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REPORT OF THE INTERNATIONAL ASSOCIATION OF ANTARCTICA TOUR OPERATORS (IAATO)

Under Article III (2) of the Antarctic Treaty

(Agenda item 8)

(Submitted by IAATO)



THE INTERNATIONAL ASSOCIATION OF ANTARCTICA TOUR OPERATORS

(IAATO) is pleased to present a report of its activities to the S-ATCM, The Haag, Netherlands, 11-15 September 2000 in relation to Article III (2) of the Antarctic Treaty.

IAATO is dedicated to appropriate, safe and environmentally sound private-sector travel to the Antarctic. Over the last year IAATO has focused its activities in several key areas:

- improved exchange of information among its members
- improved vessel communication methods via the GMDSS system
- emergency response and contingency planning
- cumulative impact of tourist activities
- improved reporting
- Antarctic shipping guidelines
- potential spreading of Antarctic diseases and prevention methods
- the role of IAATO relative to larger cruise vessels in the Antarctic and the possible expansion of IAATO to accommodate the diversification of adventure type tourism,
- the creation of additional committees within IAATO (Executive, Financial, Membership and Marine)
- the creation of the IAATO Observers Reporting Form (Appendix F).
- Proposed development of the whale watching guidelines, boot washing stations, guidelines for the transport of scientists on tour vessels. (All documents are in progress/draft form)

Liaison with national Antarctic programs and government agencies of the Sub Antarctic Island groups, scientific and environmental organizations, is an important objective of IAATO and its members.

1 Introduction

- 1.1 Founded by seven private tour operators in 1991, the International Association of Antarctica Tour Operators has 31 members and associate member companies in Argentina, Australia, Belgium, Canada, Chile, Falkland Islands, Germany, Netherlands, New Zealand, United Kingdom, and the United States. A current Membership Directory is included with this report (Appendix A).
- 1.2 Antarctic tourism has continued to grow. From November 1999 to March 2000, a total of 14, 812 persons traveled to the Antarctic on privately organized expeditions, including 14,673 passengers aboard commercially organized ships, 221 persons on chartered yachts and 139 land-based visitors. This continues an upward trend, representing an increase over the total of 10,026 visitors and 9,857 ship-borne visitors in the 1998-1999 season. A significant increase in tourism was predicted by IAATO for the 2000-01 season during the last several years. An overview of Antarctic

tourism activity is presented as a separate information paper to the S-ATCM-CEP, under agenda item 4.

1.3 IAATO held its 10th general meeting in Hamburg Germany June-July 1, 1999. The meeting was attended by a total of 49 people from 16 member companies of IAATO, non member tour operators (Orient Lines, and Holland America Westours. Representatives from the Alfred Wegener Institute, Umwelt Bundesamt, United States Antarctic Program/National Science Foundation (USA), British Antarctic Survey, Government of South Georgia, Australian Antarctic Division, SCAR, ASOC, U.S. National Ice Center, Federal Maritime and Hydrographic Agency, Jena University, Hong Kong Polytechnic University, Sheffield Hallam University, World Wildlife Fund/Arctic Program. Several IAATO member expedition team staff members also participated.

Denise Landau took over the position of Executive Secretary from Darrel Schoeling in 1999. Darrel resigned in order to be able to dedicate more time to his own business. He had been active in IAATO since the organization was formed in 1991 and IAATO is indebted to him for all his hard work, including his attendance at many Antarctic Treaty Meetings.

1.4 IAATO held its 11th General Meeting in Hobart, Tasmania, Australia June 25-29, 2000. The meeting was attended by over 75 people including 15 IAATO Member companies/Tour Operators. Potential IAATO members and tour operators attending were: Croydon Travel, Arete Polar, Ocean Frontiers, Orient Lines, Holland America Line Westours, and Southeastern Equities.

Other participants included expedition staff from several IAATO member companies, representatives from the Australian Antarctic Division, Tasmania Parks and Wildlife, Tourism Tasmania, Tasmanian Government of Antarctic Affairs, City of Hobart/government office, Hobart Ports Tasmanian Parks and Wildlife, New Zealand Antarctic Heritage Trust, Antarctica New Zealand, Antarctic Policy Unit, New Zealand Ministry of Foreign Affairs and Trade, Department of Conservation-New Zealand, COMNAP, CCAMLLR, Government of South Georgia, South Georgia Museum-field staff University of Tasmania (Institute of Antarctic and Southern Ocean Studies, IASOS), ISO/Illegal Toothfishing-ASOC, University of Queensland, Gateway Antarctica-University of Canterbury, Australian Geographic magazine, The Australian newspaper, the Mercury newspaper, ABC radio, ABC TV

- 1.5 IAATO will hold its 12th General Meeting in Washington D.C from July 9-12, 2001. Interested parties should contact the IAATO Secretariat.
- 1.6 IAATO representatives and members attended the following meetings:
 - Antarctic Treaty Meeting of Experts, London, April 2000
 - Cumulative Environmental Impacts Workshop San Diego June 2000
 - Tourism in the Ross Sea, Christchurch, New Zealand, June 2000,
 - Yearly meetings with the German Department of the Environment Umwelt

Bundesamt

• World Wildlife Fund conference on Arctic tourism, Germany, 2000

2 Membership

IAATO currently has 14 Full Members, 5 Provisional Members, 1 Probational Member and 11 Associate Members. (Appendix A)

2.1 At its Hobart 2000 meeting, IAATO reviewed the membership status of Peregrine Adventures and consequently were elected as full members after one year as provisional member of IAATO. Elected Provisional Members are: Cheeseman Ecology Safaris, Victor Emanuel Nature Tours, Oceanwide Expeditions, Golden Fleece Expeditions (yacht operator). Marine Expeditions were changed from Full Member to Probational Member.

