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# IAATO Overview of Antarctic Tourism: 2009-10 Season and Preliminary Estimates for 2010-11 and Beyond

## IAATO Overview of Antarctic Tourism: 2009-10 Season and Preliminary Estimates for 2010-11 Antarctic Season and Beyond

## Information Paper Submitted by the International Association of Antarctica Tour Operators (IAATO)

## Introduction

The International Association of Antarctica Tour Operators (IAATO) is pleased to provide an overview of Antarctic tourism for the recently completed 2009-10 season, estimates for the following season and some projected trends up to and including the 2012-13 Antarctic season.

Compared with the total number of visitors for the 2008-09 Antarctic tourism season (37,858), the total for the 2009-10 season dropped slightly to 36,881 (counting IAATO Member visitors only). Details of the 2009-10 season can be found in Appendix 1 of this paper.

Estimates for the 2010-11 season can be found in Appendix 3 of this paper. Overall, these estimates indicate a total of 34,168 visitors. As a result of the lingering effects of the world economy and recent amendments to the International Maritime Organization (IMO) MARPOL Annex I adopted at the 60<sup>th</sup> session of the Marine Environment Protection Committee (MEPC), it also may be useful to look into the near-term future of Antarctic tourism, particularly ship-borne tourism.

## 1.0 Overview

## 1.1 IAATO Member Activities

As during the past 19 seasons, IAATO membership continues to incorporate the majority of recognized Antarctic private-sector tour operators. All commercial SOLAS vessel-based operators conducting tourism activities in the Antarctic Treaty area are members of IAATO at the present time. All these operators have submitted Environmental Impact Assessments (Initial Environmental Evaluations or Preliminary Assessments) or operational documents as required by domestic legislation to their appropriate National Authority.

A summary of IAATO member activities for the 2009-10 season follows:

- 21,622 passengers landed from seaborne vessels in the Antarctic Treaty Area, a 19.7% reduction from the previous season. Of this total:
  - 20,700 passengers landed in the Antarctic Peninsula area, 18.6% fewer than the previous season;
  - 397 passengers landed in the Ross Sea or Continental region of Antarctica, down 61% from the previous season;
  - 180 passengers sailed aboard yachts (sailing or motor) that carry 12 or fewer passengers to the Antarctic Peninsula, a 3.4% increase from the previous season;
  - 345 passengers participated in air-cruise voyages to the Antarctic Peninsula area and flew from South America to King George Island to embark a vessel and cruise for six days, making landings. This represents a 21% increase from this segment.
- 15,026 passengers traveled aboard large vessels operating "cruise-only" voyages, making no landings in the Antarctic Treaty Area. This is a 41% increase in the number of cruise-only passengers from the 2008-09 season.

- 233 clients participated in multi-day land-based expeditions in the continental interior, a similar number to the previous season. However, this number includes for the first time visitors from new IAATO associate member The Antarctic Company (TAC) as well as longtime member ANI-ALE.
- No passengers participated in IAATO-member over-flights to the Antarctic continent.

## 1.2 Scope of Commercial Tourist Activities for Seaborne Tourism

Commercial tourist activities included the operation of small boats (Zodiac, Polar Cirkle Boat, R.I.B., Naiad, etc.), shore landings, and to a lesser extent, kayaking, mountain climbing, SCUBA diving, skiing, snowboarding, camping, running events, helicopter operations and use of an underwater ROV. Most of these activities have taken place for the past decade with some dating back to the beginning of Antarctic tourism in the late 1960s.

Appendices to this addendum provide further details of the scope of IAATO-member activities, including vessel/aircraft, departures, passenger numbers and activities. The appendices are as follows:

### **Appendices:**

- Appendix 1: Overview of Antarctic Tourism 2009-10;
- Appendix 2: Histogram of 1992-2010 Antarctic Tourist Trends Landed Passengers, including ship- and land-based passenger numbers (revised);
- Appendix 3: Preliminary Estimate of Antarctic Tourism 2010-11
- Appendix 4: A Decade of Antarctic Tourism: 2003-04 to 2012-13

## Table 1. Historical Statistics of Recorded Seaborne Tourism (including Cruise Only)

Based on data provided by companies who submitted Post Visit Report Forms and from other sources where available.

