

TECHNICAL VISITS TO CARIBBEAN STATES

Second Phase of Technical Visits to Caribbean Small Island States

1. Background. In December 1998 a series of visits were made to some of the small island states of the E Caribbean to discuss plans to meet the approaching deadline for implementation of the Global Maritime Distress and Safety System (GMDSS), and to assess national hydrographic capability with particular emphasis on the encouragement of data-flow to Hydrographic Offices which have charting responsibility in the region. At the 6th MACHC meeting in 2004 it was noted that the recommendations arising from the visits had not been followed up. A special workshop for the island states was convened in May 2005 at which the implications of the SOLAS V obligations which had come into effect in 2002 were explained. Subsequently a successful bid was made to the CBC to fund return visits and additional visits to states and dependencies which had not been included in 1998. These visits were split into two phases, the second of which was conducted in June 2006.

2. Analysis of situation. It was clear to the Visit Team that national co-ordination of efforts to address SOLAS V obligations is beset by considerable obstacles. Despite the significance of sea communications to island states, especially those dependent on the tourist industry, the maritime sector is by no means as tautly organised as the aviation sector, where stringent international regulations demand and receive the attention of administrations. Moreover, in the maritime sector, arrangements for compliance with the Port Security Code and ISM Code preoccupy the often small maritime authorities. In this light the following lessons arising from the visits are pertinent:

a. Teamwork between marine stakeholders is of the essence. The round-table meetings at which the Visit Team were briefed proved of equal benefit to the countries themselves by promoting transparency amongst different departments and agencies. Frequently national assets in terms of skills and resources were brought into focus for the first time. Hence, except in very small administrations, **the concept of a NHC has been proven vital.** In some instances hydrography can be covered as an agenda item in the business of existing committees under the aegis of IMO.

b. Wherever possible, the Visit Team followed up the round-table meeting with a briefing to the Minister or Permanent Secretary whose portfolio includes maritime safety. During this meeting the roles of the NHC Chairman and the MSI/GMDSS national co-ordinator were explained, and top-level support and oversight were requested. **This is an area where continued MACHC input to the regional ministerial transport committees (ACS, OECS, and CARICOM) will be invaluable.**

c. The Visit Team suggested that the annual review of data in S-55 should be the main prompt to convene the NHC. The high profile of S-55 in the IMO was noted, including its use in the IMO Country Audit Scheme, which a number of the administrations suspected would not long remain "voluntary"! The preparation of the national report to MACHC was also cited as a guide for NHC deliberations.

3. Proposals for Development of Phase 1 and 2 Hydrographic Capability. The Visit Team were guided by the firm IHOCBC criteria, which had been endorsed in MACHC. Their aim was to assist early achievement of Phase 1 hydrographic capability, and to help to identify an appropriate and sustainable level of Phase 2 capability. All the countries visited have pragmatic arrangements for the publication and distribution of charts of their national waters by the UKHO.

a. Phase 1. The key to the improvement in arrangements for MSI/GMDSS throughout the sub-region is the clear designation, empowerment and training of national co-ordinators. Once each country has identified the individual to perform this role, they must be linked into the WWNWS. The Visit Team found that, without exception, the solutions to providing this linkage are cheap, fast and easy.

b. Phase 2. Dependent on the skill levels and experience which were identified in each country, the Visit Team proposed appropriate survey capability which could be attained in a reasonable time-frame and which stood a chance of being sustained. The basic requirement

was to be able to contribute to the identification of a prioritised national survey plan. Some countries also had sufficient capacity to conduct basic QC and check surveys. A few were already able to perform some inshore survey operations.

4. Follow-up Actions. The conclusions of the Technical Visit Team were supported by measures already put in place by the MACHC with CBC support:

a. Seminar for Chairmen of NHCs. This was seen as a crucial opportunity for follow-up. **The subsequent take-up was disappointing (50%), although those attending participated very proactively and in most cases have taken significant follow-up action on return to their countries.**

b. CPRNW Training Course. **The aim was 100% attendance; 70% of independent island states and all UK Overseas Territories will attend.**

c. Participation in MACHC and submission of bids to CBC. The attendees at MACHC7 were able to shape the emerging bids to this CBC meeting. Bilateral assistance with Phase 2 capacity has also been offered by UK.

5. Conclusion. **This mission covered a sea area of immense international and regional significance. It encompassed many of the main passages from the Atlantic into the Caribbean and onwards to the Gulf of Mexico and Panama Canal. The countries bordering these strategic seaways are small island states or dependencies dealing with a multitude of challenges to good governance with limited financial and human resources. Their coastal waters are traversed by some of the biggest passenger-carrying vessels in the world, yet a significant percentage of those waters have not been surveyed since the nineteenth century. It is imperative that the countries visited are assisted to implement appropriate and sustainable arrangements to meet their obligations under SOLAS Chapter V. The recommendations of the Technical Visit team require robustly and persistent follow up by the MACHC, and momentum must not be lost as it was after the 1998 CGMHC initiative. The IHO, and especially the MACHC, is urged to work closely with the IMO, and especially its Regional Adviser, to take full advantage of the capacity building measures which are already in place and to determine how best to follow them up.**

COUNTRY REPORT: TRINIDAD AND TOBAGO

INTRODUCTION

1. **RHC Involvement.** Trinidad is an IHO member, and a member of the MACHC. It was not represented at the MACHC Technical Workshop and Special Meeting in May 2005, and a National Report was not available to the RHC Study Team. It was included in the CGMHC visits in December 1998, but subsequent liaison at RHC meetings ceased in 2002.
2. **Preliminary Liaison.** Mr T. Leong, Director, Lands and Surveys, assisted with co-ordination of the visit.
3. **Points of Contact.** Details in the IHO Year Book of the Lands and Survey Division (LSD) require amendment, and information should also be shown for the Maritime Services Division (MSD) of the Ministry of Works and Transport. Proposed amendments are at Appendix 1.

DESCRIPTION OF MARITIME ACTIVITIES

4. **National Maritime Affairs.** The Visit Team met with representatives of the MSD who were able to describe developments since 1998. Ms B. Phillip, now Director of the Division, high-lighted the salient statistics reflecting a significant increase in traffic e.g. the volume handled by Point Lisas Industrial Port has increased by 30%.
5. **Trade and Maritime Traffic.** The main updates since 1998 are as follows:
 - a. **Through Routes.** The Galleon's Passage continues to see significant traffic in and out of the Caribbean.
 - b. **Trans-shipment.** Trans-shipment has greatly increased, especially containers through Port of Spain and Point Lisas. Alumina is trans-shipped at Port Trembladora.
 - c. **Bulk Trades.** Trinidad and Tobago is now the fifth largest producer of LNG. In 2005 there were 500 additional movements in national waters associated with calls at the Atlantic Terminal at Point Fortin. This traffic uses the Bocas del Dragon, and is largely bound to and from Houston, Texas and other US ports.
 - d. **Feeder, Coasting and Local Trade.** There is increased feeder traffic through the Antilles chain. Tobago is serviced by fast ferries and an enhanced cargo service using Ro-Ro passenger cargo ferries.
 - e. **Offshore Supply and Support.** Chaguaramas and Galeota roadstead are the bases for offshore supply and support vessels.
 - f. **Tourism - Cruise Liners.** Liners continue to call at Port of Spain and Scarborough, Tobago.
 - g. **Tourism - Small Craft.** Recent severe hurricane seasons have led to some reduction in cruising.
 - h. **Fisheries.** The Fisheries Department was not represented. MSD reported that some larger fishing vessels were now operating off the east coast.
6. **Responsibility for Safety of Navigation.** MSD confirmed that, in accordance with the Shipping Act of 1987, they are responsible for safety and security of shipping and ensuring that channels (state and privately owned) are maintained in accordance with charted information. The

division is responsible for the establishment and maintenance of state-owned Navigational Aids, and the promulgation of Notices to Mariners. The Director of MSD is the receiver of wrecks.

7. Defence Force Responsibilities. The Trinidad and Tobago Defence Force Coast Guard were not represented at the meeting.

8. Coastal Zone Management and Environmental Protection. Environmentally Sensitive Areas are to be declared around Tobago, and in the area of the Nariva swamp in Trinidad, and the LSD undertook to pass co-ordinates to UKHO as soon as they are published.

OUTLINE S-55 ANALYSIS

9. Status of surveys within the National Maritime Zone. Trinidad and Tobago's entry in S-55 was reviewed, and the priorities high-lighted in 1998 were reconfirmed. The Visit Team noted the importance of developing a prioritised national survey plan, and suggested that Trinidad and Tobago might develop a bid through MACHC to the IHOCBC for the funding of a short loan to the LSD of a hydrographic surveyor with experience of this work in another MACHC MS.

10. Collection and Circulation of Nautical Information. MSD confirmed their arrangements for the promulgation of Navigational Warnings in the press and through North Post VHF radio station. These warnings are correctly drafted, and reflect good liaison between MSD, LSD and other authorities. It was stated that the information is passed simultaneously to UKHO by e-mail.

11. Survey Capability. Since 1998 the Hydrographic Survey Unit of LSD has suffered from severe problems in recruitment and retention. This partly reflects the output from local higher education institutes, but also, as in many parts of the world, the lure of the commercial sector. Only 2 Cat. B trained surveyors and two cartographers remain in the unit. As recommended in a recent external review of LSD, the unit is currently focused on the establishment of a new dGPS station at Nariva and the development of WGS transformation parameters. MV MERIDIAN is in care and maintenance, and currently has no outfit of survey equipment. Check and dredging surveys, together with QC, are out-sourced by the ports. The Lands and Surveys Act enables LSD to specify standards for surveys. Licensing arrangements also specify that the results of surveys in the offshore industry and by local practitioners must be copied to LSD. The Director confirmed that this data was forwarded to UKHO for inclusion in the official charts.

12. Independent Chart Production Capability. BA chart coverage of Trinidad and Tobago was reviewed, noting the plans which had been produced for the major ports, with benefit of the results of earlier survey and cartographic work by the Hydrographic Unit. The importance of the datum transformation campaign for the metrication of medium scale coverage was agreed. LSD confirmed that discussions of a formal bilateral agreement with UKHO were ongoing.

PROPOSALS FOR CO-ORDINATION AND CAPABILITY BUILDING

13. National Hydrographic Committee. No maritime co-ordination body had been formed following the 1998 recommendations. The Visit Team outlined the role and utility of a National Hydrographic Committee (NHC) and undertook to provide generic Terms of Reference, which are attached at Appendix 2. The Team urged that the Director of Surveys convene a wider meeting of maritime stakeholders to review the report of this visit, and to take forward the concept of an NHC. They suggested that the core tasks of the NHC should be to review the arrangements for compliance with SOLAS V regulations, and especially the implementation of GMDSS, to develop and programme a national prioritised survey plan, and to assess new charting requirements. Triggers for the meetings of the NHC would be annual review of the S-55 data-base and preparation of the national report to MACHC conferences.

14. Phase 1 Hydrographic Capability: MSI Organisation and GMDSS. The Team obtained a clear impression of good liaison and effective passage of information between national agencies.

