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See Distribution

REPORT OF MACHC TECHNICAL VISITS 2006: FIRST PHASE

References:

- A. MACHC Chairman's Letter No 6727 DIMAR-DILEM-GRASI-536 dated 6 Oct 05 (Proposal for visits).
- B. IHB S3/0125; S3/3079 dated 24 Dec 98 (Report of CGMHC Visits in December 1998).

INTRODUCTION

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 IHOCBC 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.

2. **Composition of Team.** The MACHC Visit Team comprised Captain M. K. Barritt RN, Vice Chairman IHO CBC, and Commander I. T. T. Sewell OBE RN, NAVAREA I Co-ordinator and Secretary IMO NAVTEX Panel.

3. **Countries Visited.** An outline of events during the first phase of the visits is at Annex A. Individual country reports are also annexed, all of which have been reviewed and checked by the national authorities. An updated version of this report will be submitted on completion of the second phase of the mission.

OVERALL ASSESSMENT OF THE SITUATION IN REGION

4. **Efficacy of the Visits.** The logistic planning of the programme for the mission, and especially of the regional flights between countries, was complex. The resultant timing and span of some of the visits proved less than ideal. However, in most cases the necessary meetings were easily contained in one working day. The best results were invariably obtained where the in country co-ordinator had been able to draw together a good cross-section of maritime stake-holders for a round-table briefing and discussion at the start of the visit programme. In all cases the visits were preceded by telephone and e-mail communication with the local points of contact. Despite clear requests, it was rare to find that much advance discussion had taken place, and as a result it was not possible in many cases to identify the MSI co-ordinator and offer more detailed guidance during the visits.

5. **Co-operative Arrangements and Potential.** The Visit Team found no antipathy to co-operative sub-regional approaches, and there is ample scope for MACHC to encourage this. Attendance at MACHC meetings would undoubtedly foster stronger liaison between the Caribbean small island states, as was demonstrated during the special meeting in 2005.

6. **Current Situation.** Table 1 summarises the findings of the Visit Team.

Table 1: Assessment of Current National Hydrographic Capability.

| Country | IHO Member | MACHC Member | NHC in place | Phase 1 Capacity | Phase 2 Capacity | Phase 3 Capacity | Notes |
|------------------------------|------------|--------------|--------------|------------------|------------------|------------------|-------|
| Antigua & Barbuda | No | No | Proposed | Partial | No | N/A | 3 |
| Bahamas | No | No | No | Partial | No | N/A | 3 |

| | | | | | | | |
|-------------------|----------|----------|----------|---------|---------|-----|---------|
| Jamaica | Yes | Yes | Proposed | Partial | Partial | N/A | 3 |
| Anguilla | See note | See note | | Partial | No | N/A | 1, 2, 3 |
| BVI | See note | See note | | Partial | No | N/A | 1, 2, 3 |
| Cayman Is | See note | See note | | Partial | Partial | N/A | 1, 2, 3 |
| Montserrat | See note | See note | | Partial | No | N/A | 1, 2, 3 |
| Turks & Caicos Is | See note | See note | | No | No | N/A | 1, 2, 3 |

Notes:

1. Represented by UK in IHO and MACHC.
2. UK is responsible for arranging surveys of the waters of her Overseas Territories.
3. UKHO produces charts for the Commonwealth countries, and holds responsibility for charting in the waters of the Overseas Territories.

PROPOSALS FOR CAPACITY BUILDING

7. Regional Co-ordination and Co-operative Opportunities. The most urgent matter for attention is the lack of engagement by the government of the Commonwealth of the Bahamas in international efforts to address the obligations in SOLAS Chapter V related to hydrography. This may be best addressed through co-operative effort by IMO and IHO. The following comments relate to the other countries visited in the first phase of the visits:

a. IHO. Jamaica is an IHO MS and should be encouraged to take a lead in representing the interests of the Caribbean small island states in appropriate forums. UK should consider the best way to represent the OTs in the region. IHB should advise Antigua and Barbuda on the membership process, noting that the size of ship registry and consequent financial contribution is a deterrent.

b. MACHC. Active participation in MACHC will be the most powerful tool to ensure that the recommendations of the Visit Team are put into effect. The Visit Team found a genuine will to engage on the part of the national co-ordinators. In some instances they heard of difficulties in gaining government support for travel and attendance at specialist meetings. Where the team was able to brief Ministers or Permanent Secretaries and to raise their awareness of the importance of hydrography, these obstacles were often resolved. Funding remains an issue in some countries, and MACHC MS should be asked to consider supplementing IHO sources to enable smaller states to participate.

c. UK OTs. The waters of the UK's OTs constitute a significant proportion of the area of the Caribbean island chain, and UK should be urged to take steps to engage the local governments, and especially the designated national co-ordinators, in MACHC activities. Specifically, if there is space at the Seminar for NHC Chairman in October 2006, UK should be encouraged to fund attendance from the OTs where appropriate. If an MSI Training Course can be secured, this will also be most beneficial to engender a regional spirit.

8. National Co-ordination. It was clear to the Visit Team that national co-ordination of efforts to address SOLAS V obligations is beset by considerable obstacles, and the forthcoming MACHC symposium is well-timed. 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.

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, 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 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.

9. 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.

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 WNWNS. The Visit Team found that, without exception, the solutions to providing this linkage are cheap, fast and easy. The following table summarises the proposals for implementation of GMDSS that were agreed during the visits:

Table 2: Implementation of GMDSS.

| Country | Data for IMO GMDSS Master Plan | A1 Area | A2 Area | A3 Area | NAVTEX | SafetyNET | Notes |
|-------------------|--------------------------------|---------|----------------|---------|----------|-----------|---------|
| Antigua & Barbuda | No | No | N/A – see note | Yes | No | See note | 1, 2 |
| Bahamas | No | No | N/A – see note | Yes | See note | See note | 1, 3, 4 |
| Jamaica | Yes | Yes | N/A – see note | Yes | No | See note | 1,4 |
| Anguilla | No | No | N/A – see note | Yes | No | See note | 1, 2 |
| BVI | No | No | N/A – see note | Yes | No | See note | 1, 5 |
| Cayman Is | No | No | N/A – see note | Yes | No | See note | 1, 4 |
| Montserrat | No | No | N/A – see note | Yes | No | See note | 1, 2 |
| Turks & Caicos Is | No | No | N/A – see note | Yes | No | See note | 1, 4 |

Notes:

1. MF transmissions are ineffective in the Caribbean due to climatic conditions and A2 coverage therefore cannot be achieved.
2. Arrangements proposed for promulgation of MSI by SafetyNET via MRCC Martinique.
3. Arrangements proposed for promulgation of MSI via NAVTEX station in Miami, USA.
4. Arrangements proposed for promulgation of MSI by new SafetyNET coastal warning area.
5. Arrangements proposed for promulgation of MSI via NAVTEX station in San Juan, PR.

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 competence to conduct basic QC and check surveys. A few were already able to perform some inshore survey operations. Details are in the annexed country reports. Table 3 summarises the advice of the Visit Team, and should form a foundation for further assistance from MACHC.

Table 3: Proposed National Hydrographic Capability.

| Country | IHO Member | MACHC Member | NHC in place | Phase 1 Capacity | Phase 2 Capacity | Phase 3 Capacity | Notes |
|------------------------------|-------------|--------------|-----------------------|------------------|------------------|------------------|---------|
| Antigua & Barbuda | Recommended | Recommended | Proposed | Full | Partial | N/A | 3 |
| Bahamas | Recommended | Recommended | Recommended | Full | Partial | N/A | 3 |
| Jamaica | Is a member | Is a member | Proposed | Full | Full | N/A | 3 |
| Anguilla | See note | See note | Proposed | Full | Partial | N/A | 1, 2, 3 |
| BVI | See note | See note | Proposed | Full | Partial | N/A | 1, 2, 3 |
| Cayman Is | See note | See note | Proposed | Full | Partial | N/A | 1, 2, 3 |
| Montserrat | See note | See note | N/A due to small size | Full | Partial | N/A | 1, 2, 3 |
| Turks & Caicos Is | See note | See note | Proposed | Full | Partial | N/A | 1, 2, 3 |

Notes:

1. Represented by UK in IHO and MACHC.
2. UK is responsible for arranging surveys of the waters of her Overseas Territories, but input to the prioritised National Survey Plan is required from local authorities. In BVI and Cayman Islands there is potential to develop existing capability for inshore survey work.
3. UKHO produces charts for the Commonwealth countries, and holds responsibility for charting in the waters of the Overseas Territories. Local authorities should contribute advice for review of chart schemes.

RECOMMENDATIONS

10. Urgent MSI/GMDSS Actions. Without question, the most urgent recommendation arising from the visits is the need for identification of national focal points for collation and dissemination of navigational safety information, and their early linkage into the WWNWS and the hydrographic office with primary responsibility for charting of their waters. Specific follow-up actions have been included in each individual country report.

11. MACHC/CBC Follow-up Actions. The reports also contain a number of follow-up actions for individual MACHC MS, especially the UK. The following actions require the support of all MACHC members:

a. Encouragement of NHCs. The forthcoming symposium for NHC Chairman is a crucial opportunity to follow up the visits. The Chairman and all MACHC MS should support it as far as possible through provision of lecturers and, where appropriate, supplementary funding support for attendance by the small island states. Attendance at the annual MACHC meetings will also be essential to foster and stimulate the SOLAS V arrangements in these countries, and the MACHC Chairman should take all necessary steps to encourage representation of the small island states.

b. Submissions to IHOCBC. The following MACHC bids to the IHOCBC are recommended:

- (1) An MSI training course to be delivered in region by CPRNW during 2006-07.
- (2) Hydrographic survey training for the British Virgin Islands and Jamaica once detailed proposals have been received from their NHCs.



M K BARRITT
 Captain RN
 Team Leader

Annexes:

- A. Summary of Events.
- B. Country Report: Montserrat.
- C. Country Report: Anguilla.
- D. Country Report: Antigua and Barbuda.
- E. Country Report: British Virgin Islands.
- F. Country Report: Commonwealth of the Bahamas.
- G. Country Report: Turks and Caicos Islands.
- H. Country Report: Cayman Islands.
- I. Country Report: Jamaica.

Distribution:

Chairman CBC
Chairman MACHC

COUNTRY REPORT: MONTSERRAT

INTRODUCTION

1. **RHC Involvement.** Montserrat is an Overseas Territory (OT) of UK, which provides representation at IHO and Meso-American and Caribbean Hydrographic Commission (MACHC) meetings. It was not included in the CGMHC visits in December 1998.
2. **Preliminary Liaison.** Mr R. T. Jarvis, Head of the Governor's Office, assisted with co-ordination of the visit. Mr M. Meade, Montserrat Port Manager, made the arrangements for meetings with representatives from the maritime sector.
3. **Points of Contact.** The UKHO will remain the first point of contact for survey and charting matters in the waters of Montserrat. It is proposed that sections be added to the UK entry in the IHO Year Book for each OT to indicate points of contact in country. The details for Montserrat are at Appendix 1.

DESCRIPTION OF MARITIME ACTIVITIES

4. **National Maritime Affairs.** Maritime activity in the waters of Montserrat is constrained by the continued volcanic activity in the Soufrière Hills. At present the exclusion zones are unlikely to be lifted, Plymouth jetty remains out of action, and shipping movements are focussed on Little Bay, the sole port of entry.
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.** The main regional through routes pass well clear of Montserrat. There is a weekly container service from St Martin to the jetty at Little Bay. Local trading vessels call fortnightly from Antigua and less regularly from Dominica. Fuel is delivered to the depot at Little Bay every 2-4 weeks from the trans-shipment port at Nevis.
 - b. **Tourism - Cruise Liners.** Cruise liners pass on the E side of the island, well outside the exclusion zone.
 - c. **Tourism - Small Craft.** Some 500 yachts per year call at the port of entry. Subsequently anchorage is permitted in Rendezvous Bay and Old Road Bay. S of Old Road Bay a diving school has established an artificial reef.
 - d. **Fisheries.** Artisanal fishing takes place from small boats all along the W coast.
6. **Responsibility for Safety of Navigation.** The Port Authority is responsible for the maintenance of facilities at Little Bay including the mooring buoys, and also for the jetty at Plymouth. There are no aids to navigation in the waters of Montserrat.
7. **Defence Force Responsibilities.** The Marine Police Unit has a small patrol boat which is used for surveillance and SAR. It has a very shallow draught and has not experienced any restrictions on its inshore operations, even in areas affected by volcanic activity. The RN Atlantic Patrol Task (N) (APT(N)) unit visits Montserrat's waters each year.
8. **Coastal Zone Management and Environmental Protection.** The Volcano Monitoring Organisation issues warnings related to the exclusion zones. Protected reef areas are shown correctly on the BA charts.