Year	# of Operators	# of Ships &	# of	# of Passengers	# of Cruise Only
	or Charterers	Yachts	Voyages	Making Landings	Passengers
1992-93	10	12	59	6,704	
1993-94	9	11	65	7,957	
1994-95	9	14	93	8,098	
1995-96	10	15	113	9,212	
1996-97	11	13	104	7,322	
1997-98	12	13**	92*	9,473	
1998-99	15	15**	116	9,857	
1999-00	17	21**	154	13,687	936
2000-01	15**	32**	131*	12,109	0
2001-02	19**	37**	117*	11,429	2,029
2002-03	26**	47**	136*	13,263	2,424
2003-04	31**	51**	180*	19,369	4,949
2004-05	35**	52**	207*	22,297	5,027
2005-06	47**	44**	249*	25,167	4,632
2006-07	42**	47**	268*	28,622	6,930
2007-08	48*	55*	308*	32,637	13,015
2008-09	44*	53*	290*	26,921	10,652
2009-10	44*	51*	239*	21,622	15,026

\* Does not include non-member operated yachts (sailing and motor).

\*\* Includes Member and non-member yachts (sailing and motor) where the information was available.

The vast majority of commercially operated voyages operate in the Antarctic Peninsula region during the six-month austral summer season (from mid-October to early April), departing from Ushuaia or, to a lesser extent, from other ports north of the Treaty Area.

## 1.3 Nationalities

The nationalities of Antarctic visitors are derived from the Post Visit Report Forms that are submitted to IAATO at the end of each season. At the time of this paper's submission to ATCM XXXIII, this data was not yet available. This information will be available soon in the Tourism Statistics section of the Tourism Overview page of the IAATO website (www.iaato.org).

## 1.4 Commercial Tour Vessels Operating in 2009-10

A full list of IAATO member-operated commercial tour vessels that completed cruises to the Antarctic, including information on their registry, permitting authority and passenger capacity is given in Appendix 1. In total, there were 26 vessels carrying between 13-199 passengers and four vessels carrying between 200-500 passengers, plus nine cruise-only vessels each carrying more than 500 passengers.

## 1.5 Commercial Yacht (Sailing and Motor) Activities

Based on Post Visit Reports from IAATO-member yacht operators, 180 passengers were reported to have traveled to the Antarctic Treaty Area aboard 12 commercially operated small yachts during the 2009-10 season. This information is also detailed in Appendix 1.

Visits and activities by yachts not operated by IAATO members are not included in these statistics. IAATO continues to make available its *IAATO One-Off Private Expedition Yacht Package*, which details IAATO and ATS guidelines, procedures and recommended best practices. One non-IAATO private yacht subscribed to this service for the 2009-10 season. IAATO remains concerned about tourists traveling on those non-IAATO operated yachts that appear to be unauthorized and whose crew does not follow the Environmental Protocol and its obligations. These concerns are further described in ATCM XXXIII IP075 *Non-IAATO Tourism and Visitation in Antarctica*.

## 1.6 IAATO Member-Operated Activities Conducted from Expedition Vessels & Yachts

All activities are approved through the Environmental Impact Assessments or operational documentation submitted in advance of the season, and are intended to have no more than a minor or transitory impact on the Antarctic environment.

## 1.6.1 Short Overnight Stays on the Peninsula

Seven IAATO members conducting traditional seaborne tourism to the Antarctic Peninsula offered short overnight stays in conjunction with the cruise. These short overnight stays provide an opportunity for tourists to experience a sense of wilderness in Antarctica, separate from being on the ship. Guides accompany each group ashore. This activity has taken place for more than 10 years in the Peninsula region.

When this activity takes place at sites where birds are breeding, tents are located at least 450 ft. (150 m) from nesting birds, including penguins, and located on snow or bare rock, rather than on gravel where the ground could be flattened by tent sites, or organic debris might be covered. Each tent site is used for no more than a few nights per season. Toilets are taken ashore; human waste is returned to the ship and meals are eaten only on board the ship.

## 1.6.2 Climbing and Kayaking from Vessels in the Peninsula Area

Six IAATO members, including some yacht operators, offered climbing and/or kayaking activities to their passengers during the 2009-10 season. These activities have taken place for more than 10 years in the Peninsula region.

## 1.6.3 SCUBA Diving

Four IAATO members, including two yacht operators, conducted SCUBA diving activities to their passengers during the 2009-10 season. SCUBA diving has taken place in the Peninsula region for at least ten years.

## 1.6.4 Underwater Remotely Operated Vehicle (ROV)

One IAATO member has utilized an ROV for more than eight years in the Antarctic Peninsula. The ROV is used for educational purposes, with video footage aired aboard ship for passengers to get a better understanding of undersea life.

