no presence outside these months. Some of these are charter boats and some are private. The distinctions are difficult to determine and not of great relevance.

• Day charter yachts

A highly varied fleet of day charter yachts supply an important attraction to the mainstream land based tourists and cruise ship tourists as well. Increasingly these boats are designed to provide a particular experience and are specialized in that niche. This degree of specialization was not present previously and has assisted in their success.

• Bareboat Fleet French Side

The following is an estimate of the Bareboat fleet which is officially based on the French side. The fleet sizes change as a result of bareboat companies moving their fleets between islands to satisfy demand as needed.

- Sunsail/ Stardust 75 vessels
- Moorings 50 vessels
- VPM 17 vessels
- Swan 6 vessels
- Odd visiting vessels approx 5

The fleet composition of bareboat companies continues to change with catamarans playing a much greater role in the past eight years. The fleet share of catamarans continues to increase. Because of their greater comfort they have opened up yachting to a greater range of customers. The size of the boats increased over the number of years but the increase in average size seems to have leveled off. Instead bareboat companies are becoming more sophisticated about fitting a higher quality of equipment and service on a smaller boat.

The origin of bareboats is almost entirely French. This was not at all the case when the industry first started. Initially the cause of this was the defiscalization programmes but more recently the skills that have been developed in the interim are the cause of maintenance of this sourcing. The consequence of this situation is that European connections with the Caribbean have become much greater.

A count of boats that were located in St Maarten/Saint Martin was done over a number of months, which will give an indication of the extent of activity. All boats over 28 feet were counted. Because the owners were not interview there is no idea of their use.

Table 1

		October 2001	January 2002	February 2002	March 2002	April 2002	Area (see map)	Average over months measured
1.	Simpsonbay Yacht Club	30	84	93	84	83	3	74.8
2	La Palapa (and Dive Safari's)	1	23	27	19	11	3	16.2
3.	Harry's Boat Yard	15 (water) 16 (land)	6 (water) 15 (land)	9 (water) 13 (land)	9 11	8 (water) 13 (land)	3 3	9.4 13.6
4.	FKG	2 (water) 21 (land)	8 (land)	5 0	0 0	6 (water) 0 (land)	3	9.4 13.6
5.	Lagoon Marina	1 (water) 1 (land)	6 (water)	7	9 0	5 0	3	5.6 4.2
6.	Turtle Pier	3	8	7	6	4	3	5.6
7.	Stop and Shop	3	5	4	7	5	3	4.8
8.	Island Water World	11 (water) 4 (land)	28 (water) 4 (land)	33 (water) 1 (land)	26 5	34 (water) 1 (land)	3 3	26.4
9.	Port de Plaisance	2	45	51	36	20	3	34.8
10.	Bobby's Marina at Simpson Bay	48	33	40	42	40	3	40.6
11.	Marigot Harbour (outside)	21	93	65	92	132	French side	80.6
12.	Polly Pat	52	32	30	31	35	French side	36
13.	Time Out	23	61	55	45	40	French side	44.8
14.	J.C.'s Yard	30	34	21	25	30	French side	28
15.	Geminga	80	68	30	33	37	French side	49.6
16.	Marigot Harbour (inside)	9	27	38	30	32	French side	27.2
17.	Marigot Lagoon	6	57	70	84	61	French side	55.6
18.	New Wave	10	10	6	6	6	3	7.6
19.	Grand Case	3	7	6	9	6	French side	6.2

20.	Anse Marcel	28	47 (outside 9)	54 (in)	57 (in)	39 (in)	French side	49.2
				3 (out)	5 (out)	4 (out)		
21.	Oyster pond	10	46	6	57	47	1	33.2
22.	Jon Brokhart	5	7	4	7	4	1	5.4
23.	Oyster Pond (lagoon)	15	40	26	39	39	1	31.8
24.	Mark Peterson	2	2	2	2	2	3	2
25.	Point Pirouette	6	12	15	18	17	3	13.6
26.	Ric's Place	2	2	2	2	2	3	2
27.	Pinel Island	20	28 and 1	26	27	24 and	French side	25
			airplane			1 airplane		
28.	Peg Leg's	5	5	6	9	10	3	7
29.	Boat House	0	0	0	0	0	3	0
30.	Simpson Bay (outside)	5	45	70	54	42	3	43.2
31.	Simpson Bay (inside)	32	124	130	186	153	3	12.5
32.	Snoopy Island	14	14	4	15	14	3	14.2
33.	Lee's Deep Sea Fishing	4	4	4	4	4	3	4
34.	Bobby's Marina at Philipsburg (in the water)	9	20	21	17	15	2	16.4
35.	Bobby's Marina at Philipsburg (in the yard)	40	23	35	40	34	2	34.4
36.	Greenhouse	6	3	4	6	5	2	4.8
37.	Chesterfield's	3	7	7	7	14	2	7.6
38.	At Anchor	7	7	13	12	15	2	10.8
39.	Orient Bay			5	7	6		3.6
40.	Shell			1	1	1		0.6
	Total	683	1108	1079	1188	1100		

• Analysis of areas of concentration

We have separated the boat count results into three areas of concentration. These areas are the Oyster Pond area, the Great Bay area and the Lagoon "yachting corridor". These figures will show that the major area of concentration is the lagoon area at the time of our counting.

Table 2

Area	Average of boats present in	% of total average
	season	
All areas (Dutch side)	535.5	
Area 1 (Oyster Pond)	70.4	13%
Area 2 (Great Bay)	74	14%
Area 3 (Simpson Bay & Lagoon)	391.1	73%

2.2 Structure and dynamics of the industry

The structure of the marine industry in St Maarten varies from that in most other islands. There are relatively less charter boat companies and more marine equipment suppliers. There are relatively more large yachts than elsewhere. There are relatively more suppliers of specialized skill based services. There are relatively fewer yachts anchored in quiet secluded picturesque anchorages.

The profile of the industry follows the conditions and opportunities that are present on the island. The lack of customs duties has made it possible to manage stocks of products and the relatively easy immigration possibilities has made it possible for expatriates to initiate services based on skills developed in metropolitan countries.

2.2.1 Major events

The major event that promotes yachting on the island is clearly the St Maarten Heineken Regatta. This takes place in the first week of March and simultaneously matches the peak of the season. A significant aspect of this regatta in contrast to some of the other events that play a role in showcasing the industry in the Caribbean is the fact that it has a professional management rather than a volunteer management. The event takes place annually during the first weekend of March. It is currently the largest event of its kind in the Caribbean. The regatta organization's turnover alone is around \$250,000. The 250 boats participating have on average six crew so that there are at least 2000 persons on the water competing. Approximately the same number of persons are present for the social side of the event. Of the 250 boats, about half are competitors sailing "bareboats". The most exposure value from the event however is obtained through the approximately 15-boat big boat class which are part of the Caribbean Big Boat Series. The actual participation in the regatta, however, is not what constitutes the event's economic contribution. Instead, the regatta, because of its interest value, has been an effective platform for focusing attention on the marine activities on the island. This event, together with others in the region,

has also been a major contributor in focusing attention on the region as a destination and continues to have great potential in doing more of the same.

The St Maarten Yacht Club which, through its membership has an interest in maintaining the event, owns the regatta and its contribution. The government makes a small contribution to the purchasing of media exposure for the event.

There have been discussions about the possibility of setting up a charter boat show in St Maarten. The island is conspicuous by the absence of such a show.

2.3 Anchorages and harbours on the Dutch side of St Maarten

• Oyster Pond

This well protected anchorage and dockage is half-French and half-Dutch. You'll dock your boat in Dutch water but this anchorage is accessed from French territory. The Pond is an excellent hurricane hole and blessed with good trade winds, however the entrance, although very safe, is quickly perceived as being difficult as it is on the weather side and high swells can make entering quite dramatic.

• Great Bay

A large anchorage that is excellent in normal easterly winds but if the wind veers to the south or if a large swell gets around the corner of Pointe Blanche then the anchorage becomes less calm. On board residents experience discomfort as a result of the rolling of the boat.

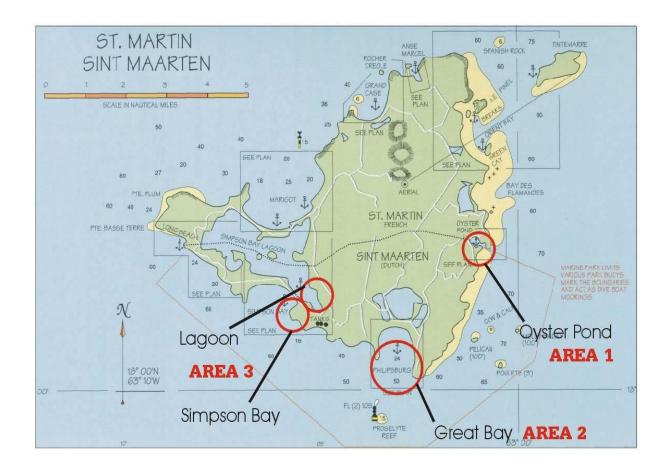
The presence of a great deal of commercial traffic has made the anchorage less attractive for yachtsmen. The high level of traffic of cruise ship tenders has also negatively affected the attractiveness of the anchorage.

• Simpson Bay

Similar to Great Bay in respect of its risk for discomfort caused by vessel rolling due to swells.

• The Simpson Bay lagoon

Fully protected and large with good anchor holding. Its negative history as a graveyard for boats during the passage of Hurricane Luis is unfair since Luis was an exceptional Category 5 hurricane, that remained in almost the same location for 36 hours and the damages caused were more a reflection of the extreme nature of the hurricane rather than the protected nature of this inland water



Three Yachting Centres

• Little Bay and Maho Bay

Irregular anchorages.

The well-known cruising guide author, Don Street, advised visitors to St.Maarten that if the Dutch side (Simpson Bay and Great Bay) were rolly, then Marigot would be fine. If Marigot were rolly then Great Bay would be fine. When the swell is directly out of the east then both are fine but as soon as the swell is either more from the north or the south then one of the two sets of anchorages becomes affected.

2.4 Patterns and levels of use

• The Move from Great Bay to the Simpson Bay Lagoon

The remarkable feature of the use patterns in St Maarten is that about half way through the 1990s the centre of activity in yachting transferred from Great Bay to the Simpson Bay Lagoon. It has to be a point to be noted when attempting to understand what causes the growth of yachting centers as to why this happened and why it happened in such a short period and to such a dramatic extent.

Originally Great Bay (Bobby's Marina and Great Bay Marina) was the only dockage available. Very few docks were present in the lagoon. There was an old bridge whose appearance did not inspire confidence. As a result of existing activity, all service and supply companies had established themselves in the same area and a considerable range of services were available.

A review of the time line will show that increasingly investments were made in the lagoon and subsequently an increasing amount of services followed. At a certain point when remaining services in Great Bay were disadvantaged by the shift in the centre of activity, almost all services moved quickly to Simpson Bay.

Dealing with the larger yacht market, it is clear (see later documentation) that the mega yacht market and the larger vessels are going to be an increasing part of the total marine cruise business in the future. The challenges in attracting this market are substantial. St Maarten has achieved a substantial market share by the provision of suitable dockage and the limited services that are required when vessels are on standby or restocking and refueling between cruises or charters.

In the case of the smaller vessels the expenditures that are normally made when refitting and refurbishing takes place have been reasonably captured by the St Maarten marine industry. Whether this is possible for the larger yachts is still a question that requires answering. The technical requirements and specific skills required for servicing the larger yachts are a lot more difficult to obtain than in the case of the smaller yachts. Equipment is more often highly specialized, custom and non stock. The nature of the equipment is very often highly advanced with complex wiring and automated systems that require highly trained personnel and with which the owners do not want to take any risks with lesser personnel.

On the other hand, the substantial growth in the number of large yachts provides an opportunity that matches well with the existing industry. Substantial revenues are at stake in this market where high standards generally take precedence over competitive pricing. There are also substantial advantages to be had by a jurisdiction where greater flexibility may be present than what is the case in metropolitan areas where trade unions and rigid environmental legislation are restrictive.