No new tour operators applied for membership at the June 2000 annual meeting although Ocean Frontiers a new Australian operator provided an overview of their proposed operations for 2000/01. To date they have not applied for membership. The South Australian Shipping Company was also invited to attend but no response was received. Southeastern Antiquities (Australian Company) advised that they were planning on starting up operations for the 2000-01 season but no further information has been received.

The issue of companies operating ships carrying more than 400 passengers was again discussed in Hobart. According to the 1991 IAATO Bylaws, IAATO member companies agree to carry no more than 400 passengers per voyage.

It was decided by the membership that a research study would be conducted to look at the potential number and size of larger ships that may include Antarctica in future cruises, and also to look at the possible changes in the industry with a view to IAATO considering whether to open IAATO up to all ships of any size. Discussions took place while in Hobart with both Orient Lines and Holland America West. Discussion also took place to consider looking at changing categories of membership to include Adventure Based (land) tourism. There will be a paper produced in the next few months that will introduce the proposed new structure to the membership.

2.2 As a matter of principle and in practice, all tour operators – whether or not associated with IAATO – are included in emergency contact information, exchange of information and other activities of the IAATO Secretariat.(Appendix B)

3 Field Coordination

3.1 As part of its annual exchange of operational information, IAATO compiles and distributes Vessel Call Data (Appendix B). In addition, contact information for private camps (ANI), tour vessels and yachts is included in the Antarctic Communications Directory (MINIATOM) compiled and distributed by the COMNAP Secretariat.

- 3.2 In addition, preliminary cruise itineraries are compiled by the IAATO Secretariat and distributed to Antarctic tour operators and national Antarctic programs and CONMAP.
- 3.3 Expedition leaders and ship's officers circulate advance itineraries and maintain regular contact throughout the season to coordinate site visits and exchange general information, a key factor in managing Antarctic tourism and mitigating potential environmental impact. An example of the annual instructions to ships' captains, radio officers and expedition leaders is included here. (Appendix C).
- 3.4 This ongoing and routine contact between vessels and with the Adventure Network Emergency and Medical Evacuation Response office in Punta Arenas (EMER) is also a key component of effective emergency response.

4 Environmental Impact Assessment

4.1 According to information received by the IAATO Secretariat, all IAATO members (except one, see below) submitted an Environmental Impact Assessment of planned activities for the 1999-2000 season to appropriate national authorities in accordance with national procedures. Australia, New Zealand, United Kingdom, United States, Germany and Canada all received EIA's from IAATO members. However, Netherlands based IAATO member, Oceanwide Expeditions produced a draft Environmental Impact Assessment but as there is still no agreed process in The Netherlands for EIA submissions, no EIA has yet been submitted by Oceanwide as of yet.

5 Procedures to Prevent the Introduction of Alien Organisms

- 5.1 Included in the Hobart IAATO Agenda, IAATO members and visitors received three presentations on the subject of Antarctic Diseases by Dr. Chris Curry, Dr. Martin Riddle, Dr. Knowles Kerry. IAATO is continuing work to develop better practices to prevent the accidental introduction of alien organisms to Antarctica and the translocation of organisms between Antarctic sites.
- 5.2 IAATO has adopted a standard protocol to report any high mortality incidents and to avoid the introduction and translocation of alien diseases. (Appendix D) IAATO members to better understand the issues involved and operational strategies to further this work are currently being discussed and implemented.

6 Reporting of Tourism and Non-Governmental Activities

- Antarctic tour operators made use of a standard reporting form as noted by ATCM XXII (Final Report, Annex J).
- 6.2 IAATO continues to support the continued use of this single form, which reduces the burden of paperwork and facilitates studies of the scope, frequency and intensity of tourist activities. As part of its ongoing work, IAATO is investigating the

development of a database version of the form that will facilitate compilation and analysis of tour data. It is worth noting that when visiting South Georgia IAATO members are also required by the local authorities to complete a form reporting their activities at each site, which is to be submitted to the Government of South Georgia following each visit. This form is somewhat similar to the IAATO form.

Antarctic tourism trends as compiled by the U.S. National Science Foundation since 1989 are presented to this meeting as part of the Information Paper "IAATO Overview of Tourism Activities". This information is also posted online at www.iaato.org.

7 Implementation of Recommendation XVIII-1

- 7.1 In consultation with COMNAP, individual national Antarctic programs and consultants, IAATO continues to research, develop and use industry-wide programs and standards wherever necessary to ensure self-sufficiency and proper conduct in the Antarctic. IAATO is currently working on the development of Whale Watching Guidelines and Guidelines for Scientists being transported by Tourist Vessels and will submit a draft to interested parties prior to the commencement of the 2000-01 season.
- 7.2 IAATO initiatives include a medical evacuation contingency plan, standard medical information, slide presentation on "Guidance for Visitors to the Antarctic," and a standardized table of contents for training materials and handbooks. IAATO values its growing and constructive dialogue with COMNAP on these operational issues.
- 7.3 An IAATO pre-season checklist is appended to this report, indicating the kind of educational materials prepared and distributed by IAATO each Antarctic season. (Appendix E).
- 7.4 Recommendation XVIII-1, "Guidance for Visitors to the Antarctic" has been translated and made available by IAATO to tour operators in English, Chinese (Mandarin), French, German, Italian, Japanese, Russian and Spanish.

8. Emergency Response Action and Contingency Planning

- 8.1 IAATO completed a survey of the types and quantities of fuel carried by Antarctic tour vessels (Appendix G) for assistance in determining appropriate response in the event of a catastrophic marine pollution emergency. Unlike national supply vessels, Antarctic tour vessels do not carry quantities of bulk diesel fuel for shore-based generators and no refueling is carried out in the Antarctic Treaty Area. Furthermore, most Antarctic tour vessels use light diesel fuels.
- 8.2 IAATO has compiled data of member tour vessels' specifications and other information that would contribute to risk assessment of Antarctic tourism activities. (Appendix G).