- a. MSI (Navigational Warnings). Other than recommending a distinction in terminology between local navigational warnings and Notices to Mariners, the team commended the existing pragmatic arrangements discussed above at paragraph 10. It was

emphasised, however, that these did not meet the remit of SOLAS V regulation 4 to use the WNWNS.

b. Information on Ports and Harbours. Trinidad and Tobago is well-placed with its legislation to gather information. All the agencies represented at the round-table meeting signalled that they had routine communication with UKHO, and there appeared to be a clear appreciation of the legal requirement and economic importance of timely supply of plans and co-ordinates of new developments for reflection in the official nautical charts. This aspect should be monitored carefully when the NHC is in place.

c. GMDSS Status. Neither the Coast Guard nor the Ministry of Public Administration and Information were represented at the meeting with the Visit Team. It was indicated that Trinidad and Tobago retains a draft Master Plan which seeks to put A1, A2 and NAVTEX coverage in place, but that funding remains an issue. Whilst NAVTEX coverage based in Trinidad (ideally located on Tobago) would undoubtedly be a welcome regional resource and could be the subject of discussion in MACHC, the current Visit Team reiterated the advice that early action should be taken to meet national obligations through the establishment of a SafetyNET Coastal Warning Area. The Visit Team could facilitate this link, which could be made, without cost, direct to the NAVAREA IV co-ordinator in the USA, but Trinidad and Tobago must first identify and formally designate an organisation to undertake the role of national co-ordinator. The CG may be the obvious provider for this function, assuming that they have a current operations team which already provides round-the-clock cover.

15. Phase 2 Hydrographic Capability: Survey. The Visit Team suggested that the advisory attachment proposed at paragraph 9 could also provide the opportunity for a review of the capacity of the Hydrographic Survey Unit. In the interim it would be beneficial if the NHC could explore and enable national teamwork, especially between the Unit and the CG. This might provide some afloat experience for the Unit e.g. in positioning and surveying the stranded wrecks which were of concern to MSD. Opportunities should also be sought to place the surveyors onboard commercial vessels during contract surveys, both for exposure to current techniques and equipment, and to foster their skills in QC and oversight. Within MACHC, Trinidad and Tobago could also pursue openings for attachments and possibly for co-operative surveys. In the short to medium term it seemed that the restoration of inshore survey capability in MV MERIDIAN was not a sustainable solution for Phase 2 hydrographic capability.

PROPOSALS FOR ASSISTANCE

16. Training. There are several different requirements and opportunities:

a. It is strongly recommended that the chairman of the Trinidad and Tobago NHC attend an IHO MACHC Course for NHC Chairmen to be held on 2-3 Oct 06, in association with the next meeting of the regional commission. This will require prompt action in response to the recommendations of this visit report.

b. IHOCBC funding has been secured for an MSI training course in the region during the first quarter of 2007, and at least one person from the Trinidad and Tobago national co-ordinator's team should attend this course. Full details of this opportunity will be provided through the MACHC Chairman as soon as they are available.

c. In Jamaica the Visit Team was informed by the CMI that there were customers for a tailor-made, uncertificated, course, delivered in region, with a focus on operation of equipment for inshore check surveys. The CMI would be willing to host such a course. This could be an attractive MACHC candidate item for IHOCBC funding, and Trinidad and Tobago may wish to declare an interest in participating.

FOLLOW UP ACTIONS

17. Encouragement of Formation of a NHC, Development of a National Hydrographic Strategy, and IHO and RHC Membership.

review
this
attend
MACHC.

a. A full meeting of maritime stakeholders in Trinidad and Tobago should be convened to review this report, and to decide the means of conducting a regular review of the status of SOLAS V arrangements. The MACHC Chairman should establish routine liaison with the Chairman of this interim NHC. It is highly desirable that a suitable future chairman be identified in time to attend the seminar in Acapulco on 2-3 Oct 06, details of which will be provided by IHB and MACHC.

ACTION: Director Lands and Surveys; IHB; MACHC Chairman.

where
East
Caribbean.

b. Trinidad and Tobago should make every effort to participate in future MACHC meetings, where their influence as an IHO member state would greatly benefit the small island states of the East Caribbean. **ACTION: Trinidad and Tobago.**

18. Encouragement of Effective and Timely Collection and Promulgation of Hydrographic Information.

a. MSD should confirm the identity of the national co-ordinator, and their role should be promulgated as quickly as possible, requiring all authorities to pass information related to safety of navigation and chart update. The Visit Team should confirm that correct contact details for the co-ordinator are held by UKHO. **ACTION: Director Maritime Services Division, Ministry of Works and Transport.**

b. Once the co-ordinating authority for MSI information has been confirmed and a post-holder identified, the Visit Team will make contact with the NAVAREA IV Co-ordinator and facilitate the access of Trinidad and Tobago to regional SafetyNET arrangements. **ACTION: Trinidad and Tobago; Visit Team; NAVAREA IV Co-ordinator.**

19. Encouragement of Development of Hydrographic Capability.

a. The Trinidad and Tobago MSI national co-ordinator should attend the training course in the first quarter of 2007, details of which will be supplied by IHB and Chairman MACHC. **ACTION: IHB; MACHC Chairman.**

b. Trinidad and Tobago should consider a bid through MACHC for IHOCBC funding for an attachment of an experienced surveyor to advise on development of a prioritised national survey and charting plan, and on specification, oversight and QC of out-sourced survey work. The same person could assist with a review of future capacity of the Hydrographic Survey Unit. **ACTION: Director Lands and Surveys; interim NHC.**

c. Trinidad and Tobago should consider supporting any MACHC bid to IHOCBC for a course in hydrographic equipment handling techniques at the CMI.

AMENDMENTS TO THE ENTRY FOR TRINIDAD AND TOBAGO IN THE IHO YEAR-BOOK

TRINIDAD and TOBAGO

HYDROGRAPHIC UNIT
Survey and Mapping Division
118 Frederick Street
Port of Spain
Trinidad and Tobago, West Indies

Department: Ministry of Agriculture, Land and Marine Resources.

Director of Surveys: Mr Tyrone D. Leong

Telephone: (868) 624 5031

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Staff employed:

- **Hydrographers:** Mr Clinton Stewart (Cat. B trained)
Mr Junior Gomes (Cat. B trained).

- **Cartographers:** Ms Joann Williams
Mr Noel John.

- **Hydrographic Surveying Assistants:** Mr Larry Lalchan
Mr Abidh Rasool

- **Tele & Electronic Technician:** Mr Rajindranath Lakhansingh
Mr Alvin Nyack

- **Mate:** Mr Edwin Mollineaux

- **Seaman:** Mr Gilford Gomez

Publications: Tide Tables.

Surveying vessels: MV MERIDIAN is in care and maintenance and without surveying equipment.

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The Maritime Services Department is responsible for the promulgation of Notices to Mariners.

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DRAFT TERMS OF REFERENCE FOR THE NATIONAL HYDROGRAPHIC
COMMITTEE OF TRINIDAD AND TOBAGO

INTRODUCTION

Trinidad and Tobago recognises its obligations under SOLAS V/4&9 to make arrangements for the following hydrographic services:

- a. The timely collection and promulgation of urgent navigational safety information through navigational warnings (using MSI/GMDSS arrangements) and notices to mariners.
- b. The conduct of hydrographic surveys which are adequate to meet the requirements of safe navigation.
- c. The publication of nautical charts and associated publications.

ROLE

The role of the National Hydrographic Committee is to assist the [appropriate Maritime Administration or Authority] to develop Trinidad and Tobago's policy and plans for the delivery of these hydrographic services.

SECRETARIAT

[A department or authority with appropriate insight] will provide the secretariat for the NHC.

MEMBERS

The following departments and authorities will provide representatives to attend the NHC:

- a. Ministry of Transport.
- b. Maritime Authority.
- c. Port Authority.
- d. Defence Force.
- e. Surveys Department.
- f. Fisheries Department.
- g.

FREQUENCY

The committee will meet annually, and for special purposes as deemed necessary.

FUNCTIONS

To develop Trinidad and Tobago's policy for the delivery of hydrographic services, taking into account the requirements of all sectors of the maritime community.

To determine inter-departmental responsibilities, [including budgetary provision].

To review Trinidad and Tobago's entry in the IHO S-55 data-base.

To review the arrangements for MSI:

- passage of information to ---HO for charting action;
- passage of information to NAVAREA ---;
- Local and Coastal Navigational Warnings;
- GMDSS/NAVTEX.

To assist in the development of a prioritised national survey plan.

To review arrangements with ---HO for the publication of charts and associated publications covering Anywhere's waters.

To make arrangements for Trinidad and Tobago's representation at [the Regional Hydrographic Commission], including the preparation of the national report.

COUNTRY REPORT: BARBADOS

INTRODUCTION

1. **RHC Involvement.** Barbados is not an IHO member, but has attended recent MACHC meetings including the Technical Workshop and Special Meeting in May 2005. It was included in the CGMHC visits in December 1998. There is routine liaison with UKHO.
2. **Preliminary Liaison.** Ms Valerie Browne, Director of Maritime Affairs and Chief Technical Officer in the Ministry of Tourism and International Transport (International Transport), chaired a pre-meeting of maritime stakeholders and co-ordinated arrangements for the visit, which took place on the first celebration of World Hydrography Day, and commenced with a television appearance on “Good Morning Barbados”.
3. **Points of Contact.** Amendments to the details for Barbados in the IHO Year Book are at Appendix 1. They reflect the role of the Director of Maritime Affairs, who, with the Coast Guard (CG), conducts the role of a Maritime Safety Authority, with some quasi-regulatory responsibilities devolved to the Government-owned Barbados Port Inc.

DESCRIPTION OF MARITIME ACTIVITIES

4. **National Maritime Affairs.** The Director of Maritime Affairs had convened a pre-meeting of the national stake-holders, and this ensured a most productive outcome from a well-attended round table meeting. (A copy of the National Programme and a list of attendees are at Appendices 2 and 3 respectively.) The presence of Lieutenant Commander Curtis Roach, IMO Regional Maritime Adviser (Caribbean) also provided an invaluable signal of IMO-IHO co-operation. He confirmed the significance of SOLAS V hydrographic obligations, not least in a region where marine tourism is so important, and agreed that this would be an area that would come under close inspection in the Voluntary Country Audit Scheme. By the end of the meeting a comprehensive overview had been obtained of the maritime sphere in Barbados.
5. **Trade and Maritime Traffic.** Significant developments since the 1998 visit are as follows:
 - a. **Through Routes.** International traffic between the Middle East oil ports and Caribbean and South American ports transits NW of Barbados on the way to the passages N and S of St Vincent and the Grenadines. Some tankers are changing crews off Barbados.
 - b. **International and Regional Trade.** The liner trades from Europe have reduced since 1998, and the majority of cargo is carried by vessels on the feeder routes from US ports and Trinidad and Tobago. Bridgetown has not expanded its trans-shipment role.
 - c. **Tourism - Cruise Liners.** This is the most significant element of the operations in Barbados, with some cruise liners now using Bridgetown as home port during the season (15 Oct – 15 Apr).
 - d. **Tourism - Small Craft.** The anchorage at Bridgetown and the marina at Port St Charles are beginning to attract mega-yachts. There is a coastal cruise market on the West coast.
 - g. **Fisheries.** The artisanal and long-distance fisheries continue. The main fishing centres are now Bridgetown, Oistins, Six Men’s Bay, Consett Bay and Skeete’s Bay.
6. **Responsibility for Safety of Navigation.** Barbados Port Inc. retains statutory responsibility for provision and maintenance of aids to navigation, and the promulgation of Local Notices to Mariners.

7. Defence Force Responsibilities. The Defence Force CG retains its roles of SAR, fishery protection, and constabulary patrols in the EEZ. It mans the Bridgetown MRSC. A new base is under construction to the N of the Deepwater Harbour.

8. Coastal Zone Management and Environmental Protection. This sector was well represented at the meeting by the Coastal Zone Management Unit and the Environmental Protection Department. The creation of a Marine Management Agency is under consideration. All restrictions in the maritime zone are clearly recorded on the BA charts.