A number of players are considering entering this market including Bobby's Marina and St Maarten Shipyard NV. The former is considering a 300 ton travel lift system and the latter a 1200 ton synchro lift system. At this time these vessels larger than 200 tons can only be hauled by dry docks located in Guadeloupe, Martinique and Puerto Rico. The first two islands have floating dry docks and the latter a synchro lift. Bobby's Marina thinks that providing this service with a travel lift will result in a larger share of the market as yachts prefer this equipment to the dry docks. If this were to be a success then the island's marine industry would enjoy a dramatic boost, as the spin off effects would be substantial.

• Time line on marine leisure sector in St Maarten

1969	Bobby Velasquez builds first dock
1974	Bobby's marina builds first slipway
1980	Bobby's marina builds dock extension
1981	Marina La Royale opened first part of dock
1982	Bobby's Marinas first travel lift (50 tons)
1983	Captain Oliver's dock opens, Bobby's marina builds breakwater
1984	Great Bay breakwater built at Bobby's marina. New Bridge to Simpson Bay Lagoon
1985	Marina La Royale opens second docks. Bobby's Marina upgrades travel lift to 70 tons
1986	Anse Marcel Marina opens its docks
1989	Simpson Bay yacht club builds 132 slip marina, Simpson Bay Yacht club opens its docks
1990	Port de Plaisance opens their first (south) docks, Island Water world opens docks
1991	Bobby's Marina upgrades travel lift to 90 tons.
1994	Hurricane Luis, 1200 boats damaged or destroyed in lagoon
1995	Hurricane Bertha. Bobby's marinas third travel lift installed.
1996	Major investment in recovery from Hurricane Luis.
1997	Marigot Breakwater construction started.
1998	Hurricane George
1999	Hurricane Lenny destroys large number of boats, FKG Yacht Rigging opens new workshop.
2000	FKG builds dock, New Budget Marine building, Bobby's marina opens.
2001-2002	Lagoon yard, dock and 25-ton travel lift; Marigot Marina started; La Palapa Marina builds dock extension; Captain Oliver's builds second part of their docks; Port de Plaisance (Now Princess Marina) builds second docks; Bobby's lagoon
	yard gets new (50-ton) travel lift; Marigot marina completed (130 slips); Isle de

Sol Mega Yacht marina starts in the lagoon for completion Dec 2002; Widening of bridge scheduled for end 2002

An attempt has been made in the above time line to list sequentially all the major investments that have driven the marine industry in St Maarten. We have included investments on the French side of the island, as, although these are not in the jurisdiction being reviewed in this report, they have been a major factor in driving the marine industry on the Dutch side of the island. It is significant that the early investments were largely on the French side of the island, although in the latter years the investment has been more on the Dutch side of the island. There have been no public sector investments in this industry on the Dutch side other than the construction of the bridge into the Simpson Bay lagoon.

SECTION 3: EVALUATION OF YACHTING WITHIN THE NATIONAL SUSTAINABLE DEVELOPMENT FRAMEWORK

3.1 Identification of developments

• What drives the growth in yacht traffic?

The choice of a destination by decision makers on yachts is based on a wide variety of factors. Very often the decision is based on the technical requirements relating to the maintenance of the yacht. The decision is always influenced by the circumstances of the owner or charterer of the vessel. If all other factors determining a yacht's destination remain the same, the destination that can consistently supply the yacht's service requirements is ultimately the one to attract a large number of visitors.

In that respect, St Maarten has a number of services that are not widely available at other destinations. The destination therefore attracts a substantial amount of traffic on the basis of being able to meet technical requirements that cannot be met elsewhere. The availability of these technical requirements goes hand in hand with the fact that they are able to be delivered here quickly whilst the neighbouring islands, where customs procedures hamper the speed of delivery, are not able to supply with the same speed.

The following are some of the other typical factors available on St Maarten that would influence decision-making concerning yachts:

- 1. The lagoon dockage provides swell free facilities with no dangers associated with inclement weather. Up to now this has only been possible for yachts with a beam of up to about 35 feet but with the increased bridge span it will be possible for the largest mega yachts to enter. (The bridge is being widened by 20 feet. This will allow much larger vessels although there remains some difficulty with the angle of the channel that precedes it)
- 2. The FKG marine rigging company has specialist rigging equipment that cannot be found elsewhere.
- 3. The two main chandleries have at least twice the product range of competitive chandleries.
- 4. Specialist electronic services have sufficient size and momentum to maintain effective relations with manufacturers and offer warranty services. These services also exist elsewhere but in the case of St Maarten they are able to access the parts quickly when the fault is found.
- 5. Princess Hotel and Isle de Sol have power supply facilities that allow large yachts to shut down their generators. This makes the destination a much more practical

one for mega yachts that want to "park" for a long time or want to unburden the crew of generator maintenance.

6. All items that are required for the vessel can be obtained quickly and cheaply.

The examples mentioned above are just some of many that can provide insight into why St. Maarten is often the inevitable destination when it comes to the various ranges in services, especially compared with neighbouring islands.

When the decision-making is not based on the requirement of services, however, the boot is on the other foot. If the decision is based on finding the idyllic Caribbean anchorage with few other occupants, St Maarten is not likely to be a destination of choice. Fortunately for St Maarten there are a number of islands in its vicinity that fit that description like Anguilla, St Barths, St Kitts and Nevis. These islands then provide the "cruising area" whilst the base of the yacht remains St Maarten, and more importantly the location of the maximum expenditures.

The growth of the yachting sector cannot be explained without referring to the role that was played in marketing the island as a yachting destination. Industry players recognized that marketing was a critical issue and made extensive efforts to profile the island's activities in various media. The fact that one of the two major marine publications of the Caribbean originated in St Maarten and was long based here was also a factor. The profiling of the island's marine services in the "St Maarten Marine Guide" also helped. The effective use of the Heineken Regatta was also a significant factor.

3.1.1 Anchoring and docking: Patterns

• Repair patterns

Ideally the marine service industry requires a mix of cheap labour and high skilled and consequently high paid labour. Ultimately, however, the high skilled labour is the most crucial as its absence removes the possibility for critical activities and consequently the demand for low skilled labour

• Supply facilities

The presence of two major trading houses of marine equipment plus numerous smaller specialist traders is a major attraction. The viability of these and other marine services is enhanced by their being consolidated in a geographical area. This consolidation is likely to be a continuing advantage to the island if extraneous circumstances do not affect it. The size of the marine industry allows for the possibility of greater specialization of services and these specialties will increasingly make the attraction of the destination even greater.

The duty free status, and more importantly the lack of delays that are typically experienced where taxation, such as border tariffs, is collected, has been a major factor in stimulating the industry. The duty free status also makes it much more economical and less risky for traders to stock equipment than it is for their colleagues in the duty paid territories who do not only suffer

the lack of competitiveness in prices but also the extra risk of stocking a product if it were not to sell.

In many of the surrounding islands, mainly those within the Caribbean Community (CARICOM) grouping, foreign yachts are forced to pay a high percentage of taxes in the form of indirect taxes even though they are not residents of that territory and even though they may have already paid income tax on their funds in other countries.

This is because the tax collection system in these islands particularly Antigua is based on indirect taxes (duty, turnover, customs service) and local residents pay this in place of a direct (income) tax. This means that visitors are being forced to pay what would have been the local income tax each time they purchase a product. This taxation is not appreciated and hundreds of "Boston Tea Parties" have taken place as the yachtsmen have relocated their spending to a jurisdiction in which this does not take place.

One would imagine that in due course these islands will restructure their tax regimes and realize that taxing visitors is not in the interests of their tourism product. When this happens, and it surely will, it would be prudent for the marine industry on St Maarten to remember that such a change is inevitable and that a new level of competition will quickly evolve.

• Vessels becoming larger and larger

Over the past 20 years there has been a dramatic change in the size of vessels that are visiting the island. Especially in the past five years there has been a huge increase in the number of larger yachts.

When Simpson Bay Yacht Club was being designed in 1985, the architects were planning on an average size boat of 40 feet. The electrical supply system was designed on that basis. In 1999 it was necessary to upgrade this at great cost because the size of boat, as well as the electrical demand, was increasing substantially.

The latest dock addition, Port de Plaisance's north dock, has been designed with the advantage of more recent experience and consequently the investment has matched the current demand profile more. It is therefore critically important that the industry will be able to forecast future demand. In that respect there is an increasing high quality of industry information available globally that can provide an improved basis for investment decision-making.

Indications are that there will be a larger demand for services for larger vessels. In "The Yacht Report" there is an ongoing survey of the level of new builds over 24m (80 feet). The most recent report advises that in this category there are over 467 yachts being built worldwide at 151 yards. The report also advises that the "giga yacht" sector is booming and there have never been as many over 80-meter yachts built as is currently the case.

The Caribbean is a likely destination for these larger yachts. The provision of the services that these yachts require is not going to be achieved by the quick construction of a dock, and some services, as was possible in the Caribbean 25 years ago when the yachts were a lot smaller. Such investments are going to require careful planning, substantial investment and inevitably a high

level of business forecasting to attract the investors. More importantly, the service of these larger yachts is going to provide dramatically different opportunities to Caribbean business than was the case in two decades ago. In the case of large mega yachts:

- 1. The complexity of the equipment is such that highly technical service staff are required.
- 2. When the yachts are built, there are very often long-term contracts for maintenance which are tied to the installation contract which eliminates Caribbean-based service possibilities.
- 3. The equipment required for service is substantial and poorly capitalized Caribbean businesses may not always be able to match the requirements.

3.2 Synergies with land based activity

The presence of a substantial land based tourism industry on the island ensures that the typical land based services are available in relatively plentiful supply. There is no shortage of restaurants and supermarkets. Besides the extent of services, the services offered are both European and American oriented and are all relatively competitively priced as a result of the low tariff economic structure.

The presence of a substantial marine sector that services the land based tourists has a major stabilizing effect on that part of the marine industry that services the marine cruising and the yachting industry.

We refer here to the part of the marine industry that services the land based tourists through ferries; day charters and dive operations. This sector inevitably provides the most direct and highest value added percentage component of all the contributions to the local economy by the marine industry. Activities are largely services with a large labour component and a limited trading function. There is a capital component in these services, which consists of vessels and investment in marketing capacity.

The activities on St Maarten consist of:

- 1. Ferries to St Barths, Saba, Anguilla
- 2. Cruises of various types including sunset, snorkelling, 12 meter racing
- 3. Dive trips
- 4. Small boat rentals and jet ski rentals

We have reviewed the size of the fleet in this sector and the total employment is in the area of 90 persons in high season, which will reduce to 40 in the low season. Probably another 20 sales persons and support staff will support these. At the time that these services are at their lowest

level of business they are typically carrying out their maintenance work and this provides some limited activity for those parts of the marine industry that are servicing the cruising yachtsmen but whose level of activity is at its very lowest at that time.

3.3 Identify gaps

• Seasonality and Hurricanes

Over the past seven years, seasonality has increased. Whilst activity in the season has increased, in some activities the absolute number of activities has decreased in the off season. This greater seasonality is particularly acute in those territories where hurricanes have recently hit, like St Maarten, but a close analysis will show that the hurricanes are not the only cause of the increased seasonality. The hurricanes have chased away the cruisers which might have been in the Caribbean at that time, but the category that has been the cause of the major growth of the industry, the larger yachts, will not be contributing to activity during this period, and the reason for this is not the hurricanes. The more important reason is the fact that the owners want to use the boats in the metropolitan regions during that summer period and the vessels' ability to do the trip in a seaworthy manner has increased dramatically over the past number of years.