## **1.6.5** Helicopter Operations

One IAATO member provided helicopter operations in conjunction with their cruises during the 2009-10 season. Helicopter operations for tourism purposes have taken place since the 1992-1993 season.

## **1.6.6** Hovercraft Operations

One IAATO member used a hovercraft in the Ross Sea area during the 2009-10 season.

## 1.7 Commercial Land-Based Tourism

With the 2009-10 season, IAATO has one member and one associate member that operate landbased tourism activities: Adventure Network International / Antarctic Logistics & Expeditions (referred to as ALE below), which conducted activities for the 24<sup>th</sup> consecutive season, and The Antarctic Company (referred to as TAC below), which operated in Antarctica for the fifth consecutive season and first as an IAATO associate member.

ALE operated out of Punta Arenas, Chile and TAC operated out of Cape Town, South Africa.

Together, the two companies employ experienced staff and guides, 80%-90% of which have worked previously in Antarctica. Staff and guides assist in the preparation of policies and guidelines, and ensure their implementation in Antarctica.

Operator	Tourists	Staff & Guides	NAP	Air Crew	Other		
ALE	161	74	89	16	_		
TAC	72	15	_	23	2*		
Total	233	89	89	39	2		

## 1.7.1 Visitor & Staff Numbers

Table 2: Land-Based Visitor & Staff Numbers

\* TAC carried two observers during the 2009-10 season: one inspector from the South African Department of Environmental Affairs and Tourism (DEAT) Directorate Antarctica and Islands, and one IAATO observer.

## 1.7.2 Aircraft Operations

ALE:

- An Ilyushin-76 was used to ferry general and hazardous cargo, fuel, staff, guides and passengers from Punta Arenas to SCPZ Runway 24M Patriot Hills on a total of 14 flights. Trail landings were made at SCGC Runway 18M, Union Glacier.
- One ski-equipped DHC-6 Twin Otter aircraft and one ski-equipped Douglas DC-3 Basler aircraft were used for flights in Antarctica and to support medical evacuation throughout the Antarctic season.

TAC:

• An Ilyushin-76 was used to ferry general cargo, staff, guides and passengers from Cape Town to Novo Runway on a total of twelve flights, shared with Antarctic Logistics Center International (ALCI).

- A Boeing 727 was used to transport clients and guides from Cape Town to Novo Runway on one flight.
- One ski-equipped Twin Otter aircraft and one ski-equipped DC-3 Basler aircraft were used for flights in Antarctica and SAR support during the Antarctic season. In conjunction with ALCI.

## 1.7.3 Traverses

ALE:

• A number of tractor traverses were operated, primarily for more efficient transport of fuel and cargo and to support scientific activities. Fuel caches were pre-placed for scientific projects for the 2010-11 season.

TAC:

• One vehicle (one of two Toyota Hiluxes, modified for Antarctic travel) traverse was operated to support a fuel drop at S 83 depot and passenger/cargo transportation in the area of Schirmacher Oasis.

## 1.7.4 Camps

ALE:

• Patriot Hills Camp opened November 7, 2009 and closed February 6, 2010.

TAC/WDL\*:

- TAC Camp opened November 6, 2009 and closed February 27, 2010.
- WDL Camp opened November 10, 2009 and closed December 19, 2009.

\* WDL is White Desert Ltd., an IAATO associate member.

## 1.7.5 Programs and Activities

Activities included the operation of standard programs as well as the organization and operation of private expeditions.

Table 5: ALE Programs & Participant Numbers					
ALE Program	Number of Participants **				
Antarctic Odyssey	2				
Emperor Penguin	4				
Last Degree	20				
Marathon	19				
Ski Safari	1				
South Pole Fly-In	47				
South Pole Ski – Berkner Island	2				
South Pole Ski – Hercules	7				
South Pole Ski – Messner	11				
Vinson Massif	85				
Vinson to Sea Ski	2				

Table 3: ALE Programs	& Participant Numbers
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\*\* The numbers in Table 3 include only passengers and ALE staff participating in these particular programs.

Note: Remote Automatic Weather Stations (RAWS) were deployed at locations up to 100km from Patriot Hills to provide weather data.