8.3 All IAATO member companies have Shipboard Oil Pollution Emergency Plans (SOPEP) in place that satisfy regulation 26 of Annex I of MARPOL. A "Special Antarctic Addendum" to the SOPEP was developed by IAATO and distributed to Antarctic tour operators for implementation and comment in 1998. While the addendum has no legal status, it includes notice to contact Antarctic stations in the vicinity of any marine pollution incident along with appropriate national authorities.

9. 1999-2000 Scientific and Environmental Research Initiatives

- 9.1 Specific consideration of the issue of cumulative impacts has been given by all IAATO members this year. During June 7,8,9, 2000 IAATO jointly hosted with the Environmental Protection Agency and the National Science Foundation a workshop entitled "Assessment of the Possible Cumulative Environmental Impacts of Commercial Ship-Based Tourism in the Antarctic Peninsula Area." (Appendix H). The proceedings from this workshop should be published sometime in December 2000. The workshop was very successful and will hopefully be a first step in the process of beginning to understand the future direction for both the tourism and scientific communities in order to better understand, minimise and mitigate cumulative impact from tourist activities in Antarctica
- 9.1 IAATO member companies continued to provide logistic and scientific support to national Antarctic programs and Antarctic organizations. Tour vessels provide a cost-effective resource for the scientific community. During the 1999-2000 season more than 100 scientists and other personnel from five Antarctic Treaty Parties along with their equipment were supported, mainly in transport to and from stations and field areas. IAATO continued its support of the Oceanites Antarctic Site Inventory Project whose personnel were again provided with accommodations, transport and access to visitor sites. At least two IAATO member vessels on three occasions were chartered by Antarctic Treaty Parties for station resupply during the 1999-2000 season.
- 9.2 Specific requests for logistic or other support should be made to individual members or the IAATO Secretariat. A current IAATO Membership directory is attached to this report. (Appendix A).
- 9.3 IAATO members also provided transport for researchers, personnel and material in the sub-Antarctic, including the Falkland Islands, South Georgia, Macquarie Island and the New Zealand Sub-Antarctic Islands.
- 9.4 Antarctic tour operators and passengers continued their tradition of direct financial contributions to many organizations active in Antarctica including the Scott Polar Research Institute, UK Antarctic Heritage Trust, Antarctic Heritage Trust and the Humpback Whale Identification Project. It is noteworthy for instance that according to the annual report of the Antarctic Heritage Trust, 38% of their annual income was provided by Antarctic tour operators whose itineraries included the historic huts.

Appendices

- A. IAATO Membership Directory September 2000
- B. IAATO Call Data 1999-2000
- C. IAATO Annual Instructions
- D. IAATO Disease Protocol
- E. IAATO Pre-Season Checklist
- F. IAATO Observers Report Form
- G. Ship Specifications Survey
- H. Assessment of the Possible Cumulative Environmental Impacts of Commercial Ship-Based Tourism in the Antarctic Peninsula Area.

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Mountain Travel-Sobek

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Clipper Cruise Line/ New World Ship Management Company LLC/

7711 Bonhomme Avenue Suite 300 St. Louis, Missouri 63105 USA Captain Neil Kelleher RES 800 325 1033 TEL 314 721 5888 FAX 314 727 5246 Email: nkelleher@nwship.com www.clippercruise.com

Pelagic Expeditions

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Victor Emanuel Nature Tours

2525 Wallingwood Drive, Suite 1003 Austin, Texas 78746 USA RES 800 328 8368 TEL 512 328 5221 FAX 512 328 2919 Shirley Anderson Email: shirley@ventbird.com http://www.ventbird.com

http://birdcruises.ventbird.com

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Galapagos Travel

783 Río Del Mar Blvd., Suite #47 Aptos, CA 95003 USA RES 800 969 9014 TEL 831 689 9192 FAX 831 689 9195 Email: galapagostravel@compuserve.com http://www.galapagostravel.com

LaTour Chile

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FAX 56 2 225 2545
E-Mail: info@mikelatour.cl

LifeLong Learning

101 Columbia, Suite 150 Aliso Viejo, CA 92656 USA Bill Diebenow RES 800 854 4080 TEL 714 362 2900 FAX 714 362 2075

For general inquiries: travel@lifelong-xpo.com

For member info: billd@lifelong-xpo.com

Natural Habitat Adventures

2945 Center Green Court Boulder, CO 80301 USA Wendy Klausner RES 800 543 8917 TEL 303 449 3711 FAX 303 449 3712 Email: wendyk@nathab.com

www.nathab.com

Radisson Seven Seas Cruise

600 Corporate Drive, No 410 Ft. Lauderdale, Florida 33334 USA Paul Goodwin RES. 800 333 3333 TEL 954 776 6123 FAX 954 776 2283 Email: pgoodwin@radisson.com www.rssc.com

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Appendix B 1999-2000 IAATO Call Data and Emergency Contact Information