OUTLINE S-55 ANALYSIS

9. Status of surveys within the National Maritime Zone. The entry for Barbados in S-55 was reviewed and agreed. The Barbados Port Inc. has continued to pursue a pragmatic and successful out-sourcing strategy for hydrographic survey requirements, and has ensured swift incorporation of results in the published charts. Shipping needs in the waters of Barbados are well-served.

10. Collection and Circulation of Nautical Information. Barbados Port Inc. has excellent links with UKHO, and the round table meeting indicated that, in general, local agencies and authorities understood the importance of consulting with and communicating information to this co-ordinating point. However, the meeting did reveal that a number of Barbados' lights are currently unlit, and the Barbados Port Inc. undertook to provide details to UKHO and to issue an appropriate radio warning.

11. Survey Capability. The meeting revealed significant skill and equipment resources in the island. Mr Lester Toppin of the Coastal Zone Management Unit is a graduate of the University of New Brunswick Category A Course. He has equipped his unit with echo sounders and processing system and a dGPS receiver and base station. A tide gauge has been procured which will be sited near the new CG Base. When equipped with the CZMU's echo sounder, the Port pilot craft and/or the CG vessels could be used for inshore and near-coastal hydrographic work.

PROPOSALS FOR CO-ORDINATION AND CAPABILITY BUILDING

12. National Hydrographic Committee. The recommendations made in 1998 for strategic oversight of national hydrographic obligations had not been pursued. The Visit Team now urged the Director of Maritime Affairs to re-convene the stakeholders to discuss the report arising from this meeting, and to consider the formation of a permanent National Hydrographic Committee. Draft generic terms of reference for such a committee are at Appendix 4. It was suggested that annual meetings should suffice, to review S-55 and draft Barbados' Report for the MACHC conference. It was agreed that Barbados Port Inc. (Captain George Fergusson) should formally assume the role of National Co-ordinator and point of contact for IHO, and that it would normally provide the delegate to MACHC. The Visit Team welcomed this decision, whilst noting the need for succession planning to provide successors for the senior staff currently fulfilling this role. The team also commended consideration of application for membership of the IHO. They subsequently provided the information from IHO publication M-2 and indicated that the IHB could provide further guidance.

13. Phase 1 Hydrographic Capability: MSI Organisation and GMDSS. The review of S-55 had focussed the attention of the meeting on the actions which were needed to plug the gaps in meeting obligations for MSI/GMDSS.

a. MSI (Navigational Warnings). The Visit Team noted the need to provide local radio navigational warnings to complement the Local Notices to Mariners which are promulgated in the media.

b. Information on Ports and Harbours. Captain George Fergusson of Barbados Port Inc. has been sustaining stalwart work to chase down details of developments and changes which need to be charted. The Visit Team noted the value of formal promulgation of the Barbados Port Inc's role as national co-ordinator.

c. GMDSS Status. Very limited progress has been made with GMDSS implementation since 1998, partly because of lack of clarity on the potential for sub-regional co-operation and cost sharing. The Visit Team acknowledged the desirability of NAVTEX cover for the

Barbados EEZ, but urged that in the short term at least a SafetyNET coastal warning area be defined and promulgated. Once Barbados identified a national MSI co-ordinator, the Visit Team could link that person in to the WWNWS through an E-mail link to the Martinique MRCC. The CG seemed the obvious provider for this function, utilising their current operations team which already provides round-the-clock cover. Plans to implement Sea Area A1 coverage around Barbados by installing VHF DSC were also noted and strongly supported by both the IHO and IMO representatives. As part of these plans, consideration needs to be given to training for MRSC personnel who will operate this equipment.

14. Phase 2 Hydrographic Capability: Survey. The Visit Team made a number of suggestions of ways in which Barbados could capitalise on the skills and resources noted at paragraph 11.

a. Provision of Survey Data. One obstacle to swift charting action is the lack of information, especially details of position-fixing systems and horizontal and vertical reference datums. They suggested that Mr Toppin, in liaison with the Lands and Surveys Department, could provide guidance on the information required. The NHC should also consider whether licensing requirements could be used to insist on minimum specifications and compulsory supply of information for incorporation in land mapping and official nautical charts. The process of checking new information against the current chart would also be assisted by software and ARCS coverage. This could be discussed bilaterally with UKHO.

b. Survey Capability. The Team noted that Mr Toppin could play a role as technical adviser to the NHC, including the development and management of a prioritised national survey plan. He could obtain advice and assistance for this role through a short attachment of an experienced surveyor from an IHO member state. This might be pursued through bilateral discussions with UK, or through MACHC, where a number of East Caribbean States may indicate an interest in a concerted bid to the IHO Capacity Building Committee (CBC). Turning to another facet of hydrographic policy and planning, the Team also supported Mr Toppin's case for training and equipping with CARIS LOTS software for his role as technical expert in Barbados' continental shelf delimitation team. They also applauded his initiative in investigating the possibility of expanding his limited field experience by short secondments to the Canadian Hydrographic Service, and recommended that this be supported by the Government of Barbados. This would build up his ability to provide quality control and oversight of survey activity in national waters, and to assist the port authority in liaison with UKHO. Both sub-sessions revealed considerable enthusiasm for the pooling of resources to form a national response team which could conduct check surveys e.g. after hurricane impact. Mr Toppin could provide technical leadership. Both Barbados Port Inc. and CG expressed interest in the concept of a course in practical hydrographic equipment handling techniques.

PROPOSALS FOR ASSISTANCE

15. Training. There are several different requirements and opportunities:

a. It is strongly recommended that the Chairman of the Barbados NHC attend an IHO MACHC Course for NHC Chairmen to be held on 2-3 Oct 06, in association with the next meeting of the regional commission. The Visit Team will arrange for full details to be passed to the Director of Maritime Affairs.

b. IHOCBC funding has been secured for an MSI training course in the region, probably at the CMI in Kingston, Jamaica, during the first quarter of 2007, and at least one person from the Barbados National Co-ordinator's team should attend this course. Full details of this opportunity will be provided to the Director of Maritime Affairs and the CG as soon as they are available.

c. The CMI has indicated that there are customers in Jamaica for a tailor-made, uncertificated, course, delivered in region, with a focus on operation of equipment for inshore check surveys. This option is likely to be discussed at MACHC, and, if significant support is forthcoming from other islands, it could be an attractive candidate for IHOCBC funding.

d. Options for practical field experience for Barbados' Category A trained surveyor (Mr. Toppin) can be explored with IHO member states. The MACHC Conference is a good forum for obtaining regional support and exploring available opportunities.

16. Funding. The Visit Team noted that as yet the IHO's Capacity Building Fund was small and permitted only seed-corn advisory and training activity. They recommended nonetheless that MACHC Member States use the regional forum to give full visibility to their requirements, especially as this might enable a stronger co-ordinated bid.

FOLLOW UP ACTIONS

17. Encouragement of Formation of a NHC, Development of a National Hydrographic Strategy, and IHO and RHC Membership. Barbados should re-convene a meeting of maritime stakeholders to review this Report. The meeting should assess and recommend to Government the option of a formal NHC to conduct a regular review of the status of SOLAS V arrangements. The MACHC Chairman should establish routine liaison in advance of annual meetings of the regional commission. The IHB should provide advice as required on accession to the intergovernmental convention of the IHO. For the time being, the Director Maritime Affairs is interim NHC chair, and the Barbados Port Inc. is the national point of contact (details at Appendix 1). ACTION: **Director Maritime Affairs; MACHC Chairman; IHB.**

18. Encouragement of Effective and Timely Collection and Promulgation of Hydrographic Information.

a. The (interim) NHC should formalise the role of the Barbados Port Inc. as the national co-ordinator for liaison with UKHO, and this role should be promulgated as quickly as possible, requiring all authorities to pass information related to safety of navigation and chart update. ACTION: **Director of Maritime Affairs.**

b. The CG should identify the person or team to undertake the national co-ordinator role for liaison with the WNWNS, and provide contact details to the Visit Team. ACTION: **CO BDF CG.**

c. Once the action at sub-paragraph 18.b. is complete, the Visit Team will make contact with the NAVAREA IV Co-ordinator and Martinique MRCC and facilitate the access of Barbados to regional SafetyNET arrangements. ACTION: **Visit Team; NAVAREA IV Co-ordinator.**

19. Encouragement of Development of Hydrographic Capability.

a. Barbados should take up the option of the NHC Chairman attending the Symposium planned by the IHO on 2-3 October in Acapulco, Mexico, immediately before the next meeting of the MACHC. The Visit Team will ensure that correct contact details for a letter of invitation are provided to the IHB. ACTION: **Director of Maritime Affairs; Visit Team; IHB.**

b. Barbados should take up the allocated place on the MSI training course in the first quarter of 2007. Details will be supplied by IHB and MACHC. ACTION: **MACHC Chairman; IHB.**

c. Barbados should continue to attend MACHC meetings. The delegation should be equipped to deliver a national report and to register interest in capacity building opportunities. Guidance on the format for national reports is available from the MACHC Chairman. ACTION: **MACHC Chairman.**

AMENDMENTS TO THE ENTRY FOR BARBADOS IN THE IHO YEAR-BOOK

BARBADOS

DIRECTOR OF MARITIME AFFAIRS
Ministry of Tourism and International Transport (International Transport)
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Ms. Browne is interim Chairman of the National Hydrographic Committee.

BARBADOS PORT INC.
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APPENDIX 2 TO
ANNEX K TO
HA/317/022/01- 03
DATED 8 AUG 06

NATIONAL PROGRAMME

6.00 am	Good Morning Barbados
9.00 am	Roundtable Meeting with agencies on hydrographic matters
12:30 pm	LUNCH PERIOD
2:00 pm	Concurrent Sessions Meeting on GMDSS with Commander Tim Sewell as facilitator Meeting on general hydrographic matters with Captain Mike Barritt as facilitator
4.00 pm	Wrap up Session

List of Attendees

International Transport

Ms. Valerie Browne, Chief Technical Officer
Miss Jacqueline Blackman, Deputy Chief Technical Officer
Ms. Dionne Gibbs, Research Officer II (ag)
Mr. Walter Best, Shipping Superintendent
Mrs. Jessica Taylor, Assistant Shipping Superintendent (ag)

Barbados Port Inc.

Mr. Richard Alleyne, Harbour Master/Manager, Marine Services
Mr. Kent Fergusson, Berthing Master
Captain George Fergusson, Special Adviser to the NH Committee

Barbados Defence Force/Barbados Coast Guard

Commander David Dowridge, Chief of Staff (ag)
MCPO Erlin Lynch

Coastal Zone Management Unit

Mr. Lester Toppin, Hydrographer

Ministry of Foreign Affairs

Mr. Tyrone Brathwaite, Foreign Service Officer I

Lands & Surveys Department

Mr. Andrew Bourne, Senior Surveyor

Telecommunications Department

Mr. Winston Devonish, Senior Telecommunications Officer

Fisheries Division

Mr. Stephen Willoughby, Chief Fisheries Officer

Environmental Protection Department

Ms. Ingrid Lavine, Senior Marine Pollution Officer

Barbados Marine Trust

Mr. James Blades
Mr. Michael Young

DRAFT TERMS OF REFERENCE FOR THE NATIONAL HYDROGRAPHIC COMMITTEE OF ANYWHERE

INTRODUCTION

Anywhere recognises its obligations under SOLAS V/4&9 to make arrangements for the following hydrographic services:

- a. The timely collection and promulgation of urgent navigational safety information through navigational warnings (using MSI/GMDSS arrangements) and notices to mariners.
- b. The conduct of hydrographic surveys which are adequate to meet the requirements of safe navigation.
- c. The publication of nautical charts and associated publications.

ROLE

The role of the National Hydrographic Committee is to assist the [appropriate Maritime Administration or Authority] to develop Anywhere's policy and plans for the delivery of these hydrographic services.