Activity in the months of June to September can never grow until a technical solution is found to the issue of hurricane damage risk. At this time such solutions are not easily available. Existing hauling facilities are full in the off season and the cost of land on St Maarten and its availability makes the returns on investment limited. In the water, storage is never risk free and it is only the Simpson Bay Yacht Club Marina and Captain Oliver's marina that are positioned in relatively low risk locations. The continued situation whereby the fixed costs of enterprises continue through half the year reduces the possibility of investment of surpluses and attracting investment.

Unfortunately solutions cannot be copied from other environments and are going to have to be specific to the particular demands of this subregion. Technically the solutions cannot be so problematic as the problem of creating low risk structures in hurricane winds is far from complex. The problem is that the developments of the solutions require investment and the investment has to come from the small surpluses of the industry.

If the season could be stretched even to some degree it would increase the viability of business substantially. Instead of closing down for six months, a four months close down would make a very large difference indeed. Of course, most businesses do not close down but somehow struggle on. The short season means that they can never employ the people they should and make the investments they should. The options for stretching the season are obviously reduced to two options. One of these is the June July period and the other the November period. If it were not for the fact that recent hurricanes took place in both of these periods (Bertha in July 1996 and Lenny in November 1999) it would be more likely to sell one of these periods.

Nevertheless, it would be prudent for the private and public sector to coordinate in such a manner as to focus on one or the other of the two marginal periods to increase activity and to ensure that the necessary marketing, price reductions and special events be coordinated in such a way as to build a trend to greater activity in one or the other period.

• Storage and land scarcity

The impact of seasonality can and does get minimized when the destination is able to store boats during the off season whereby the boats are stored out of the water, protected from hurricane damage and inevitably are serviced and repaired to some degree. Whilst this activity had seen an upward trend till 1995, the insurance availability and restrictions meant that there was a sudden rush to the hurricane free areas to the south of St Maarten and a lessening of the activity.

Whilst the activity has come back to some degree it is and will be limited by the availability of affordable and plentiful land. Certain other destinations have greater availability of this "factor of production". Conditions in St Maarten in this respect are likely to become worse rather than better as more land is likely to not be available.

• Insurance

After the 1995 hurricane insurance companies were most reluctant to bear any risk in St Maarten as a result of the huge losses in the lagoon. The aftermath in which substantial confusion reigned did not improve their attitude. Certain other islands like Saint Lucia and Tortola made specific efforts to engender confidence amongst underwriters whilst no activity of this sort was forthcoming from St Maarten.

3.4 Dependent communities

The nature of the industry in St Maarten is such that it is not possible to identify any specific communities dependent on the marine sector. The people in the sector are physically closely integrated with the other economic sectors. The entire community of St Maarten is dependent on this sector as being one of the few sectors that have shown growth in the past few years.

3.5 Stakeholders and User conflicts. Land traffic vs. vessel traffic

One of the direct conflicts between marine tourists and the land-based economy is the delay caused by the Simpson Bay Bridge. At the height of the season the bridge can stay open as long as 25 minutes causing substantial delays along the Lowlands/Cole Bay artery. In the most recent season there have been changes in bridge times but the disruptions are still substantial. Better bridge management and communication could minimize such conflicts. On the other hand the problem will be exacerbated with the growth of the yachting sector in the lagoon area.

• Sewage in Simpson Bay

There being no sewage system in the Cole Bay area, the overflow from septic tanks, when it rains, enters the lagoon. This causes substantial stench in that area of the lagoon where a large number of yachts are docked or anchored and where the tidal evacuation effect is the least.

• Hurricane Refuge conflicts

When vessels seek protection from hurricanes in the Simpson Bay lagoon or the Oyster Pond, the interests of these vessels become intertwined. Any vessel that is poorly prepared increases the

risk of those vessels that are well prepared to ride out the hurricane. The larger vessels pose relatively larger risks to others, and particularly large low value steel vessels pose the greatest risk to others. The most vulnerable vessels are the high value yachts with high quality finishes and whose hulls are more suitable for performance and beauty rather than strength.

From the national interest the general effectiveness of a refuge for vessels is diminished by individual yachts that are likely to cause themselves and others more damage due to the lack of preparation. It would therefore be valuable if it were possible to minimize the unnecessary risk created by these vessels and thereby increase the attractiveness of the destination, particularly in the hurricane (off) season. The fact that it is not predictable which vessels will make use of the refuge limits such actions.

At the present time the SMPA has a vessel zoning plan which segregates the Simpson Bay lagoon between cargo and pleasure vessels. Unfortunately, in the narrow time-frame in which this segregated anchoring would need to be enforced (the few hours before a hurricane strike) personnel are in the very shortest supply and the SMPA has to see to other hurricane preparations.

Whilst there is a plan, therefore, the possibility of policing it to make it effective is not there. Even with the limitations on policing the plan in the final hours before a hurricane strike, the possibility is there to provide anchoring schemes to all vessels in the region and to distribute such schemes via existing media options. This has not been done and presents an easy option to improve this situation and to limit the policing work at the crucial moment.

SECTION 4: EMPLOYMENT ASPECTS OF THE YACHTING SECTOR

4.1 Direct employment generated

The total employment in the sector is approximately 322 persons in the season. We assume that persons who work in the season and not in the off season do not have alternative employment. The total employment in St Maarten, as recorded by the Bureau of Statistics in 1997, was 18,899 making the direct marine industry component of all employment 1.7% of the total work force. The current workforce in the industry has a high level of foreign workers by origin although increasingly this group is becoming settled, has acquired rights locally and become stable.

There exists a relatively large demand for the provision of high skill labour and the ability to supply this has probably been a major factor in the growth of the industry. These skills are evident in electrical and electronic installation and servicing, rigging services and mechanical repairs. These services have built up a volume of business and have invested in business development to the extent that they have created a level of service provision that exceeds that of any of the competitive destinations. These businesses have one problem in common being that they need to continue attracting labour that is not only skilled in the general field but also in the more specific fields that relate to the particular marine leisure applications.

The generation of unskilled labour creates demand for workers who, in current labour market conditions, tend to be attracted from outside of the territory rather than from the local labour force.

4.2 Indirect employment generated

The yachting sector indirectly creates jobs in services which do not primarily service the sector but whose job base is extended through the demand created by the yachting sector. Some of these are:

- 1. Laundry Services and Garbage disposal
- 2. Taxi services
- 3. Car Rental
- 4. Super markets and food wholesalers
- 5. Travel agencies
- 6. Banking Services
- 7. Restaurants and Bars
- 8. Cleaning services
- 9. Hairdressers
- 10. Dive shops
- 11. Florists
- 12. Gas suppliers
- 13. Medical services

Table 3

Company	Activity	No of	No of	% turnover
		employees	employees Low	in marine
Deade et Manine	C1	high season	season	industry
Budget Marine	Chandlery	40	35	97%
Island Water World	Chandlery	37	37	99%
FKG Rigging	Yacht rigging, fabrication and machine work	19	15	95%
Dive Safaris	Dive charters	25	15	-
Ocean explorers	Dive Charters	3	3	-
MSC Full marine services		4	1 1/2	95%
La Palapa Marina	Marina	8	3	100%
Simpson Bay Marina	Marina	11	9	100%
Princess Marina	Marina	6	4	100%
Bobby's Marina	Marina	44		100%
Out Island Charters	Day charters	17	17	-
12 Metres	Day Charters	30	15	
Electec	Electrical services	35	33	40%
Main Tec	Electrical services	6	3	80%
Marina Tech	Electrical services	3	2	100%
St. Maarten sails & Canvas	Sailmaker	6	6	75%
New Wave Marine	Marina (?)	2	2	100%
Simpson Bay Diesel service	Diesel service	7	2	90%
Yamaha	Yamaha dealer	5 5	5	70%
Bay Island Yachts	Yacht broker	2	2	100%
Business center	Internet and phone service, crew placement	3	2	90%
Necol	?	6	0	99%
Permafrost	Marine fridges and air- conditioning	3	0	100%
Total		322.5	211.5	

This indirect employment occurs at all times of the year insofar as the core marine businesses are requiring support services to operate their own business. The direct purchasing by marine tourists is very much more seasonal. Some services like administration services would be hardly seasonal, whilst others, like high end limousine services or specialized food suppliers would totally close down in the off season. If we assume that the core marine industry supports another 50% of the employment that exists in the marine industry we can assume that the indirect employment generated is something of the order of 161 persons.

The total employment that is created by the existence of the marine cruise industry could therefore be roughly estimated at 2.55% of the total work force. It must be remembered that this only refers to the marine cruise industry and not to that part of the marine industry that services land based tourists.

4.3 Employment practices

Employment practices vary per activity. In the chandleries and larger service establishments most employment is year round. In the marinas and yards the core staff is also likely to be year round. The most seasonal employment practices are found amongst the independent day workers and amongst the contractors in the yards and those business that are only open for the season.

4.4 Available Skills

The fact that the majority of skills utilized in the industry are from extraneous sources confirms the fact that there are very few skilled sources locally available. This is not to suggest that talent or manpower is not available, simply that interest in this sector and this type of position is not there.

4.5 Training Facilities

There are no formal training facilities other than those that are supplied on the job to employees. We have had contact with the coordinator of scholarships for the island government, who reports that up to now the marine sector in general has not been a target area for scholarships. "Boat Repair" is now on the priority listing of government. She also reports:

"The financing department is currently preparing to conduct a study, which will facilitate the decision on what should be the priority (target) areas of government. This survey queries the private and public sector as to the skills/careers that this island needs in the next five years. The marine sector will also be approached to participate in this survey so the opportunity will be given to partner with government as to what careers/skills are needed in the marine leisure sector in St Maarten".

The technical school section which might have been the source of trained artisans, the Milton Peters MTS has in 2002 closed its doors so that this possibility of sourcing technically proficient workers has been eliminated. There remains a lower technical school that provides technical training but whose level is only going to be suitable for a more limited range of functions in the marine industry.

4.6 Participation of Caribbean Nationals

The rapid growth of the St Maarten economy in the past 20 years has created substantial job opportunities for Antillean nationals. There has therefore not been a great deal of interest by career seeking Antillean youth to enter the industry. The industry has not been seen as a highly desirable career choice as much of the work was seen to be physical and because the association with marine affairs was closely related to hardship often inspired by the fact that, historically, marine transport was the only option for St Maarteners who, because of the poverty of their island, were forced to travel to other destinations like Curacao and Santo Domingo to find work. The common thread between Antilleans that are in the industry is some long-term affiliation with the sea and marine affairs. Usually a relative has worked in the industry.

As the economy of St Maarten levels off in its growth rate, and the natural growth rate of the population has in the interim been augmented by extensive immigration, there will be a demand for employment outside of the most desirable career paths that have traditionally been chosen.

The Government of St Maarten spends a large amount of money on scholarships that can be taken up in various countries. Although there have been attempts to direct scholarship awards to skills that are more appropriate to the economy as a whole there is not yet much demand amongst school leavers for studies in this sector.

SECTION 5: THE SOCIAL ECONOMIC IMPORTANCE OF THIS INDUSTRY

5.1 Public Sector Revenues

Public Sector direct receipts from the yachting industry are limited. Clearing fees are very low indeed (About \$13.00 per departure) and there is certainly no benefit for the government in such income. This limited income is probably more than counterbalanced by the free services provided to the industry in respect of bridge opening and maintenance, garbage collection and dredging.

Public sector receipts from the taxation are relatively high. No figures are available as the industry does not enjoy separate categorization in tax figures. The fact that there have been no tax holidays (on profit taxes) given in this industry whilst extensive holidays have been given to attract other industries would suggest that relatively speaking the industry is a strong supporter of government revenues.

5.2 Measuring economic impact

Measurement of the economic impact can be done in a number of ways. The most obvious one is to measure the total number of yachtsmen, (= consumers = visitors = customers), determine an average expenditure and then extrapolate to measure a total economic impact. Hence like most studies, the number of consumers are measured by counting the number of yachts and then these are multiplied by an average expenditure that is deduced from a measured sample.