Name	Operator	Call Sign	Fax	Voice	Email/MMSI	Telex	Sel- Call
EMER	Adventure Network Punta Arenas, Chile or Adventure Network in UK	24 hour Emergency Station	(56) 61 226167 44-1494-671808	(56)61247735 Emergency: (56) 61220565 44-1494-671808	Anichile@ctcinternet.cl ANI monitors HF radio frequencies (mhz): 15026, 11228, 8992 or in the UK Adventurenetwork@compuserve.om		ζ΄
Patriot Hills	Adventure Network		874-683-141498	874-683-143497	113251.2240@compuserve.		
Blue One	Adventure Network		871-683-141511	871-683-141510			
Aegean 1	Marine Expeditions	SWEO	Xxx1130627	Xxx1130627	aegeanI@goldensuncruise s.com		
Boris Petrov	Peregrine Expeditions	UVDX	xxx761319231	Xxx761319229	MMSI numbers are 427345476 or 273454710	42734547 00581/ 00584	See mmsi
Bremen	Hapag-Lloyd	C6JC3	xxx330842912 xxx1103405	Xxx330842910 Xxx1103404	captain@ms-bremen.com	430842910 1103404	61789
Caledonia n Star	Special Expeditions	C6BE4	xxx-330 818 213	\$18 210 xxx-330 818 211 xxx-330 818 212			61547
Clipper Adventure r	New World/Clipper Cruise Line	C6PG6	xxx-330 999 716	xxx-330 999 710 xxx-330 999 711 xxx-330 999 712 xxx-330 999 713 xxx-330 999 714	clipper-adventurer @super-hub.com MMSI-309997000	330999718	61975 &61977
Explorer	Abercrombie & Kent / Explorer Shipping	ELJD8	xxx-(81)124 1224	xxx-(81)124 1223	explorer@super-hub.com	1241223	6360084 95
Hanseatic	Hapag-Lloyd	C6KA9	xxx330957712 xxx1103727	Xxx330957710 Xxs 1103730	Captain@ms- hanseatic.com	430957710 1103727	61326
Ioffe	Marine Expeditions	UAUN	xxx-140 0655 (V/F)	xxx-140 0655 (V/F)			4273413 400
Kapitan Khlebniko v	Quark Expeditions	UTSU	872—140-2733 872- 327307514	872140-0676 872-327307513	Kapitankhlebnikov@compuser ve.com MMSI-273146110	327307516	54557
Lyubov Orlova	Marine Expeditions	9HDU5	8816 263-22190	881626322190	AnswerbackAVBEX inmarsat C 424971610	424971610	72114
Marco Polo	Orient Lines	С6J27	xxx-130 7232 usa	Usa#14077241349 14077240948	marcopolo@orien	1307232	27638

Appendix B 1999-2000 IAATO Call Data and Emergency Contact Information

		I					1
			#14077241349		tlines.co.uk mmsi		
					308693000		
Mikeeev	Oceanwide Expeditions	UCRE	xxx472300789			xxx472300 789	2734579 20
Molchanov	Aurora Expeditions	UAKA	xxx-427300512 xxx427300513	xxx-627315410 xxx-627 315411 xxx627315412		427300512 427300513	2734585 00
Multanovs iky	Quark Expeditions	UCLA	xxx-327 374 912	xxx-327 314 910			2734329 10
Ocean Explorer	World Cruise Co. & Marine Expeditions	3FKD8	Xxx35586412	Xxx35586410	Cabin#Berth@oceanexplor erI.com Mmsi 355864000		
Pelagic	Pelagic Expeditions	ZJL539 0	xxx4378 00434				
Rotterdam	Holland America	PDGS	xxx324616713	Xxx324616710	MMSI 246167000		36597
Shokalski Y	Heritage Expeditions	UBNF		881656312222	427320483@telstar.ves.net	427320483 incoming	
Shuleykin	Marine Expeditions	UBNZ	xxx-761321-410	xxx-761-321-399	Ubnz@globeemail.com (Via Globe Wireless) MMSI 273417610	286-06	2734176 10
Vavilov	Quark Expeditions	UAUO	xxx-140-1507	xxx-140-1507			2734144 0
World Discovere r	Society Expeditions	ELDU3	xxx-363 650 920	xxx-363 650 910	WorldDisco@aol. com MMSI 636007584	463 650 730	24680
In.Fue. Tur	Argentina/Ush uaia		54-901-30694	54-901-23340	antartida@tierradelfueg o.org.ar		

IAATO HF radio schedule (khz) (0700, 1930 Ushuaia local time) 4146 (1°), **6224 (2°)**, 8294 (3)

Ocean Codes 874,871,872, 873

Appendix C Annual Instruction

October 11, 1999

MEMORANDUM

TO All Antarctic Captains, Expedition Leaders and Radio Officers

FM IAATO

RE 1999/00 Season

We developed the following notice at the IAATO annual meeting to help guide the exchange of information among vessels, coordination of itineraries and reporting for the season.

Exchange of Itineraries

- IAATO members agree to exchange itineraries and coordinate schedules. This is a key factor in self-regulation, monitoring of activities and also in effective emergency response.
- Consult the IAATO preliminary schedule (and updates circulated by In.Fue.Tur) to determine which vessels will be in your cruising area.
- Circulate your proposed final itinerary via telex by broadcast mode or radio (preferred) or fax or e-mail. (Please note that few tour vessels have regular real-time exchange of e-mail.) Since all ships are supposed to be equipped with the new GMDSS radio station, they should be able to scan a frequency in the 6310 KZ band (24 hrs). By using broadcast mode (one way) ships can send itineraries, ice information and other information as needed. These transmissions will be picked up by all vessels and should be able to printout.
- Itineraries may also be circulated via In. Fue. Tur but this is a method of last resort. Not all ships call at Ushuaia and the responsibility to circulate information is on individual vessels.
- Be sure to also exchange environmental information and management recommendations for individual landing sites or other notices with your colleagues as the season progresses.

Itinerary Changes

- To avoid conflicts, notify vessels in the region of any changes in planned itinerary as soon as practical.
- Notification can be by fax, telex, VHF or HF (see below)

Landing Priority

- In general, priority is given to the first vessel that has made its intentions known.
- In the event of conflict, expedition leaders should coordinate between themselves to determine priority, which is best accomplished through negotiation via HF or VHF.
- Please resolve any conflicts equitably. It is assumed that vessels visiting a site with some regularity will give way to a vessel that is not but any number of factors may come into play.
- Two vessels are not to land at the same place at the same time and, to avoid any potential environmental impacts, efforts should be made to spread out visits over time.