SECRETARIAT

[A department or authority with appropriate insight] will provide the secretariat for the NHC.

MEMBERS

The following departments and authorities will provide representatives to attend the NHC:

- a. Ministry of Transport.
- b. Maritime Authority.
- c. Port Authority.
- d. Defence Force.
- e. Surveys Department.
- f. Fisheries Department.

g.

FREQUENCY

The committee will meet annually, and for special purposes as deemed necessary.

FUNCTIONS

To develop Anywhere's policy for the delivery of hydrographic services, taking into account the requirements of all sectors of the maritime community.

To determine inter-departmental responsibilities, [including budgetary provision].

To review Anywhere's entry in the IHO S-55 data-base.

To review the arrangements for MSI:

- passage of information to ---HO for charting action;
- passage of information to NAVAREA ---;
- Local and Coastal Navigational Warnings;
- GMDSS/NAVTEX.

To assist in the development of a prioritised national survey plan.

To review arrangements with ---HO for the publication of charts and associated publications covering Anywhere's waters.

To make arrangements for Anywhere's representation at [the Regional Hydrographic Commission], including the preparation of the national report.

COUNTRY REPORT: GRENADA

INTRODUCTION

1. **RHC Involvement.** Grenada is not an IHO member, nor a member of the MACHC. It was not represented at the MACHC Technical Workshop and Special Meeting in May 2005, and a National Report was not available to the RHC Study Team. It was included in the CGMHC visits in December 1998. There is routine liaison with the UKHO.
2. **Preliminary Liaison.** Mr Anthony Belmar, the IHO's designated point of contact, assisted with co-ordination of the visit.
3. **Points of Contact.** Some minor amendments to the details for Grenada in the IHO Year Book, principally reflecting functions of the Maritime Administration which are vested in the Port Authority, are at Appendix 1.

DESCRIPTION OF MARITIME ACTIVITIES

4. **National Maritime Affairs.** The Visit Team's meeting with the Grenada Ports Authority enabled the picture in the 1998 report to be updated to reflect the maritime economic developments which have been achieved and sustained despite severe hurricane damage in recent seasons.
5. **Trade and Maritime Traffic.** The significant developments since 1998 are as follows:
 - a. **International and Regional Trade.** The development of the Trinidadian trans-shipment ports has affected the pattern of trade touching at Grenada, with most containers arriving in the feeder service from Port of Spain and Port Lisas. Oil products now arrive from Trinidad as well as from Curacao.
 - b. **Coasting and Local Trade.** There is now little activity at Grenville, and Hillsborough, Carriacou, is the second port of Grenada. There is a fast ferry service between St George's, Hillsborough and Martinique.
 - c. **Tourism - Cruise Liners.** The new jetty at St George's is attracting larger liners, and the new generation of very large liners are anchoring off during the season (1 October to 30 April). Smaller liners prefer the inner berths in St George's. The anchorage at Hillsborough is also frequented. There were 380 calls in Grenada's ports in 2005.
 - d. **Tourism - Small Craft.** In addition to the marinas in the Lagoon at St George's, there is a new small facility at St David's on the S coast. Mega-yachts are visiting the island, using the anchorages at St George's and Mount Hartman.
 - e. **Fisheries.** The fishery remains artisanal, with Gouyave, Grand Mal, Victoria, Woburn, Sauteurs and Grenville as the significant ports. It is known that foreign fishing vessels infringe Grenada's fishery limits.
6. **Responsibility for Safety of Navigation.** The Grenada Maritime Administration retains statutory responsibility for port operation, provision and maintenance of aids to navigation, and the promulgation of Notices to Mariners.
7. **Defence Force Responsibilities.** The Grenadan Coast Guard was not represented at the meeting. It was reported that budgetary constraints and manning difficulties were constraining its ability to sustain regular patrols.

8. Coastal Zone Management and Environmental Protection. It was reported that the Ministry of Agriculture and Health was promoting a bill to draw together the environmental management responsibilities which currently lie with several different ministries and authorities. The Visit Team noted that no information on Marine Parks or other restricted areas was shown on the published charts. The Ports Authority and Lands and Surveys Department undertook to pass details of parks at Molinière Point and Carriacou to UKHO.

OUTLINE S-55 ANALYSIS

9. Status of surveys within the National Maritime Zone. Grenada's entry in S-55 was discussed and the information in the Source Data Diagrams on the BA charts was analysed. The broad conclusions in S-55 were agreed. The Director of Maritime Affairs expressed concern over the status of surveys in the SE sector of Grenada's coastal waters in the light of potential future developments, and sought advice on costs and avenues to conduct larger area surveys outside port limits. The response from the Visit Team is summarised below at paragraph 15.

10. Collection and Circulation of Nautical Information. The role of the Port Authority in co-ordinating the collection and dissemination of new information was confirmed, and it was noted that this first phase of hydrographic capacity had a particularly high profile in joint IMO/IHO effort to improve the performance of all coastal states in meeting their obligations under SOLAS Chapter V. The discussions revealed a number of changes and developments that need to be reflected on the BA charts (survey data for the area of the new jetty at St George's and for Tyrrel Bay, the extension of the jetty at Hillsborough, the new marina at St David's, the relocation of the Queen's Park Terminal, and the prohibited anchorage areas in Grand Anse Bay and Tyrrel Bay Careenage). The Port Authority undertook to communicate the required information. The Visit Team undertook to reinforce the lines of communication with UKHO. The Port Authority confirmed that local warnings are promulgated in the press and by VHF radio in the immediate vicinity of St George's.

11. Survey Capability. The Port Authority continues to use the echo sounder in their pilot boat to conduct check lines in the channels and along the jetties of St George's. These checks inform a programme of small out-sourced area surveys in the ports.

12. Chart Production. The Grenadan policy of providing data to the UKHO for BA coverage of the country's waters is pragmatic and successful. However, the Visit Team noted that the 1998 recommendation for improved coverage of Tyrrel Bay, in particular to show the tanker mooring, has not been actioned. One option could be an extension of the plan of Hillsborough Bay on BA Chart 795.

PROPOSALS FOR CO-ORDINATION AND CAPABILITY BUILDING

13. National Hydrographic Committee (NHC). The recommendation made in 1998 for an NHC, chaired by the Office of the Prime Minister, has not been followed up. The Visit Team reiterated the developments which have taken place since then, particularly the new obligations defined in SOLAS V, and the imminent inclusion of the national data in IHO S-55 (www.iho.int) in the IMO Voluntary Audit Scheme. They encouraged the Director of Maritime Affairs to re-examine the NHC proposal, perhaps with the Permanent Secretary of the Ministry of Finance as Chairman. The committee need not necessarily confine its remit to hydrography, but could be used to provide oversight for broader maritime safety concerns. They noted the Seminar which will take place for NHC Chairmen of the region on 2-3 Oct 06. They offered draft Terms of Reference for such a committee, and these are included at Appendix 2.

14. MSI Organisation and GMDSS. The following proposals arose from the discussions:

a. MSI (Navigational Warnings). The NHC should monitor the effectiveness of current arrangements, especially for the smaller ports. As in 1998 the Port Authority was urged to use all pragmatic measures to improve coverage of the remoter areas of national waters, especially by encouraging alert look-out and reports from visiting and local shipping.

b. Information on Ports and Harbours. It was suggested that the Director Maritime Affairs consider using the Gazette or other suitable official publication to promulgate the co-

ordination role of the Port Authority, and to call on other agencies to communicate important maritime safety information without delay. Lands and Surveys, Physical Planning, Fisheries and Environmental agencies have particularly important roles to play.

c. GMDSS Status. The Visit Team recommended that the Port Authority should also be the local focal point for communicating information to the WWNWS, and that this could best be achieved by declaring a SafetyNET Coastal Warning Area. The Visit Team could help to establish a direct E-mail link to the French co-ordinator in MRCC Martinique. The Port Authority undertook to confirm the name of the national co-ordinator as soon as possible.

15. Hydrographic Capability. The Visit Team were impressed by the pragmatic approach of the Port Authority team, who are currently monitoring any silting around the new jetty caused by out-flow from the St John's River. Routine contracting arrangements are in place to bring in companies from Trinidad to conduct re-surveys in the port areas when required. Currently, a contract is in place to resolve tidal datum for a recent survey of the vicinity of the new jetty. The Visit Team suggested that Grenada might wish to follow several other Eastern Caribbean island states in submitting a bid through MACHC to the IHO's Capacity Building Committee (CBC) for funding of a short attachment of an experienced surveyor to advise on the development of a prioritised national survey plan for the whole sea area of the country. Such an expert could also advise on specification of surveys and oversight of contract work. They also noted the putative CMI course in basic survey techniques. The Port Authority confirmed an interest in such a course, and it was agreed that this could increase the national capacity to conduct check surveys of channels in the wake of hurricane or other environmental emergencies.

PROPOSALS FOR ASSISTANCE

16. Training. The Visit Team reiterated the benefit to Grenada of participation in the IHO MACHC Course for NHC Chairmen to be held on 2-3 Oct 06, in association with the next meeting of the regional commission. They also noted that a place had been reserved for Grenada's national co-ordinator on the MSI training course to be held at the CMI in Kingston, Jamaica in the first quarter of 2007. Full details of this opportunity will be provided to the Port Authority as soon as possible. Finally, the Visit Team noted that participation in the MACHC meetings would ensure that Grenada was included in bids for assistance to regional states which were formulated for submission to the IHOCBC.

FOLLOW UP ACTIONS

17. Encouragement of Formation of a NHC, Development of a National Hydrographic Strategy, and IHO and RHC Membership. Grenada should convene a meeting to review this report, and particularly the proposal for an NHC to take responsibility thereafter for regular monitoring of the status of SOLAS V arrangements. The IHB should provide follow up advice on IHO membership, and the MACHC Chairman should establish routine liaison with the NHC in advance of annual meetings of the commission. ACTION: **Grenada Ports Authority; Ministry of Finance, Grenada; IHB; MACHC Chairman.**

18. Encouragement of Effective and Timely Collection and Promulgation of Hydrographic Information.

a. The Grenada Ports Authority should identify the national co-ordinator, and their role should be promulgated as quickly as possible, requiring all authorities to pass information related to safety of navigation and chart update. ACTION: **Grenada Maritime Administration and Ports Authority.**

b. The Visit Team should reinforce the link between Grenada's national co-ordinator and UKHO. ACTION: **Visit Team.**

c. Once the action at sub-paragraph 18.a. is complete, the Visit Team will make contact with the MRCC Martinique and the NAVAREA IV Co-ordinator and facilitate the access of Grenada to regional SafetyNET arrangements. ACTION: **Visit Team; MRCC Martinique; NAVAREA IV Co-ordinator.**

19. Encouragement of Development of Hydrographic Capability.

a. Grenada should take up the option of the NHC Chairman attending the symposium planned by the IHO on 2-3 October in Acapulco, Mexico, immediately before the next meeting of the MACHC. The Visit Team will ensure that correct contact details for a letter of invitation are provided to the IHB. ACTION: **Grenada; Visit Team; IHB.**

b. Grenada should take up the place on the MSI training course in the first quarter of 2007, for which IHB and MACHC will provide details. ACTION: **Grenada Ports Authority; IHB; MACHC Chairman.**

c. Grenada should attend the forthcoming MACHC meeting on 4-5 Oct 06 in Acapulco, particularly to register interest in submissions to the IHOCBC for capacity building support e.g. advisory attachments, CMI survey training, and survey effort by the survey ships of MACHC member states which might be deployed in the East Caribbean region. ACTION: **Grenada Maritime Administration and Ports Authority.**

AMENDMENTS TO THE ENTRY FOR GRENADA IN THE IHO YEAR-BOOK

GRENADA

**GRENADA PORTS AUTHORITY
and GRENADA MARITIME ADMINISTRATION
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St George's
Grenada W.I.**

Department to which the Ports Authority is responsible: Ministry of Finance.