TAC Program	Number of Participants
White Desert 10-day Program, including Emperor Penguin	22
South Pole Fly-In and Skydiving	6
Austrian Mountaineering Expedition	3
French Mountaineering Expedition	4
One-day Trip to Queen Maud Land	23
Frederik Paulsen Expedition (Geomagnetic Pole)	11
Marko Peljan Expedition	3

Table 4: TAC Programs &	& Participant Numbers
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Note: Fuel Depot (FD 83) was deployed at locations with coordinates S 83 20 E 20 17 to support South Pole flights/traverses and to provide SAR operations in this part of Antarctica.

## 1.7.6 Government Activity Supported by ALE

ALE also supports National Antarctic Program (NAP) activities. Requests from National Operators, research institutes and government agencies resulted in ALE providing support for 53 National Antarctic Program (NAP) scientists and logistic staff and 36 NAP flight crew.

Research groups, government representatives and their logistic support visited Patriot Hills and were accommodated at the camp for varying periods. ALE hosted visitors from British Antarctic Survey (BAS), Centro de Estudios Científicos, Chile (CECS), Ejército de Chile (Chilean Army), FACh (Chilean Airforce), National Science Foundation (USA), and Programma Nazionale di Ricerche in Antartide, Italy (PNRA).

One of ALE's ski aircraft, Douglas DC3-TP67, was contracted to PNRA to fly staff between McMurdo (USA), Terra Nova Bay (Italy), Concordia (Italy, France) and Dumont d'Urville (France) stations as part of their seasonal deployment.

A group of scientists and support staff from NSF were accommodated at Patriot Hills camp and provided with logistic and flight support while working on POLENET (<u>www.polenet.org</u>).

ALE also provided flight and overland support for a continuation of glacier studies at Union Glacier by researchers from the Centro de Estudios Científicos, Chile (CECS).

ALE supported the exchange of personnel and transported two tons of cargo to Belgrano-II Station for the Ministerio de Defensa, Argentina.

Fuel caches were placed for research projects that will commence in the 2010-11 season, and as part of the build up to the Lake Ellsworth Drilling project (<u>www.geos.ed.ac.uk/research/ellsworth</u>).

## **1.8** Air / Land-Based Activities conducted by IAATO Members in the Antarctic Peninsula<sup>1</sup>

For the 2009-10 season, IAATO associate member Destination Management Chile (DMC), operating through Aerovias DAP, conducted seven separate day-trips and one overnight trip from Punta Arenas, Chile to King George Island. These flights are offered as an optional excursion to cruise ship

<sup>&</sup>lt;sup>1</sup> As Aerovias DAP, which is not an IAATO member, was the operator of record for these 285 passengers, they are not included in the overall statistics in the Overview addendum.

passengers calling at Punta Arenas. A total of 285 passengers were escorted on visits to Frei Base and Zodiac rides to Ardley Island. Seven of these passengers participated in the overnight trip, with accommodations at Frei Base. Eight other planned trips were cancelled due to inclement weather or the effects of the earthquake that struck Chile.

## 1.9 Air Operations – Over-flights operated by IAATO Members

For the 2009-10 season, there were no over-flights of Antarctica by IAATO members.

## 2.0 Preliminary Estimate of Planned Activities for the 2010-11 Season

Appendix 3 illustrates a breakout of tourism categories that are projected for the 2010-11 season. According to estimates provided to IAATO by members, 18,885 seaborne and yacht (sailing and motor) passengers are expected to land in Antarctica from commercially organized vessels, 558 from combination air-cruise programs, and 375 on air/land-based expeditions during the 2010-11 season. Another 14,350 are anticipated on cruise-only programs. No over-flights by passengers aboard IAATO-member aircraft are expected during the 2010-11 season.

Ship-based tourism is expected to again include the operation of small auxiliary boats (Zodiac, Polar Cirkle Boat, R.I.B, Naiad, etc.), shore landings, kayaking, mountain climbing, running events, SCUBA diving, skiing, snowboarding, camping, helicopter operations and use of an underwater ROV.

## 3.0 Projected Tourism Trends through the 2012-13 Antarctic Season

As noted in the introduction of this paper, recent actions taken at the IMO to ban the use and carriage of heavy fuel oil will affect Antarctic tourism in the next few years. This, along with recent interviews with IAATO members, makes it possible to look beyond the upcoming 2010-11 Antarctic season and forecast tourism trends through the 2012-13 season.

The ban will significantly affect the operation of large cruise-only ships (500+ passengers) that transit around the tip of South America and briefly visit Antarctic waters. In addition to the financial implications, the ban on the carriage of these fuels will make these voyages very difficult logistically, as banned fuels must be completely utilized, or discharged to shore or to barges in areas where virtually no fuel-transfer capabilities exist, in order to meet the requirements of the ban.