OUTLINE S-55 ANALYSIS

9. Status of surveys within the National Maritime Zone. As noted in S-55, the port of entry and approaches are adequately covered for the needs of shipping serving Montserrat. There are no high priority re-survey requirements to match current activity in Montserrat's waters.

10. Collection and Circulation of Nautical Information. The Team noted some information which had not been communicated to UKHO for publication (e.g. a stranded barge inshore in Little Bay), but important safety guidance related to the exclusion zones and depth changes resulting from the volcanic activity was in place on the charts. Some GPS measurements were made by the team in Old Road Bay, where BA Chart 254 does not show the encroachment of ash into the sea, engulfing the jetty. This information will be rendered to UKHO.

11. Survey Capability. There is no local hydrographic capability. There are no harbour craft which could be employed for check survey work. The Police Marine Unit patrol craft is fitted with GPS, and the importance of reporting information was emphasised. It was noted that the artificial reef S of Old Road Bay is marked by 2 buoys, only one of which is charted with an approximate position. It was recommended that a position be obtained for both buoys.

12. Independent Chart Production Capability. UKHO produces the chart coverage for Montserrat. The current scheme meets the requirements of local mariners.

PROPOSALS FOR CO-ORDINATION AND CAPABILITY BUILDING

13. National Hydrographic Committee. Maritime issues are delegated from the Ministry of Communications and Works to the Montserrat Port Authority. The visit team met with the Manager and Superintendent, and representatives of Customs and Excise and the Police Marine Unit. The small maritime sector in Montserrat has no particular need for a co-ordinating committee provided that routine liaison is sustained.

14. MSI Organisation and GMDSS. The Visit Team noted the arrangements which the IMO has made to encourage and monitor the implementation of appropriate arrangements for the hydrographic services mandated in Chapter V of the SOLAS Convention. Amongst the gaps in provision, especially in the Caribbean region, the absence of arrangements for collation and dissemination of Maritime Safety Information (MSI), especially through the Global Maritime Distress and Safety System (GMDSS) was undoubtedly of greatest concern, and discussion focussed on the identification of appropriate and sustainable future arrangements for Montserrat.

a. MSI (Navigational Warnings). There are at present no arrangements for the promulgation of local navigational warnings. The Port Authority and Marine Police should assess the potential for the broadcast of urgent local information using their VHF equipment.

b. Information on Ports and Harbours. The Port Authority has been passing some information to UKHO, and is the best local focal point for the collation and onward transmission of such information.

c. GMDSS Status. The Visit Team urged that the Port Authority should also be the local focal point for communicating information to the WWNWS, and that this could best be achieved with a direct E-mail link to the French co-ordinator in MRCC Martinique.

15. Hydrographic Capability. UK retains responsibility under the SOLAS Convention for survey and charting of Montserrat's waters, but the Port Authority has a role in updating the assessment in this report and communicating advice to government. The UKHO will liaise with the Port Authority when conducting the annual review of the information for Montserrat in the IHO S-55 data-base.

a. Provision of Survey Data. Mr S. O'Garro has assumed responsibility for this task, and the Visit Team provided details of his point of contact in UKHO. The Team will monitor the successful implementation of this essential line of communication. Mr. O'Garro has agreed to obtain information on the position of the wreck in Little Bay, and this will provide the substance of an initial message.

b. Survey Capability. UKHO can provide advice on future survey requirements.

PROPOSALS FOR ASSISTANCE

16. Training. IHOCBC funding will be sought for an MSI training course in the region during 2006-07, and it is recommended that Mr O'Garro attend this course. Full details of this opportunity will be provided to Montserrat Port Authority as soon as possible after the June meeting of the IHO Capacity Building Committee (IHOCBC).

17. Equipment. The Visit Team will discuss with UKHO the identification and funding of a package of PC software and ARCS charts and digital publications (Admiralty Sailing Directions and tidal data) covering national waters, for the co-ordinators in the OTs in the region. Such a package would greatly facilitate their task of reporting changes and other urgent navigational safety information.

FOLLOW UP ACTIONS

18. Liaison with IHO and MACHC. The Visit Team will recommend the addition of the information at Appendix 1 to the UK entry in the IHO Year Book. They will also recommend to UKHO that the annual review of S-55 should be used to confirm Montserrat's survey and charting requirements, and the correct functioning of GMDSS arrangements. A report should also be rendered for each meeting of the MACHC. ACTION: **Visit Team; UKHO**.

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

a. The Visit Team should forward information gathered during the visit for the update of the BA charts, and should monitor the successful implementation of the link between Montserrat Port Authority and UKHO. ACTION: **Visit Team**.

b. The Visit Team should investigate with UKHO the provision to the Montserrat national co-ordinator of the package outlined at paragraph 17. ACTION: **Visit Team; UKHO**.

c. The Visit Team will make contact with the MRCC Martinique and the NAVAREA IV Co-ordinator and facilitate the access of Montserrat to regional SafetyNET arrangements. ACTION: **Visit Team; MRCC Martinique**.

20. Capacity Building Assistance. Montserrat should be included in the MACHC bid to IHOCBC for an MSI training course in 2006-07. ACTION: **MACHC Chairman; Vice Chairman IHOCBC**.

APPENDIX 1 TO
ANNEX B TO
HA317/022/001-03
DATED 9 MAY 06

PROPOSED ENTRY FOR MONTSERRAT IN THE UK SECTION OF THE IHO YEAR-BOOK

MONTSERRAT

MONTSERRAT PORT AUTHORITY
Little Bay
Montserrat

The Port Authority has devolved statutory responsibility for maritime matters from the Ministry of Communications and Works.

Manager: Mr Melroy Meade

Superintendent: Mr Shaun O'Garro.

National co-ordinator for collection and dissemination of navigational safety information to UKHO and to the WWNWS via MRCC Martinique.

Telephone: (664) 491 2792

FAX: (664) 491 8063

E-mail: monpa@candw.ms ; sogarro@hotmail.com

COUNTRY REPORT: ANGUILLA

INTRODUCTION

1. **RHC Involvement.** Anguilla is an Overseas Territory (OT) of the UK, which provides representation at IHO and Meso-American and Caribbean Hydrographic Commission (MACHC) meetings. It was not included in the CGMHC visits in December 1998.
2. **Preliminary Liaison.** The Honourable Deputy Governor, Mr M. Capes, the EA to the Governor, Miss A. Finn, and Mr R. Baptiste of the Ministry of Infrastructure, Communications, Utilities, Agriculture and Fisheries (MICU) assisted with co-ordination of the visit.
3. **Points of Contact.** The UKHO will remain the first point of contact for survey and charting matters in the waters of Anguilla. It is proposed that sections be added to the UK entry in the IHO Year Book for each OT to indicate points of contact in country. The details for Anguilla are at Appendix 1.

DESCRIPTION OF MARITIME ACTIVITIES

4. **National Maritime Affairs.** Anguilla lies at the N end of the Leeward Islands chain and its territory includes Sombrero Island with the lighthouse in the centre of the passage of the same name.
5. **Trade and Maritime Traffic.** Anguilla is dependent on imported raw materials and products and the main components of sea-borne traffic, and the patterns of activity in national waters, are as follows:
 - a. **International and Regional Trade.** Traffic on the route through Sombrero Passage passes well clear of the island of Anguilla and its off-lying cays and reefs. However, Anguilla is responsible for the operation of Sombrero Island Lighthouse. Anguilla is served by regional traffic from S America, Puerto Rico and the Antillean islands. The Ro-Ro jetty in Road Bay is the main entry point for cargo, with 5 ship movements per week. Fuel is delivered to the Coritot depot on the coast of the Anguilla channel. A ferry runs from Blowing Point Harbour to St Martin.
 - b. **Tourism - Cruise Liners.** Small cruise liners anchor in Road Bay.
 - c. **Tourism - Small Craft.** Mega-yachts and sailing craft anchor in Road Bay, and may subsequently be given permission to anchor in Crocus Bay or Blowing Point Harbour. Sports fishing craft operate from Road Bay and Island Harbour, although the absence of aids to navigation at the latter location has attracted criticism. Some proposed major marina developments are subsequently being assessed by the government of Anguilla.
 - d. **Fisheries.** Fishing is artisanal, based on Road Bay and Island Harbour. Some Japanese fishing vessels operating from St Martin have been observed in Anguillan waters.
6. **Responsibility for Safety of Navigation.** Anguilla Sea Ports are responsible for the provision and maintenance of aids to navigation, including remote operation of Sombrero Lighthouse. They have need of technical advice. Specific guidance was requested on the marking of Blowing Rock in the entrance to Anguilla Channel, which was formerly covered by a sector light on Anguillita Island. The Visit Team undertook to discuss this requirement with IALA and the General Lighthouse Authorities (GLAs) in UK.
7. **Defence Force Responsibilities.** The Royal Anguilla Police Force (RAPF) operates one offshore and one inshore craft from Road Bay for surveillance patrol and SAR. Their local knowledge is good and they are not constrained by any shortcomings in the BA charts and publications. It was suggested that the RN APT (N) had expressed misgivings about access to some areas of Anguilla's waters, and the Visit Team will follow this matter up with UK Fleet staff.

8. Coastal Zone Management and Environmental Protection. The Fisheries and Marine Resources Department undertook to ensure that information on protected areas is communicated through MICU to UKHO, so that they can be shown on the BA charts.

OUTLINE S-55 ANALYSIS

9. Status of surveys within the National Maritime Zone. The chart coverage of the Anguilla Channel is based on nineteenth century open line lead-line surveys. Although ship transits of the channel are rare, the area which has not been systematically surveyed does include the approaches to the Coritot fuel terminal.

10. Collection and Circulation of Nautical Information. A number of changes were detected which have not been communicated to UKHO. The Visit Team took some GPS measurements at the Ro Ro jetty in Road Bay, the Blowing Point Harbour ferry jetties, and a new private jetty in Rendezvous Bay. These will be submitted as a Hydrographic Note following further liaison with the authorities in Anguilla. Sea Ports and the RAPF will obtain and forward revised positions of buoys and positions for jetties in Cove Bay and Island Harbour.

11. Survey Capability. The Seaports authority does not have a boat. The patrol boats of the RAPF are fitted with GPS and echo sounders, and could be tasked to run check lines as well as to confirm buoy positions and to keep watch on aids to navigation

12. Independent Chart Production Capability. The UKHO will retain responsibility for charting of Anguilla's waters, but needs concerted support from local government and agencies to keep information accurate and up to date.

PROPOSALS FOR CO-ORDINATION AND CAPABILITY BUILDING

13. National Hydrographic Committee. Most of the maritime stakeholders who met with the Visit Team operate under the aegis of MICU. Provided that effective liaison is maintained with the Department of Disaster Management in the Chief Minister's area, the Permanent Secretary of MICU is best placed to maintain oversight of maritime policy in Anguilla.

14. MSI Organisation and GMDSS. The Visit Team noted the arrangements which the IMO has made to encourage and monitor the implementation of appropriate arrangements for the hydrographic services mandated in Chapter V of the SOLAS Convention. Amongst the gaps in provision, especially in the Caribbean region, the absence of arrangements for collation and dissemination of Maritime Safety Information (MSI), especially through the Global Maritime Distress and Safety System (GMDSS) was undoubtedly of greatest concern, and specific advice was offered to address this. On the eve of the visit, the operation of the Sombrero Light was reduced in range. This provided a real life context in which to discuss arrangements in Anguilla's waters.

a. MSI (Navigational Warnings). The local port VHF radio provides a suitable method of promulgating local navigational warnings, and the Port Manager indicated that he also provided information via written notices that were faxed to a number of local authorities in the region. Coastal warnings for areas outside the port and inshore area need to be input into the World Wide Navigation Warning System (WWNWS). Sombrero Island Light is of such significance to regional and international shipping that problems with its operation should automatically be the subject of a NAVAREA IV warning.

b. Information on Ports and Harbours. The discrepancies noted in paragraph 10 underlined the importance of identifying and resourcing a national co-ordinator. The Permanent Secretary MICU approved the allocation of this role to Mr R. Baptiste. The Visit Team had emphasised, however, that he would need support from other departments and agencies, particularly Mr A. Richardson of Sea Ports. The RAPF also has a vital role in noting and reporting information from its patrols. The Lands and Surveys Department must provide details of new developments which need to be depicted on the charts.

c. GMDSS Status. The Visit Team advised that MICU should also be the local focal point for communicating information to the WWNWS, and that this could best be achieved with a direct e-mail link to the French co-ordinator in MRCC Martinique. This was agreed and the Team will facilitate the

link. In the interim, the Team arranged for promulgation of the information on Sombrero light through the UKHO RNW office to the NAVAREA IV Co-ordinator.