General Manager and Director of Maritime Affairs: Mr Ambrose Phillip.

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E-mail: grenport@caribsurf.com

Port Manager and Deputy Director of Maritime Affairs: Mr Ian Evans.

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IHO Point of Contact: Mr Anthony Belmar

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COUNTRY REPORT: ST VINCENT AND THE GRENADINES

INTRODUCTION

1. **RHC Involvement.** St Vincent and the Grenadines is not an IHO member, nor a member of the MACHC. It was represented at the MACHC Technical Workshop and Special Meeting in May 2005, and a National Report was available to the RHC Study Team. It was not included in the CGMHC visits in December 1998. There is routine liaison with the UKHO.
2. **Preliminary Liaison.** Captain Brennan King, Harbour Master, St Vincent and the Grenadines Port Authority, assisted with co-ordination of the visit.
3. **Points of Contact.** Amendments to the details for St Vincent and the Grenadines in the IHO Year Book are at Appendix 1.

DESCRIPTION OF MARITIME ACTIVITIES

4. **National Maritime Affairs.** The recent formation of the Ministry of National Security has brought many of the most significant maritime stakeholders under the same aegis. The value of this close association became apparent during a most productive round table meeting at the Port Authority which enabled a clear picture to be obtained of the salient features of the maritime sphere.
5. **Trade and Maritime Traffic.** The main components of sea-borne traffic, and the patterns of activity in national waters, are as follows:
 - a. **Through traffic on International Routes.** Traffic through the passages between St Lucia and St Vincent, and between St Vincent and Bequia has increased, particularly since the advent of home-porting of cruise liners in Bridgetown, Barbados. Tankers linking the Gulf of Mexico ports and the Middle East also use the N passage regularly.
 - b. **Feeder, Coasting and Local Trade.** St Vincent is on the feeder route from Trinidad (Barbados, St Lucia, St Vincent, Grenada) for container traffic. Oil products are mainly imported from Trinidad, and are delivered to the Arnos Vale Terminal in Great Head Bay. A new terminal is under development in Camden Park Bay. Local trade is carried by small ferries, some with stern ramps, serving Admiralty Bay in Bequia, Britannia Bay in Mustique, Charlestown Bay in Canouan, and Clifton Harbour in Union Island.
 - c. **Tourism - Cruise Liners.** Large liners, including QUEEN MARY II, anchor off Kingstown. Smaller vessels use the Cruise Ship Terminal. In the Grenadines, liners are known to anchor at Admiralty Bay in Bequia and off Canouan at the W entrance to the North Mayreau Channel.
 - d. **Tourism - Small Craft.** Mega-yachts are beginning to visit the group. There is extensive cruising activity from the marinas at Blue Lagoon in Calliaqua Bay, and Otley Hall Bay.
 - e. **Fisheries.** Artisanal fishery is based on Kingston and Calliaqua Bay.
6. **Responsibility for Safety of Navigation.** The Port Authority is responsible for the maintenance of channels, provision and maintenance of aids to navigation, and the promulgation of Notices to Mariners.
7. **Defence Force Responsibilities.** The St Vincent and the Grenadines Coast Guard (CG), based at Calliaqua, is responsible for SAR, fishery protection, and constabulary patrol of the EEZ. The CG

indicated that they have difficulty in sourcing charts, and this should be discussed with UKHO. There is a particular requirement for BA 794 with the plans in the central Grenadines.

8. Coastal Zone Management and Environmental Protection. A Marine Park has been established in the Tobago Cays and there is a conservation zone on the S coast of St Vincent. The Port Authority undertook to obtain coordinates and pass them to UKHO.

OUTLINE S-55 ANALYSIS

9. Status of surveys within the National Maritime Zone. The significance of the S-55 data-base on the IHO web-site (www.iho.int) was explained, with particular emphasis on its high profile in the IMO. The status of surveys in the waters of St Vincent and the Grenadines was discussed in the context of the summary of maritime activity, with reference to the information in the Source Data Diagrams on the BA charts. It was agreed that movements of cruise liners in the Grenadines represented the major concern which might lead to a need for modern survey coverage, including a side-scan sonar sweep.

10. Collection and Circulation of Nautical Information. It was very clear to the Visit Team that the Port Authority Harbour Master and the Maritime Division provide a most effective national co-ordination point to handle liaison with UKHO. Sensible measures are taken to sensitise local mariners and the charter cruising companies to the need to monitor aids to navigation and to report other maritime safety information in the extensive waters of the group. The discussions revealed a number of uncharted lights, and some other aids which have been discontinued or which are temporarily unlit. The Visit Team undertook to arrange for a copy of the relevant page of the Admiralty Lights List to be supplied to the Port Authority to assist them to update the information held by UKHO.

11. Survey Capability. The Port Authority conducts check sounding of berths, and out-sources re-survey work to commercial companies based in Trinidad. The CG is alert for new dangers, and uses HSA to position their soundings.

12. Chart Coverage. The St Vincent and the Grenadines authorities were content with the scheming of BA charts of their waters, and with routine liaison with UKHO. They should discuss with UKHO the availability of suitable software for use of ARCS to assist this liaison.

PROPOSALS FOR CO-ORDINATION AND CAPABILITY BUILDING

13. National Hydrographic Committee. The Permanent Secretary of the Ministry of National Security chairs a Board of Maritime Commission which oversees the work of the Division for Maritime Affairs, the CG, and the Port Authority. The Visit Team recommended that the Board should receive a regular report on the status of arrangements to deliver the government's SOLAS V obligations for hydrographic services. This could be done on an annual basis, ideally in time to approve a national report to the MACHC conference.

14. Phase 1 Hydrographic Capability: MSI Organisation and GMDSS. The Visit Team explained the fundamental importance of measures to keep the official charts up to date, and to pass urgent safety critical information to the mariner with the minimum delay.

a. MSI (Navigational Warnings). In addition to the publication of local Notices to Mariners in the press, local navigational warnings are broadcast on VHF by the CG and Fort Charlotte Radio Station. There is excellent coverage of national waters.

b. Information on Ports and Harbours. The arrangements noted at paragraph 10 indicated that the responsible authorities had a clear grasp of the legal requirement and economic importance of timely supply of plans and co-ordinates of new development to UKHO. Examination of the charts indicated that they present an accurate current picture, apart from the discrepancies related to aids to navigation, and the Marine Park and Conservation Area. The Visit Team suggested that the Gazette or other official medium might be used to formalise the coordination role of the Port Authority Maritime Division.

c. GMDSS Status. As reported at the special MACHC meeting in 2005, St Vincent and the Grenadines has a Master Plan and has links with MRCC Martinique for SAR. The Visit Team proposed that this liaison be extended to put in place a SafetyNET Coastal Warning Area for the group, with the CG providing the MSI national co-ordinator. Once the name and post of the co-ordinator was confirmed, the Visit Team would liaise with MRCC Martinique and the NAVAREA IV co-ordinator and facilitate this linkage into the WWNWS.

15. Phase 2 Hydrographic Capability: Survey. The Visit Team recommended that the St Vincent and the Grenadines authorities seek advice as required from UKHO on future survey requirements. The most important local role was to be alert for new or inappropriate shipping movement in those areas which had not been surveyed in the last 30 years.

PROPOSALS FOR ASSISTANCE

16. Training. The Visit Team drew attention to forthcoming training opportunities arranged by the IHO, details of which are shown in the next section. They also encouraged continued participation in MACHC meetings to ensure that St Vincent and the Grenadines was included in any bids for assistance to regional states which were formulated for submission to the IHO's Capacity Building Committee (CBC).

17. Funding. The Visit Team explained that as yet the IHO's Capacity Building Fund was small and permitted only seed-corn advisory and training activity. The MACHC forum facilitated bilateral contact with member states which might be able to offer funding assistance, or spare survey capacity.

FOLLOW UP ACTIONS

18. Encouragement of Formation of a NHC, Development of a National Hydrographic Strategy, and IHO and RHC Membership. The Visit Team noted the seminar for NHC Chairman planned by the IHO on 2-3 October in Acapulco, Mexico, immediately before the next meeting of the MACHC, and recommended that the Permanent Secretary of the Ministry of National Security should attend. The Visit Team will ensure that correct contact details for a letter of invitation are provided to the IHB. They recommend that the Board of Maritime Commission should convene to review this report when it is formally submitted, and to approve a national report to be delivered by the national co-ordinator at the MACHC meeting. **ACTION: St Vincent and the Grenadines; Visit Team; IHB.**

19. Encouragement of Effective and Timely Collection and Promulgation of Hydrographic Information.

a. The Board of Maritime Commission should consider formal promulgation of the role of the Port Authority Harbour Master as the national co-ordinator, requiring all authorities to pass information related to safety of navigation and chart update. **ACTION: St Vincent and the Grenadines Board of Maritime Commission.**

b. The Visit Team should reinforce the link between St Vincent and the Grenadine's national co-ordinator and UKHO, and ensure that information on aids to navigation is updated. They should also ask UKHO to investigate availability of products in St Vincent and the Grenadines. **ACTION: Visit Team.**

c. The Coast Guard should confirm the identity of the MSI national co-ordinator. Once this is done, the Visit Team will make contact with the MRCC Martinique and the NAVAREA IV Co-ordinator and facilitate the access of St Vincent and the Grenadines to regional SafetyNET arrangements. **ACTION: St Vincent and the Grenadines CG; Visit Team; MRCC Martinique; NAVAREA IV Co-ordinator.**

20. Encouragement of Development of Hydrographic Capability.

a. St Vincent and the Grenadines should take up the place reserved for their co-ordinator on the MSI training course in the first quarter of 2007, for which IHB and MACHC will provide details. **ACTION: St Vincent and the Grenadines CG; IHB; MACHC Chairman.**

b. St Vincent and the Grenadines should attend the forthcoming MACHC meeting on 4-5 Oct 06 in Acapulco, particularly to register interest in submissions to the IHOCBC for capacity building support e.g. advisory attachments, CMI survey training, and survey effort by the survey ships of MACHC member states which might be deployed in the East Caribbean region. ACTION: **St Vincent and the Grenadines Port Authority.**

APPENDIX 1 TO
ANNEX M TO
HA/317/022/01-03
DATED 7 AUG 06

AMENDMENTS TO THE ENTRY FOR ST. VINCENT AND THE GRENADINES
IN THE IHO YEAR-BOOK

ST. VINCENT AND THE GRENADINES

DIVISION OF MARITIME AFFAIRS

Department to which the Division is responsible: Ministry of National Security

Director: Mr David Robin.

The Division is answerable to the Board of Maritime Commission, chaired by the Permanent Secretary, Ministry of National Security.

Contact details to be supplied by the St. Vincent and the Grenadines Port Authority.

ST. VINCENT AND THE GRENADINES PORT AUTHORITY
P.O. Box 1237
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Department to which the Division is responsible: Ministry of National Security

CEO: Mr Paul L Kirby

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National Co-ordinator for liaison with IHO and UKHO: Captain B. B. King.

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COUNTRY REPORT: ST LUCIA

INTRODUCTION

1. **RHC Involvement.** St Lucia is neither an IHO member, nor a member of the MACHC. It was represented at the MACHC Technical Workshop and Special Meeting in May 2005. It was included in the CGMHC visits in December 1998. There is routine liaison with the UKHO.
2. **Preliminary Liaison.** Mr Dermot Saltibus, Director of Maritime Affairs, assisted with co-ordination of the visit.
3. **Points of Contact.** Details for St Lucia in the IHO Year Book require only minor amendments which are shown at Appendix 1.