IAATO expects that a percentage of large cruise-only vessel operators and some mid-size vessel (201-500 passengers) operators will leave the Antarctic tourism market because of these logistical factors, once the amendment comes into effect August 1, 2011. It should be noted that factors other than the fuel oil ban have been responsible for some of these mid-size vessels leaving the market following the 2008-09 Antarctic season. These expectations, based on recent interviews with IAATO cruise-only and mid-size vessel operators, are shown in Tables 5 and 6 below.

It is not expected that the fuel ban will have a significant impact on small expedition vessels carrying fewer than 200 passengers (traditional tourism with landings), that carry and use lighter distillate fuels such as marine gas oil (MGO) or marine diesel oil (MDO), both of which continue to be permitted under the new requirements.

	2008-09 Season	2009-10 Season	2010-11 Season (estimate)	2011-12 Season (estimate)	2012-13 Season (estimate)
Number of Cruise-Only Vessels	5	9	7	3	4
Number of Cruise-Only Voyages	8	12	10	4	5
Number of Cruise-Only Passengers	10,652	15,026	14,350	6,400	7,250

### Table 5: Projected Trends for Cruise-Only Vessels, 2010-11 through 2012-13 Seasons

	2008-09 Season	2009-10 Season	2010-11 Season ( <i>estimate</i> )	2011-12 Season (estimate)	2012-13 Season (estimate)
Number of Mid-Size (201-500 passenger) Vessels	5	4	4	2	3
Number of Mid-Size (201-500 passenger) Vessel Voyages	26	19	16	13	16
Number of Passengers aboard Mid-Size Cruise Vessels	7,738	4,831	4,050	3,510	4,320

## Table 6: Projected Trends for Mid-Size Cruise Vessels, 2010-11 through 2012-13 Seasons

Extrapolating overall passenger statistics for future years based on the above projection of ships and voyages in Tables 5 and 6, overall Antarctic tourism numbers for the 2011-12 season are expected to drop 15%-20% from the 2009-10 season, as shown in Table 7 below:

 Table 7: Antarctic Tourism Trends, 2010-11 through 2012-13 Seasons

Total Visitors for:	2007-08	2008-09	<b>2009-10</b>	<b>2010-11</b>	2011-12	2012-13
	Season	Season	Season	Season	Season	Season
				(estimate)	(estimate)	(estimate)
Seaborne, Traditional	31,941	26,648	21,277	18,885	21,810	25,365
Tourism (with						
landings)						
Seaborne Tourism,	13,015	10,652	15,026	14,350	6,400	7,250
Cruise-Only (no						
landings)						
Air/Cruise	257	285	345	558	600	650
Air/Land-Based	439	273	233	375	450	525
Traditional Tourism						
Over-flights (no	613	0	0	0	0	0
landings)						
Total	46,265	37,858	36,881	34,168	29,260	33,790

Predicting the number of tourism vessels, including cruise-only and mid-size ships, beyond the 2012-13 season is more difficult. However, it can be expected that demand on the part of consumers to visit Antarctica will continue, and that growth could resume in 2012-13 and the years following, should economic conditions be favorable for tourism.

As new cruise ships are brought into the Antarctic tourism market, the fuel ban – as well as IMO low sulfur emission requirements that call for the use of lighter distillate fuels – and other regulatory guidelines will be important considerations. Improvements in logistics and operational planning in managing fuel use are also expected to play a role in the predicted resumption of growth in the cruise-only and mid-size vessel segments of the market.

## 4.0 Historic Antarctic Tourism Trends

A trends chart showing the change in cruise-borne tourism (with landed passengers), dating from the 1992-1993 season and including estimates for the 2010-11 season, can be found in Appendix 2 of this paper. Appendix 4 shows a decade of Antarctic tourism trends, from 2003-04 to 2012-13.

## **5.0 Tourism Statistics**

The following data sheets are being prepared for inclusion in the IAATO website (<u>http://www.iaato.org</u>) and can be found as a link "Tourism Statistics" under the category of

## Tourism Overview:

- Tourists by Nationality (Landed)
- Tourists by Nationality (Air and Cruise)
- Tourists by Nationality (All)
- Tourist Nationalities by Vessel
- Trends 1992-2007
- Number of Visitors (tourists, staff, crew) per site per vessel-All Antarctic Sites
- Number of Visitors (tourists, staff, crew) per Site per Vessel-Continental Sites
- Number of Tourists per Site Per Vessel-All Antarctic Sites
- Number of Tourists per Site per Vessel
- Number of Tourists per Site Per Vessel-Peninsula Sites
- Number of Visits per Site per Activity.