We suspected from the start that the variance of expenditures, length of stays and nature of activity whilst in the territory were so great that such a method would not be effective and our interviews and responses confirmed this. Here are some of the issues that make the standard approach of measuring consumer patterns difficult, if not impossible:

- 1. In St Maarten the controlling of vessels properly entering has historically been limited. Many vessels traditionally do not clear in or have not in the past.
- 2. The authorities do not differentiate between the type of vessels that clear in. The number will include persons who do regular short trips to nearby neighbouring islands. These people may be locally based. The numbers will include small yacht like vessels that bring in a variety of goods from other islands. The number will include small informal ferries. The number will include bareboats on delivery arrivals.
- 3. Vessels that will only clear into the French side of the island generate a large part of the economic activity on the Dutch side of St Maarten and we would be likely to under measure the activity.
- 4. The number of yachts does not relate to the economic activity. We suspect that a few yachts are responsible for a disproportionately large amount of activity and

other yachts for a disproportionately small amount of activity. Our response figures make it very clear that this is indeed the case. It is quite likely that the economic impact of one yacht might equal the economic impact of 20 others. How would we know how many of the high economic impact yachts would be counted? Or whether we have a disproportionate number of low impact yachts in any location or in any season?

It was therefore decided to measure the economic impact with a "production" approach in which the fundamental pitfalls we have described above are eliminated but which approach brings with it other, we believe, lesser problems.

5.2.1 Methodology

In our production approach to measuring the economic activity that constitutes this industry we have estimated the basis for the total revenues of the industry by measuring the number of employees and using industry benchmarks to determine the total economic activity. From trade figures we know of the rough rates of turnover. In the chandlery field, for instance the average employee should match with a minimum of US\$125,000 per annum of turnover. These are figures regularly published and discussed in industry magazines like "Boating Industry" and other metropolitan trade magazines.

We then surveyed vessels in various size categories as to what percentage of their expenditure went to the "core" marine industry. (The players in the core industry are listed in section 14.) This allows us to develop a multiplier from which we come to the conclusion of the total economic impact of the sector. We discovered however, that the percentage spent on the marine industry was variable, as was the total amount spent. This high degree of variation in expenditure and the statistical implications of this have consequences both for our methodology as well as one based on visitor expenditure.

We come to the conclusion therefore that the variation amongst yachtsmen in respect of expenditure is so variable that studies based on a survey of vessels need to be relatively large. We also conclude that material based on the production side of the industry are relatively more accurate than those based on the highly variable material of the demand side of the industry. Our strategy for measuring the economic impact is to estimate the revenue base of the various players in the industry and to multiply this by a factor that we derived from our survey. The description of the survey may be found in section 5.3

5.2.2 Revenue base of the "Core" marine service industry

In the absence of industry figures on revenues estimates of revenue are based on the number of employees. This is a standard practice in this and other industries. In the case of purely trading activities the ratio between employee cost and total revenue is usually quite high. A figure of 9:1 is quite likely. In the case of service industries the ratio is much lower going as low as 3:1 in some sectors. Many of the activities like rigging, sail-making and electronic work are based on a combination of trading and supply of labour, thus making the ratio fall somewhere between the two figures mentioned.

In the case of a service industry where some sales are made, it is likely that the total revenues are going to be about five times the total wage bill. This would mean that a small service operation with four people working with the average wage bill being in the order of US\$20,000 per person will be the basis of a turnover of US\$400,000. In the case of activities with lower paid labour the factor will be different to that in higher paid services like electronics. We have indicated per sector what our "turnover per person" figure is for the purposes of our calculation.

Marinas: We approximate the number of people working here as being 30. Labor is a very low percentage of the revenue base of this sector and total marina revenue is estimated at US\$7.6 million. We estimate that fuel sales constitute 30% of this amount and this figure includes \$2.3 million of fuel sales.

Chandleries and distribution: We approximate the number of people working here as 60. Labor is also a very low percentage of the revenue base and the total chandler revenue is estimated at US\$9 million. (Turnover per person = \$150,000.)

Electrical Services: In this subsector the activities are often only partly marine. We estimate the equivalent of 12 persons being engaged in this when spread over the entire year (activity is very seasonal) Labor is a very high percentage of the revenue base but these players also usually do a substantial amount of equipment trading. Total revenue base is estimated at US\$1.6 million. (Turnover per person - \$130,000)

Yard Services: There are three yards and a number of smaller ones with approximately 35 persons engaged in yard services. Much of the revenue is based on storage in the two Bobby's Marina yards. We estimate a revenue base of \$5 million. (Turnover per person = \$140,000)

Sailmakers: In this subsector there are two firms which together employ eight persons and also sell some products. Revenues are estimated at \$0.8million. (Turnover per person - \$100,000)

Riggers and Fabricators: The one major player here employs between 15 and 19 persons with an estimated turnover of \$1.7 million (turnover per person - \$100,000)

Specialized Service Activities: We have identified numerous players who do engine repair, refrigeration service and other activities. We estimate nine persons in this sector and a turnover of \$1 million (Turnover per person - \$110,000)

Grey market activity: There are numerous commercial activities that take place outside of the registered and known companies. We estimate a turnover base of \$1million for this.

Crew Salaries: We assumed that there were about 65 crewed yachts for five months, that the average crew earned US\$2,500 and spent 50% of his or her salary. (For explanation of the calculations below please see section 5.3).

Table 4

	Turnover	Amt as basis for econ. impact	Total Econ impact (US\$m.)
Marinas	7.6	7.6	
Chandlery	9.0	6.0	
Electrical Services	1.6	1.6	
Boatyard Services	5.0	5.0	
Sailmakers	0.8	0.8	
Rigging and Fabrication	1.7	1.7	
Specialized Services	1.0	1.0	
Grey Market Activity	1.0	1.0	
Total		24.7	52.36
Crews Salaries			1.25
Guest Expenditure on boats not reported by owners or captains			1.0
Total			54.61
All figures in US Dollars			

5.3 Survey of core marine activity compared to total economic impact; the basis for a multiplier

We divided our respondents into boat size categories of under 44 ft, between 44 ft and 70 feet and above 70 feet. We would have liked to have separated them further but this leads to substantial complications. We asked them what percentage of their expenditure was on specifically marine services. If they were not sure of this we showed them our list of marine businesses.

We expect that we are obtaining reasonably accurate figures from most respondents but we are certain that we are missing some of the expenditures that are made by charter guests and owners and crews on a private basis. Our respondents were exclusively the captains of the boats and their perspective is inevitably the expenditure of the boat. We think that this explains the relatively high expenditure for core marine services amongst the over 70 foot group. We had in fact expected that for certain services this group would have had a relatively low expenditure on core marine activities compared to the smaller vessels. We also have breakdowns of a detailed analysis of a single larger yacht which supports our case. We also think that a large percentage of the large yacht expenditure is on fuel and dockage and we would like to research this in a future study.

<u>Under 44 ft</u>: The eight respondents in this category averaged a 37.25% expenditure on core marine expenditures

44 to 70 feet: The 23 respondents in this category averaged a 49.56% expenditure on core marine expenditures

Over 70 feet: The 22 respondents in this category averaged a 54.64% expenditure on core marine expenditures.

If we assume the response numbers to be roughly indicative of the total value of expenditure of those groups we can assume an average of 47.15 % of expenditure on marine services. Using this figure to calculate a multiplier for total expenditure on the island for the impact of the marine industry we multiply the total revenues of the core marine industry (US\$24.7 m) by the multiplier of 2.12 (100/47.15). We add the amounts that are not affected by the multiplier being crew salaries and guest expenditure. The total impact of the marine cruise or yachting industry for Dutch St Maarten can be estimated to value US\$54.61

• Crews Salaries and Guest Expenditure

Our analysis through survey of the amount spent on core marine activities and others did not include the amounts spent on crews' salaries and guest expenditure. As far as the crews are concerned we can only provide a reasonable guess.

As far as the guests are concerned this would be highly dependent on the amount of time they actually spend on Dutch St Maarten and our guess would be that it is relatively little and our estimate is therefore also based on that. We have no way of knowing the total number of guests who stay on boats. The collection of this data would be difficult as it would include arrivals by air and boat, as well as requiring a separation of crew and passengers whilst in many cases the definitions of the person's position is not clear. Also the variation in expenditure is suspected to be so great that a substantial sample would be required.

The estimates of these expenditures are added on after the factoring exercise on our table. The documentation of the responses can be found in Section 12 of this report.

5.4 Taxation Environment

There are no tax revenue figures that can be used in any significant manner to evaluate the contribution of the marine industry to public sector coffers. The tax regime in the Windward Islands of the Netherlands Antilles (Saba, St Eustatius and St Maarten), on the basis of the most recent figures available from the Bureau of Statistics, collects the majority of its revenue from direct taxes and specifically wage taxes which constituted 55% of all tax collected in 1997.

In the past years the indirect taxes may have become relatively greater through the introduction of the turnover tax (also called Gross Receipts tax in the United States). The turnover tax in the Windward islands is calculated at 3% over total revenues. Other taxes are connected with licensing especially casino licensing and hotel room taxes.

We are not aware of any tax holidays that have been granted in the marine industry and the industry generally bears a full tax burden. Some exemptions have been granted in respect of turnover tax for deliveries to foreign customers, an exemption that is standard throughout the Antilles for export activities. Due to the small scale of many of the enterprises, exemptions are not utilized, therefore relatively increasing the burden of the industry.

5.5 Industry strengths and weaknesses

Probably the greatest strength of the marine industry in St Maarten is the fact that it has developed without any public sector assistance. It is therefore not in any manner tied to the continuation of public sector support or assistance as many other sectors in the Caribbean are. (This is a common occurrence in the Caribbean where hotels close as soon as their tax holiday comes to an end, or gaming activities that are dependent on offshore opportunities). Expectations of support from government is therefore limited.

Another great strength is the fact that St Maarten has, relative to comparative destinations, economies of scale which are being achieved that raise the competitive position. Depending on the future trends in equipment choice, the range of services, in particular the specialized ones, may be a major factor in the growth of the destination. The proximity of good, quiet and attractive cruising grounds on the nearby islands must also be noted as being highly advantageous.

5.6 Towards a better database

In this study we have chosen to measure the production side of the market equation for reasons that we have documented. This choice was partly determined by the lack of consumer data. Whether or not a production (supply side) approach is made or a consumption (demand) approach, it would be in the best interests of further research to have better and more options for calculating economic impact.

Our review of records that were available at the St Maarten Port Authority was such that we could not distinguish between yachts and cargo vessels. This should be corrected. However we would like to see further collection of data as well, which would allow us to determine the nature of the arrival and departure. Some examples of the data we would like to see captured would be:

- 1. Choose primary reason for visiting St Maarten? Provide alternatives like shopping, cruising, repair etc.
- 2. Choose between the vessel operating as a yacht or as a cargo vessel.
- 3. Number of crew on vessel that are employed by the vessel. This would give some indication of the number or real tourists as distinct from crew that are clearing in.
- 4. Fill in the type of vessel, date of construction, design. This may not always produce useful results but will assist in determining whether the vessel is likely to be a yacht or a cargo or a charter, etc.
- 5. E-mail address for marketing purposes

Such questionnaires need to be tested prior to introduction in order to be sure that data matches the requirements determined.

5.7 Industry Contribution to GDP

There are no clear figures for the total GDP of the Dutch side of St Maarten. The National GDP is given as US\$2520 m. This includes the GDP of all the islands of the Netherlands Antilles (Saba, Statia, Bonaire, Curacao and St Maarten). The total employment on St Maarten is given as 22% of the entire country so that if the ratio of earnings to labour force were to be equal one could estimate the GDP of St Maarten at US\$554m.

Estimates that were made on the basis of the collection of turnover tax put the GDP at US\$400m but this figure can be expected to be relatively low due to the number of revenues that are collected offshore not being counted.