15. Hydrographic Capability. UK retains responsibility under the SOLAS Convention for survey and charting of Anguilla's waters, but the departments of MICU have a vital role in conducting a regular review of the assessment in this report and communicating advice to government. The UKHO will liaise with MICU when conducting the annual review of the information for Montserrat in the IHO S-55 data-base.

a. Provision of Survey Data. The Visit Team provided details to MICU of the point of contact in UKHO for chart update. The Team will monitor the successful implementation of this essential line of communication, and will use the liaison over the new information discussed above at paragraph 10 to provide guidance to the MICU team.

b. Survey Capability. The Visit Team recommended that Anguilla should seek UK assistance to plan and conduct a modern survey to cover the approaches to the Coritot terminal, also including Blowing Point Harbour. Such a survey will be essential if a project for a new deep water harbour in the Coritot area comes to fruition. Check survey lines should also be run in Road Bay and the approaches. The Team noted that their visits to the Overseas Territories seemed likely to identify an aggregate package of requirements for larger area ship surveys that would support a bid for deployment of an RN survey ship. This concept would be taken forward with the Governor's offices and the British Defence Advisers in region.

c. Potential for Regional Activity. The promulgation of urgent navigational safety information through existing French arrangements for GMDSS has been noted above at sub-paragraph 14.c.

PROPOSALS FOR ASSISTANCE

16. Training. IHOCBC funding will be sought for an MSI training course in the region during 2006-07, and it is recommended that Mr R. Baptiste of MICU attends this course. Full details of this opportunity will be provided to Permanent Secretary MICU as soon as possible after the June meeting of the IHO Capacity Building Committee (IHOCBC).

17. Equipment. The Visit Team will discuss with UKHO the identification and funding of a package of PC software and ARCS charts and digital tidal data covering national waters, for the co-ordinators in the Overseas Territories in the region. Such a package would greatly facilitate their task of reporting changes and other urgent navigational safety information.

FOLLOW UP ACTIONS

18. Liaison with IHO and MACHC. The Visit Team will recommend the addition of the information at Appendix 1 to the UK entry in the IHO Year Book. They will also recommend to UKHO that the annual review of S-55 should be used to confirm Anguilla's survey and charting requirements, and the correct functioning of GMDSS arrangements. A report should also be rendered for each meeting of the MACHC. **ACTION: Visit Team; UKHO.**

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

a. The Visit Team should forward information gathered during the visit for the update of the BA charts, and should monitor the successful implementation of the link between MICU/Sea Ports and UKHO. **ACTION: Visit Team.**

b. The Visit Team should investigate with UKHO the provision to the Anguilla national co-ordinator of the package outlined at paragraph 17. **ACTION: Visit Team; UKHO.**

c. The Visit Team will make contact with the MRCC Martinique and the NAVAREA IV Co-ordinator and facilitate the access of Anguilla to existing regional SafetyNET arrangements. **ACTION: Visit Team; MRCC Martinique.**

d. MICU should promulgate the role of Mr R. Baptiste and urge all authorities to pass information related to safety of navigation and chart update. **ACTION: MICU Anguilla.**

20. Capacity Building Assistance.

- a. Anguilla should be included in the MACHC bid to IHOCBC for an MSI training course in 2006-07. **ACTION: MACHC Chairman; Vice Chairman IHOCBC.**
- b. Advice should be sought from IALA and the UK GLAs. **ACTION: Visit Team.**
- c. UKHO should provide technical advice to the Governor Anguilla and BDA Bridgetown in the preparation of any bid for RN survey assistance. **ACTION: UKHO.**

APPENDIX 1 TO
ANNEX C TO
HA317/022/001-03
DATED 9 MAY 06

PROPOSED ENTRY FOR ANGUILLA IN THE UK SECTION OF THE IHO YEAR-BOOK

ANGUILLA

MINISTRY OF INFRASTRUCTURE, COMMUNICATIONS & UTILITIES

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The Valley

Anguilla B.W.I.

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Technical Officer: Mr Roy Baptiste

National co-ordinator for collection and dissemination of navigational safety information to UKHO and to the WNWNS via MRCC Martinique.

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COUNTRY REPORT: ANTIGUA AND BARBUDA

INTRODUCTION

1. **RHC Involvement.** Antigua and Barbuda is not an IHO member, nor a member of the MACHC. Although an invitation to the MACHC Technical Workshop and Special Meeting in May 2005 was accepted, the Antiguan delegate was not able to attend, and a National Report was not available to the RHC Study Team. Antigua was included in the CGMHC visits in December 1998, and the subsequent report was available to the Visit Team. There is routine liaison with UKHO.
2. **Preliminary Liaison.** Mrs V. Matthew, Permanent Secretary at the Ministry of Public Works, and Mr H. Mack, Operations Manager, Antigua and Barbuda Port Authority, assisted with co-ordination of the visit.
3. **Points of Contact.** An update to details in the IHO Year Book is provided at Appendix 1. Mr D. Gardiner is now the Permanent Representative of Antigua and Barbuda to IMO, and maintains a most constructive interest in SOLAS matters. Mr H. Mack of the Port Authority has been designated chairman of Antigua's National Hydrographic Committee and IHO point of contact.

DESCRIPTION OF MARITIME ACTIVITIES

4. **National Maritime Affairs.** The Port Authority gathered together a good quorum of maritime stakeholders to meet the Visit Team and this permitted the picture in the 1998 report to be readily updated. The Antigua and Barbuda Registry has now grown to 7.3M grt. Of the 1.2k vessels on the registry, only 200 of coaster size and below are local. Although this registered tonnage has implications for membership contribution, Antiguan officials understood the value of accession to IHO. A copy of M-2 was provided, with the assurance that the IHB would be ready to provide further advice. Meanwhile, it was agreed that Antigua would derive great benefit from Associate Membership of MACHC, and they should be invited to attend the next meeting on 4-5 Oct 06.
5. **Trade and Maritime Traffic.** Details in the 1998 report have been checked, and updates are indicated below:
 - a. **International, regional and local trade.** A project is pending for a harbour at Palmetto Point in Barbuda.
 - b. **Tourism - Cruise Liners.** There are now 4 berths at Heritage Quay. A hydrofoil ferry service runs to Barbuda.
 - c. **Tourism - Small Craft.** This continues to be a most significant sector. In 2005, over 3.5k yachts called at English Harbour, 1k at Jolly Harbour, and 31 in St John's. Sports fishing is being encouraged.
 - d. **Fisheries.** The local artisanal fishery is mainly based in St John's, but a new fishing harbour is under development at Urlings on the S coast and another at Parham Harbour. A reef marking project is underway.
6. **Responsibility for Safety of Navigation.** The Port Authority retains responsibility for the maintenance of channels, removal of wrecks, and provision and maintenance of aids to navigation. Local warnings are broadcast by Port VHF and also by the Coast Guard.
7. **Defence Force Responsibilities.** The Coast Guard (CG) continues to provide SAR, fishery protection, and operations to counter traffic in drugs, contraband and illegal immigrants. Plans for the CG to operate from a new base in Parham Harbour are still pending. Particular concern was expressed about the status of surveys and charting on the E coast of Antigua, the N and W coasts of Barbuda, and around Redonda.

8. Coastal Zone Management and Environmental Protection. Co-ordinates are required to enable a National Marine Park and several other protected areas to be shown on the official BA charts. The Visit Team explained the importance of this depiction. The Fisheries Division undertook to provide the required information to the Port Authority for onward transmission to UKHO as a matter of urgency.

OUTLINE S-55 ANALYSIS

9. Status of surveys and charting within the National Maritime Zone. The entry for Antigua and Barbuda in S-55 was reviewed, noting the comments made by the CG (paragraph 7). The Visit Team asked that a regular review of the information, especially current re-survey and charting priorities, be conducted in order to inform the annual review of S-55 which is co-ordinated by UKHO.

10. Collection and Circulation of Nautical Information. The Port Authority pilots maintain a good liaison with UKHO, which has enabled charting to keep abreast of movement of the buoys at the narrowest part of the entrance channel. However, the Visit Team noted a new fishing harbour in the vicinity of Point Wharf, which is not shown on chart BA 2065. As noted in earlier paragraphs, there are also other developments and designations of restrictions which are not reaching the official charts.

11. Survey Capability. The St John's pilots perform check surveys in the entry channel and in the turning basin, where the azipods fitted to many modern liners are continuously scouring and modifying the seabed. The CG maintain a lookout and render Hydrographic Notes as a matter of routine, although it is not clear that these are reaching UKHO for chart action.

12. Independent Chart Production Capability. The authorities in Antigua and Barbuda are content with current arrangements with UKHO for the production of charts of their waters.

PROPOSALS FOR CO-ORDINATION AND CAPABILITY BUILDING

13. National Hydrographic Committee. The effectiveness of the round table meeting with the Visit Team led to a decision to convene a National Hydrographic Committee (NHC) at regular intervals under the chairmanship of the Operations Manager, Port Authority. The Visit Team suggested that the meetings might be timed to provide input through UK to the annual review of data in IHO S-55 (paragraph 9) and to Antigua and Barbuda's report to MACHC. The designated Chairman indicated that the inaugural meeting would be called to review the draft of this visit report. The Visit Team hoped that Antigua and Barbuda's Permanent Representative to IMO would be able to join in the NHC deliberations; noting his frequent absences in London, they suggested that he be an information addressee on NHC minutes and letters.

14. MSI Organisation and GMDSS. This element of Antigua and Barbuda's SOLAS V obligations was the primary focus of discussion with the Visit Team:

a. MSI (Navigational Warnings). It was suggested that the current roles of Port Authority and Coast Guard be formalised and promulgated by government notice, requiring information to be passed to them by other agencies and by mariners without delay. The effectiveness of local navigational warnings and Notices to Mariners should be a matter for review on the agenda of the NHC.

b. Information on Ports and Harbours. Comments above in paragraphs 5, 8 and 10, underline the importance of establishing a designated national co-ordinator for the collation and onward transmission of navigational safety information and updates to UKHO. The Visit Team recommended that such a co-ordinator be found from the staff of the Port Authority.

c. GMDSS Status. The Visit Team advised that the Port Authority should also be the local focal point for communicating information to the WWNWS, and that this could best be achieved with a direct E-mail link to the French co-ordinator in MRCC Martinique. The urgency of establishing this link was emphasised, and the Port Authority undertook to confirm the name of the national co-ordinator as soon as possible.

15. Hydrographic Capability. The local skills noted at paragraph 11 are appropriate and sustainable and meet Antigua's routine requirements. Major requirements for hydrographic survey can be brought to the MACHC for discussion with other member states, facilitating the identification of regional or bilateral options for funding and conduct of the work.

PROPOSALS FOR ASSISTANCE

16. Training. The Visit Team noted the benefit to Antigua of participation in 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. They also noted that IHO Capacity Building Committee (IHOCBC) funding will be sought for an MSI training course in the region during 2006-07, and recommended that Antigua's national co-ordinator attend this course. Full details of this opportunity will be provided to the Port Authority Operations Manager as soon as possible after the June meeting of the IHOCBC.