DESCRIPTION OF MARITIME ACTIVITIES

4. **National Maritime Affairs.** The Visit Team were briefed on the evolution of the unusual arrangement in St Lucia, whereby a Division of Maritime Affairs had been set up within the St Lucia Air and Sea Ports Authority (SLASPA) rather than independently. The relative lack of progress in areas discussed in 1998 suggested to the Visit Team that there was a need for greater awareness of, and engagement in, maritime affairs at ministerial level, not least in view of the SOLAS Vobligations which came into effect in 2002. Further comment will be made later in this report. Nonetheless the Division of Maritime Affairs had convened a preparatory meeting of stakeholders, and the Coast Guard and Surveys and Mapping Division were able to join in discussions during the visit. This enabled the Visit Team's understanding of the maritime sphere in the country to be updated.
5. **Trade and Maritime Traffic.** The main components of sea-borne traffic, and the patterns of activity in national waters, are as follows:
 - a. **International and Regional Trade.** Tankers from the Middle East bound to Caribbean and South American ports pass through the deep water channel to the S of St Lucia, and also deliver to the Grand Cul de Sac terminal. This terminal also handles St Lucia's own imports from Trinidad and Tobago, other than the aviation fuel landed at Vieux Fort. Vieux Fort is on the container and reefer liner routes. It is a trans-shipment and feeder port for some other destinations in the Antilles chain. Castries handles some domestic container traffic. There are no other national cargo-handling ports.
 - b. **Tourism - Cruise Liners.** Castries is the main port of call. Some Holland American line vessels heave to in Soufrière Bay. The small sail-assisted liners berth by Mediterranean moor at Soufrière, and also anchor at Rodney Bay and Marigot Bay.
 - c. **Tourism - Small Craft.** Rodney Bay, Marigot Bay and Soufrière are the ports of entry for yachts, and mega-yachts are beginning to frequent the first two locations, fuelling in Castries. New jetties have been constructed at Marigot Bay, and a new marina is under development at Praslin Bay on the E coast. Some charter operations run from Castries.
 - d. **Fisheries.** Vieux Fort, Choiseul and Dennery remain the ports for the artisanal fishery. There was reference to a fishery college at Choiseul, and to problems arising from siltation at this port.

6. Responsibility for Safety of Navigation. SLASPA retains statutory responsibility for the maintenance of channels into ports, the provision and maintenance of aids to navigation, and the promulgation of local Notices to Mariners.
7. Defence Force Responsibilities. The main roles of the Marine Department of the Royal St Lucian Police Force (RSLPF) remain SAR, fishery protection, and operations to counter traffic in drugs. They rely on local knowledge in the many poorly charted areas on St Lucia's narrow continental shelf.
8. Coastal Zone Management and Environmental Protection. No representatives of this sector were available to attend the meeting. However, it appeared that the note on BA 1273 related to anchoring restrictions in Soufrière Bay reflects the only current legislation.

OUTLINE S-55 ANALYSIS

9. Status of surveys and charting within the National Maritime Zone. The significance of the S-55 data-base on the IHO web-site (www.iho.int), especially within ongoing IMO discussion of the Voluntary Country Audit Scheme, was discussed. The entry for St Lucia was reviewed. It was acknowledged that the approaches to the significant ports on the narrow coastal shelf were probably adequately covered by surveys and charting. However, an annual review should be held to note any developments in coastal navigation, especially tourist traffic, which might lead to a requirement for improved coverage. The St Lucia authorities undertook to assess a possible requirement for larger scale coverage of Soufrière Bay and possibly some of the fishing ports, and to communicate their advice to UKHO.
10. Collection and Circulation of Nautical Information. In addition to issue of local Notices to Mariners, the liaison between Mr Oliviere Cadet, SLASPA Chief Pilot, and UKHO continues to be excellent. In addition to the local warnings broadcast on VHF from the port facilities at Castries and Vieux Fort, there is good awareness of the broadcast facilities available at Martinique MRCC.
11. Survey Capability. The SLASPA pilot boats, and the Police Marine Department cutters, are fitted with echo sounders, and both authorities are alert for indications of depth changes or new hazards.

PROPOSALS FOR CO-ORDINATION AND CAPABILITY BUILDING

12. National Hydrographic Committee. The proposal made in 1998 for the formation of a National Hydrographic Committee (NHC) has not been followed up. Given the significant developments in the maritime sphere since that date, the current Visit Team would urge most strongly that St Lucia should consider forming a National Maritime Committee (NMC), to provide oversight of the major responsibilities being coordinated by the SLASPA Division of Maritime Affairs. The advice of the IMO Regional Adviser (Caribbean) should be sought on this proposal, and particularly how it might tailor into the annual inter-governmental meetings to review the PSC and other business of the Maritime Administrations of the region, and into the special meetings at Permanent Secretary level. From an IHO perspective, it would suffice for hydrography to form an agenda item at the annual NMC meeting, for which representation should be sought from other ministerial stakeholders e.g. Internal Security; Planning Development, Environment and Housing. The Visit Team would recommend that the NMC be chaired by the Permanent Secretary of the Ministry of Communications, Works, Transport and Public Utilities. The committee should review the status of St Lucia's arrangements to comply with SOLAS V/9 and 14, ideally in time to inform the annual meeting of the Meso-American and Caribbean Hydrographic Commission (MACHC).
13. Phase 1 Hydrographic Capability: MSI Organisation and GMDSS. The Visit Team explained the IHO objective of encouraging and assisting all coastal states to put in place effective local arrangements for the vital basic stage of hydrography i.e. the collation and dissemination of information to update the official charts and to broadcast more urgent information as radio warnings to shipping.
 - a. MSI (Navigational Warnings). The existing arrangements for local Notices to Mariners and VHF broadcast of warnings are almost certainly sufficient. A judgment may

need to be made on the need for improved coverage of the artisanal fisheries from the minor ports, and for availability of notices and warnings at the main marinas.

b. Information on Ports and Harbours. The Visit Team recommended that the responsibility of SLASPA under the SLASPA and Shipping Acts for local Notices to Mariners and warnings should be brought to the attention of other agencies and sea users through formal promulgation e.g. in the official Gazette. Whilst the key relationships appear to be working well on an informal basis, there would be particular value in underlining the importance of co-ordination between SLASPA and Surveys and Mapping and the Development Control Authority. Other agencies in the fisheries and environmental sectors should also be sensitised to the legal requirement and economic importance of timely supply of plans and co-ordinates of new developments through SLASPA to the UKHO for inclusion in St Lucia's official charts.

c. GMDSS Status. The St Lucia Master Plan which had been sighted in 1998 had emphasised the good existing links between the RSLPF Marine Department and the MRCC in Martinique for SAR. This Visit Team reiterated the proposal that this liaison be extended to put in place a SafetyNET Coastal Warning Area for St Lucia. The conclusion of the discussions was that SLASPA would co-ordinate information and determine when a Coastal Warning was required, formatting the message and passing it to the Police Marine Department for transmission to Martinique. The Visit Team would liaise with MRCC Martinique and the NAVAREA IV co-ordinator and facilitate this linkage into the WNWWS once this had been agreed by the St Lucian authorities.

14. Phase 2 Hydrographic Capability: Survey. Current practice of out-sourcing survey requirements in the port areas, and requiring developers of new coastal facilities to conduct surveys and submit the resultant data to SLASPA, is pragmatic and appropriate for St Lucia. The Visit Team suggested that specifications for survey work should include reference to the minimum standards published in IHO Special Publication 44, which is freely available on the IHO web-site. The Surveys and Mapping Division could provide local advice on interpretation of the technical information therein, and advice could also be sought from UKHO. Consideration might be given to seeking a short advisory visit by an experienced surveyor from an IHO Member State to explain survey specification, over-sight and appraisal in more detail.

15. Arrangements for charting. The Visit Team recommended that St Lucia discuss a formal bilateral arrangement with UKHO, which could cover such issues as availability of ARCS versions of St Lucia's charts to facilitate national planning and co-ordination of coverage.

PROPOSALS FOR ASSISTANCE

16. Training. The Visit Team drew attention to forthcoming training opportunities arranged by the IHO, details of which are shown in the next section. They also encouraged continued participation in MACHC meetings to ensure that St Lucia is included in any bids for assistance to regional states which may be formulated for submission to the IHO's Capacity Building Committee (CBC).

17. Funding. The Visit Team explained that as yet the IHO's Capacity Building Fund was small and permitted only seed-corn advisory and training activity. The MACHC forum facilitated bilateral contact with IHO member states which might be able to offer funding assistance, or spare survey capacity.

FOLLOW UP ACTIONS

18. Encouragement of Formation of a NHC. Development of a National Hydrographic Strategy, and IHO and RHC Membership. The Visit Team noted the seminar for NHC Chairman planned by the IHO on 2-3 October in Acapulco, Mexico, immediately before the next meeting of the MACHC, and recommended that the Permanent Secretary (PS) of the Ministry of Communications, Works, Transport and Public Utilities should attend. The Visit Team will ensure that correct contact details for a letter of invitation are provided to the IHB, and they will also ask the IHO Directing Team to offer further advice to the PS. They recommend that the St Lucia authorities should convene, ideally as an interim National Maritime Committee, to review this report when it is formally submitted, and to approve a

national report to be delivered by the national co-ordinator at the MACHC meeting. They also recommend most strongly that St Lucia should become an Associate Member of MACHC. ACTION: **St Lucia; Visit Team; IHB; MACHC Chairman.**

19. Encouragement of Effective and Timely Collection and Promulgation of Hydrographic Information.

a. The St Lucia government should consider formal promulgation of the role of SLASPA as the national co-ordinator for liaison with IHO, UKHO and MACHC, requiring all authorities to pass information related to safety of navigation and chart update. ACTION: **St Lucia.**

b. The Visit Team should reinforce the link between St Lucia's national co-ordinator and UKHO, and also ask UKHO to advise on the process for putting in place a formal bilateral agreement. ACTION: **Visit Team.**

c. The identity of the MSI national co-ordinator within SLASPA should be confirmed. Once this is done, the Visit Team will make contact with the MRCC Martinique and the NAVAREA IV Co-ordinator and facilitate the access of St Lucia to regional SafetyNET arrangements. ACTION: **St Lucia; Visit Team; MRCC Martinique; NAVAREA IV Co-ordinator.**

19. Encouragement of Development of Hydrographic Capability.

a. St Lucia should take up the place reserved for their co-ordinator on the MSI training course in the first quarter of 2007, for which IHB and MACHC will provide details. ACTION: **St Lucia; IHB; MACHC Chairman.**

b. St Lucia should attend the forthcoming MACHC meeting on 4-5 Oct 06 in Acapulco, particularly to register interest in submissions to the IHOCBC for capacity building support e.g. advisory attachments, and survey effort by the survey ships of MACHC member states which might be deployed in the East Caribbean region. ACTION: **Ministry of Communications, Works, Transport and Public Utilities; SLASPA.**

ANNEX N TO
HA/317/022/01-03
DATED 7 AUG 06

AMENDMENTS TO THE ENTRY FOR ST LUCIA

ST LUCIA

ST LUCIA AIR AND SEA PORTS AUTHORITY
DIVISION OF MARITIME AFFAIRS

Department to which the Division is responsible: Ministry of Communications, Works, Transport and Public Utilities

Staff employed: [Delete reference to Hydrographers and insert instead:]

National Coordinator for liaison with IHO and UKHO:

COUNTRY REPORT: ST KITTS AND NEVIS

INTRODUCTION

1. **RHC Involvement.** The Federation of St Christopher and Nevis (St Kitts and Nevis) is not an IHO member, nor a member of the MACHC. It was represented at the MACHC Technical Workshop and Special Meeting in May 2005. It was not included in the CGMHC visits in December 1998. There is routine liaison with the UKHO.
2. **Preliminary Liaison.** Mr McClean Hobson, Director of Maritime Affairs, Ministry of Public Works, Utilities, Transport and Posts, and Captain Nigel Herbert, Manager, Marine Division of the St Christopher Air and Sea Ports Authority (SCASPA), assisted with co-ordination of the visit.
3. **Points of Contact.** Amendments to the details for St Kitts and Nevis in the IHO Year Book are at Appendix 1. The most important of these reflect the need for points of contact in both islands of the Federation.