SECTION 6: ENVIRONMENTAL IMPLICATIONS OF YACHTING

6.1 Anchorages

6.1.1 The Simpson Bay Lagoon

The Simpson Bay Lagoon has huge potential for the continued growth of the yachting industry. From an environmental point of view it is fortunate that the most intensely utilized area is that part of the Simpson Bay Lagoon between a line drawn between the corner of the airport runway and Witches Tit and Cole Bay. The rest of the lagoon is used far less or not at all by yachts with the exception of a stretch along the runway. This area, particularly the Western section of the lagoon, is the most environmentally critical area and the area that has the greatest potential for preservation.

The design of the Simpson Bay lagoon is such that certain areas enjoy daily and rapid replacement of the water by strong tides that are caused by having only two small openings to the sea. At the openings the tides can run up to 3 knots. The extreme western and eastern parts of the lagoon however do not enjoy such cleaning action. Where the natural flushing occurs it is highly effective. Where it does not occur the water condition can and does become very poor.

Evidence of this can be seen when the causeway between Snoopy Island and the mainland is filled in causing an area of still water to the east of it. This causeway has been created and removed on a number of occasions through filling in of sand. Every time this happens the tidal cleaning effect is eliminated and the area very quickly becomes pungent due to the lack of tidal cleaning.

Large parts of the shoreline that are currently being intensely used were created in the 1960s when the airport runway was created, so there is little fauna and flora that calls for preservation. Only 20% of the shoreline of the lagoon is natural, the balance has been artificially created. (ref: van den Borch, Nature Foundation Study 2002). A large area was recently filled in for airport expansion, which involved substantial dredging of the lagoon.

The Cole Bay corner (the most easterly part of the lagoon) is the victim of much polluted run off from the Cole Bay urbanization as well as poor quality shoreline filling. The western side of the lagoon is relatively still in good environmental condition and it would make sense to preserve this area as much as possible.

Any discussions on the lagoon quickly lead to the conclusion that the French side should match any initiatives. The wait for a joint initiative has inhibited progress. A review of efforts to create statutory bodies across the border would suggest that realization is not very likely. It would therefore be advisable to proceed with a structure regardless of whether it is matched by the French side.

A current political issue in St Maarten concerns the dredging that was done by the Princess Hotel to create their North Marina. Pumping the dredged material onto adjacent land instead of

properly retaining the fill, caused it to overflow into the lagoon which created a semi submerged island. This has greatly modified the shoreline in this area. Princess Hotel intends to correct the situation, but the dredging equipment has already left the island.

Another shoreline alteration occurred during the dredging of the south dock of Port de Plaisance. Here, at an earlier stage the same shoreline alteration took place on a smaller scale and created a semi submerged island between Princess Hotel and Island Water World.

In the second half of 2002 the information has become available that the island government has given permission for the construction of a marina in the western section of the lagoon where there have up to now not been any marinas. This marina, apparently is to be connected to a new resort development being constructed.

An excellent study has been published in August 2002 by the Nature Foundation of St Maarten entitled "Impacts of Human Development in the Simpson Bay Lagoon Sint Maarten". This study fully reviews all the aspects of environmental impact including that of yachting.

6.1.2 Oyster Pond

Oyster Pond is also a vulnerable harbor due to its geography. It enjoys some tidal cleansing but not so much as the well-cleaned parts of the Simpson Bay Lagoon. The limited urbanization on its shores reduces rainwater run off with the result that water quality is quite good. The fact that there are no larger yachts here and the major operators can be easily identified (two large bareboat charter companies) limits the risk.

6.1.3 Great Bay

Great Bay has good tidal flow ensuring that there is a constant cleaning action. During the course of the studies that led up to the building of the Cruise Ship dock, current flows were studied. Current flows and the cleaning effect here are created by ocean currents rather than by tides and they are relatively evenly spread around the bay. Unfortunately there is a substantial amount of cleaning that is required, especially when after heavy rains the run off of the Rolandus Kanaal, which is the drain off for all the areas on the east of the Salt Pond, runs into the sea. Then, just like in Cole Bay, the overflowing septic tanks and all other garbage enters the bay. Also, the Rolandus Kanaal, under normal conditions smells of sewage and this smell can be identified by cruising yachtsmen when they tie up their dinghies or dock at Bobby's Marina, one of the two facilities in Great Bay.

6.2 Liquid and solid waste

6.2.1 Solid waste

Currently there is no planning nor policy in place to deal with solid waste in the long term. Although we earlier determined that in the short term and in the context of the available resources this is not critical, this will become increasingly critical as the intensity of use increases and the area of use widens

Although yachts do largely pump effluent into the anchorages, the effect of such effluent is tiny compared to the effluent, which is pumped in from domestic sources.

The solid waste from yachts gets immediately broken down in the salt water and distributed through the tidal affect whilst that from domestic sources in Cole Bay and Sucker Garden gets dumped in the sea in large quantities on those occasions when heavy rains cause septic tanks to overflow.

The evidence for this can be seen on every occasion that heavy rainfall occurs. As a result of the rain and the poor drainage system a substantial amount of septic tank overflow pours into the Simpson Bay lagoon and consequently the anchorage area. The pungent smell of this effluent is so great, the discoloration so obvious and the nature of the content so clear, that it does not require any further study to conclude the extent of this pollution. The identical situation occurs in Great Bay where after a rainfall the smell of effluent from the Rolandus Kanaal is almost unbearable as it enters the Bay in the north west corner and envelopes the yachts anchored in that corner of the bay. In comparison to this effluent, which is immediately pumped into the seawater from yachts and whose breakdown in the salt water is so rapid, the negative contribution is so small that it is truly negligible.

Ultimately the effluent of all sources needs to be brought under control, but at this time the contribution by yachts is not substantial. This conclusion is supported by the study carried out by the Nature Foundation on the Human impact on the Simpson Bay Lagoon.

6.2.2 Solid waste solutions

In discussions relating to this problem there is often reference to pump out stations. We would like to suggest that pump out stations are a somewhat ambitious solution to the problem in these territories where even gravity operated domestic systems do not always exist. Pump out stations, if they are to exist, must be perfect in their operation; they are going to be expensive to operate and must deal with all boats that come. In the case of a boat discharging sewage the pump out systems needs to mechanically raised by pumping the solid waste out of the boat, and then, in most cases, pump the material away from the dock into some suitable dump or into a truck which carries it to that dump. The pumping systems will require a high degree of maintenance and if not maintained in perfect order will inevitably cause great disruption.

We would suggest that a far more viable solution would be a "Marine Sanitation Devices" which partially treat the sewage on board the boat and which then pump it overboard in a state of such decomposition that the environmental hazard is much smaller. These systems are approved for certain areas in the United States. They operate with electrodes, which temporarily convert the salt water into a powerful bactericide in a process that destroys bacteria, harmful pathogens and viruses. They are able to achieve high standards of coliform and suspended solids removal.

We believe that this approach would be much more effective in the short term although it would be a disadvantage since it would not stimulate the investment in pump out facilities that will ultimately be required and which are currently not a viable inclusion into the public sector budgets of most east Caribbean nations.

6.2.3 Anti fouling paints

Like all Caribbean countries, the legislature of the Netherlands Antilles has not yet passed legislation limiting the use of tin in anti fouling (the most toxic heavy metal used in anti fouling). The result is that tin is still the element of choice in anti fouling paints in St Maarten and the region. The danger of tin cannot be underestimated.

There are reasons to suspect that tin content in the Simpson Bay lagoon is high. The International Maritime Organization (IMO), which is the division of the United Nations charged with the matter of ship pollution, has adopted a convention for the phased discontinuation of the harmful organotins in anti foulings. The water samples taken in the lagoon during the course of the study done by Emile van der Borch on behalf of the Nature Foundation showed heavy metal pollution that qualified between "moderate" and "serious "pollution.

The convention states that by January 2003 there should be no reapplication of paints bearing these compounds and by 2008 the existence should be totally banned except where the old paint is covered with a barrier coat. Apparently there are a number of States still to sign the treaty. The Assistant Harbor Master of St Maarten is not presently aware of any mechanisms for control being introduced in the Netherlands Antilles. Stockpiles of the material will still exist for some time but there should be a gradual move away from this material, as the availability becomes less, the exact pace of this reduction in application will no doubt depend on numerous factors.

6.3 Damages through anchoring

For years there was some controversy about the damage that anchors and anchor chains caused to the sea grass particularly in Great Bay, where magnificent sea grass could always be seen through the crystal clear water. Since then, however, the government owned Port Authority obtained permission to dredge for the purposes of a new cruise ship dock. This caused dredging silt to entirely cover the sea grass in Great Bay with the result that all of the sea grass has been covered by sand. The sea grass is now slowly returning.

Damages through anchoring can be largely avoided by mooring buoys, which can increase safety, minimize maintenance and increase comfort for the yachts. They can increase safety because they penetrate the bottom to a much greater extent and they increase comfort, because by proper spacing they minimize the chance of boats swinging into one another leading to inevitable user conflicts. From an environmental point of view they allow the grass to grow too.

Moorings are however a risk involving liability for non performance. In the situation that we have in the Simpson Bay lagoon, a well managed and well contracted concession for moorings with necessary risk coverage would not only provide revenue for government, but also increase the comfort of cruisers and minimize costs of maintenance.

6.4 Oil and lubricant Pollution

<u>Spills</u>: There remains a constant risk of spills of fuel and oil by yacht traffic, especially at the point of filling. The location of the providers in high tidal areas limits the damage. Yachts tend to be very conscious of the risk of damage but not necessarily driven to remedial action in the

case of a mishap. The introduction of compulsory remedial action by the vessel concerned as in the United States would be valuable.

Running of Generators: The large yachts, especially the mega yachts have high-energy requirements. Marinas that service these yachts do not always have the power requirements to meet their needs with the result that they are forced to run generators on a 24/7 basis. The new Princess Resort Marina has the level of power supply to avoid this. The mega yachts are able to operate entirely on shore power so that one of the potential sources of pollution is eliminated. Given the likelihood of increased mega yacht traffic this is a positive development, which is aided by the fact that these yachts suffer less costs if they are running off shore power compared to operation of on board generators on a 24/7 basis. Marinas should be encouraged to invest in the capacity to supply.

6.5 St Maarten marine park

Proposals by the St Maarten Nature Foundation have marked out a marine park in which zoning for usage of coastal areas is determined. Zoning is an essential prelude to environmental protection and management.

SECTION 7: GOVERNMENT AND PRIVATE SECTOR POLICIES

7.1 Interest Groups and Associations

The St Maarten Marine Trades Association (SMMTA) was formed in 1994. Since its inception it has been successful in ensuring that the marine industry has achieved a higher profile in St Maarten through ongoing and consistent involvement in the social and political processes.

The SMMTA was originally founded when the Commissioner of Economic Affairs at that time, introduced legislation whereby it was intended to collect a bridge toll for each and every vessel of US\$50 each way for passing through the Simpson Bay bridge. This proposal was considered a major threat to the growth of the industry and although the legislation was introduced it was never put into effect. However, since its inception the association has gradually moved towards the following goals:

- 1. Raising the profile of the industry on the island and emphasizing its contribution to the economy.
- 2. Promoting St. Maarten as a marine tourism destination through participation in boat shows like Antigua, San Remo, Monaco and Fort Lauderdale.

The President of the SMMTA reports increasing success in communicating with government. He describes a definite openness to listen to the industry as well as an increasing interest in the industry. One of the main frustrations is the lack of specifically responsible people when it comes to government apparatus. No one person in government is responsible for dealing with this sector. Hence dealing with the government involves communication with a large number of departments, none of which necessarily deals with the matter.

In this respect it is interesting that the government has appointed a single person, attached to the Department of Tourism, who is responsible for the communication between government departments and the cruise ship industry. This may be an effective solution for the marine industry as well. If this person were to be effective he or she would have to play a major role in informing public sector bodies on the nature and challenges of the marine industry. This position would best be privatized with responsibilities to both the public and the private sector as is envisaged with the current tourist office.