FOLLOW UP ACTIONS

17. Encouragement of Formation of a NHC, Development of a National Hydrographic Strategy, and IHO and RHC Membership. Antigua and Barbuda should convene the NHC to review this report, and thereafter to conduct a regular review 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: **Antigua and Barbuda Port Authority; IHB; MACHC Chairman.**

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

a. The Antigua and Barbuda Port 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: **Antigua and Barbuda Port Authority; Ministry of Works, Transportation and the Environment.**

b. The Visit Team should monitor the successful implementation of the link between the Antigua 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 Antigua and Barbuda to regional SafetyNET arrangements. ACTION: **Visit Team; MRCC Martinique; NAVAREA IV Co-ordinator.**

19. Encouragement of Development of Hydrographic Capability.

a. Antigua and Barbuda should take up the option of the NHC Chairman attending the symposium planned by the IHO on 2-3 October in Vera Cruz, 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: **Antigua and Barbuda; Visit Team; IHB.**

b. Antigua and Barbuda should be included in the MACHC bid to IHOCBC for an MSI training course in 2006-07. ACTION: **MACHC Chairman; Vice Chairman IHOCBC.**

APPENDIX 1 TO
ANNEX D TO
HA317/022/001-03
DATED 9 MAY 06

AMENDMENTS TO THE ENTRY FOR ANTIGUA AND BARBUDA IN THE IHO YEAR-BOOK

ANTIGUA and BARBUDA

ANTIGUA AND BARBUDA PORT AUTHORITY

Deep Water Harbour

P.O. Box 1052

St John's

Antigua B.W.I.

The Antigua and Barbuda Port Authority is responsible to the Ministry of Works, Transportation and the Environment.

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Operations Manager: Mr Hugh Mack.

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E-mail: mackhc@hotmail.com

The Operations Manager is designated as the National Hydrographic Committee Chairman for Antigua and Barbuda, the representative to MACHC, and the contact point for IHO.

The Office of the Permanent Representative to the IMO for the Government of Antigua and Barbuda.

Mr Dwight C. R. Gardiner

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COUNTRY REPORT: BRITISH VIRGIN ISLANDS

INTRODUCTION

1. **RHC Involvement.** The British Virgin Islands (BVI) are an Overseas Territory (OT) of the UK, which provides representation at IHO and Meso-American and Caribbean Hydrographic Commission (MACHC) meetings. The islands were not included in the CGMHC visits in December 1998.
2. **Preliminary Liaison.** Mr D. Norman, Head of the Governor's Office, and Captain P. Nawaratne, Chief Surveyor and Acting Head of the Maritime Administration, assisted with co-ordination of the visit.
3. **Points of Contact.** The UKHO will remain the first point of contact for survey and charting matters in the waters of BVI. It is proposed that sections be added to the UK entry in the IHO Year Book for each OT to indicate points of contact in country. The details for BVI are at Appendix 1.

DESCRIPTION OF MARITIME ACTIVITIES

4. **National Maritime Affairs.** In common with the rest of the Virgin Islands chain, BVI attracts substantial tourism, both in cruise liners and small craft. The cruise liners and mega-yachts are operating in waters where few areas have been swept with sidescan-sonar or MBES. The myriad of small leisure craft are not at present served by a Local Warnings VHF service.
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 Routes.** The Anegada/Sombrero Passage lies to the E of BVI.
 - b. **Regional and Local Trade.** BVI is on the liner routes between ports in Florida and the Antilles chain, with international cargo arriving via regional trans-shipment ports. 90% of BVI trade is handled through Road Harbour. Oil and gas products are also delivered at two buoy stations on the SW coast of Tortola. There is extensive local small craft trade with Puerto Rico and the other Virgin Islands. A Ferry Service links Road Harbour to the other main islands within BVI, and there are subsidiary inter-island ferry services. The size and draught of these ferries is increasing, and the need for modern survey information around Anegada was specifically mentioned in this context.
 - c. **Tourism - Cruise Liners.** The larger vessels with draughts greater than 7m call at Road Harbour and St. Thomas Bay. The smaller vessels are taking passage more widely in BVI waters, including North (Gorda) Sound and Jost Van Dyke. Some cruise companies are expressing an interest in Anegada, but the current survey coverage is a deterrent.
 - d. **Tourism - Small Craft.** A huge seasonal industry operates in BVI, with many hulls being delivered from the Mediterranean in specialised container vessels. There are numerous marina developments, not all of which are shown on the BA charts. A particularly significant element of this sector of the tourist presence in BVI is the mega-yacht industry. These hulls are growing in size and draught.
 - e. **Fisheries.** BVI fishing is local and artisanal. Some larger foreign fishing vessels are known to operate in the E part of the BVI Fishery Zone.
6. **Responsibility for Safety of Navigation.** The Maritime Administration is responsible for policy and all other maritime safety and navigational matters related to the national waters of the Territory. The BVI Port Authority has been given responsibility for the maintenance of channels, removal of wrecks, and provision and maintenance of aids to navigation only within declared ports for which they are responsible.

7. Defence Force Responsibilities. The BVI Police Force Marine Unit conducts patrols of BVI waters. Its roles include SAR, fishery protection, and operations to counter traffic in drugs and illegal immigrants. Whilst the local pilotage knowledge of personnel is very good, concern was expressed about the quality of available hydrographic information for Anegada and the N coast of Tortola.

8. Coastal Zone Management and Environmental Protection. There appear to be sensitive areas, some with protected status, which are not currently depicted on the BA charts.

OUTLINE S-55 ANALYSIS

9. Status of surveys within the National Maritime Zone. The summary in IHO S-55 was confirmed, and an analysis of priorities related to sea usage was conducted with local expert input. Particular areas of concern related to the increasing cruise liner traffic are the Narrows between Great Thatch Island and St John, Soper's Hole, St Thomas Bay, the passages to and from Sir Francis Drake's Passage on both sides of the Dog Islands, North (Gorda) Sound (and especially its entrance) and the channel into Anegada.

10. Collection and Circulation of Nautical Information. Liaison between BVI authorities and UKHO has been satisfactory. Clearly the pace of development, especially in areas away from Road Harbour, presents a challenge, and excellent teamwork is needed within BVI to ensure that changes are depicted on the official charts in a timely manner.

11. Survey Capability. The Port Authority and the BVI government own and operate many vessels of various size and configurations, and have showed considerable interest in building up a local capability to conduct check surveys. The Survey Department is conscious of its roles in datum transformation, definition of MSL, and coast mapping, and has been approached to undertake small hydrographic tasks. The Conservation and Fisheries Department has close links with US NOAA, and the Visit Team urged close inter-departmental coordination to ensure that regional resources and opportunities were maximised.

12. Independent Chart Production Capability. The BVI authorities are content with their relationship with UKHO, and with the current chart scheming. Their priorities for larger scale coverage are St Thomas Bay, Jost Van Dyke and Anegada. There are significant marina developments which are covered only at smaller scales in the BA SOLAS series, and there may be mutual benefit to exploration of additional plans in the UKHO Admiralty Leisure folio for this area.

PROPOSALS FOR CO-ORDINATION AND CAPABILITY BUILDING

13. National Hydrographic Committee. An excellent quorum of representatives of the maritime sector met under the chairmanship of the Director of the Maritime Administration to brief the Visit Team, and substantial benefit resulted in inter-departmental sharing of information. The Maritime Administration acknowledged the benefits of regular meetings of appropriate departments as a National Hydrographic Committee (NHC) for BVI. The Visit Team suggested that the meetings might be timed to provide input through UK to the annual review of data in IHO S-55 and the UK report to MACHC. The attention of the Team was also drawn to the meetings of the Red Ensign Group, and they undertook to liaise with UKHO and UK MCA to raise the visibility of hydrographic policy issues in that forum.

14. MSI Organisation and GMDSS. The Visit Team noted the arrangements which the IMO has made to encourage and monitor the implementation of appropriate arrangements for the hydrographic services mandated in Chapter V of the SOLAS Convention. Amongst the gaps in provision, especially in the Caribbean region, the absence of arrangements for collation and dissemination of Maritime Safety Information (MSI), especially through the Global Maritime Distress and Safety System (GMDSS) was undoubtedly of greatest concern. The volume of cruise liner and leisure craft traffic in BVI waters make the firm implementation of appropriate MSI arrangements a matter of the highest urgency. The following areas were discussed with the Maritime Administration and other departments.

- a. MSI (Navigational Warnings). At present, local navigational warnings are passed out through the pilots. This is a satisfactory arrangement for the larger SOLAS shipping, though it could be supplemented by broadcast warnings through the Port Authority VHF. However, the volume of small craft traffic throughout the waters of BVI makes the establishment of an A1 area by means of a VHF transmitter at the Chalwell aerial site a high priority.

b. Information on Ports and Harbours. Despite historic liaison with UKHO, even within Road Harbour there are developments which are not yet depicted on the official BA charts. The Visit Team explained the legal requirement and economic importance of timely update, and reiterated that this requires team-work between departments and agencies. The Port Authority and the Survey Department have particularly vital roles because of their access to plans and awareness of new projects.

c. GMDSS Status. The Visit Team explained the urgency of implementing a GMDSS arrangement for the waters of BVI, and suggested that this could be achieved economically by establishing an e-mail link to the NAVTEX station in San Juan, Puerto Rico. The Visit Team would facilitate the establishment of this link, but BVI must first identify and formally designate an individual who would be the national co-ordinator. The Maritime Administration undertook to discuss this requirement with other departments and to pass name and contact details to the Visit Team as soon as possible.

15. Hydrographic Capability. UK retains responsibility under the SOLAS Convention for survey and charting of BVI's waters, but the Maritime Administration, with assistance from the other members of the putative NHC, has a vital role in conducting a regular review of the assessment in this report and communicating advice to government. The UKHO should liaise with the Maritime Administration when conducting the annual review of the information for BVI in the IHO S-55 data-base.

a. Provision of Survey and other Data. The challenge which BVI faces in keeping official maps and charts up to date has been discussed above at paragraphs 10 and 14.b. The Visit Team suggested that the task of timely collation and transmission of updates to UKHO should be given to the GMDSS national co-ordinator. When selecting the person for this post, the Maritime Administration should take into account their background skills and ability to decide whether information should be disseminated as a radio-navigational warning or as a notice to mariner (chart update).

b. Survey Capability. The Visit Team was impressed by the enthusiasm of the BVI government for the establishment of a local team which could use Port Authority and or BVI Government craft to undertake small area check surveys. A number of outstanding requirements for such inshore surveys were aired during the meeting. The Visit Team provided advice on appropriate training to support this ambition, and this is discussed further at paragraph 16. The Team also noted that the RN has deployable survey teams, equipped with portable equipment, and suggested that a bid might be made through the Governor's office for tasking of such a team in BVI waters. Attachment of BVI personnel to such a team would provide invaluable field experience in basic check survey techniques. Similar opportunities may be available if USN or NOAA teams are deployed in the US Virgin Islands. The Team also noted that their visits to the Overseas Territories seemed likely to identify an aggregate package of requirements for larger area ship surveys that would support a bid for deployment of an RN survey ship. This concept would be taken forward with the Governors' offices and the British Defence Advisers in region.

c. Chart Production. The Visit Team will pass the local advice at paragraphs 9 and 12 to UKHO, and recommend that the BVI government provide regular feedback from the NHC.

d. Potential for Regional Activity. The meeting with BVI officials noted the potential for a survey team to develop as a regional asset, at the very least for the Overseas Territories.

PROPOSALS FOR ASSISTANCE

16. Training. There are two separate requirements:

a. MSI. IHOCBC funding will be sought for an MSI training course in the region during 2006-07, and the BVI national co-ordinator should attend this course. Full details of this opportunity will be provided to the Maritime Administration as soon as possible after the June meeting of the IHO Capacity Building Committee (IHOCBC).

b. Hydrographic Survey. The Visit Team confirmed that the IHOCBC can provide follow up advice on appropriate training options once the BVI government has considered the shape of the inter-departmental team and identified personnel. One option would be to select a member of the Survey Department as Team Leader, with particular responsibility for survey planning and analysis of results,

and to seek training for him on a Category B Hydrography Course. The IHO can provide details of such courses, which range in length from 3 - 9 months. One or two other team members, with a marine background, might be selected from the Port Authority. They could be given a tailor-made, uncertificated, course, with a focus on operation of equipment for inshore check surveys. This course could be delivered in region, and would be an attractive candidate for IHOCBC funding.

17. Equipment. The IHOCBC generally advises against substantial equipment holdings in tropical climates. This is reflected in the advice given by the Visit Team:

a. MSI. The Visit Team will discuss with UKHO the identification and funding of a package of PC software and ARCS charts and digital tidal data covering national waters, for the co-ordinators in the Overseas Territories in the region. Such a package would greatly facilitate their task of reporting changes and other urgent navigational safety information.

b. Hydrographic Survey. It is most strongly recommended that equipment be hired when required. For many small check survey tasks, the Port Authority craft should be able to use the existing fit of GPS and echo sounder.