DESCRIPTION OF MARITIME ACTIVITIES

4. **National Maritime Affairs.** Since 2003, the Directorate of Maritime Affairs (DMA) has been coordinating maritime matters in St Kitts and Nevis, and a National Maritime Security Policy is under discussion. Nevis has a Maritime Committee providing oversight in its waters. The Visit Team met with representatives from both SCASPA and the Nevis Air and Sea Ports Authority (NASPA), and this enabled a comprehensive grasp of navigational issues in the islands to be obtained.
5. **Trade and Maritime Traffic.** The main components of sea-borne traffic, and the patterns of activity in national waters, are as follows:
 - a. **International, regional and local trade.** Feeder traffic from US ports, Jamaica, and Trinidad approaches from the W of the islands. Container traffic comes mainly from Trinidad and Miami. Oil fuels and LNG come from Curacao and Trinidad. Some liner traffic coming from Antigua to St Kitts passes S of Nevis. This includes the monthly GEEST line call, and car carriers. Basseterre, St Kitts, and Long Point, Nevis, are the entry points for containers and fuel products. There is a daily local cargo service from Basseterre to Long Point. There are daily fast ferry services between Basseterre, Charlestown and Long Point.
 - b. **Tourism - Cruise Liners.** Liners from New York and Miami call at St Kitts after Puerto Rico and St Thomas. Large liners such as the QUEEN MARY II have used the Port Zante jetty, and a test call by the LEGEND OF THE SEAS is scheduled for November 2006. Smaller liners can use the berth at the Deep Water Port. Smaller vessels have also anchored in North Friar's Bay and Frigate Bay, and occasionally off Nevis from Charlestown to Oualie Beach.
 - c. **Tourism - Small Craft.** Mega-yachts are beginning to frequent the islands, using the marina at Basseterre and anchoring in White House Bay and off Nevis from Charlestown to Oualie Beach. Smaller yachts use all these locations and also Shitten Bay.
 - d. **Fisheries.** Whilst some new 40' boats have been introduced, the fishery is mainly artisanal, with craft operating from various locations in St Kitts and Nevis including a new fishing facility at Old Road, and other smaller settlements (St Kitts: Dieppe Bay, Fig Tree, Newton Ground; Nevis: Gallows Bay, Jessups Bay, Newcastle Bay, Indian Castle).
6. **Responsibility for Safety of Navigation.** Responsibility for the maintenance of channels, and provision and maintenance of aids to navigation lies with SCASPA and NASPA inside the ports, and

with DMA outside the ports. DMA delegates the promulgation of local Notices to Mariners to the port authorities.

7. Defence Force Responsibilities. The Defence Force Coast Guard (CG) was not represented at the meeting with the Visit Team but it is understood that it has the same roles as its counter-parts elsewhere in the RCC area e.g. SAR, fishery protection, and operations to counter traffic in drugs. It was reported that the CG was particularly concerned about the poor hydrographic data for the Indian Castle area on the south coast of Nevis and the entire east coast of St Kitts and Nevis.

8. Coastal Zone Management and Environmental Protection. The Federation is awaiting signature of the SPA convention. Meanwhile, UNEP has been providing advice on designation of sensitive areas, and a private company with links to a University in UK was said to have conducted some survey work around Nevis. Some yacht moorings are being put in place around the latter island, and it is intended to promulgate anchoring restrictions. The Visit Team noted the importance of passing full details, including coordinates, for any future designations to UKHO so that they are shown on the official charts of St Kitts and Nevis.

OUTLINE S-55 ANALYSIS

9. Status of surveys within the National Maritime Zone. The entry for St Kitts and Nevis in the IHO S-55 data-base has been built up with good input from the Federation's representative at the Meso-American and Caribbean Hydrographic Commission (MACHC). The Visit Team noted that the full and honest comments therein gave mariners a clear warning of the shortcomings in survey coverage. The Team used the Source Data Diagrams on the BA charts to work with the local experts to produce a prioritised list of requirements to meet the needs of the modern shipping noted in earlier paragraphs. The top priority was to survey the approaches to Basseterre, Charlestown, Long Point, Newcastle and Sandy Point in part to check on the impact of Hurricane Lenny. The Visit Team also noted the need to complete a side-scan sonar sweep to confirm the absence of any isolated dangers in the approaches to Port Zante. The second priority is a survey of the Narrows, both for CG patrol activities and also to remove the need for a long detour S of Nevis by tug and barge traffic from Antigua. Having inspected the charts subsequent to the discussions, the Visit Team also note with concern that the reported liner anchorage at North Friar's Bay lies in an area where the surveys are incomplete.

10. Collection and Circulation of Nautical Information. Captain Herbert at SCASPA has established a good liaison with UKHO. The Visit Team noted additional information which needed to be reflected on the charts. They were given a copy of a Report on Survey of Aids to Navigation around St Kitts and Nevis which contains invaluable information which will facilitate the update of the relevant BA charts and publications.

11. Survey Capability. Both SCASPA and NASPA take check soundings in their berths. Outside the area of any new developments, where it is expected that a hydrographic survey should form part of the project, no out-sourcing of survey work has taken place.

12. Provision of Charts. The current coverage in the BA charts was discussed, noting the need to transform the medium and large scale charts to WGS 84 datum. The Visit Team urged the DMA and Port Authorities to discuss this matter with the Lands and Surveys Department and to pass any information arising to UKHO. In terms of shortcomings in coverage, the most significant information to arise from the meeting was the completion of the harbour works at Long Point, Nevis. NASPA indicated that full information was available for this new port, and that it would be passed to UKHO without delay for charting action. This is most urgent to avoid any liability arising from an incident in that location.

PROPOSALS FOR CO-ORDINATION AND CAPABILITY BUILDING

13. National Hydrographic Committee (NHC). Although there are proposals to put in place a National Maritime Security Committee, the Director of Maritime Affairs assessed that it was important

to put in place an NHC. This was endorsed in subsequent discussions with the Permanent Secretary in the Ministry of Public Works, Utilities, Transport and Posts, and it was agreed that this body would convene to review the report arising from the visit. The Visit Team provided a set of generic Terms of Reference and an electronic copy of IHO publication M-2. They suggested that the NHC meet annually to review the status of provisions to meet SOLAS V obligations, using the S-55 data-base, and to prepare a national report to be delivered by their delegate at the MACHC conference.

14. MSI Organisation and GMDSS. The Visit Team were impressed by the steps that had already been taken to implement guidance received at the special MACHC meeting in 2005. Particular credit is due to Captain Herbert.

a. MSI (Navigational Warnings). The local navigational warnings passed out by Basseterre and Longpoint ports, and by the CG, appear adequate to cover the needs of St Kitts and Nevis.

b. Information on Ports and Harbours. It was decided that co-ordination and liaison with other local agencies to ensure timely supply of plans and co-ordinates of new developments and other updating information to UKHO would best be served by having a separate National Coordinator for each island. This proposal is reflected in the details at Appendix A.

c. GMDSS Status. Captain Herbert has in effect been acting as a National Coordinator for MSI linkage into the WWNWS, using an E-mail link direct to the NAVAREA IV coordinator. The Visit Team suggested that this arrangement be formalised and improved by the definition of a SafetyNET Coastal Warning Area and a link to MRCC Martinique. Once St Kitts and Nevis have formally confirmed their National Coordinators for the two islands, the Visit Team can facilitate the implementation of these arrangements.

15. Hydrographic Capability. The Visit Team recommended that the roles of the National Coordinators be promulgated formally by the government to emphasise the legal and economic significance of the role. They undertook to debrief UKHO on the new information which had been identified during the visit, and to ensure that the linkages with SCASPA, and now with NASPA, were reinforced. They suggested that St Kitts and Nevis should ask UKHO to provide information on a formal bilateral agreement, including the means by which such an agreement could be used to provide assistance in survey planning. The value of an ARCS outfit for national planning was noted. It was also agreed that St Kitts and Nevis would appreciate guidance on specification, oversight and appraisal of any future outsourced survey work. In the interim the significance of the minimum standards in IHO publication S-44 was explained, and examples of hydrographic policies and plans on the web-sites of IHO Member States (MS) were high-lighted. Finally, the Visit Team advised that the National Report to MACHC was the ideal medium in which to indicate major survey requirements and to bid for any spare capacity which might be available from survey vessels of IHO MS which might deploy in the region.

PROPOSALS FOR ASSISTANCE

16. Training. The Visit Team drew attention to forthcoming training opportunities arranged by the IHO, details of which are shown in the next section. They also encouraged St Kitts and Nevis to sustain their proactive participation in MACHC meetings, not least to ensure that they are included in any bids for assistance to regional states which may be formulated for submission to the IHO's Capacity Building Committee (CBC).

17. Funding. The Visit Team explained that as yet the IHO's Capacity Building Fund was small and permitted only seed-corn advisory and training activity. The MACHC forum facilitated bilateral contact with IHO member states which might be able to offer funding assistance, or spare survey capacity.

FOLLOW UP ACTIONS

18. Encouragement of Formation of a NHC, Development of a National Hydrographic Strategy, and IHO and RHC Membership. The Visit Team noted the seminar for NHC Chairman planned by the

IHO on 2-3 October in Acapulco, Mexico, immediately before the next meeting of the MACHC, and recommended that the Director of Maritime Affairs should attend. The Visit Team will ensure that correct contact details for a letter of invitation are provided to the IHB. They recommend that the St Kitts and Nevis NHC should convene to review this report when it is formally submitted, and to approve a national report to be delivered by one of the national co-ordinators at the MACHC meeting. They also recommend most strongly that the Federation of St Christopher and Nevis should become an Associate Member of MACHC. ACTION: **St Kitts and Nevis; Visit Team; IHB; MACHC Chairman.**

19. Encouragement of Effective and Timely Collection and Promulgation of Hydrographic Information.

a. The St Kitts and Nevis government should consider formal promulgation of the role of SCASPA and NASPA as the national co-ordinators for liaison with IHO, UKHO and MACHC, requiring all authorities to pass information related to safety of navigation and chart update. ACTION: **St Kitts and Nevis.**

b. The Visit Team should reinforce the link between the St Kitts and Nevis national co-ordinators and UKHO, by ensuring that communication of the urgent information arising from the discussions takes place. They should also ask UKHO to advise on the process for putting in place a formal bilateral agreement. ACTION: **Visit Team.**

c. Once the identity of the St Kitts and Nevis National Coordinators is confirmed formally, the Visit Team will make contact with the MRCC Martinique and the NAVAREA IV Co-ordinator and facilitate the access of St Lucia to regional SafetyNET arrangements. ACTION: **St Kitts and Nevis; Visit Team; MRCC Martinique; NAVAREA IV Co-ordinator.**

20. Encouragement of Development of Hydrographic Capability.

a. St Kitts and Nevis should take up the place reserved for their co-ordinator on the MSI training course in the first quarter of 2007, for which IHB and MACHC will provide details. The Visit Team will take action to alert the IHB and MACHC to the need for places for both St Kitts and Nevis. ACTION: **St Lucia; IHB; MACHC Chairman; Visit Team.**

b. St Kitts and Nevis should be represented at the forthcoming MACHC meeting on 4-5 Oct 06 in Acapulco, particularly to register interest in submissions to the IHOCBC for capacity building support e.g. survey effort by the ships of MACHC member states which might be deployed in the East Caribbean region. ACTION: **Director of Maritime Affairs, SCASPA, NASPA.**

AMENDMENTS TO THE ENTRY FOR ST KITTS AND NEVIS IN THE IHO YEAR-BOOK

ST KITTS AND NEVIS

DIRECTOR OF MARITIME AFFAIRS
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Mr Hobson is Chairman designate of the proposed National Hydrographic Committee.