Appendix C Annual Instruction

Station Visits

- Tour operators have agreed to provide 72 hour-notice of any planned station visit.
- Follow individual procedures determined by national programs/station leaders.
- Provide timely notice of cancellation, generally 48 hours in advance.
- Please include any additional station contact information, standard procedures or incidents involving stations in your voyage report to the home office.
- Remember no visits to Palmer Station are allowed on Sunday's and preferably not on Saturdays. All Palmer visits have been prearranged. Any changes, please advise Palmer as soon as possible.

Channel 16

- Channel 16 is used for hailing purposes only, NOT general communication.
- After making contact, immediately switch to another channel to continue conversation.
- Expedition Leaders should periodically review radio etiquette with staff. The airwaves during the height of the season in the Peninsula have been crowded, an issue with IAATO members and potentially with research stations. Take care to follow standard international procedures.

IAATO Radio Schedule

- IAATO members have agreed to implement a twice daily radio schedule.
- All ships should report in with their position/destination at 1230 and 1930 daily (Ushuaia local time). Each radio officer should record this information.
- Suggested HF hailing frequencies are: 4146 (1 \circ), 6224 (2 \circ)-SSB, 8294 (3 \circ), to be finalized by radio officers during the season based on experience. Use 6224 whenever possible.
- Expedition leaders should make use of this schedule whenever VHF communication is impossible for exchange information. This will reduce communication costs.
- Please switch to another frequency for any extended conversation.

EMER (Emergency and Medical Evacuation Response)

- Review the IAATO Emergency Contingency Plan included in your briefing package.
- The reporting scheme indicated above is an integral part of emergency response. Please insure that it is followed and report any difficulties to your home office.

Post-Visit Reporting

- Following Antarctic Treaty recommendations, complete Part 1 and Part 2 of the standard Post-Visit report for every expedition. This should be the ONLY form completed and it should be completed carefully and returned to the office. This information is tabulated and circulated internationally.
- Please note guests of the company, guest lecturers, other "non-revenue passengers" should be reported as passengers for the purposes of this report unless they have a specific role ashore. In general, those responsible for supervising passenger operations ashore who report to the expedition

Appendix C Annual Instruction

- leader are considered staff. Your office will provide additional guidance.
- Please use the standard list of "Antarctic Peninsula Region Landing Sites" for Part 2, in which case you need not complete the Latitude/Longitude. Please correct duplications or inconsistencies. In general, the most specific place name is used.
- Make additions to the list of landing sites as necessary -taking note of the standard procedures included in your briefing packet for assessing new or rarely visited sites.
- EL's, please note that this information is used for statistics that are tabled worldwide. Please do not hastily fill this out. If you have questions, consult your home office.

Have a safe and successful Antarctic season.

Appendix D

Introduction and Detection of Diseases in Antarctic Wildlife, IAATO Perspective

Preamble

Inherent in the mandate of IAATO member companies is a long term commitment to environmentally sensitive travel to Antarctica. For a number of years IAATO members, being mindful of Environmental Protocol Recommendation XVIII-I, have been using simple precautionary techniques to ensure that foreign material and/or potential pathogens are not introduced into Antarctica by tourists. In the last several years these procedures have been formalized and reviewed by national authorities via Environmental Impact Assessments.

Recognizing that tourists in Antarctica are a highly mobile population and that little is known about the introduction and translocation of alien organisms in the Antarctic, IAATO hopes to play a continuing active role in responding to new information.

Resulting from the Diseases of Antarctic Wildlife workshop hosted by the Australian Antarctic Division (Hobart, Oct 1998), this document is intended to address the concern about the potential translocation of diseases by tourists in Antarctica, and to suggest a cost effective, practical solution. Given the current lack of scientific data on natural disease status and microbial populations of Antarctic wildlife, and of methods to prevent anthropogenic transmission, a sensible precautionary approach is proposed.

Antarctic tour operators and staff can be a resource for disease surveillance, reporting and containment. Vessels operated by IAATO members cover a wide variety of coastal terrain in a short space of time and can provide valuable data to the scientific community on the overall state of wildlife populations.

IAATO members have continued to make use of boot-washing stations before and after each landing along with a visual check of clothing and gear for any exotic organisms. Following the Diseases of Antarctic Wildlife workshop, IAATO researched a simple effective antiseptic which could be used to limit possible translocation of diseases, such as in penguin feces, when passengers moved from one rookery to another for example.

We were surprised to find that experts in the field do not agree whether any further action is required beyond simply washing boots and soiled clothing in clean water. A number of researchers suggested that a weak solution of iodine might be a suitable antiseptic. Bearing in mind the variance in opinion amongst experts in the field, IAATO suggests the following:

1. PREVENTATIVE ACTION

- * Prior to their first landing in Antarctica, all passengers receive a comprehensive briefing on Antarctic conservation. An integral part of this briefing is explaining the importance of preventing the possible introduction of foreign materials to Antarctica, and the potential for translocation between Antarctic sites.
- * Before each shore visit passengers and staff are asked to check their clothing for seeds and other extraneous material and scrub their boots in a foot bath on the ship's deck. Given that most voyages depart from Ushuaia and many passengers spend time in Tierra del Fuego before embarkation, the opportunity to transport material to the Antarctic is obvious and a thorough cleaning before the first landing is particularly important.
- * Following each landing for the duration of the voyage, passengers scrub boots at the water's edge prior to boarding Zodiacs and again aboard the ship at the head of the gangway. The foot bath should contain a diluted iodine solution (ratio: three tablespoons of saturated solution to a ten gallon bucket).
- * Disposal of the used iodine solution, which may possibly contain pathogens and is a poison, must be considered. Iodine occurs naturally in the ecosystem and is present in foot bath water in low enough concentrations that it is not considered a threat to the environment. We propose that dirty foot bath water should be disposed into the sea at the place of anchorage at each landing rather than flushed into the ship's tanks. In this way any contaminants acquired at that site will be returned to the waters from which they came, rather than being translocated.
- * Zodiacs are kept clean between landings and care is taken to remove stones, kelp etc. from the floor of the Zodiac after each landing.
- * Helicopter skids and passenger compartments are cleaned between landings using clean sea water.