These datasheets will be posted once the statistics have been finalized in June 2010.

## **Appendices:**

- Appendix 1: Overview of Antarctic Tourism 2009-10;
- Appendix 2: Histogram of 1992-2010 Antarctic Tourist Trends Landed Passengers, including ship- and land-based passenger numbers;
- Appendix 3: Preliminary Estimate of Antarctic Tourism 2010-11
- o Appendix 4: A Decade of Antarctic Tourism, 2003-04 through 2012-13 Seasons

## Appendix 1: Overview of Antarctic Tourism 2009-10 Based on Information provided by IAATO Members to the IAATO Secretariat as of Apr 20, 2010

IAATO Members Seaborne Tourism – Peninsula Region – 2009-10										
Vessels	Vessel Registry	Operator / Charterer	Operator Country	Passenger Capacity	Actual Voyages	Actual # Passengers	Activities incl.			
							landings			
Traditional Vessels										
							Zodiac, kayak,			
Akademik Ioffe	Russia	One Ocean Expeditions	Canada	110	5	412	camping, climbing			
Akademik Sergey		Quark	United				Zodiac, kayak, camping,			
Vavilov	Russia	Expeditions	States	110	9	907	climbing			
Antarctic Dream	Belize	Antarctic Shipping	Chile	78	12	750	Zodiac			
Bark Europa	Netherlands	Rederij Bark Europa B.V	Netherlands	48	5	171	Zodiac			
Bremen	Bahamas	Hapag Lloyd Kreuzfahrten	Germany	164	4	559	Zodiac			
Clelia II	Malta	Travel Dynamics	United States	100	3	164	Zodiac			
Clipper Adventurer	Bahamas	Quark Expeditions	United States	122	8	900	Zodiac			
Corinthian II	Malta	Travel Dynamics	United States	120	7	725	Zodiac			
Delphin	Bahamas	Hansa Kreuzfahrten	Germany	350	3	1,033	Zodiac			
Expedition	Liberia	GAP Adventure	Canada	120	3	356	Zodiac			
Fram	Norway	Hurtigruten ASA	Norway	317	12	2,730	Polar Cirkle Boats			
Hanseatic	Bahamas	Hapag Lloyd Kreuzfahrten	Germany	188	6	896	Zodiac			
Kapitan Khlebnikov	Russia	Quark Expeditions	United States	108	3	304	Zodiac, helicopter			
Le Diamant	France	Compagnie Des Iles Du Ponant	France	226	5	753	Zodiac			
Le Diamant	France	Zegrahm Expeditions	United States	226	1	170	Zodiac			

IAATO Members Seaborne Tourism – Peninsula Region – 2009-10

IAATO Members Seaborne Tourism – Peninsula Region – 2009-10

IAATO Members Vessels	Vessel Registry	Operator / Charterer	Operator Country	Passenger Capacity	Actual # Voyages	Actual # Passengers	Activities incl. landings
Traditional Vessel	s						
Lyubov Orlova	Avatiu, Cook Islands	Quark Expeditions	United States	120	11	1,239	Zodiac
Minerva (Cat 1)	Bahamas	Abercrombie & Kent	United States	200	5	986	Zodiac
Minerva (Cat 2)	Bahamas	Abercrombie & Kent	United States	350	2	611	Zodiac
National Geographic Explorer	Bahamas	Lindblad Expeditions	United States	150	9	1,285	Zodiac, Kayak
Ocean Nova	Bahamas	Quark Expeditions	United States	72	10	707	Zodiac, Kayak, Camping
Plancius	Netherlands	Oceanwide Expeditions	Netherlands	122	5	476	Zodiac, Kayak, Camping, Diving
Polar Pioneer	Russia	Aurora Expeditions	Australia	56	10	521	Zodiac
Polar Star	Barbados	Polar Star Expeditions	Norway	105	7	596	Zodiac
Polar Star	Barbados	Cheesemans' Ecology Safaris	United States	105	1	95	Zodiac
Prince Albert II	Bahamas	Silversea Cruises	United States	132	10	1190	Zodiac
Professor Molchanov	Russia	Oceanwide Expeditions	Netherlands	52	9	444	Zodiac
Professor Molchanov	Russia	Waterproof Expeditions	Netherlands	52	2	92	Zodiac, diving
Professor Multanovskiy	Russia	GAP Adventure	Canada	52	1	37	Zodiac
Professor Multanovskiy	Russia	Oceanwide Expeditions	Netherlands	52	5	254	Zodiac, Kayak, climbing, hiking, camping
Ushuaia	Comoros	Antarpply Expeditions	Argentina	84	10	749	Zodiac
Ushuaia	Comoros	Antarpply Expeditions / Waterproof Expeditions	Netherlands	84	1	56	Zodiac

