HCA Survey Prioritisation Working Group Letter No. 1/2009

To: Members of the Hydrographic Commission on Antarctica

Subject: IHO Hydrographic Commission on Antarctica. HCA8.

Action Item No 8/16.

Dear Members,

- 1. This circular letter refers to the Decisions and Actions resulting from the HCA8 meeting in Rio de Janeiro, Brazil.
- 2. Action item 8/16 has now been completed. The HCA Survey Short List (Annex A) and the HCA Long Term Survey Plan (Annex B) accompany this letter. The two lists have been updated from the National Reports submitted to HCA8 last year. I would be grateful for your comments and observations on the documents and feedback on any information and data that has been omitted or should be included.
- 3. I have extensively researched the survey data in and around Deception Island and would like to propose, with the member's agreement, to promote MSR Ac (Deception Island and Port Foster) to the **Survey Short List**. Having this in the prioritised list will highlight the need for a full Multibeam survey to find an accurate position and depth for Ravn Rock. This is the controlling danger in Neptunes Bellows, a narrow and navigationally difficult transit into Port Foster and Whalers Bay (3rd most visited site). With increased tourist traffic and ever larger vessels visiting each year it is imperative that we have this stretch of water surveyed as accurately as possible to negate any potential disaster. I welcome your comments on this **draft** proposal.
- 4. To maintain momentum, responses, by email, are requested by 30th July 2009. Thank you for your support.

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Andy Willett Chairman IHO HCA Survey Prioritisation Working Group

Annexes:

- A. HCA Survey Short List
- B. HCA Long Term Survey Plan

HCA SURVEY SHORT LIST

(Updated to June 2009)

Categories

Category	Usage
Α	Frequent
В	Regular
С	Infrequent

Category	Current survey status
Α	Adequately surveyed
В	Requires re-survey at larger scale or to S-44 standard
С	Has not been systematically surveyed/Unsurveyed

Main Corridors

MSR*	Name	Usage category	Survey category	Notes and INT chart coverage. Published and proposed.
4	Gerlache strait	Α	A + C	95% surveyed. INT 9156 & 9157 Blocks surveyed by UK in 2005-07(Flandres Bay also 35% surveyed)
17	South Shetlands MSR	А	A+C	INT 9151. SW corridor surveyed by UK, Livingstone Island to Penguin Island complete. Circular route around Deception Island 100% complete. Blocks surveyed by UK in 2005-08 and Brazil 2007-08
18	Elephant Island MSR	A+C	A+C	INT 9150 Block surveyed by Brazil in 2006
19	Elephant Island to KGI	А	С	INT 9150, INT 9151Block surveyed by Brazil in 2005
20	Deception Is to Brabant Island	Α	С	INT 9120, INT 9155, 9156, 9157 Block surveyed by UK in 2005-06

Branch Corridors and Approaches

MSR	Name	Usage	Survey	Notes and INT chart coverage. Published and
		category	category	proposed.
С	Paulet Island	Α	A + C	50% surveyed, remaining area top of UKHO priority.
				INT 9112 Block surveyed by UK in 2005-06
D	Brown Bluff and	Α	A+C	INT 9154 Approaches to Brown Bluff complete up to
	Fridtjof Sound			50m contour. Block surveyed by UK in 2006-07
M	Melchior Islands and	A+C	A+C	INT 9157Block surveyed by UK in 2005-06
	approaches			
N	Errera Channel	Α	С	Includes Cuverville Is, Danco Is and Ronge Is. INT
				9103. 70% complete. Block surveyed by UK in 2005-06
0	Andvord Bay	Α	С	Includes Neko Harbour. INT 9103. 70% complete.
				Block surveyed by UK in 2005-06
Р	Paradise Harbour	Α	С	Almirante Station and Waterboat Point. INT 9104
				Paradise Harbour 90%, Bryde Channel 90%, Furguson
				Channel 80%. Block surveyed by UK in 2007-08
Q	Neumayer Channel	Α	A + C	100% complete. INT 9158 & 9104. Block surveyed by
	and Port Lockroy			UK in 2005-06
Ae	McFarlane Strait	Α	A + C	Half Moon Is cat A, Yankee Harbour 100%, McFarlane

 $^{^*}$ MSR = Maritime Shipping Route. The figures / letters in this column are shown on the MSR diagram which is on the following page.