18. Funding. The Visit Team explained the role of MACHC and IHOCBC in very general terms. UKHO and Chairman MACHC should provide further guidance once any bids for assistance by BVI have been firmed up. These bids will have better prospects of success if they can be married up with the requirements of the other OTs, and UKHO International Relations Branch will be asked to provide co-ordination.

FOLLOW UP ACTIONS

19. Encouragement of Formation of a NHC, Development of a National Hydrographic Strategy, and liaison with MACHC and IHO. The Maritime Administration should call an early meeting of the BVI NHC, ideally to review and follow up the recommendations in this report. The Visit Team will recommend the addition of the information at Appendix 1 to the UK entry in the IHO Year Book. They will also recommend to UKHO that the BVI NHC should be involved in the annual review of S-55 to confirm Anguilla's survey and charting requirements, and the correct functioning of GMDSS arrangements. A report should also be rendered for each meeting of the MACHC. ACTION: **BVI Maritime Administration; Visit Team; UKHO**.

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

a. The Visit Team should bring the information at paragraphs 9 and 12 to the attention of the appropriate branch in UKHO, and should monitor the successful implementation of the link between BVI national co-ordinator and UKHO. ACTION: **Visit Team**.

b. The Visit Team should investigate with UKHO the provision to the BVI national co-ordinator of the package outlined at sub-paragraph 17.a. ACTION: **Visit Team; UKHO**.

c. BVI Maritime Administration should identify the national co-ordinator and promulgate their role as quickly as possible, urging all authorities to pass information related to safety of navigation and chart update. ACTION: **BVI Maritime Administration**.

d. Once the action at sub-paragraph 20.c. is complete, the Visit Team will make contact with the NAVAREA IV Co-ordinator and facilitate the access of BVI to existing regional GMDSS arrangements through the NAVTEX station in San Juan, Puerto Rico. ACTION: **Visit Team; NAVAREA IV Co-ordinator**.

21. Capacity Building Assistance.

a. UK should liaise with BVI to assess the option of the NHC Chairman attending the symposium planned by the IHO on 2-3 October in Vera Cruz, Mexico, immediately before the next meeting of the MACHC. This symposium will include guidance on the prioritisation of national survey requirements. ACTION: **UKHO and BVI government**.

b. BVI should be included in the MACHC bid to IHOCBC for an MSI training course in 2006-07. ACTION: **MACHC Chairman; Vice Chairman IHOCBC**.

c. MACHC and IHOCBC should provide more detailed advice to BVI on options for training a small hydrographic survey team. **ACTION: MACHC Chairman; Vice Chairman IHOCBC.**

d. UKHO should provide technical advice to the Governor BVI and BDA Kingston in the preparation of any bid for RN survey assistance. **ACTION: UKHO.**

APPENDIX 1 TO
ANNEX E TO
HA317/022/001-03
DATED 9 MAY 06

PROPOSED ENTRY FOR BVI IN THE UK SECTION OF THE IHO YEAR-BOOK

BRITISH VIRGIN ISLANDS

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COUNTRY REPORT: COMMONWEALTH OF THE BAHAMAS

INTRODUCTION

1. **RHC Involvement.** The Commonwealth of the Bahamas 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. The Visit Team based its work on the report arising from the CGMHC visit in December 1998.
2. **Preliminary Liaison.** Regrettably, no formal response to the letter of the Chairman MACHC offering the technical visit was received from the Bahamian authorities indicated in the IHO Year Book. The Team Leader made contact with the Port Authority, Defence Force, and Department of Lands and Surveys in advance of the mission, and on arrival in Nassau.
3. **Points of Contact.** The details in the IHO Year Book of local points of contact should be retained until completion of a forthcoming review by the government of the Commonwealth of the Bahamas.

DESCRIPTION OF MARITIME ACTIVITIES

4. **National Maritime Affairs.** The 1998 report noted the challenge of providing hydrographic services in the extensive Bahamian archipelago, especially for the burgeoning tourism industry, both large cruise liners and private power and sailing pleasure craft. Hence, in the light of the 2002 revisions to SOLAS Chapter V, a high priority for this visit was to establish what arrangements might have been put in place in the intervening period.
5. **Trade and Maritime Traffic.** The Port Authority undertook to review and update the assessments made in 1998. However, it appeared that the main components of sea-borne traffic, and the patterns of activity in national waters, remain broadly as reported in 1998. As elsewhere in the region, substantial mega-yachts are now a significant presence. This is being taken into account in marina development plans, and it should also inform the review of SOLAS V services throughout the archipelago.
6. **Responsibility for Safety of Navigation.** The Port Authority retains responsibility for policy matters related to navigation, for the manned light-houses, and for some technical support for aids to navigation. However, the Bahamas Defence Force Coast Guard (CG) has taken on the task of monitoring and maintenance of aids to navigation throughout the archipelago. It uses the government radio station (1540 AM) to promulgate information related to defective navigational aids.
7. **Defence Force Responsibilities.** The task of servicing aids to navigation arises from the footprint of the CG in discharging its patrol roles. It retains the fishery inspection task noted in 1998, and continues to operate with the USCG to counter traffic in drugs and illegal immigrants. The Operations Department works with the Bahamas Air and Sea Rescue Authority (BASRA) for SAR matters.

OUTLINE S-55 ANALYSIS

8. **Status of surveys within the National Maritime Zone.** The Visit Team drew attention to the IHO S-55 data-base, noting its use within the new IMO Voluntary Audit Scheme. The current information for the archipelago had been compiled by UKHO, who had not been able to obtain input from the Bahamas authorities. The importance of a regular review of re-survey priorities was discussed during this visit.
9. **Collection and Circulation of Nautical Information.** Information from the ports of Freeport and Nassau reaches the UKHO, but the Visit Team could find no evidence that the recommendations made in 1998 for collation and transmission of information for the whole archipelago had been actioned. This need is urgent given the rate of coastal development throughout the islands.
10. **Survey Capability.** There is no survey capability in the Bahamas.

11. Independent Chart Production Capability. The locally produced charts which were sighted in 1998 are not maintained. Indeed, hydrographic skills have not been sustained in the Lands and Surveys Department, which is even more heavily burdened by the cadastral demands of the massive development industry in the islands. There is a small Bahamas National GIS Centre which deals *inter alia* with products for delimitation, using a CARIS LOTS system.

PROPOSALS FOR CO-ORDINATION AND CAPABILITY BUILDING

12. National Hydrographic Committee. In view both of the profile of the Commonwealth of the Bahamas as an IMO member with one of the largest international shipping registers, and of the awareness of marine environmental matters at ministerial level in 1998, the Visit Team were most disappointed to find that no steps had been taken to provide oversight of hydrography as a vital element of national policy-making. They were informed that the Ministry of Transport has implemented a national Marine Action Plan, and that a committee had been tasked to review legislation and current responsibilities. They urged that this review should take note of the obligations of the Bahamas government under SOLAS V Regulations 4 and 9.

13. MSI Organisation and GMDSS. The most urgent element of these obligations is the implementation of arrangements to update the official charts and to get urgent information to shipping, especially by means of GMDSS. Above all, there must be significant improvement in liaison and effective passage of information between national and regional agencies.

a. MSI (Navigational Warnings). A review is needed of the pragmatic arrangements of the Port Authority and the CG to use VHF, government radio station and the press for local navigational warnings and Notices to Mariners. These methods may well be appropriate and sufficient, but it was not clear to the Visit Team that all items of significance to the mariner were necessarily being covered. There should be clear terms of reference and accountability for this role.

b. Information on Ports and Harbours. Effective discharge of the obligations in SOLAS V requires the identification and empowerment of a national co-ordinator, whose identity and function must then be promulgated by government to all those who use the Bahamas sea area. The CG and shipping using Bahamian waters have a clear role in reporting information on dangers and changes. But the Lands and Survey Department also has a vitally important part to play in communicating coastal change and development so that it can be reflected on the official charts of the Bahamas sea area which are compiled by UKHO.

c. GMDSS Status. The Visit Team were disappointed to find that no steps have been taken since 1998 to implement GMDSS in the waters of the Bahamas. This is a matter of particular concern in the SE part of the archipelago, which lies beyond the range of the US NAVTEX station in Miami. The Team briefed the Bahamian authorities on the proposal for a SafetyNET Coastal Warning Area which they would be discussing with the administration in the Turks and Caicos Islands. They noted that the Bahamas could be linked into the WWNWS in the same economical fashion, but that they must first put in place the national co-ordinator, as discussed in the previous sub-paragraph.

14. Hydrographic Capability. The Visit Team reiterated that advice from the Bahamian authorities, preferably co-ordinated through an oversight committee, would greatly assist the UKHO to maintain the official charts of the archipelago. The UKHO could in turn continue to assist the Bahamas to prepare its input to the high profile S-55 data-base, especially in advance of the annual review in the IMO MSC. The Bahamas would also derive great benefit from representation in the MACHC, where opportunities for regional co-ordination and maximisation of resources were best identified.

a. Provision of Survey Data. The urgent need for a national co-ordinator to handle hydrographic data has been stated in paragraph 14. The selection for this post should take into account background skills and ability to decide whether information should be disseminated as a radio-navigational warning or as a notice to mariner (chart update).

b. Survey and Charting. Survey and charting capabilities are a low priority for the Bahamas until the urgent needs related to MSI are resolved. However, there may be merit in providing some hydrographic training for a member of the Lands and Survey Department, provided that they are firmly allocated to the task of updating the record of changes in the national maritime sector.

PROPOSALS FOR ASSISTANCE

15. Training. Provided that responsibilities have been confirmed and formalised and notified to IHO, the Bahamas could benefit from participation in the MACHC Course for NHC Chairmen to be held on 2-3 Oct 06, in association with the next meeting of the regional commission. IHO Capacity Building Committee (IHOCBC) funding will be sought for an MSI training course in the region during 2006-07, and the national co-ordinator could attend this course. Full details of this opportunity will be provided to the Bahamas authorities as soon as possible after the June meeting of the IHOCBC.

FOLLOW UP ACTIONS

16. Encouragement of Formation of a NHC, Development of a National Hydrographic Strategy, and RHC Membership. The Ministry of Transport of the government of the Commonwealth of the Bahamas should take the obligations under SOLAS V into account when reviewing legislation and responsibilities for maritime matters. Advice should be sought from the national delegation to the IMO. A copy of this report should be supplied to the Ministry of Transport, who may also approach the IHB and the Chairman MACHC for follow-up advice. The Ministry should also resource the regular representation of the Bahamas in the MACHC. ACTION: **Ministry of Transport (Bahamas); Visit Team; Delegation to IMO; IHB; MACHC Chairman.**

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

a. The Bahamas authorities 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: **Ministry of Transport.**

b. Once the action at sub-paragraph 17.a. is complete, the Visit Team will make contact with the NAVAREA IV Co-ordinator and facilitate the access of the Bahamas to regional SafetyNET arrangements. ACTION: **Visit Team; NAVAREA IV Co-ordinator.**

18. Encouragement of Development of Hydrographic Capability. Details will be provided of the symposium for NHC Chairmen planned by the IHO on 2-3 October in Vera Cruz, Mexico, and, if confirmed, of the MSI training course in 2006-07. ACTION: **MACHC Chairman; Vice Chairman IHOCBC.**

COUNTRY REPORT: TURKS AND CAICOS ISLANDS

INTRODUCTION

1. RHC Involvement. The Turks and Caicos Islands (TCI) are an Overseas Territory (OT) of the UK, which provides representation at IHO and Meso-American and Caribbean Hydrographic Commission (MACHC) meetings. They were not included in the CGMHC visits in December 1998.
2. Preliminary Liaison. Mr D. Brett, First Secretary, assisted with co-ordination of the visit.
3. Points of Contact. The UKHO will remain the first point of contact for survey and charting matters in the waters of TCI. It is proposed that sections be added to the UK entry in the IHO Year Book for each OT to indicate points of contact in country. The details for TCI are at Appendix 1.