Vessels	Vessel Registry	Operator / Charterer	Operator Country	Passenger Capacity	Actual # Voyages	Actual # Passengers	Activities incl. landings
Traditional Vessels	5						
Ushuaia	Comoros	Students on Ice	Canada	84	1	76	Zodiac
Vistamar	Spain	plantours & Partner GmbH	Germany	290	2	456	Zodiac
Total					187	20700	

## IAATO Members Seaborne Tourism - Peninsula Region 2009-10

	Vessel Registry	Operator / Charterer	Operator Country		Actual # Voyages	Actual # Passengers	Activities incl. landings
Air/Cruise							hundings
Professor Multanovskiy	Russia	Antarctica XXI	Chile	52	9	345	Zodiac
Total					9	345	

#### IAATO Member Yachts (all regions) 2009-10

Vessels	Vessel	Operator /	Operator	Passenger	Actual #	Actual #	Activities
	Registry	Charterer	Country	Capacity	Voyages	Passengers	incl.
							landings
Yachts							
							Zodiac,
							kayak,
		Ocean					camping, climbing,
Australis	Australia	Expeditions	Australia	9	3	23	skiing
	UK	Golden	UK				
	Overseas	Fleece	Overseas				
Golden Fleece	Territory	Expeditions	Territory	12	2	10	Zodiac
							Zodiac,
II	A	Hanse	Comment	10	4	25	kayak,
Hanse Explorer	Antigua	Explorer	Germany	12	4	35	camping
K - 4: - L	Energy	Kotick	Energy	6	1	F	Zodiac,
Kotick	France British	Charters Ltd	France	6	1	5	skiing
	Virgin	Pelagic	United				
Pelagic	Islands	Expeditions	Kingdom	6	1	6	Zodiac
			6				Zodiac,
							kayak,
	British						camping,
	Virgin	Pelagic	United				climbing,
Pelagic Australis	Islands	Expeditions	Kingdom	12	2	13	skiing
							Zodiac,
		Spirit of					kayak, camping,
		Sydney					climbing,
Podorange	Australia	Expeditions	Australia	8	1	8	skiing

## IAATO Member Yachts (all regions) 2009-10

Vessels	Vessel Registry	Operator / Charterer	Operator Country	Passenger Capacity	Actual # Voyages	Actual # Passengers	Activities incl. landings
Yachts							
Santa Maria Australis	Germany	Sea and Ice Mountain Expeditions	Chile	9	2	13	Zodiac, kayak, climbing, activities vary
Seal	USA	Sterna Corporation	USA	6	2	8	Zodiac
Spirit of Sydney	Australia	Spirit of Sydney Expeditions	Australia	8	4	28	Zodiac, kayak, camping, hiking, skiing, diving
Vaihéré	France	Latitude Oceané	France	10	2	20	Zodiac
Xplore	Panama	Xplore Expeditions	Panama	10	2	11	Zodiac
Total					26	180	

## IAATO Large Ships Cruise-Only/Peninsula 2009-10

Vessels	Vessel Registry	Operator / Charterer	Country	Passenger Capacity	Actual # Voyages	Actual # Passengers	Activities incl. landings
Cruise Only							
Amsterdam	Netherlands	Holland America Line	United States	1,340	1	976	Cruise Only
Celebrity Infinity	Malta	Celebrity / Royal Caribbean	United States	1,950	2	3,902	Cruise Only
Crystal Symphony	Bahamas	Crystal Cruises	United States	940	1	545	Cruise Only
Deutschland	Germany	Peter Deilmann Reederei Gmbh & Co.	Germany	360	1	235	Cruise Only
Oceanic	Bahamas	Peace Boat / Japan Grace	Japan	1,550	1	525	Cruise Only
Prinsendam	Netherlands	Holland America Line	United States	800	1	678	Cruise Only
Seven Seas Mariner	Bahamas	Regent Seven Seas	United States	700	1	579	Cruise Only
Star Princess	Bermuda	Princess Cruises	United States	2,600	2	5,064	Cruise Only
Veendam	Netherlands	Holland America Line	United States	1,340	2	2,522	Cruise Only
Total					12	15,026	