				Strait 100% up to NW point of Greenwich Island. INT 9121 & 9112. Block surveyed by UK in 2005-07
Am	Point Wild	Α	С	INT 9150
	Mawson	С	С	AUS600
	Commonwealth Bay	С	С	AUS603
	Davis to Larsemann	С	С	No chart coverage except at small scale.
	Hills			Sandjeford Bay to Cape Rundingen – AUS452 scale
				1:500,000

HCA LONG TERM SURVEY PLAN

Updated to June 2009

Table of MSRs, base/site calls, usage category, and current survey category

Note: In the tables below, high priority surveys have been emphasized in yellow. Indications of planned surveys appear in red. Indications of surveys completed appear in blue.

I. ANTARCTIC PENINSULA

Categories

Category	Usage
Α	Frequent
В	Regular
С	Infrequent

Category	Current survey status
Α	Adequately surveyed
В	Requires re-survey at larger scale or to S-44 standard
С	Has not been systematically surveyed/Unsurveyed

Main corridors (see diagram on last page for MSR references)

MSR	Name	Usage category	Survey category	Notes and INT chart coverage. Published and proposed.
1	James Ross Island cicular route	B+C	A + C	Prince Gustav Channel & Eastern corridor 55% surveyed. 45% unsurveyed. <i>Blocks surveyed by UK</i> 2005-07. <i>Blocks planned by UK for future seasons</i> . INT 9153
2	Joinville Island circular route	A+B	A + C	45% surveyed (Antarctic Sound), 55% unsurveyed. Blocks surveyed by UK 2005-07 and Uruguay 2008. Blocks planned by UK for future seasons INT 9154
3	Orleans Strait to Antarctic Sound	В	B + C	INT 9155
4	Gerlache strait	A	A + C	95% surveyed. INT 9156 & 9157 Blocks surveyed by UK 2005-07 also Flandres Bay 35% surveyed
5	Bismarck Strait	A+B	A + B	Approaches to Palmer Station and Port Lockroy. INT 9158. <i>Block surveyed by UK 2005-06</i>
6	Lemaire Channel	А	A+B	Petermann Is, Pleneau Is, Argentine Is, Yalour Is. 65% surveyed.INT 9106. <i>Block surveyed by UK 2005-06</i>
7	Grandidier Channel	A+B	В	INT 9158 & <i>9159</i>
8	Cape Garcia to Jagged Island	В	С	INT 9159
9	Crystal Sound	В	В	Numerous reports of uncharted rocks. INT 9160
10	Liard Island to Rothera	В	С	INT 9161, 9108 AND 9163
11	Marguerite Bay	C	B+C	INT 9163 & 9164
12	Woodfield Channel	С	В	INT 9163
13	Woodfield Channel to Matha Strait	В	С	INT 9162 & 9160
14	Matha Strait to Hugo Island	В	С	INT 9160, 9159 & 9158
15	Hugo Island to Low Island	В	B + C	INT 9156, 9157 & 9158
16	Low Island to Antarctic Sound	С	B + C	INT 9154, 9155 & 9156. Blocks planned by UK for future seasons

<mark>17</mark>	South Shetlands	A	A+C	INT 9151. SW corridor surveyed by UK, Livingstone
	MSR			Island to Penguin Island complete. Circular route around
				Deception Island 100% complete. Blocks surveyed by
				UK 2005-08 and Brazil 2007-08
<mark>18</mark>	Elephant Island MSR	A+C	A+C	INT 9150 Blocks surveyed by Brazil 2006
<mark>19</mark>	Elephant Island to KGI	A	C	INT 9150, INT 9151 Blocks surveyed by Brazil 2005
00		Δ.		INIT 0400 INIT 0455 0450 0457 Planta comment to IIII
<mark>20</mark>	Deception Is to	A	C	INT 9120, INT 9155, 9156, 9157 Blocks surveyed by UK
	Brabant Island			2005-06