7.2 Tourism and yachting policies

There have not been specific policies towards this sector on the part of the St Maarten Island Government other than a general encouragement in business activity. This approach has become more positive over the recent years when the sector started to show signs of becoming more substantial.

One of the major issues in respect of yachting has been the question of some form of tax on yachting. Whilst there has been a general agreement that the industry can bear some level of taxation without any negative consequences, the proposal of the government in 1993 to impose a fee of US\$100 for entry and departure from the lagoon was considered to be an unbalanced and damaging tax. The threat of this tax was a major factor in the organization of the marine trades association.

The proposed tax was widely discussed in the local press and the marine press and within a short period it was assumed that the tax was going to be collected. The publicity had a negative impact on the marine industry even though no actual monies were collected. The information on the tax was well received locally because it was considered a politically positive move. For the destination of St Maarten it meant a drop in yachting revenues without actually collecting any greater public revenues.

The lesson that might be learnt from this experience is that proposed taxes could be better not extensively advertised prior to the economic viability being researched and the market testing done with stakeholders, so that if there is going to be any taxation there are at least not going to be any negative consequences. In other words a win/lose is better than a lose /lose.

This same experience has recently occurred in Grenada (March/April 2002) where a new tax was introduced and then hastily partially repealed. The total increase in revenues as a result of the tax is going to be minimal but the negative impact is going to be extensive and the end result is going to be less revenue rather than more.

Another major issue for the SMMTA was the manner in which the government dealt with the salvaging of vessels after the 1995 hurricane. In this case the perception was created, and was borne out to be partly true, that there was to be a monopoly on salvage. The consequence of this policy was that many of the insurance underwriters were unhappy with St Maarten as a location where the insured properties might suffer damage and as a result have since not been enthusiastic about writing insurance coverage for boats that are based in St Maarten. It is impossible to measure to what degree this has exacerbated the decline of the "off season" in St Maarten, but it is undoubtedly true that underwriters have been less than enthusiastic about writing insurance here.

Pollution is and should be an issue for the yachting industry. In the case of the major yachting area of St Maarten, yachting is more a victim of pollution than a cause of it.

A major factor that affects the ability of the public authorities to make a policy for the yachting sector is the complexity of the sector. In contrast with the hotel sector there are far fewer consistent patterns in the industry. In the marine tourism industry the functions are more extensive, more varied, less consistently structured and also entirely turned around when the accommodation is without service (bareboat) or the client brings his own accommodation (cruiser).

Another factor that discourages efforts by the public sector is the perception that the marine tourism industry is not immediately able to supply the sort of employment that Caribbean

nationals can easily fit into, and it sometimes appears that in order for any employment to be possible it requires two expatriate work permits before there can be one local position.

7.2.1 *Media*

The yachting clientele are often using non-mainstream media to communicate, and the policy makers and land-based industry are often not attuned to these media. Cruisers often do not have access to conventional communication and use short wave and vhf radio to communicate. The arrangement to communicate at a specific time of the day is called a "net". Many of the islands have a net system, which is managed by volunteers. In St Maarten such a net exists in the morning on Channel 14. There are numerous nets on short wave, which are used by the cruising community to advise each other about opportunities and threats. Pricing and harassment are a common subject on these nets.

The mega yacht market is influenced by a small number of influential people whose communication is very informal. Charter brokers and mega yacht managers play a substantial role. Web sites dedicated to mega yachts are playing an increasing role.

7.3 Government Institutional Arrangements

There are at present no specific departments of government that deal with the issue of the growth or decline of the industry. Following are some of the institutions that are influential:

- 1. The St Maarten Port Authority is a government utility company that is structured on the basis of a holding company and a number of operating companies that include the cargo operating company, the cruise terminal operating company and others. This organization also is responsible for the typical public service functions such as safety inspections and management of the public waters. The main focus of this group of companies over the past number of years has centered around the promotion and operation of the cruise ship business which is seen as a major economic pillar of the island. The organization is in the curious position of being a regulatory body, on the one hand, and a private company with a mandate to be profitable, on the other. The potential of this conflict is recognized. Harbor Master and CEO of the company, Mr. Ramel Charles, advises that part of such conflicts are resolved by the government allocating direct investments of non profit areas as capital injections to the SMPA. There are however activities like the maintaining and operating of the Simpson Bay Bridge which are obviously not profitable but are still paid for by the SMPA without any apparent benefit to their profitability.
- 2. The Tourist Office is the government (soon to be privatized) department of government that is responsible for marketing the island. The tourist office has never been directly involved with the challenges of the marine cruise tourism, but the potential of particularly the St Maarten Heineken Regatta as a promotional vehicle has increased their involvement with the industry. The Office will be converted to a non-governmental organization (NGO) in the near future with participation by the private sector as well as government. The lack of direct

- involvement with the marine industry is partly a result of the demands that maintaining the crucial land based tourism industry brings.
- 3. The customs department on St Maarten cannot be compared to the customs departments in other territories. The duty free status of the island eliminates the need to process incoming goods. Instead the customs department is focused on contraband and illicit materials. The customs department did not exist in St Maarten for many years and only recently returned to the island. As a result the customs reporting at the point of entry for yachts is still handled by the immigration department. The intention is to synchronize the reporting with the system that is defined as the Regional Clearing System 2000 of the Caribbean Customs and Law Enforcement Council (CCLEC) support (RCS2000). The current head of the Customs department, Ben Heineken, strongly argues that effective enforcement of compliance of customs related legislation could be achieved through methods that do not disturb the logistics of pleasure yachts, but can still achieve the essential goals of law enforcement.

7.4 Tax Environment

There are no specific incentives for the marine industry in place. The fact that the collection of public revenues on St Maarten occurs within a very different structure to that in the surrounding islands is the strongest fiscal lever that has moved the marine tourism industry. Whilst the cost of holding inventory in the CARICOM islands has been inflated by border collection of duties, the structure on Dutch St Maarten is more focused on wage and income taxes, profit taxes and a small turnover tax. The turnover tax can be avoided on certain export sales. The result is that the cost of holding inventory in Dutch St Maarten is much less and the potential of traders to be profitable is much higher.

SECTION 8: PROBLEMS AND STRUCTURAL WEAKNESSES FACING THE INDUSTRY

8.1 Overcrowding

The perception of overcrowding is one that is of particular relevance to destinations where the aspirations of the tourist are to be relatively undisturbed. The search for quiet and tranquility is clearly not the main criteria in destination choice of the visitors to St Maarten. Their more common reason for choosing St. Maarten is the availability of services and entertainment. In order to be able to supply the services in a sustainable manner a substantial volume of business is required and therefore the "overcrowding" is not only inevitable but also essential.

In physical terms there is plenty of space. Great Bay easily accommodates 300 boats at anchor when the Heineken Regatta visits although the vessel movement through rolling on swells gets worse as one leaves the north east corner of the bay.

The lagoon also already accommodates a large number of boats easily. The increased dockage availability currently under construction constitutes a large percentage of the previously available capacity. Our boat count documents the number of boats in St Maarten at any one time.

8.2 Composition of the Yachting Sector and the implications on seasonality

In section 2(c) we refer to the seasonality as it applies to different categories of boats. Bareboats are active throughout the year although the charter companies may reduce their risk by hauling some of their fleet and offering a smaller cruising ground at the height of the hurricane risk season. The cruising boats are the least seasonal and the mega yachts the most seasonal. The cruising boats may stay till as late as July and start returning as early as October. The mega yachts have a very clearly defined season and they have no representation to speak of outside of that season. They will arrive at the beginning of December and be gone by mid May.

In St. Maarten the percentage of mega yachts has increased over the last number of years and the investments that have been made have been skewed towards this subsector. Although the mega yachts are responsible for particularly high revenues in such fields as dockage, fuel sales, transfers, entertainment and hospitality services, their contributions to certain services that are crucial to the industry and in which long-term employment opportunities are likely to be built up are relatively less. A review of the industry literature will show mega yachts to be the strongest growth segment. In Section 11 we focus on the differences in expenditure patterns between mega yachts and the smaller more traditional visitors to St Maarten.

8.3 Level of yachting skills by visitors

There is no international qualification for the operation of leisure vessels. This is compounded by the fact that skill requirements per vessel vary extensively. There is therefore no possibility of measuring the condition of skill level by visitors. On the larger yachts the boating skills have reached very high levels especially with the currently required MCA licensing that many jurisdictions are now requiring on board the vessels they have registered. The larger problem is the matching of local services to the expectations of this professional group.

Many visitors to St Maarten follow the island chain down from the Florida area. The passage between the Virgins and St Maarten is a relatively long one (100 miles) that is also often accompanied by a strong current. The result is that many vessels run into difficulties during this passage. Fortunately the volunteer-based Antillean Sea Rescue is well prepared to assist mariners in distress. The French side also has a rescue service.

8.5 Cruise ship tourism

Cruise ship tourism is an important part of the St Maarten economy. There is no form of conflict between this activity and yachting tourism in any manner. The only conflict in this respect might be the conceptual conflict over the value of the sector to the industry and the consequent priority accorded to each sector for public sector investments. The employment offered by this sector in the form that it currently operates is of a very different nature to that offered by the yachting sector so that there is no conflict in this respect either.

The tourism impact study of 1997 concluded that for 1997 there were a total of 885,956 cruise ship passengers who each spent an average of \$120.00 on the Dutch side of St Maarten. The total expenditure from cruise ships would therefore be in the order of \$106 million. This would suggest that the cruise ship tourism accounts for almost twice as much expenditure on Dutch St Maarten as the yachting sector.

8.6 Work Permits

There has always been a relatively facilitative regime in this respect in St Maarten. Recently there have been efforts to clamp down on the issuing of work permits. Public administrators have great difficulty in establishing which applications for work permits are justified and which are not. Without a detailed knowledge of the work place it is difficult for administrators to understand whether the claimed requirements for foreign workers is as essential as it is often claimed to be. The bureaucratic procedures are slow and frustrating for the applicants although improvements have been made recently.

Here are a number of factors that affect the process of granting work permits:

- 1. The particular skills that are required are not immediately apparent to the adjudicators. A requirement for a welder in marine fabrication is very different to a welder in automotive or industrial applications. The understanding of these differences is crucial to the adjudication of the requirement for expatriate sourced skills.
- 2. There has been no training in marine skills at a basic level and consequently there is no basis for the private sector to build on some existing skills through in-house training.
- 3. The private sector has not been convinced of the seriousness of government to start the process of localizing the industry other than the restriction of some work permits.
- 4. The private sector has not been able to create an understanding in government of the differential skill requirements and the function of these skills in the industry.

8.7 Seasonality

The extreme seasonality that has developed in the past number of years is the single most important factor in restricting the maturation of the industry. Seasonality means that capital investment must be written off over the course of a much more limited period of time. This can often be overcome by creative means. More important, however, is the impact that it has on human resources, especially when these constitute a large percentage of the cost of production. It generally has the consequence that year round positions cannot be offered. This means that the best quality persons are lost to other sectors, as part year employment does not rate highly amongst career seekers. The result is that employees tend to be those with short-term goals rather than with long-term career plans.

Many of the successful companies have found partial solutions to this problem by taking on some land based work in the off season or hiring employees who like to work only half a year. On the whole however these solutions are not entirely satisfactory. Besides the labor issue, the extreme seasonality reduces the likelihood of profitability of enterprises because the fixed costs that are carried throughout the off season are difficult to recoup in the "in " season and still be competitive. In some markets the need to be competitive is less but in some it is crucial.

8.8 Impact of Major Events

• St Maarten Heineken Regatta

The St Maarten Heineken regatta is a major boating event which takes place during the first weekend of March every year. It currently rates as the regatta with the largest number of entries of any regatta in the Caribbean. The St Maarten Yacht Club owns the regatta event. The organizational budget exceeds \$200,000. The bareboat class, which consists for 95% of foreign entries, includes 110 boats. The entire regatta has had 265 boats entering in 2001 and 235 in

2002. Besides the direct impact of the regatta, the value of the event as a vehicle for promoting the destination is substantial.