DESCRIPTION OF MARITIME ACTIVITIES

4. National Maritime Affairs. The opening of a new private cruise liner terminal in TCI is symptomatic of a booming tourist industry, including extensive building developments which rely on sea transportation for heavy equipment and construction materials. The provision of SOLAS V hydrographic services has not kept up with the pace of change in the islands.
5. Trade and Maritime Traffic. The main components of sea-borne traffic, and the patterns of activity in TCI waters, are as follows:
 - a. Through Routes. The islands lie immediately E of the Caicos Passage, one of the major international routes between the Atlantic Ocean and the Caribbean Sea, and flank the Turks Island Passage.
 - b. Regional and Local Trade. TCI depends on imported raw materials and products which come direct from ports in the USA, Cuba and the Dominican Republic. Currently, the busiest port is South Dock in Providenciales. Grand Turk is served by a freighter dock, and an anchorage off Cockburn Town. South Caicos is served by Cockburn Harbour. Barges and small craft are used to feed goods to other destinations in the group.
 - c. Tourism - Cruise Liners. The Carnival Cruise company has opened a large terminal on the W coast of Grand Turk.
 - d. Tourism - Small Craft. The extensive coastal developments include marinas, such as that at Turtle Cove on the N coast of Providenciales, which are not shown on the official charts. New marina developments are proposed at the NW point of West Caicos and at Big Ambergris Cay. Here as elsewhere in the region, mega-yachts form an increasingly significant component of this sector.
 - e. Fisheries and Offshore resources. The TCI fishery is artisanal, and is mainly based in Providenciales and South Caicos. There is a seasonal sports fishing industry. There are proposals for sand mining around the islands to serve the construction industry.
6. Responsibility for Safety of Navigation. The Maritime Department is responsible for the lights in TCI waters. The Department of the Environment and Coastal Resources (DECR) is responsible for buoys which have been laid to delineate protected areas. The Receiver of Wrecks has responsibility for the removal of wrecks, working with the Maritime Department and DECR. No formal local navigational warnings or notices to mariners are issued.
7. Defence Force Responsibilities. The Police Marine Unit has 3 craft for patrol duties. It operates under a joint arrangement with the USCG and Bahamas Defence Force CG for counter-narcotics patrols. It also deals

with smuggling of illegal immigrants. It provides fishery protection, and also works with the Fisheries Department and USCG for SAR in TCI waters. The RN APT (N) visits once each year.

8. Coastal Zone Management and Environmental Protection. The BA charts indicate the general location of some of the Marine National Parks and other protected areas in TCI waters. A full list of co-ordinates will be provided to UKHO by DECR.

OUTLINE S-55 ANALYSIS

9. Status of surveys within the National Maritime Zone. The visit team drew attention to the entry for TCI in the IHO S-55 data-base and to the source data diagrams on the published BA charts. They noted with concern that South Dock, the current main entry port for cargo for Providenciales lies within the uncharted waters of the Caicos Bank, with only a few soundings shown in Caicos Creek and Clearsand Roads. They learnt that a vessel had grounded recently on South West Reef. They were told that a new deep water harbour is under construction on North Caicos, with access between Parrot and Dellis Cays, again in unsurveyed waters. They advise that modern surveys of these areas should be an urgent priority.

10. Collection and Circulation of Nautical Information. The Visit Team used the new intelligence at paragraph 9 to stress the vital importance of updating the official chart of TCI waters, noting that the UKHO had been struggling to get information on the new cruise liner dock at Grand Turk. They explained the issues of contingent liability if charts were not updated with such information, stressing that it was important to get a "Works in Progress" legend on the chart as soon as physical development work got underway. This needed a clearly designated national co-ordinator in TCI and good team-work between all agencies which had information on changes within the coastal zone.

11. Survey Capability. It was established that DECR have boats and GIS capacity which might facilitate hydrographic survey operations in TCI waters.

12. Status of Charting. Raster versions of the current BA scheme for TCI were displayed during the meeting. It quickly became apparent that BA 3907 is at an inadequate scale for the activity in the waters of Providenciales where some shipping is consulting the unofficial yachtsman's charts produced by Bob Gascoigne. The Visit Team advised that the definition of plans for South Dock and the new development at North Caicos should be an urgent priority for discussion with UKHO.

PROPOSALS FOR CO-ORDINATION AND CAPABILITY BUILDING

13. National Hydrographic Committee. As in the visits to other UK OTs, the round table meeting with the Chief Maritime Officer and officials of DECR proved of equal value to TCI officials and the Visit Team. It was concluded that the First Secretary should reconvene the group, with additional attendees from Lands and Surveys, the Police Marine Unit, Public Works, and Customs, to review the report arising from this visit. The group, perhaps formally designated as an oversight committee, might also provide the best means of monitoring subsequent progress with the recommendations of the report.

14. MSI Organisation and GMDSS. The Visit Team noted the arrangements which the IMO has made to encourage and monitor the implementation of appropriate arrangements for the hydrographic services mandated in Chapter V of the SOLAS Convention. Amongst the gaps in provision, especially in the Caribbean region, the absence of arrangements for collation and dissemination of Maritime Safety Information (MSI), especially through the Global Maritime Distress and Safety System (GMDSS) was undoubtedly of greatest concern, and specific advice was offered to TCI authorities to address this.

a. MSI (Navigational Warnings). The Visit Team advised that in the first instance priority should be given to gaining access to the World-Wide Navigational Warning System (WWNWS) which served SOLAS shipping. This is discussed below at sub-paragraph 14.c. However, the various means of disseminating warnings to local craft were described, and it was noted that teamwork between such agencies as the Marine Police and Fisheries, and with local port and marina operators, could facilitate this.

b. Information on Ports and Harbours. The Visit Team detected a real commitment to deliver the teamwork to address the back-log discussed at paragraphs 9-10. However, it was plain that further discussion was needed to identify a national co-ordinator to handle the liaison with UKHO. The remit

lies most logically within the remit of the small Maritime Department, but it is over-burdened and would need additional resources to take on the task. DECR officials undertook to provide some of the outstanding information, and they may be in a position to perform the co-ordination function, at least as an interim solution.

c. GMDSS Status. The Visit Team explained the urgency of implementing a GMDSS arrangement for the waters of TCI, and suggested that this could be achieved economically by declaring a SafetyNET Coastal Warning Area. The Visit Team could facilitate this and establish a link with the NAVAREA IV co-ordinator in the USA, but TCI must first identify and formally designate an individual who would be their national co-ordinator. This requirement is the highest priority for TCI, and name and contact details should be passed to the Visit Team as soon as possible.

15. Hydrographic Capability. UK retains responsibility under the SOLAS Convention for survey and charting of TCI's waters, but, as this report has illustrated vividly, the TCI government departments have a vital role in conducting a regular review of priorities and communicating advice to government. The UKHO should liaise with the Governor's Office and the Maritime Department when conducting the annual review of the information for TCI in the IHO S-55 data-base.

a. Provision of Survey Data. The Visit Team provided details of the points of contact in UKHO for chart update information. The Team will monitor the successful implementation of this essential line of communication, and are ready to provide guidance to the TCI authorities as they prepare to pass the information discussed at paragraphs 8, 9, 10 and 14.b. They suggested that in the longer term the task of timely collation and transmission of updates to UKHO should be given to the GMDSS national co-ordinator. Hence, the selection should take into account background skills and ability to decide whether information should be disseminated as a radio-navigational warning or as a notice to mariner (chart update).

b. Survey Capability. The Visit Team Leader noted his intention to discuss with the Defence Advisers in region the formulation of a concerted bid from the Governors of the OTs for survey assistance from the RN. This could be provided both by a mobile survey team, perhaps based on the APT (N), or by a short deployment of an RN survey ship. The requirements of TCI would be a high priority within such a package. In addition an RN survey vessel fitted with multi-beam echo sounding equipment could sweep along the edges of the Caicos and Turks Island Passages, improving the delineation of the reef edges. Further advice would be provided to the Governor's office.

c. Chart Production. The Visit Team will draw the conclusions at paragraph 12 to the attention of UKHO.

d. Potential for Regional Activity. Previous discussion of hydrographic support to the OTs within the Red Ensign Group was high-lighted by the Chief Maritime Officer. This was the second time that this forum has been drawn to the attention of the Visit Team, and they reiterated their intention to seek policy advice from the relevant UKHO and MCA desk officers who support the group.

PROPOSALS FOR ASSISTANCE

16. Training. IHOCBC funding will be sought for an MSI training course in the region during 2006-07, and it is recommended that TCI's national co-ordinator attends this course. Full details of this opportunity will be provided to the First Secretary as soon as possible after the June meeting of the IHO Capacity Building Committee (IHOCBC). The First Secretary should consider attending, or sending an appropriate representative to, 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.

17. Equipment. The Visit Team will discuss with UKHO the identification and funding of a package of PC software and ARCS charts and digital publications (Admiralty Sailing Directions and tidal data) covering national waters, for the co-ordinators in the Overseas Territories in the region. Such a package would greatly facilitate their task of reporting changes and other urgent navigational safety information.

FOLLOW UP ACTIONS

18. Liaison with IHO and MACHC. The Visit Team will recommend the addition of the information at Appendix 1 to the UK entry in the IHO Year Book. They will also recommend to UKHO that the annual review of S-55 should be used to confirm TCI's survey and charting requirements, and the correct functioning of GMDSS arrangements. A report should also be rendered for each meeting of the MACHC. ACTION: **Visit Team; UKHO.**

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

a. The Visit Team will monitor the passage by TCI authorities of the urgent information required by UKHO to update the official charts. ACTION: **Visit Team; TCI.**

b. The Visit Team should investigate with UKHO the provision to the TCI national co-ordinator of the package outlined at paragraph 17. ACTION: **Visit Team; UKHO.**

c. TCI should identify the national co-ordinator and promulgate their role as quickly as possible, urging all authorities to pass information related to safety of navigation and chart update. ACTION: **Governor's Office and Maritime Department.**

d. Once the action at sub-paragraph 19.c. is complete, the Visit Team will make contact with the NAVAREA IV Co-ordinator and facilitate the access of TCI to regional GMDSS arrangements through the declaration of a new SafetyNET Coastal Warning Area. ACTION: **Visit Team; NAVAREA IV Co-ordinator.**

20. Capacity Building Assistance.

a. TCI should be included in the MACHC bid to IHOCBC for an MSI training course in 2006-07. ACTION: **MACHC Chairman; Vice Chairman IHOCBC.**

b. Consideration should be given to attendance at the IHO MACHC Course for NHC Chairmen on 2-3 Oct 06. ACTION: **Governor's Office; Visit Team; IHB; MACHC Chairman.**

c. UKHO should provide technical advice to the Governor TCI and BDA Kingston in the preparation of any bid for RN survey assistance. ACTION: **UKHO.**

APPENDIX 1 TO
ANNEX G TO
HA317/022/001-03
DATED 9 MAY 06

PROPOSED ENTRY FOR TCI IN THE UK SECTION OF THE IHO YEAR-BOOK

TURKS & CAICOS ISLANDS

GOVERNOR'S OFFICE
Government House
Grand Turk, T.C.I.

First Secretary: Mr David Brett (to be relieved by Ms Jean Harrod in mid-2006)

Chairs a committee which will meet to review hydrographic requirements.

Telephone: (649) 946 4111

E-mail: David.Brett2@fco.gov.uk

**MARITIME DEPARTMENT
Ministry of Works, Communications and Utilities
Providenciales, T.C.I.**

Head of the Maritime Department: Mr Henry Wilson.

Telephone: (649) 941 3148

FAX: (649) 941 4213

COUNTRY REPORT: CAYMAN ISLANDS

INTRODUCTION

1. **RHC Involvement.** The Cayman Islands are an Overseas Territory (OT) of the UK, which provides representation at IHO and Meso-American and Caribbean Hydrographic Commission (MACHC) meetings. They were not included in the CGMHC visits in December 1998.
2. **Preliminary Liaison.** Mr S. Tonge, Head of the Governor's Office, and Mr D. Christian, Operations Manager of the Port Authority, assisted with prior co-ordination of the visit.
3. **Points of Contact.** The UKHO will remain the first point of contact for survey and charting matters in the waters of the Cayman Islands. It is proposed that sections be added to the UK entry in the IHO Year Book for each OT to indicate points of contact in country. The details for the Cayman Islands are at Appendix 1.