2. PROCEDURES UPON THE DISCOVERY OF A HIGH MORTALITY EVENT

Antarctic tour vessels can potentially act as monitors of the health of wildlife populations, traveling along coastal areas throughout the Antarctic summer. We are not proposing that IAATO vessels take any formal responsibility of monitoring the health of wildlife populations but rather that IAATO instigates a code of practice for responding to a high mortality event.

While acknowledging that high mortality events are open to interpretation in size and cause, the critical issue is that any perceived, highly unusual event be noted and reported appropriately. In the event of discovering a mortality event, tour operators should:

* Describe and report the event to the nearest scientific station and ships operating in the area. The national authority that the tour organizer provided advance notification should also be notified and an incident report should be 0/10/00 file: vessel call data 9900

prepared for IAATO.

- * In such a scenario, the primary responsibility of the operator is to say that he/she has seen something unusual.
 - * Where the operator has reason to believe that landing passengers could lead to translocation of disease or may otherwise be ill-advised, the landing should be aborted.
 - * In the event of a landing being made and a mass mortality event not being recognized, then normal boot scrubbing procedures and adherence to approved landing procedures should be enough to minimize the risk of spreading disease.

IAATO Pre-Season Checklist

1999-2000 Season

- Memorandum to Antarctic Captains, Expedition Leaders and Radio Officers
- □ Antarctic Communications Directory (COMNAP MINI-ATOM)
- □ IAATO Call Data, 1999-2000
- □ Preliminary Ship Schedules, November 1999 March 2000
- Copy of Organizer's Environmental Impact Assessment (varies by organizer)
- □ CCAMLR Marine Debris in Antarctic Waters (placard)
- ☐ Ship Observation of Antarctic Icebergs
- □ Help Stop Toothfish Poaching
- Diseases of Antarctic Wildlife
- □ Approved 1999-2000 Palmer Station Cruise Ship Visits

General

- Post-Visit Report, Part 1 (Expedition Record) and Part 2 (Site Visit Record)
- □ Antarctic Peninsula Region Landing Sites (with Longitude and Latitude)
- ☐ General Medical Information, Parts I, II and III
- □ IAATO Emergency and Medical Response Contingency Plan
- □ Recommendation XVIII-1 (English, Spanish, French, Russian, German, Japanese, Chinese)
- □ IAATO Slide Presentation, Safety and Conservation Briefing
- Antarctic Tourism statistics, graphs and charts compiled by NSF
- □ IAATO Annual report to the ATCM and other relevant papers
- Compendium of Antarctic Peninsula Visitor Sites (Can be obtained from Oceanities)
- "Behold Antarctica" Video (produced by U.S. National Science Foundation)
- □ Handbook off the Antarctic Treaty System (Currently out of Print-there is a CD rom in process)
- ☐ List of Protected Areas
- □ Appropriate and Relevant Legislation per company per country (for example, the US Antarctic Conservation Act 1978, public law 95-541) necessary for vessels carrying US citizens (etc).
- Convention on the Conservation of Antarctic Marine Living Resources (1980)
- Convention on the Conservation of Antarctic Seals
- Protocol on Environmental Protection of the Antarctic Treaty (1991)

Checklist for IAATO Observers on Provisional of Probational Member Vessels

To: Observers:

The following checklist is hopefully a useful guide to evaluate IAATO Provisional and Probational members. When answering the questions you can use yes, no, unsure and short explanations. If any long answers are required, then please use additional space. If this evaluation can be transmitted by email its preferable. Hopefully it is a useful tool or checklist to assure that all obligations set forth by IAATO and the Antarctic Treaty System are met.

Please submit by mail or preferably by email to: IAATO
PO Box 2178
Basalt, CO 81621
Or by email to: iaato@iaato.org
Or by fax to: USA 970-704-9660

Please give at least one copy to a designated representative of the IAATO Member Company to whom you are evaluating and send the other copy to IAATO. This evaluation is simply intended to evaluate the operation based on the IAATO By-Laws and operating procedures, IAATO Pre-Season Checklists and Regulations set forth by the Antarctic Treaty, its Recommendations, and Agreed Measures and specifically by the Protocol on Environmental Protection.

Voyage Date (embarkation	and
disembarkation):	
Your name:	
Date:	

Overall itinerary:

- 1) Overall impression of the voyage: Did the company support the basic mission of IAATO? To advocate, promote and practice safe and environmentally responsible private sector-travel to the Antarctic?
- 2) Staff to Passenger Ratio: Was there 20:1 experienced staff to passengers?

Was there 75% experienced Antarctic staff?
Names of staff members, specialty and years of Antarctic experience:

3) Was the Environmental Impact Assessment on board in an easy 10/10/00 25 IP32e

access location?

If the Expedition Leaders changed was there a handover procedure?

Is there a copy of Advance Notification on board? Did the expedition staff read the environmental impact assessment and did the expedition adhere to the Environmental Impact Assessment and to Advance Notification. (Observers please review the EIA and note any discrepancies).

4) Guidelines:

Was the Crew briefed prior to the start of the season?

Were the passengers briefed prior to arriving in Antarctica?

Where the IAATO slides used? If not, why not? Was there a substitute?

Was a copy of Recommendation XVIII-I handed out to passengers with this briefing?

Were copies of non-English guidelines given out to non-English speaking passengers?

Were there periodic briefings/announcements given to remind passengers that they should not get closer than 15 feet/5 meters to wildlife?