• Charter Yacht Show

The Nicholsons Charter Boat show at the beginning of December has a positive impact on Antigua and it is generally believed that this is the cause of a weak December in St Maarten. The popularity of St Barths over Christmas and New Year is not unconnected with the St Barths "bucket" at that time. Seeing that many of the yachts already prefer to locate in St Maarten particularly during the pre charter provisioning and preparation period, there appears to be great potential for a charter yacht show on the island. At this time a show is being planned for April 2003 called the "West Indies Boat Show"

• Fishing Tournaments

A "Marlin Open" on the French side in July of each year attracts some large boats at the time of the season that is much in need of stimulation.

• The impact

The persons who are attracted by the event but not participating create a significant part of the impact of the Heineken regatta. In many cases the participants spend less in comparison with the visitors to the regatta. The understanding of the nature of the impact of events is probably the most essential lesson for public sector planners in this respect. At this time it is not well understood. Events could play a major role in "anchoring" the economic activity of the sector and it would be a sound investment for there to be continued exploration by the public and private sector to explore the possibilities of expanding the range of events.

8.9 Harassment

In contrast to the experience that many boaters have in waterfront communities in other islands, there has never been any significant problem in this regard in St Maarten. There have never been any "boat boys" and the possible traditional "game" of harassing boaters. This phenomenon does exist in Phillipsburg where over-aggressive sales tactics by hair braiders and time share salesmen have resulted in many negative reports by visitors.

8.10 Maintenance of Competitiveness as a yachting destination

The competitive position of St Maarten can be reviewed from the points of view of price levels as well as availability:

1. <u>Price Levels</u>: As has been discussed earlier the maintenance of competitive price levels is simplified by the fact that competitive destinations have higher levels of indirect taxation that are paid by the visitor which is not the case on St Maarten. This advantage is compounded by the growth in volumes that is creating an even greater advantage over nearby competitive destinations.

2. <u>Availability</u>: The availability of equipment and services creates a competitive position that lessens the impact of pricing. The level of demand for such equipment or infrastructure is continually growing as the vessels increase their demands for services. Such crucial services include high amperage power supply, supply of high end food products, services for electronic repair, diving services, technical component sourcing and supply.

The long-term potential of the growth of the industry on St Maarten can be regarded as good for the reason that both price and availability conditions are relatively good. The area of competitiveness on which St Maarten is weak, and is likely to get increasingly weak on, is the environmental condition of the island as well as the traffic congestion.

8.11 Data deficiencies

The lack of data and documentation on the industry makes it very difficult for non-industry persons to comprehend and evaluate the industry. This makes for great difficulties for:

- 1. Public sector personnel who wish to obtain an understanding of the sector.
- 2. Bankers and investors who wish to understand the industry.
- 3. Educationalists who would like to understand how they might orient courses towards the requirements of the industry.

The requirements of each of the above groups for data will be quite different, but at this time there is little or no material, neither of a general nor a specific nature.

8.12 Inadequacies in organizational and personnel arrangements

Relatively speaking St Maarten has been blessed with friendly and cooperative personnel, but every now and again there are reports of a non-welcoming reception or some bureaucratic twist that frustrates the visitor. By and large the authorities that do clearing in and out are professional and supportive of the industry.

8.13 Planning issues and shoreline alterations

• Options for marina and infrastructure investment

The information available to investors that are not intimate with personalities in the planning field is very limited. Unless an investor is well connected it is difficult to establish where one might invest in a marina or shore side facility. The rights to the water in the Simpson Bay lagoon are unclear and the planning permissions are difficult to identify. At this time there is no master plan for the lagoon. Clearly the possibilities of environmental rescue are different for different parts of the lagoon. Some parts are relatively untouched, whilst others require sanitation.

Policing of dredging and construction activities is poor. The recent dredging of the lagoon in order to create the water depth for the Princess Hotel north dock has left a new island that does not seem to enjoy prospects of being removed in the near future. In Great Bay the dredging done

for the cruise ship facility changed the seabed substantially. No follow-up study has been done on this, however, but it is very obvious that major changes have occurred.

8.14 Management of anchorage and mooring policies

• Regular Anchoring

An anchoring plan exists for Great Bay, which allows for channels to the marinas and to the town dock.

In Simpson Bay there is a channel for vessels approaching the Bridge entrance. In the Simpson Bay lagoon there is a restriction on anchoring too close to the airport runway as well as channels leading to the west of the lagoon, to Princess Hotel North and South Docks, to Simpson Bay Marina and to Island Water World.

The maintenance of these channels and their markers is imperfect. Non compliance to the anchoring plan is very often a case of the boat operator not being well informed. In many cases the work of re anchoring a vessel is substantial. The effective informing of visitors about anchoring restrictions would reduce conflicts substantially.

• Hurricane Anchoring

The St Maarten Port Authority has drawn up a mooring plan for the lagoon in case of hurricanes. It has however not been extensively published so as to ensure that a large number of yachtsmen are familiar with it. It is impossible at this stage to say whether or not there would be a problem in implementing it, as only when the yachtsmen can access it easily is there any chance of it being effective.

An effective anchoring plan for the Simpson Bay lagoon would make a big difference to the confidence which insurance companies might have in insuring boats in the lagoon. The St Maarten Ports Authority advises that in the hours before a hurricane their manpower is so restricted that they have no opportunity of ensuring that a mooring policy is adhered to. The government should make arrangements for emergency staff to cover this function in the hours before the hurricane strikes.

8.15 Raising of the bar in marketing activities

We have referred earlier to the role that was played in marketing activities in the development of the industry. Since the early effective marketing efforts of the island, the level of marketing efforts has increased across the Caribbean. The standards for effective marketing have increased through the increased quality of material and the increased creativity incorporated in the different messages.

SECTION 9: RECOMMENDATIONS

9.1 Data insufficiencies

A regional body should further develop the tools for the study of the impact of this sector. Our choice of methodology has been the evaluation of the supply side. The possibility of measuring the economic impact through the consumption side would be greatly enhanced if measurement systems of data in respect of visitors would be improved.

The Marine Trades Association should formally request the Island Government Department of Economic Affairs, the Federal Department of Statistics and the St Maarten Port Authority to include the Marine Leisure sector in statistical analysis as soon as possible.

The Port Authority should be requested to collect data that will be the basis for the measurement of the economic impact of the yachting industry along the lines outlined in section 5 .6. The final selection of data to be captured should be decided in collaboration with private sector organizations. The improved level of data should lead to the option of measuring the economic impact of this sector both from a production and an expenditure perspective.

9.2 Position of marine sector in St Maarten

• Industry Profile

The Marine Trades Association should continue their successful drive to profile the marine sector locally. They should also embark on an effort to increase the level of understanding of the relatively complex marine sector amongst government officials, educators, politicians and influential local persons.

9.3 Employment/Training

The government should create a facility for the allowing of work permits on a seasonal basis only so as to allow the possibility of maintaining high skilled services that are critical to the industry. In addition, the government should actively target the development of marine skills at both the basic and the medium skill level through scholarships and curriculum development in local training institutions.

The government and private sector should partner in providing a greater level of information to national students in respect of opportunities in the marine industry.

9.4 Events

The public and private sector should aggressively explore the possibility of a charter yacht show. Conditions are eminently suitable. The ownership of the event should be tied to the island if at all possible and the marketing should be in the hands of experienced event managers who are familiar and sensitive to the needs of this very special niche market.

9.5 Environmental protection

The government should appoint a Lagoon Authority. However, they should not wait until such an authority has a counterpart on the French side as this could take forever. The lagoon authority should be authorized to prosecute parties for illegal filling in of the lagoon and to propose legislation to protect the lagoon. The lagoon authority should ensure that the relatively unspoilt part of the lagoon stays that way.

The government should encourage the use of MSDs and possibly provide a tax incentive to have these on board. A cruising fee with MSD could be slightly lower than a cruising fee without MSD.

A lagoon authority should explore the granting of a concession for moorings, which would enhance the level of service provision, minimize environmental damage and provide some income.

9.6 Seasonality

All parties should continue to explore a long-term vision of the industry with a high degree of seasonality, the implications for business viability and long-term stable employment. All options, no matter how small, for reducing this seasonality should be explored.

The government should be made aware of the employment implications of a long-term focus on super yachts rather than on the less than super yacht category.

9.7 Public sector management

The Island Government of St Maarten should appoint a single coordinator for marine leisure affairs, possibly attached to the tourist office, whose mandate should be to ensure that coordination between the industry and the government is maximized.

9.8 Responsibilities for marine affairs

The Island Government of St Maarten should segregate the regulatory functions and the commercial functions that currently resort under the St Maarten Port Authority.

9.9 Hurricane preparation

The St Maarten Port Authority, in its capacity as a regulator, should ensure that already existing anchoring schemes for the Lagoon and Oyster Pond are widely disseminated so that in the case of a hurricane all stakeholders have instant access to information. They should explore every possible medium that would ensure that hurricane protection seekers were informed prior to the hurricane warning.

The St Maarten Port Authority and/or government should make arrangements for well-briefed staff to police anchoring and positioning in the Simpson Bay Lagoon.

SECTION 10: FRAMEWORK FOR A YACHTING POLICY

10.1 Bringing the public sector up to speed

The growth of the industry in St. Maarten has to date been based on private sector initiative and public sector planning has not played any role so far.

The marine sector is currently seen as one of the few growth sectors in the St Maarten economy. This is in contrast to the period 1980-1995 when there was not much interest in the sector as so many other sectors were enjoying rapid growth and most of these better suited available labor capacities and were better understood by the local populace. There is every reason to believe therefore that more public sector involvement in the sector is likely in the medium term. In any event, public sector involvement is an inevitable condition for every sector and the sector should be preparing to ensure that the public private partnership is as constructive as possible.

If the public sector is going to be effective in contributing to making this an important economic pillar of the economy, the public sector is going to have to develop skills and expertise in the field. As there are few, if any, role models of this type of sector available to imitate or copy, this is going to be much more difficult than in, for instance, the hotel sector. This is also the reason why the series of studies of which this report is one, is so important for territories confronting similar challenges.

One of the first public sector policies therefore should be a policy of creating expertise in the public sector that is familiar with the issues and the possible resolutions to problems in the sector.

10.2 Super yachts versus less than super

One of the major policy choices that will be confronted will be the question of whether to promote super yachts over and above other yachting clients or whether super yachts should be ignored. Super yachts have the advantage of substantial spending in non-marine sectors, raising the profile of the island, and are likely to remain in a growth mode. A disadvantage of the super yacht is the fact that they have many on-board crew who supplant local services, are very seasonal, and many of the high revenue earning facilities for them are not present as yet.

In comparison, smaller yachts have the advantage of being less seasonal and of spending a greater percentage of money towards local services. Their disadvantage however is the total lesser revenues and they also lack the allure that is associated with the mega yachts.

The present government seems to be enthused by the potential of the super yacht business and in order to promote this they are supporting a project currently underway to widen the Simpson Bay Bridge. Whilst such a widening will be a positive step towards the growth of the industry and will improve the long-term viability of the investment-critical services, such as marinas, it is going to further swing the balance towards a more seasonal revenue pattern instead of a revenue pattern that is less seasonal and thereby increases the chances of long-term career opportunities for nationals.

10.3 Identifying the needs of the marine cruise tourist in the future

The skill requirement for the servicing of yachts has dramatically changed in the last few years and will no doubt continue to change. In the last 20 years the median skills required have gone from caulking, varnishing and basic mechanics to electronics, management and a host of specialized equipment. Recent breakthroughs in networking, GPS technology and software are going to create substantially new demands. The skill updating in the islands has not matched the change in demand in the past 20 years. The next 20 years should not cause an even greater backlog.

10.4 Confirming a long-term future

All the evidence suggests that marine leisure activity in the Caribbean is not going to fall off. The order books for super yachts are over-full and smaller yacht builders are doing very well. There is a continuing interest in leisure in this area. No other competitive regions exist.