Branch corridors and approaches

MSR	Name	Usage category	Survey category	Notes and INT chart coverage. Published and proposed
Α	Marambio	В	С	INT 9100
В	Duse Bay and Eagle Island	В	С	Includes Crystal Hill. INT 9154
C	Paulet Island	A	A + C	50% surveyed, remaining area top of UKHO priority. INT 9112 Blocks surveyed by UK 2005-06
D	Brown Bluff and Fridtjof Sound	A	A+C	INT 9154 Blocks surveyed by UK 2006-07 Approaches to Brown Bluff complete up to 50m contour
E	Hope Bay	А	А	INT 9101. 95% complete. Blocks surveyed by UK 2006-07 and Uruguay 2008
F	Gourdin Island and Siffrey Point	В	С	INT 9154
G	Bernado O' Higgins and approaches	С	С	INT 9102
Н	Curtiss Bay	С	С	INT 9155 & 9156
I	Hydrurga Rocks	В	С	INT 9156 & 9157
J	Alcock Island	С	С	INT 9156 & 9157
K	Portal Point	С	A+C	INT 9112 Charlotte Bay surveyed by UK 85% complete.
L	Enterprise Island	В	С	INT 9157
M	Melchior Islands and approaches	A+C	A+C	INT 9157 Blocks surveyed by UK 2005-06
N	Errera Channel	A	A+C	Includes Cuverville Is, Danco Is and Ronge Is. <i>INT 9103</i> 70% complete. <i>Blocks surveyed by UK 2005-06</i>
O	Andvord Bay	A	A+C	Includes Neko Harbour. <i>INT 9103.</i> 70% complete. <i>Block surveyed by UK 2005-06</i>
P	Paradise Harbour	A	A+B	Almirante Station and Waterboat Point. <i>INT 9104</i> . Paradise Harbour 90%, Bryde Channel 90%, Furguson Channel 80%. <i>Blocks surveyed by UK 2007-08</i> .
Q	Neumayer Channel and Port Lockroy	A	A	100% complete. INT 9158 & 9104 Blocks surveyed by UK 2005-06
R	Arthur harbour	В	С	INT 9105
S	French Passage	В	В	INT 9106
Т	Prospect Point	В	С	INT 9107
U	Pendleton Strait	В	В	INT 9159
V	Matha Strait	В	С	INT 9160
W	Detaille Island and approaches	С	С	INT 9161
Χ	Lallemand Fjord	С	С	INT 9161
Υ	Shumskiy Cove	С	С	INT 9108
Z	Rothera	В	Α	BAS and RN vessels. INT 9109. 100% complete. <i>Blocks surveyed by UK 2007-08</i>
Aa	Avian Island	С	В	INT 9110
Ab	Approaches to Millerand Island	С	В	INT 9111

Ac	Deception Island and Port Foster	A	A+B	Whalers Bay and Port Foster 95% complete. Ravn Rock needs full multibeam insonification. INT 9120. <i>Blocks surveyed by UK 2005-07</i>
Ad	South bay and Hannah Point	А	А	INT 9121. Block surveyed by UK in 2006-07
Ae	McFarlane Strait	A	A + C	Half Moon Is cat A, Yankee Harbour 100%, McFarlane Strait 100% up to NW point of Greenwich Island. INT 9121 & 9112. Blocks surveyed by UK in 2005-07
Af	English Strait	Α	A+B	Aitcho Islands and Discovery Bay. INT 9122 & 9152. 75% complete.NE section still unsurveyed. Blocks surveyed by UK in 2005-07, Ecuador in 2004 and Chile.
Ag	Robert Point	С	С	INT 9151
Ah	Nelson Strait	С	A+C	INT 9151. 80% complete. Block surveyed by UK in 2005-07, Blocks surveyed by Chile in 2005-08
Ai	Maxwell Bay and approaches	A	A+C	Ardley Cove, Marian Cove and Potter Cove. <i>INT 9123</i> . 80% complete. <i>Blocks surveyed by UK in 2005-07</i> , <i>Potter Cove surveyed by Argentina 2005-06</i> , <i>Uruguay 2008</i>
Aj	Admiralty Bay	A	A	Artowski Station, Ferraz Station and Martel Inlet. <i>INT</i> 9125. 70% complete. <i>Block surveyed by UK in</i> 2006-07, <i>Blocks surveyed by Peru</i> 2002-06, <i>Block surveyed by Brazil</i> 2007-08. <i>Block planned by Peru</i> 2009
Ak	Penguin Island and approaches	Α	A+C	Endurance 2005 survey. INT 9151 Approach channel surveyed by UK 2006, 50% complete.
Al	Cape Lookout	В	С	INT 9112
Am	Point Wild	A	C	INT 9150
An	Cape Valentine	В	С	INT 9150
Ao	Danger Islands	С	С	INT 9154
Ар	Dundee Island	В	A+C	INT 9154 60% Blocks surveyed by UK in 2005-07, Block surveyed by Argentina in 2005-07
Aq	Herbert Sound	В	A+C	INT 9153. 90% complete. Blocks surveyed by UK in 2005-07
Ar	Historic Monument	В	С	INT 9153
As	Freud Passage	В	С	INT 9156 & 9157
At	Booth Is, Port Charcot	В	С	INT 9158
Au	Gunnel Channel	В	С	INT 9108 & 9161
Αv	Pourqoi Pas Island	С	С	INT 9163 & 9161