- 5) Was there an Expedition Leader Reference Notebook on board? If so, please include a copy of the table of contents? Was it useful? If not, why not?
- 6) Was there a battery collection box or procedures for battery collection easily available or communicated to passengers?
- 7) Was there a briefing done with the appropriate passengers, officers and crew to make sure that nothing including cigarette butts was thrown overboard and that it was not appropriate to feed birds off the decks of the ship.
- 8) Sewage, Waste Disposal etc: Did the vessel operations comply with Annex III and IV of the Protocol on Environmental Protection? Please describe procedures or include a copy of the waste management plan for the vessel.
- 9) Was there oil spill equipment on board? Was there a SOPEP on board?

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- 10) On shore:
- A). Did the Expedition staff on shore give the passengers and appropriate briefing once the passengers arrived, setting boundaries and reminding them of appropriate distances?
- B). Were the staff ashore escorting passengers and or providing educational information? Was there a particularly effective way to manage passengers ashore organized by the staff?
- C) Was there any new sites visited and if so what criteria was used to evaluate the site?
- D) Was there scuba diving or camping or any other non-traditional type of tourism being conducted? If so, was it noted in the IEE and or Advance Notification?
- 11) Zodiac Cruising: Were zodiac drivers respectful of the whales, seals, penguins or other forms of wildlife?
- 12) Were there appropriate boot washing stations? Did passengers diligently clean their boots, backpacks etc to avoid the possible transportation of diseases from one site to another? Were passengers reminded periodically throughout the cruise?
- 13) Poultry Products: Were poultry products separated out from all other food garbage?
- 12) Additional Comments or Suggestions

Thank you for your time and effort. On behalf of all the IAATO member companies we appreciate your feedback and hope you had a great time.

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Vessel	Current operating company	Nationality of current operating company	Passenger capacity	Antarctic tourist trips operating since	Registry
Explorer	Abercrombie and Kent/Explorer Shipping	United States	100	1970	Liberia
World Discoverer	Society Expeditions	United States	138	1977	Liberia
Bremen **ex Frontier Spirit	Hapag Lloyd Kreuzfahrten		164	1989	Bahamas
Professor Molchanov	Aurora Expeditions	Australia	52	1991	Russia
S/Y Pelagic	Pelagic Expeditions	United Kingdom	6	1991	British V.I.
Kapitan Khlebnikov	Quark Expeditions	United States	114	1992	Russia
Akademik Sergei Vavilov	Quark Expeditions	United States	76	1992	Russia
Akademik loffe	Marine Expeditions	Canada	80	1992	Russia
Akademik loffe	Peregrine Adventures	Australia	117	1992	Russia
Hanseatic	Hapag Lloyd Kreuzfahrten	Germany	180	1993	Bahamas
Clipper Adventurer **ex Alla Tarasova	New World Shipping/Clipper Cruise Line	United States	122	1994	Bahamas
Kapitan Dranitsyn	Quark Expeditions/Supernova Expeditions		105	1993 but not continuously	Russia
Akademik Shokalskiy	Heritage Expeditions	New Zealand	46	1994	Russia
Professor Multanovskiy	Quark Expeditions/Supernova Expeditions	United States	45	1995	Russia
Akademik Shuleykin	Marine Expeditions	Canada	45	1996	Russia
Caledonian Star	Lindblad Expeditions	United States	110	1998	Bahamas
Lyubov Orlova	Marine Expeditions	Canada	120	1999	Russia
Boris Petrov	Peregrine Adventures	Australia	52	1995 and 1999 only	Russia
Grigory Mikheev	Oceanwide Expeditions	Netherlands	36	1999	Russia
Vista Mar	Plantours and Partners	Germany	280	1991 but not continuously	Panama
Mariya Yermolova	Marine Expeditions	Canada	120	2000	Russia
SY Golden Fleece	Golden Fleece Expeditions	Falkland Islands	8	28 years operating in Antarctica	Falkland I.
Non IAATO Vessels	Non IAATO Members				
Marco Polo	Orient Lines	United States	800	1993	Bahamas
Rotterdam VI	Holland America	United States	1316	January 2000 - one trip	Netherlands
Aegean 1	World Cruise Company	Canada	630	1999	Greek
Ocean Explorer 1	World Cruise Company	Canada	850	1999	Panama
Sir Hubert Wilkins	Ocean Frontiers Pty	Australia	20	2000	Australia

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Workshop on Means for Detecting the Cumulative Environmental Impacts of Tourism in the Antarctic Peninsula

Background

Tourism in Antarctica, particularly ship-based tourism in the Antarctic Peninsula area, has increased steadily in It is doubtful that any visit by the last decade. tourists to a particular site in the Peninsula will have significant adverse environmental effects if the visits are conducted in accordance with the guidelines provided in Antarctic Treaty Consultative Meeting (ATCM) Recommendation XVIII-1. However, it is possible that multiple visits to some areas, during the same austral summer or over a series of summers, could have measurable adverse cumulative effects, even if the visits are carried out in accordance with Recommendation XVIII-1. For example, over time, ship-borne tourists walking from traditional landing areas to areas of particular interest at certain sites may create pathways, which in turn may make the area more vulnerable to wind and water erosion. Likewise, over time, repeated minor disturbances during the nesting season might cause some bird species to abandon or avoid traditional nesting areas, which in turn may make eggs, chicks, and even adults more vulnerable to predation and other sources of natural mortality.

Available information is insufficient to accurately predict how or to what extent the physical features and biota at particular sites may be affected by repeated visits. Furthermore it is possible that faunal species react differently to visits by tourists. Likewise, available information is insufficient to accurately predict the frequency and duration of tourist visits likely to produce particular effects - i.e., to predict likely cause-effect relationships. Additionally, it is not always clear that an impact which can be detected causes harm to the environment. Available information also is insufficient to determine how best to avoid or mitigate possible cumulative adverse effects and whether there are threshold levels of disturbance. For example, cumulative impacts might best be avoided or minimized by dispersing tourist activities over as many sites as possible to minimize activities at any one site or, alternatively, by concentrating activities and their potential impacts at as few sites as possible.