This information has not been effectively transmitted to the various players in the islands. Local investors both in the private and public sector have never seen the long-term future of the industry because evidence has not been presented to them confirming its long-term viability. The simplistic view that all yachts can sail away whilst buildings cannot needs to be brought into a more realistic perspective. The sector has an excellent long-term perspective especially if the sector can meet the increasing demands of service fulfilment and technical requirements that modern yachts are demanding. St Maarten already enjoys a head start but such head starts have been known to vanish rapidly both in this and other sectors if the vision is not shared across the public and private sectors.

SECTION 11: SURVEY RESULTS

Note: The responses that we added after the formal responses were not part of a structured survey and we included them in order to give some indication of the type of issues that existed amongst each response group.

The following are answers to the question:

What is the greatest shortcoming that would prevent your vessel from returning to St. Maarten?"

- 1. Customs and immigration not friendly, and don't make it easy to enter.
- 2. Bridge is too narrow
- 3. St. Maarten has most expensive dockage in the Caribbean
- 4. Cleanliness, the processing of the water. The lagoon needs a pump-out system
- 5. Geographic location, not many neighboring islands as there are in Bahamas for instance. And there are not a lot of good anchorages for this size boat.
- 6. Greatest shortcoming Customs Greatest advantage liquor
- 7. Greatest shortcoming bridge openings
 - Greatest advantage docking
- 8. Greatest shortcoming bridge openings
- Greatest advantage dockage
 9. Greatest shortcoming bridge
 Greatest advantage booze

Table 5
Yachts over 70 feet

Type of boat	No. of crew	Time period on Spent time in sxm		% of expenditures	
		which estimate is before?		on marine related companies	
152 ft motoryacht	7	5 months	3 rd season	75%	
45 meters	10	1 month	3 seasons	40 %	
motoryacht					
136 ft Mefasah	4	3 months	Every other season	80 %	
112 ft sailingyacht	5	3 months	Every season for 15 years	80 %	
33 meter sloop rig	6	4 months	First time	80 %	
75 ft motoryacht	2	1 month	First time	90% of average \$10.000	
122 ft motoryacht	6	2 months	First time	60 %	
175 ft feadship	11	2 months	2 seasons	20 %	
80 ft sailing boat	4	4/5 months		80 %	
90 ft sloop	3	2 months		20 %	
118 ft featship	6	2/3 months	2 seasons	10-15% monthly	
84 ft steel katch	3	1 week	First time	80 %	
75 ft sail vessel	3	1 month	6 seasons	80 %	
105 ft power boat	6	2 months	not in the last years	5 %	
140 ft power	9	all winter	Last 5 yrs Last 3 years	30%	
120 ft power	9	all winter	Last 2 years	70%	
110 ft power	7	6 weeks	Last 2 years	30%	
80 ft power	5	3 months		70%	
140'	9	All season	Last 5 years	30%	
120'	9	All Season	Last three seasons	70%	
110'	7	Off and on for 6 weeks	Last 2 years	30%	

Table 6
Yachts under 70 ft.

Type of boat	No. of crew	Time period on which estimate is based	Spent time in sxm before?	% of expenditures on marine related companies	Average monthly expenditures
67 ft alu- minium catch	2	4 months	8 seasons	80%	\$3000
44 ft motoryacht	2	3 months	Based here year round	90%	\$4000
63 Richleigh	2	3 months	10 seasons	80%	\$4000
51 ft Bertram sport	2	2 weeks	5 seasons	20%	
68 ft Swan	3	1.5 months		70 %	
56 ft Swan	2	3 months		10 %	
60'	3	Most season	Yes	30%	\$10,000
60'	1	4 months	None	30%	\$8,000
60'	3	4 months	6 seasons	60%	\$20,000
53'	2	30 days	None		\$1200
48'	2	2 months	1998,1season	20%	\$2000-3000
47'	2	30 days		80%	\$10,000- 11,000
46'	2	2 weeks	None	25%	\$2,000
46	5 (family)	5 weeks	None		\$500
45.5'	2	3 months	(last)1season	50%	\$6,000
45'	1	2 months	1988-1990	50%	\$5,000
44'	2	1 week	5 seasons	50%	\$500
44'	2	1 month	None	50%	\$1000
Swan 51	1/2	5 months	2 nd season	70%	\$3000
Swam 68	1	2 months 3 seasons 30%		30%	\$10.000
Section 01 Country Background.doc60	2	18 months First time 50 %		50 %	

ft katch	2	3 weeks	First time	50 %
46 ft motor yacht				
44 ft	2	6 months		15 %
Koopmans				\$ 1000 per seasons
44				
				80 %
47 ft sloop	2	4 weeks	4 seasons	50.04
60 ft sailing sloop	2	4 months		50 %
Total 23				<u>average</u> <u>49.56 %</u>

The following are answers in this category to the question

What would be the greatest reason for your vessel returning or not returning to St Maarten?

1. Lack of parts in chandleries

2. Customs and immigration (especially for south Africans)

3. No complaints, marina facilities are very good

4. All the boats commented how all the facilities here are better than on any other island.

5. greatest shortcoming – opening times greatest advantage – provisioning / booze

6. greatest shortcoming – immigration greatest advantage – people

7. greatest shortcoming – bridge opening times

greatest advantage – booze

8. greatest shortcoming – prices are high

greatest advantage – people 9. greatest shortcoming – none

greatest advantage – provisioning
10. greatest shortcoming – computer parts
greatest advantage – boat repair
11. greatest shortcoming – transportation

11. greatest shortcoming – transportation greatest advantage – provisioning

12. greatest shortcoming – speeding tenders and dive boats

greatest advantage – You can get anything here as marine parts

13. greatest shortcoming – season bound

greatest advantage – good place to spend the winter season

14. greatest shortcoming – lack of security greatest advantage – anchorage

15. greatest shortcoming – to little bridge-openings

greatest advantage – intersrtucture

16. greatest shortcoming - none

greatest advantage – airport service and connection with United States.

Table 7 Yachts under 44 ft.

Type of boat	No. of crew	Time period on which estimate is based	Spent time in sxm before?	% of expenditures on marine related companies	Average monthly expenditures
Fortuna 37	1	Year round	-	55%	
40 ft Hunter	2	1 year	First time	10 % annually	
31 ft sloop	2	Year round	15 seasons	10 %	\$3000
39 ft wooden classical sailing sloop	1	6 months	10 seasons	60 %	
33 ft samson seamist	2	Year round		40 % monthly	
32 ft Muira	1	5 months		33 %	
42 ft salining sloop	1	2 months	Last 5 seasons	40 %	
42'	1	1 month	Every Season	50 %	
Total 8				<u>average</u> <u>37.25 %</u>	

Answers to question

- Lack of selection and availability of products.
 Crime, lack of police patrol and inadequate conduct when handling burglaries

SECTION 12: DOCUMENTATION RELEVANT TO THE SUPER YACHT GROWTH ISSUE

12.1 Article in Soundings Trade Only, January 1999

By Jim Flannery

- 1. In 1989 the number of super yachts owned by Americans was 8 to 9 percent. In 1999 that percentage had jumped to 45-50%. North Americans were moving very fast into the size range above 90 foot and domestic production of these vessels went up from 2-4% to 34-36% of global production.
- 2. The number of mega yachts doubled in the 90's decade to a global total of about 5,600.
- 3. The shortage of dockspace for mega yachts in South Florida (Fort Lauderdale particularly) has led to the development of two major yards in the state of Georgia.
- 4. The breakdown of super yacht expenses shows the following categories of expenditure: Crew Salaries 31%, Shipyard Expenses20%, Dockage 4%, Boat Supplies 5%, Food Crew etc 8%, Repair and Maintenance 7%. This study was done for the Marine Industries Association of South Florida.

12.2 Article in the Yacht Report, February 1999

By (editor) Martin H Redmayne.

- 1. There are currently around 3000 vessels over 80 feet
- 2. Numerous production builders including Sunseeker, Azimut and Ferretti have gone into production or semi production building of boats over 80 feet. This production category did not exist before thus suggesting that a new level of yacht size is being created in production boats.

SECTION 13: CORE MARINE ESTABLISHMENTS

The following list was used in obtaining response on expenditures. These are determined as "core" marine establishments, as their customers are primarily and largely marine.

Table 8

Company	Phone #	Contact	Activity	
			•	
Budget Marine	5443134	Alfred Koolen	2	
Budget Nautique		Susan Petersen	Marine clothing	
FKG Rigging	5444733	Kevin Gavin	Rigging and Fabrication	
Island Water World	5445310	Paul Marshall or Sean	Chandlery, Dockage and	
		Kennealy	service.	
Bobby's Marina		Geoff Howell	Marina, Hauling, Numerous	
		Ray Ditton	services	
Marine trading online	Cell: 5225615	Smiley	Product Sourcing	
Electec	5442051	Snowy Struthers	Electric, Electronic sales and	
Licetee	3442031	Showy Structers	service	
Necol	5452363	Andrew Rapley	Electronic sales and service	
Allard Benjamins	575055	Allard Benjamin	Engine and equipment	
		J	sales/service	
Diesel outfitters	5442320	Ray Longbottom	Diesel sales and Service	
Simpson Bay diesel	5445397		Diesel sales and service	
services				
Simpson bay marine	5443249		Outboard sales and service	
			and installation	
Dive safaris, bobby's	5429001		Leisure diving and diving	
marina	3429001		services	
Dive safaris, Simpson	5453213		Leisure diving and diving	
bay	3 133213		services and equipment sales	
Ocean explorers	5445252		Leisure diving	
The scuba shop	5453213		Leisure diving	
•				
Marine Tech			Equpment servicing	
Lagoon diving	5442309		Diving services	
services	540650		D ' 11 (11 (
Main Tec MSC Full marine	548650 5454118	Montin	Repair and Installation	
MSC Full marine services	3434118	Martin	Repair and Installation	
Princess yacht club	5442953		Marina	
Captain oliver's	0059059087334		191411114	
Capitalii Olivei 5	0037037007334			

Marina	7		
Palapa Marina	5452735	Valeska	
Seabridge Maritime	5429726		
Total cleaning	5442937		Cleaning services
The bread basket			Specialist food services
Trimarine dock	5442611		Marina
Connoisseur's yacht	5452902		Specialist and custom
provisioning			provisioning
Palapa Mini market	5452735		
St. Maarten sails and	5445231		Sailmaking and Canvas work
canvas			
Tropical sail loft	5445472		Sailmaking and canvas work
Lagoon Marina	5445210		Marina
International yacht	5443780		Charter Brokers, yacht
collection			management
St. Maarten Yacht	5442075		Event organization
Club			
Brookaar Marine	557 1416		Diving Services
Services			

SECTION 14: REFERENCES

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- Mega yachts dropping big bucks into South Florida economy By Jim Flannery in Soundings Trade Only, January 1
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- www.imo.org

Web site of the International Maritime Organization . This site contains material explaining the motivation and history of the banning of inorganic tin components in anti foulings.

• <u>www.heinekenregatta.com</u>

Web site of the St Maarten Heineken regatta which gives substantial insight into the operation of this event.

- "Impacts of Human Development in the Simpson Bay Lagoon Sint Maarten" published by the Nature Foundation of St Maarten. P.O. Box 863 Phillipsburg, St Maarten, NA www.naturefoundationsxm.org Report written by Emile van der Borch
- <u>Statistical yearbook of the Netherlands Antilles 2000</u> Central bureau of Statistics, Willemstad, March 2001
- <u>Tourism expenditure survey Sint Maarten 1997</u> Central Bureau of Statistics, Willemstad, March 1999
- Boat Count:

Done by Jack Miller on behalf of Budget Marine Group

• Expenditure Survey:

Done by Michele Ferron and Jack Miller

• Marine Park Map <u>www.mina.vomil.an</u> web site of the Netherlands Antilles Ministry for the Environment where the St Maarten Nature foundation map is to be found.