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Captain Parke is National Coordinator for liaison with IHO and UKHO.

COUNTRY REPORT: DOMINICA

INTRODUCTION

1. **RHC Involvement.** The Commonwealth of Dominica is neither an IHO member, nor a member of the Meso-American and Caribbean Hydrographic Commission (MACHC). It was not represented at the MACHC Technical Workshop and Special Meeting in May 2005, and a National Report was not available to the RHC Study Team. It was included in the CGMHC visits in December 1998.
2. **Preliminary Liaison.** Dr Colmore Christian, Permanent Secretary, Ministry for Communications, Works, Lands, Housing, Ports and Energy, and Mr Andrew Magloire, Chief Fisheries Officer, assisted with co-ordination of the visit.
3. **Points of Contact.** As noted in 1998, responsibilities for maritime matters in Dominica are complex. The proposed details for the IHO Year Book at Appendix 1 reflect the senior posts with responsibility for policy matters. **Specific points of contact for liaison with IHB and MACHC will be confirmed by the government of Dominica during their assessment of this report.**

DESCRIPTION OF MARITIME ACTIVITIES

4. **National Maritime Affairs.** Although some key maritime stake-holders were missing from the round-table discussions with the Visit Team, a comprehensive picture was obtained of developments since 1998. The discussions confirmed that neither the IHO MACHC nor UKHO have been able to build on the linkages identified during the CGMHC visit. Consequently the most urgent action to meet Dominica's SOLAS V obligations is to update the information in official charts and publications.
5. **Trade and Maritime Traffic.** The main components of sea-borne traffic, and the patterns of activity in national waters, are as follows:
 - a. **International, Regional and Local Trade.** Most of Dominica's export and import cargo is handled at the Ocean Berth at Woodbridge Bay. Some general cargo passes through Glánvillia in Prince Rupert Bay, and Colgate-Palmolive operate a jetty at Mahaut on the W coast. Oil fuels and LNG are handled at the mooring off the Shell Depot in Woodbridge Bay, and there is an LPG berth off the mouth of the Boeri river. There are a number of small uncharted jetties on the W coast at which cement and aggregate materials are handled in barges. Roseau is still served by the high speed hydrofoil service linking the neighbouring French islands. There is still significant schooner traffic from Anse du Me to Marie Galante.
 - b. **Tourism - Cruise Liners.** This remains the most significant element of SOLAS traffic in the waters of Dominica. The majority of calls are made at the dedicated Roseau berth. The Ocean Berth at Woodbridge Bay is sometimes used at the height of the season. The other port of call is the Cabrits berth in Prince Rupert Bay.
 - c. **Tourism - Small Craft.** Portsmouth in Prince Rupert Bay is the main centre for yachts, including mega-yachts. Near the capital the area S of Roseau as far as Loubiere is designated for visiting yachts. Moorings and facilities have been provided at Méro on the W coast, and there are plans for a development at Lagon, NW of Portsmouth.
 - d. **Fisheries.** The large artisanal fishery based in the coastal villages is now operating out to 50nm from shore. In addition to the centre at Roseau, another joint Dominica and Japan development has put in place a fishery port at Marigot on the E coast. Further plans are under discussion for Portsmouth.

6. Responsibility for Safety of Navigation. A small Directorate of Maritime Affairs (DMA), headed by the Permanent Secretary of the Ministry of Foreign Affairs, Trade and Labour, includes in its remit the responsibility for the provision and maintenance of aids to navigation, and the promulgation of local Notices to Mariners and warnings. Within the ports areas these responsibilities are delegated to the Port Authority.

7. Defence Force Responsibilities. Unfortunately the Marine Branch of the Commonwealth of Dominica Police Force (CG) was not represented at the meeting. However, it was confirmed that its roles remain SAR, fishery protection, and operations to counter traffic in drugs.

8. Coastal Zone Management and Environmental Protection. With the Fisheries and Marine Research sectors well represented at the meeting, a particularly fruitful discussion ensued. The Visit Team have co-ordinates of the Soufriere/Scotts Head Marine Reserve to pass to UKHO, and details of the Cabrits National Park will follow. It was also recommended that a general note be placed on BA Chart 697 to alert shipping to the deployment of FADs in the EEZ of Dominica.

OUTLINE S-55 ANALYSIS

9. Status of surveys within the National Maritime Zone. The significance of the S-55 data-base on the IHO web-site (www.iho.int), especially within ongoing IMO discussion of the Voluntary Country Audit Scheme, was discussed. The entry for Dominica was reviewed, using the Source Data Diagram on BA Chart 697. It was acknowledged that the approaches to the significant ports on the narrow coastal shelf were probably adequately covered by surveys and charting. However, an annual review should be held to note any developments in coastal navigation, especially tourist traffic, which might lead to a requirement for improved coverage.

10. Collection and Circulation of Nautical Information. A very substantial number of gaps in the information shown on BA Chart 697 came to light during the discussions. These largely related to the new jetties and fishing facilities and to the restricted areas. The Visit Team also left a copy of the entry for Dominica in the Admiralty List of Lights for checking by DMA and Port Authority.

PROPOSALS FOR CO-ORDINATION AND CAPABILITY BUILDING

11. National Hydrographic Committee. Whilst the Director of Maritime Affairs indicated that there were plans to implement a Maritime Authority in the near future, he agreed in the interim to convene a meeting of maritime stakeholders to review the report arising from this visit. The Visit Team leader urged him to consider putting this body on a permanent footing as a National Maritime Committee, which could hear an annual report on the status of provisions to meet SOLAS V obligations, using the S-55 data-base, and which could approve a national report to be delivered by the delegate of Dominica at the MACHC conference. It was desirable for there to be continuity in the chairmanship of this Committee, which should be at PS level, or alternately form part of the remit of the Director of the new Maritime Authority.

12. Phase 1 Hydrographic Capability: MSI Organisation and GMDSS. The Visit Team explained the IHO's short-term aim of enabling all coastal states to put in place appropriate and sustainable arrangements for the most important requirement under SOLAS V – timely dissemination of navigational safety information to the mariner.

a. MSI (Navigational Warnings). As far as the Visit Team could judge, the arrangements for local Notices to Mariners and for local warnings broadcast by the Port and CG VHF systems are adequate.

b. Information on Ports and Harbours. The Visit Team noted the need to establish a National Co-ordinator to collate and disseminate information, and recommended that this role, which might best be discharged by the Port Authority, should be brought to the attention of other agencies and sea users through formal promulgation e.g. in the official Gazette. The key relationships would be with Lands and Surveys and any development control authority, and with the fisheries and environmental sectors. The Visit Team reiterated the legal requirement and economic importance of timely supply of plans and co-ordinates of new developments to the UKHO for inclusion in Dominica's official charts.

c. GMDSS Status. Without representation from CG and Telecommunications Department, it was difficult to assess the status of the draft National Master Plan which had been sighted in 1998. This Visit Team reiterated the proposal that a SafetyNET Coastal Warning Area be put in place for Dominica. They suggested that the Port Authority could best decide which information required promulgation as a Coastal Warning rather than a Notice to Mariner or chart update, and could format the message and pass it to the CG for transmission to MRCC Martinique. This would require a decision by the relevant authorities in Dominica. Once this was done and the coordinator(s) identified, the Visit Team would liaise with MRCC Martinique and the NAVAREA IV co-ordinator and facilitate the linkage into the WNWNS.

13. Phase 2 Hydrographic Capability: Survey. The Visit Team recommended that Dominica use its bilateral liaison with UKHO, and the forum of the IHO MACHC, to give visibility to any survey requirements and to seek assistance. The Visit Team would brief UKHO on the points of contact for the passage of updating information as soon as these were confirmed, and they would also ask UKHO to give guidance on the availability of copies of the BA charts of Dominica to the Lands and Survey Department in order to fulfil its duties as place of record, and to the DMA/Port Authority to discharge the responsibilities of National Co-ordinator.

PROPOSALS FOR ASSISTANCE

14. Training. The Visit Team drew attention to forthcoming training opportunities arranged by the IHO, details of which are shown in the next section. They also encouraged Dominica to take part in MACHC meetings, not least to ensure that they are included in any bids for assistance to regional states which may be formulated for submission to the IHO's Capacity Building Committee (CBC).

15. Funding. The Visit Team explained that as yet the IHO's Capacity Building Fund was small and permitted only seed-corn advisory and training activity. The MACHC forum facilitated bilateral contact with IHO member states which might be able to offer funding assistance, or spare survey capacity. Specifically, the Visit Team agreed to ask UKHO to consider helping to fund the attendance of a delegate from Dominica to the forthcoming MACHC meeting.

FOLLOW UP ACTIONS

16. Encouragement of Formation of a NHC, Development of a National Hydrographic Strategy, and IHO and RHC Membership. The Visit Team noted the seminar for NHC Chairman planned by the IHO on 2-3 October in Acapulco, Mexico, immediately before the next meeting of the MACHC, and recommended that the designated chairman of Dominica's "National Maritime Committee" should attend. The Visit Team will ensure that correct contact details for a letter of invitation are provided to the IHB. They recommended that, in the interim, the Director of Maritime Affairs should convene a meeting of stakeholders to review this report when it is formally submitted, and to approve a national report to be delivered by the national co-ordinator at the MACHC meeting on 4-5 October. They also recommend most strongly that the Commonwealth of Dominica should become an Associate Member of MACHC. ACTION: **Dominica; Visit Team; IHB; MACHC Chairman.**

17. Encouragement of Effective and Timely Collection and Promulgation of Hydrographic Information.

a. The government of Dominica should consider formal promulgation of the role of the nominated national co-ordinator for liaison with IHO, UKHO and MACHC, requiring all authorities to pass information related to safety of navigation and chart update. ACTION: **Dominica.**

b. The Visit Team should reinforce the link between the Dominica national co-ordinator and UKHO, by ensuring that communication of the urgent information arising from the discussions takes place. They should also ask UKHO to provide advice on management of the official charts of Dominica, possibly through the medium of a formal bilateral agreement. ACTION: **Visit Team.**

c. Once the identity of the Dominica MSI National Coordinator is confirmed formally, the Visit Team will make contact with the MRCC Martinique and the NAVAREA IV Co-ordinator and facilitate the access of Dominica to regional SafetyNET arrangements.
ACTION: Dominica; Visit Team; MRCC Martinique; NAVAREA IV Co-ordinator.

20. Encouragement of Development of Hydrographic Capability.

a. Dominica should take up the place reserved for their co-ordinator on the MSI training course in the first quarter of 2007, for which IHB and MACHC will provide details.
ACTION: Dominica; IHB; MACHC Chairman; Visit Team.

b. Dominica should be represented at the forthcoming MACHC meeting on 4-5 Oct 06 in Acapulco, particularly to register interest in submissions to the IHOCBC for capacity building support. **ACTION: Director of Maritime Affairs, Port Authority.**

PROPOSED ENTRY FOR DOMINICA IN THE IHO YEAR-BOOK

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