A number of studies have been and are being done which may provide the data necessary to detect immediate and cumulative effects of tourist activities in Antarctica and to determine how best to prevent or mitigate those impacts. However, it is not clear whether these studies will provide all of the needed information nor is it certain what additional work and time might be necessary to answer these questions. To help resolve these uncertainties, the National Science Foundation (NSF), the

U.S. Environmental Protection Agency (EPA), and the International Association of Antarctica Tour Operators (IAATO) are jointly organizing a workshop to consult with scientists and others who have first hand knowledge of tourist operations and the physical and biological features of sites commonly visited by tourists, with an emphasis on the Antarctic Peninsula area.

Workshop Objectives

The objectives of this workshop are to:

- 1. Identify, based upon available information and experience elsewhere, the types of cumulative adverse impacts on the physical environment and biota that could result from multiple visits, within a season and over a series of years, at the types of sites in the Antarctic Peninsula presently being visited by organized ship-based tours. The emphasis will be on typical tourist activities as opposed to visits by scientists or other field personnel;
- 2. Identify the variables concerning the sites and the tourist activities likely to determine the nature and severity of possible cumulative effects;
- 3. Consider the range of measures that possibly could be taken to avoid or minimize possible adverse cumulative effects and the questions that would have to be answered to decide which measures would be most practicable and cost-effective;
- 4. Identify the difficulties likely to be encountered in assessing cumulative adverse impacts to the physical environment and biota;
- 5. Identify the variables that would be most appropriate to assess and monitor in order to detect a) cumulative impacts; b) effectiveness of mitigation measures; c) anthropogenic vs. natural variability.
- 6. Review on-going research and monitoring programs in the Antarctic Peninsula to determine whether they likely will be able to detect the possible cumulative adverse effects of ship-based tourism before they reach significant levels i.e., levels that would not be considered minor or transitory under the Protocol on Environmental Protection to the Antarctic Treaty;

WORKSHOP AGENDA

Detecting the Cumulative Environmental Impacts of Tourism in the Antarctic Peninsula

Radisson Hotel, La Jolla, San Diego, California
June 7-9, 2000

Day One

0830 Welcome, introductions, and review of objectives (Dr. Joyce Jatko)

0900 Review of the history, current status, and anticipated future of ship-based tourism

in the Antarctic Peninsula and compilation of site visit statistics (Ms. Victoria $\,$

Underwood-Wheatley Ms. Denise Landau)

0930 Review of variables considered in selecting sites to be visited and review of the

different types of sites commonly visited in the Antarctic Peninsula area

(Mr. Matt Drennan)

1000 Coffee break

1030 Review of typical activities carried out at sites and procedures used to manage

and supervise activities at those sites (Mr. Matt Drennan)

1100 Discussion Groups - Identify the range of measures that possibly could be taken

to avoid or minimize possible adverse cumulative effects and the variables that

would have to be considered to decide which measures would be most cost-effective $% \left(1\right) =\left(1\right) +\left(1\right) +$

1215 Lunch

1330 Review of site characteristics likely to affect the nature and severity of possible cumulative impacts (Mr. Ron Naveen)

1400 Discussion Groups - Identify the kinds of cumulative impacts at the different

types of sites commonly visited that could result from multiple visits. List and

rank, if feasible, the relative importance the site characteristics most likely to determine the nature and severity of cumulative effects

1530 Coffee break

1600 Review of the objectives, methods, and results of research/monitoring programs

(30 minutes each including questions and discussion)

1600 Overview of AMLR/CEMP program (Dr. Rennie Holt)

1630 Torgersen Island study (Dr. William Fraser)

1700 Adjourn

Day Two

0830 Continue review of on-going research and monitoring programs

0830 Palmer LTER program (Dr. Maria Vernet)

0900 Lessons learned from long term seal research (Dr. Donald Siniff)

0930 Lessons learned from long term penguin research (Dr. Wayne Trivelpiece)

1000 Coffee break

1030 Discussion Groups - Identify the variables that would be most appropriate to

assess and monitor in order to detect a) cumulative impacts; b) effectiveness of

mitigation measures; c) anthropogenic versus natural
variability

1200 Lunch

1330 Discussion Groups - Identify limitations of on-going research and monitoring

programs in detecting cumulative impacts

1500 Break

1530 Discussion Groups - Identify changes in on-going programs and/or additional

programs that would be required to detect cumulative adverse environmental

impacts or evaluate the effectiveness of measures intended to avoid or mitigate $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

adverse cumulative impacts.

1700 Summary of findings and conclusions

1715 Adjourn

Day Three

0830 Facilitators and rapporteurs meet to develop summaries of discussion group findings and recommendations.

1000 Entire group reconvenes for reporting out of preliminary findings and

recommendations followed by discussion and adoption by workshop.

1130 Adjourn

Workshop Attendees

- Mr. Martin Betts
- Ms. Katherine Biggs
- Mr. Scott Altmann
- Dr. Maj DePoorter
- Mr. Matt Drennan
- Dr. William Fraser
- Ms. Louise Hampson
- Dr. Robert Hofman
- Dr. Rennie Holt
- Dr. Joyce Jatko
- Dr. Mahlon Kennicutt
- Ms. Lisa King
- Ms. Denise Landau
- Mr. Joseph Montgomery
- Mr. Ron Naveen
- Dr. Polly Penhale
- Ms. Sally Poncet
- Dr. Martin Riddle
- Dr. Donald Siniff
- Mr. Richard Taylor
- Dr. Wayne Trivelpiece
- Ms. Victoria Underwood
- Dr. Jose Valencia
- Dr. Maria Vernet
- Dr. David Walton