DESCRIPTION OF MARITIME ACTIVITIES

4. **National Maritime Affairs.** The Cayman Islands lie on the ridge of the same name which straddles the sea routes from the Gulf of Mexico and Yucatan Channel to the Caribbean Sea. The islands rely heavily on sea transportation, and Grand Cayman is also a port of call for cruise liners, which landed 2M tourists in 2005.
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 Routes.** Substantial traffic passes the islands on the routes between North and South America, including oil tankers and PANAMAX freighters.
 - b. **Regional and Local Trade.** Most cargo for the islands arrives from trans-shipment ports in the USA (Mobile, Tampa, Port Everglades and Miami). Cars arrive from Jamaica. George Town is the island's terminus for this traffic. The oil product terminal for the islands is at Jackson Point, S of George Town. Onward transportation to Anchorage Bay on Little Cayman and the landing at Creek on Cayman Brac is by ramped barges. There is also a private facility on Cayman Brac from which aggregate is shipped to Grand Cayman.
 - c. **Tourism - Cruise Liners.** Cruise liners anchor in 4 designated berths off George Town and one berth off Spots Bay on the S coast. It is common for 6 liners to land tourists in a day during the high season.
 - d. **Tourism - Small Craft.** There is a local yacht charter sector which is largely based in North Sound. Very few yachts visit the islands which are isolated from the main Caribbean cruising grounds.
 - e. **Fisheries.** There are small artisanal and sports fisheries. There are occasional reports of Far Eastern long-line fishing vessels in the waters of the Cayman Islands.
6. **Responsibility for Safety of Navigation.** The Port Authority is responsible for the maintenance of channels, removal of wrecks, and the maintenance of aids to navigation listed in the Government Gazette. It is also frequently called on to assist private operators with the provision of lights, channel markers and buoys. No local Notices to Mariners are issued.
7. **Defence Force Responsibilities.** The Government Maritime Strategy Group has conducted a review which will lead to the upgrade of the capability of the Police Marine Unit for patrol of the Cayman Islands' waters. The Department of the Environment has 7 craft for enforcement of regulations related to environmental protection and fisheries.
8. **Coastal Zone Management and Environmental Protection.** There are 23 different Marine Parks and other regulated zones around the islands, which are promulgated in public documents such as the Cayman

Islands telephone directory, but which require to be shown on the official chart produced by UKHO. The Department of the Environment undertook to provide co-ordinates.

OUTLINE S-55 ANALYSIS

9. Status of surveys within the National Maritime Zone. The visit team drew attention to the entry for the Cayman Islands in the IHO S-55 data-base and to the source data diagrams on the published BA chart 462. It was agreed that surveys and chart meet the needs of SOLAS shipping. Further comment is made at paragraph 12

10. Collection and Circulation of Nautical Information. Whilst it was plain that several authorities in the island had links with UKHO, the round table meeting with the Visit Team revealed a significant number of changes and developments which are not reflected on BA chart 462. These include extension of the jetty and West Wharf at George Town, the additional cruise liner berths in the roadstead, additional submarine cables in North Sound and at East End, and the demolition of Sand Cay light by Hurricane Ivan. The Visit Team explained the issues of contingent liability if charts were not updated with such information, stressing, for example, that it was important to get a "Works in Progress" legend on the chart as soon as physical development work got underway. This needed a clearly designated national co-ordinator and good team-work between all agencies which had information on changes within the coastal zone.

11. Survey Capability. The Lands and Survey Department, with consultancy assistance, have trained and deployed a team of 4 in a 28' boat during 2006 for a programme of data capture for coastal zone management (CZM) and hazard warning. They are equipped with a single-beam echo-sounder and RTK dGPS to collect inshore bathymetric profiles running out to the 200m contour line. They have sought advice from the Bathymetric Data Centre in UKHO.

12. Independent Chart Production Capability. The Visit Team noted that the Lands and Surveys Department are producing CZM maps based on their surveys, but advised that the bathymetric data also be passed to UKHO for assimilation into BA 462. The Raster version of BA 462 was displayed during the meeting. The only concern with coverage related to North Sound, where the depiction based on old surveys was considered misleading for the local and tourist craft using the area. It is also proposed to construct a new Police Marine Unit Base in the sound.

PROPOSALS FOR CO-ORDINATION AND CAPABILITY BUILDING

13. National Hydrographic Committee. As in the other visits to UK OTs, the round table meeting with the IHO Visit Team provided an opportunity for sharing of information between maritime stakeholders in the Cayman Islands, and it was agreed that an expanded group should meet under chairmanship of the Maritime Authority to review the draft report arising from the meeting. During subsequent discussions with the Head of the Governor's Office it was proposed that this group should be constituted as an Ad Hoc Sub Committee reporting to the Cayman Islands Maritime Security Committee. The Visit Team noted that input to the annual review of information for the Cayman Islands' entry in S-55 and the UK report to the regional hydrographic committee (MACHC) could provide a trigger for subsequent meetings of the committee.

14. MSI Organisation and GMDSS. The Visit Team noted the arrangements which the IMO has made to encourage and monitor the implementation of appropriate arrangements for the hydrographic services mandated in Chapter V of the SOLAS Convention. Amongst the gaps in provision, especially in the Caribbean region, the absence of arrangements for collation and dissemination of Maritime Safety Information (MSI), especially through the Global Maritime Distress and Safety System (GMDSS) was undoubtedly of greatest concern, and specific advice was offered to Cayman Island authorities to address this.

a. MSI (Navigational Warnings). The Visit Team advised that in the first instance priority should be given to gaining access to the World-Wide Navigational Warning System (WWNWS) which served SOLAS shipping. This is discussed below at sub-paragraph 14.c. However, the various means of disseminating warnings to local craft were described, and it was noted that teamwork between agencies would facilitate this.

b. Information on Ports and Harbours. The Visit Team was impressed by the range of skills and the professionalism and commitment of the agencies with whom they met. They had confidence that the backlog of information noted above at paragraphs 8 and 10 will be addressed with urgency. They recommended most strongly that a national point of co-ordination for the collation and onward

dissemination of such information to UKHO should be identified. This role is distinct from the ongoing liaison related to Land and Surveys Department hydrographic work, though that department will be a key team member in providing cadastral information related to new coastal developments. The Maritime Authority undertook to take the lead in identifying the co-ordinator.

c. GMDSS Status. The Visit Team explained the urgency of implementing a GMDSS arrangement for the waters of the Cayman Islands, and suggested that this could be achieved economically by declaring a SafetyNET Coastal Warning Area. The Visit Team could facilitate this and establish a link with the NAVAREA IV co-ordinator in the USA, but the Cayman Islands must first identify and formally designate an individual who would be their national co-ordinator. This requirement is the highest priority for the Cayman Islands in meeting their SOLAS V obligations, and name and contact details should be passed to the Visit Team as soon as possible.

15. Hydrographic Capability. UK retains responsibility under the SOLAS Convention for survey and charting of the waters of the Cayman Islands, but, as this report has illustrated vividly, the Cayman Island government departments have a vital role in conducting a regular review of priorities and communicating advice to government. The UKHO should liaise with the Governor's Office and the Maritime Authority when conducting the annual review of the information for the islands in the IHO S-55 data-base.

a. Provision of Survey Data. The Visit Team suggested that the task of timely collation and transmission of updates to UKHO could be discharged by the GMDSS national co-ordinator, who would ideally have a maritime background and ability to decide whether information should be disseminated as a radio-navigational warning or as a notice to mariner (chart update). The Team will monitor the successful implementation of this essential line of communication, and are ready to provide guidance to the Cayman Island authorities as they prepare to pass the information discussed at paragraphs 8 and 10.

b. Survey Capability. The Visit Team were most impressed by the briefing on the capability of the Lands and Survey Department hydrographic unit, and by its liaison with UKHO and other sources of advice. The Visit Team Leader noted his intention to discuss with the Defence Advisers in region the formulation of a concerted bid from the Governors of the OTs for survey assistance from the RN. This could be provided by a mobile survey team, perhaps based on the APT (N). During discussion with the Head of the Governor's Office it was agreed that a joint survey in North Sound would provide excellent training and experience for the Lands and Surveys team, and that this survey should be added to the list of requirements.

c. Chart Production. The Visit Team will draw the discussion of charting of the area of North Sound to the attention of UKHO.

d. Potential for Regional Activity. The Visit Team were pleased to note a very strong awareness of the benefits of concerted action and regional burden-sharing. They noted the role of the MACHC in encouraging such co-operation.

PROPOSALS FOR ASSISTANCE

16. Training. IHOCBC funding will be sought for an MSI training course in the region during 2006-07, and it is recommended that the Cayman Islands' national co-ordinator attends this course. Full details of this opportunity will be provided to the Head of the Governor's Office as soon as possible after the June meeting of the IHO Capacity Building Committee (IHOCBC).

17. Equipment. The Visit Team will discuss with UKHO the identification and funding of a package of PC software and ARCS charts and digital publications (Admiralty Sailing Directions and tidal data) covering national waters, for the co-ordinators in the OTs in the region. Such a package would greatly facilitate their task of reporting changes and other urgent navigational safety information.

18. Funding. The Visit Team noted that the Cayman Islands have limited funding for travel and training. They provided assurance that wherever possible the IHO brought the trainers into region. They also undertook to ask UKHO to consider travel sponsorship for the MSI training course noted at paragraph 16.

FOLLOW UP ACTIONS

19. Encouragement of Formation of a NHC, Development of a National Hydrographic Strategy, and RHC Membership. The Visit Team will recommend the addition of the information at Appendix 1 to the UK entry in the IHO Year Book. This reflects the decision of the Cayman Islands government to form the Ad Hoc Sub Committee under the chairmanship of the Maritime Authority. The Visit Team will also recommend to UKHO that the annual review of S-55 should be used to confirm the Cayman Islands' survey and charting requirements, and the correct functioning of GMDSS arrangements. A report should also be rendered for each meeting of the MACHC. ACTION: **Visit Team; Maritime Authority of the Cayman Islands; UKHO.**

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

a. The Visit Team will monitor the delivery by the Cayman Island authorities of the urgent information required by UKHO to update the official charts. ACTION: **Visit Team; Cayman Islands.**

b. The Visit Team should investigate with UKHO the provision to the Cayman Islands national co-ordinator of the package outlined at paragraph 17. ACTION: **Visit Team; UKHO.**

c. The Cayman Islands should identify the national co-ordinator and promulgate their role as quickly as possible, urging all authorities to pass information related to safety of navigation and chart update. ACTION: **Governor's Office and Maritime Authority.**

d. Once the action at sub-paragraph 20.c. is complete, the Visit Team will make contact with the NAVAREA IV Co-ordinator and facilitate the access of the Cayman Islands to regional GMDSS arrangements through the declaration of a new SafetyNET Coastal Warning Area. ACTION: **Visit Team; NAVAREA IV Co-ordinator.**

21. Capacity Building Assistance.

a. The Cayman Islands should be included in the MACHC bid to IHOCBC for an MSI training course in 2006-07. ACTION: **MACHC Chairman; Vice Chairman IHOCBC.**

b. UKHO should provide technical advice to the Governor Cayman Islands and BDA Kingston in the preparation of any bid for RN survey assistance. ACTION: **UKHO.**

APPENDIX 1 TO
ANNEX H TO
HA317/022/001-03
DATED 9 MAY 06

PROPOSED ENTRY FOR THE CAYMAN ISLANDS IN THE UK SECTION OF THE IHO YEAR-BOOK

THE CAYMAN ISLANDS
GOVERNOR'S OFFICE
4TH Floor AALL Building
North Church Street
George Town
Grand Cayman, Cayman Islands

Head of Governor's Office: Mr Simon Tonge.

Telephone: (345) 244 2425

E-mail: Simon.Tonge@fco.gov.uk

MARITIME AUTHORITY OF THE CAYMAN ISLANDS

**3RD Floor Kirk House
22 Albert Panton Street
P.O. Box 2256
George Town
Grand Cayman, Cayman Islands**

Department to which the Authority is responsible: Ministry of Finance and Economic Development.

Adviser on Policy and Legal Development: Captain W. Barrie Rial

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LANDS AND SURVEYS DEPARTMENT

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Department to which the Department is responsible: Leader of Government Business and Minister for District Administration, Planning, Environment and Agriculture

Chief Surveyor: Mr Grant Vincent

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COUNTRY REPORT: JAMAICA

INTRODUCTION

1. RHC Involvement. Jamaica is an IHO member, and a member of the Meso-American and Caribbean Hydrographic Commission (MACHC). Jamaica was included in the CGMHC visits in December 1998. It was represented at the MACHC Technical Workshop and Special Meeting in May 2005, and a National Report was available to the Visit Team.