II. MAINLAND ANTARCTICA**

Main corridors

MSR	Name	Usage	Survey	Notes and INT chart coverage. Published and
		category	category	proposed.
	Hobart to	С	A + B	Annual re-supply station by Aurora Australis.
	Macquarie Island			Tourist vessels and fishing boats
				Charts - Hobart AUS173 and 174
				Macquarie Island – AUS604
				Cape Darnley to Tasmania - INT 74 (AUS 4074)
	Hobart to Casey	С	A + B	Annual re-supply of station by Aurora Australis
	station			and other vessel plus occasional tourist vessels.
				Charts.
				Hobart AUS173 and 174
				Casey - INT9021 (AUS601)
				Cape Darnley to Tasmania - INT 74 (AUS 4074)

^{**} Australian Antarctic Division Submission

MSR	Name	Usage	Survey	Notes and INT chart coverage. Published and
		category	category	proposed.
	Hobart to Davis	С	A + B	Annual re-supply of station by Aurora Australis and other vessel plus occasional tourist vessels Charts - Hobart AUS173 and 174 Davis – INT9032(AUS602) Cape Darnley to Tasmania - INT 74 (AUS 4074)
	Hobart to Mawson	С	A+B	Annual re-supply of station by Aurora Australis and other vessel plus occasional tourist vessels Charts Hobart AUS173 and 174 Mawson – AUS600 Cape Darnley to Tasmania - INT 74 (AUS 4074) Magnet bay to Cape Rouse – AUS449
	Hobart to Heard Island	С	A+C	Marine science voyage by Aurora Australis, customs patrol vessels plus occasional tourist and fishing vessels. Charts Hobart AUS173 and 174 Heard Island – AUS605 Cape Darnley to Tasmania - INT 74 (AUS 4074) Magnet bay to Cape Rouse – AUS449
	Fremantle to Heard Island	С	A+C	Marine science voyage by Aurora Australis, customs patrol vessels plus occasional tourist and fishing vessels.
	Hobart to Commonwealth Bay	С	A+C	Occasional visits by Aurora Australis, Astrolabe and occasional tourist vessels Charts - Hobart AUS173 and 174 Commonwealth Bay – AUS603
	Davis to Larsemann Hills	С	A+C	Occasional visits by Aurora Australis, Chinese resupply vessel Xue Long and Russian re-supply vessels. No charts exist of the approaches to the Larsemann Hills
	Davis to Sansom Island	С	B+C	
	Hobart and Fremantle to Southern Ocean	С	A+C	Marine science voyages

Branch corridors and approaches

MSR	Name	Usage category	Survey category	Notes and INT chart coverage. Published and proposed
	Macquarie Island	С		AUS604
	Casey	С		INT9021 (AUS601)
	Davis	С		INT9032(AUS602)
	Mawson	С		AUS600
	Commonwealth Bay	С		AUS603
	Davis to Larsemann Hills	С		No chart coverage except at small scale. Sandjeford Bay to Cape Rundingen – AUS452 scale 1:500,000
	Davis to Sansom Island	С		No chart coverage except at small scale Sandjeford Bay to Cape Rundingen – AUS452 scale 1:500,000