2. Preliminary Liaison. Rear Admiral P. Brady, Director General of the Maritime Authority, and Mr C. Thompson of the National Land Agency assisted with co-ordination of the visit.

3. Points of Contact. Since the 1998 visit the Maritime Authority of Jamaica (MAJ) was formed in January 1999 to give effect to the Jamaica Shipping Act, 1998 including a requirement to regulate the safety of shipping and of navigation. The Port Authority retains its responsibility for promulgating MSI, and is assisted by the Jamaica Defence Force Coast Guard (CG). The line accountability of the Hydrographic Unit within the National Land Agency has changed. All these arrangements require amendment to the details in the IHO Year Book, as shown in Appendix 1.

DESCRIPTION OF MARITIME ACTIVITIES

4. National Maritime Affairs. Jamaica has a national objective of promoting the island as a centre for regional marine services. Full advantage has been taken of the strategic location noted in the 1998 report, and there have been significant increases in tonnage in most sectors, but especially cruise liners and container vessels.

5. Trade and Maritime Traffic. The broad picture painted in the 1998 report is confirmed. Significant updates are as follows:

a. Trans-shipment. Volumes of trade have doubled since 1998, and the total of TEUs handled is expected to reach just over 2M by the end of this year. Kingston is now second only to Panama as a regional trans-shipment port.

b. Bulk Trades. There has also been great expansion in export cargoes of bauxite and alumina. Port Rhoades requires development to handle bigger vessels. Fuel bunkering at Kingston has quadrupled, including an offshore dimension, and with subsequent distribution to depots at Montego Bay, Discovery Bay/Port Rhoades, and Port Esquivel. Bunker ships will also be servicing cruise ships in Ocho Rios very shortly. Further development will be needed in Port Esquivel within the next 2 years to handle an expected development of LNG cargo facilities.

c. Feeder, Coasting and Local Trade. Efforts are in hand to promote short-sea shipping to take pressure off Jamaica's roads.

d. Offshore Supply and Support. Exploration is underway between the SW coast and Pedro Bank. The Visit Team stressed the importance of issuing warnings related to ongoing seismic surveys, and noted the hydrographic implications of any future production activity.

e. Tourism - Cruise Liners. There are development plans for both Montego Bay, where the aim is to accommodate the largest size of cruise liner, and Ocho Rios. Smaller liners are now calling at Port Antonio.

f. Tourism - Small Craft. This sector has expanded, with marina proposals right around the coast. Port Antonio is attracting mega-yachts with a newly constructed marina and dry dock facilities.

g. Fisheries. There are now some larger fishing vessels based at Black River which operate on the Rosalind and Seranilla Banks. Two Fish Aggregation Devices have been established off White Horses on the S coast, and the Visit Team noted the urgent requirement to reflect these on the official charts.

6. Responsibility for Safety of Navigation. The overall statutory responsibility for the safety of navigation in Jamaica's maritime space lies with the Maritime Authority of Jamaica. The Port Authority retains responsibility for the maintenance of channels into the ports, provision and maintenance of aids to navigation throughout national waters, and the promulgation of local Notices to Mariners and navigational warnings by way of the print media and to local agencies by written correspondence. The CG transmits local and coastal warnings via scheduled VHF and HF voice broadcasts from an operations centre that is manned 24/7.

7. Defence Force Responsibilities. The CG retains its patrol and constabulary roles of SAR, fishery protection, marine environmental protection and operations to counter traffic in drugs and illegal immigrants. It needs improved hydrographic information for operations in inshore waters and around the offshore cays.

8. Coastal Zone Management and Environmental Protection. The Visit Team again noted the urgent need to show Marine National Parks and other management zones on the official navigational charts.

OUTLINE S-55 ANALYSIS

9. Status of surveys within the National Maritime Zone. Jamaica's entry in S-55 was reviewed, and a number of priorities for survey were discussed with the aid of the source data diagrams on the BA charts. The Visit Team noted the importance of developing a prioritised national survey plan, and suggested that Jamaica might develop a bid through MACHC to the IHOCBC for the funding of a short loan to the National Land Agency of a hydrographic surveyor with experience of this work in another MACHC MS. It was recognised that Jamaica does not have substantial areas of unstable seabed requiring a re-survey programme, but that special attention would be needed to identify urgent work arising from impact of severe weather systems, which have increased in frequency and intensity.

10. Collection and Circulation of Nautical Information. Whilst the links with UKHO for chart update, and the arrangements for local and coastal warnings, are clearly working well, the discussion of maritime activities indicated the need for improved liaison with other national agencies, particularly those operating outside the main ports. The Visit Team suggested that there might be benefit in more formal designation and wider promulgation of information on the co-ordinators' responsibilities.

11. Survey Capability. A strong team has been built up in the National Land Agency. There are now 4 Category B hydrographic surveyors and a technician. One of the surveyors is attending a Category A level course in Mexico. The team has a basic equipment outfit of dGPS, SBES and TG. Its field activity, and consequently its experience, is severely constrained by the lack of a dedicated survey craft. The survey team provides advice to the Port Authority on the conduct of check surveys.

12. Chart Production. Jamaica is content with the arrangements with UKHO for chart production, and is able to adjust the scheme of coverage to reflect changing patterns of activity.

PROPOSALS FOR CO-ORDINATION AND CAPABILITY BUILDING

13. National Hydrographic Committee. The Visit Team met with an excellent cross-section of maritime stakeholders under the chairmanship of DG MAJ, and suggested that this gathering might be expanded into a National Hydrographic Committee (NHC) reporting back to the National Council on Ocean and Coastal Zone Management (NCOCZM). This proposal was made to the NCOCZM, which met in special session under the chairmanship of the Honourable Delano Franklyn, Minister of State, Foreign Affairs and Foreign Trade. While the Chairman/ Minister of State agreed in principle to its institutionalisation as a sub-committee of the Council, it was to be considered further at a meeting on 19 April 2006. 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 Visit Team noted that amongst the gaps in SOLAS V provision, especially in the Caribbean region, the absence of arrangements for collation

and dissemination of Maritime Safety Information (MSI) through the Global Maritime Distress and Safety System (GMDSS) was undoubtedly of greatest concern to the IMO.

a. MSI (Navigational Warnings). As noted at paragraph 10, Jamaica's arrangements for local transmission of navigational warnings are sound. Some minor improvement in internal arrangements to pass all appropriate information to the co-ordinators in Port Authority and CG are required, and arrangements to expand transmission to include standard WWNWS methods need to be implemented.

b. Information on Ports and Harbours. The same comment applies to this activity, and examples of current gaps are noted in earlier paragraphs. The need for action to provide co-ordinates for the charting of national protected areas, outstanding since 1998, is particularly prominent.

c. GMDSS Status. The Master Plan which was outlined to the earlier IHO Visit Team in 1998 has not been realised. The major obstacle has been the lack of resources to implement proposed NAVTEX arrangements. Whilst NAVTEX coverage based in Jamaica 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 would facilitate this link, which could be made, without cost, direct to the NAVAREA IV co-ordinator in the USA, but Jamaica must first identify and formally designate an organisation to undertake the role of national co-ordinator. The CG is the obvious provider for this function, utilising their current operations team which already provides round-the-clock cover.

15. Phase 2 Hydrographic Capability: Survey. As noted at paragraph 11, the main obstacle to national hydrographic survey effort is the lack of a dedicated survey craft. Discussions with Mr Calvin Thompson and representatives of Maritime and Port Authorities indicated that it was a seaworthy inshore survey launch which was required. The Port Authority buoy tender could be a platform for survey work in more exposed areas, although it does not have a great deal of spare programme capacity. Funding of the inshore craft should be the highest priority of the government of Jamaica in order to deliver its obligations under SOLAS V. The next priority would be purchase of a sidescan sonar outfit, and then the acquisition of a data processing system. For larger area survey requirements in the Jamaican EEZ, the government may have to consider out-sourcing in the commercial sector. However, exposure of requirements in MACHC may open the door to co-operative arrangements with other member states. Such joint surveys would offer considerable capacity building benefit to Jamaica. In the immediate term the Visit Team noted that their visits to the UK Overseas Territories had revealed substantial requirements, and that, should a deployment of an RN survey ship arise from this, there would be merit in Jamaica broaching the option of a joint survey of the Morant Cays and adjacent offshore banks near the international shipping route to and from the Windward Passage.

PROPOSALS FOR ASSISTANCE

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

a. It is strongly recommended that the chairman of the Jamaican 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 DG MAJ.

b. IHOCBC funding will be sought for an MSI training course in the region during 2006-07, and at least one person from the Jamaican national co-ordinator's team should attend this course. Full details of this opportunity will be provided to the chairman NHC and the CG as soon as possible after the June meeting of the IHO Capacity Building Committee (IHOCBC). The Caribbean Maritime Institute (CMI) (formerly the Jamaica Maritime Institute) intimated that it had ideal facilities for such a course which it would be willing to make available free of charge. The Visit Team undertook to communicate this most generous offer to the IHOCBC.

c. The National Land Agency has a well-trained team of hydrographic practitioners. However, the CMI indicated that there were customers in Jamaica for a tailor-made, uncertificated, course, delivered in region, with a focus on operation of equipment for inshore check surveys. Again the CMI would be willing to host such a course. The Visit Team noted that there had been interest in such a course in other islands, and that it could be an attractive candidate for IHOCBC funding.

17. Equipment. The MACHC provides an ideal forum in which to seek advice on the identification and purchase of the items of equipment discussed above in paragraph 15.

18. 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

19. Encouragement of Formation of a NHC, Development of a National Hydrographic Strategy, and IHO and RHC Membership. Jamaica should convene the NHC to review this report, and thereafter to conduct a regular review of the status of SOLAS V arrangements. The MACHC Chairman should establish routine liaison with the NHC in advance of annual meetings of the commission. ACTION: **DG MAJ; Visit Team; MACHC Chairman**.

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

a. The (interim) NHC should identify the national co-ordinator for liaison with UKHO, 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: **NHC**.

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

c. Once the action at sub-paragraph 20.b. is complete, the Visit Team will make contact with the NAVAREA IV Co-ordinator and facilitate the access of Jamaica to regional SafetyNET arrangements. ACTION: **Visit Team; NAVAREA IV Co-ordinator**.

21. Encouragement of Development of Hydrographic Capability.

a. Jamaica should take up the option of the NHC Chairman attending the symposium planned by the IHO on 2-3 October in Vera Cruz, 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: **DJ MAJ; Visit Team; IHB**.

b. Jamaica should be included in the MACHC bid to IHOCBC for an MSI training course in 2006-07. ACTION: **MACHC Chairman; Vice Chairman IHOCBC**.

c. MACHC and IHOCBC should communicate with CMI on hosting arrangements for the MSI course, and on the concept of a short hydrographic survey familiarisation course. ACTION: **MACHC Chairman; Chairman IHOCBC**.

d. MACHC MS should assess capacity building opportunities for joint surveys with Jamaica when deploying survey ships in the region. ACTION: **All MACHC MS**.

APPENDIX 1 TO
ANNEX I TO
HA/317/022/001-03
DATED 9 MAY 06

PROPOSED AMENDMENTS TO THE ENTRY FOR JAMAICA IN THE IHO YEAR-BOOK

JAMAICA

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Chair of National Hydrographic Committee reporting to the National Council on Ocean and Coastal Zone Management on compliance with regulations in SOLAS V.

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**Vice President and Harbourmaster: Captain Hopeton Delisser
Assistant Vice President and Port Captain: Captain G. D. Mendes**

The Port Authority is responsible for maintenance of channels into ports, for aids to navigation throughout national waters, for local notices to mariners and navigational warnings, and for communication of chart updates to UKHO.

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JAMAICA DEFENCE FORCE COAST GUARD

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Department to which the Coast Guard is responsible: Ministry of National Security

Commanding Officer: Commander Sydney Innis

The Coast Guard broadcasts Local and Coastal Warnings and co-ordinates input to the WWNWS.

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The Agency has trained hydrographic personnel who are tasked to collect data for navigational safety, port maintenance and development, and chart update.

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