Vessels	Vessel Registry	Operator / Charterer	Country	Passenger Capacity	Actual # Voyages	Actual # Passengers	Activities incl. landings
Kapitan Khlebnikov	Russia	Quark Expeditions	United States	108	1	106	Zodiac, helicopter
Orion	Bahamas	Orion Expeditions	Australia	106	2	192	Zodiac
Spirit of Enderby	Russia	Heritage Expeditions	New Zealand	50	2	99	Zodiac, hovercraft
Total					5	397	

IAATO Members Seaborne Tourism – Continental/Ross Sea - 2009-10

## IAATO Members Air/Land Based Tourism - 2009-10

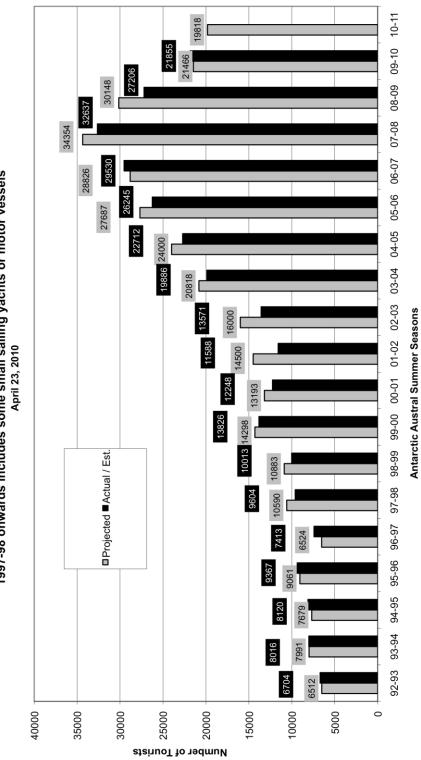
Operator	Country	Antarctic Area Visited	Aircraft Used	Actual # Voyages	Actual # Passengers	Activities
Adventure Network International / Antarctic Logistics and Expeditions	United States	Patriot Hills, South Pole	Ilyushin-76, Twin Otter, DC3 Basler	Varies	161	Camping, climbing, skiing, marathon, station visits
The Antarctic Company (TAC)	Varies	Filchner Ice Shelf, South Pole	Ilyushin-76, Boeing 727, Twin Otter DC3 Basler	Varies	72	Climbing, skiing, station visits
Total					233	

## SUMMARY OF ACTUALS for 2009-10 SEASON

(All Tourist Types) \*Note all numbers and company status are subject to change and are preliminary estimates only

Types of Tourism	Number of Vessels	Number of Departures	Total Number of Passengers
IAATO Seaborne, Landed/Peninsula	33	187	20,700
IAATO Seaborne, Landed/Ross Sea-Continental	3	5	397
IAATO Sailing Vessels/Yachts	11	26	180
IAATO Air-Cruise/Peninsula	1	9	345
IAATO Large Ships Cruise-Only/Peninsula	9	12	15,026
IAATO Air/Land-Based		varies	233
IAATO Air Over-flights/Peninsula		0	0

Total Visitors for 2009-10 Season:	
Seaborne Traditional Tourism (with landings)	21,277
Seaborne Tourism Cruise-Only (no landings)	15,026
Air/Cruise	345
Air/Land-Based Tourism	233
Over-flights (no landing)	0
Total	36,881





1992-2009 ANTARCTIC TOURIST TRENDS - Landed Passengers Includes Ship and Land-based passenger numbers. 1997-98 onwards includes some small sailing yachts or motor vessels IP 113

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# **Appendix 3: Preliminary Estimate of Antarctic Tourism 2010-11** Based on Information provided by IAATO Members to the IAATO Secretariat as of Apr 20, 2010

Vessels	Vessel Registry	Operator / Charterer	Operator Country	Passenger Capacity	Est. # Voyages	Est. # Average	Est. # of Passengers	Activities incl.
						Load		landings
Traditional Ves	sels							
								Zodiac,
		Overal	I.I: to d					kayak,
Akademik Ioffe	Russia	Quark Expeditions	United States	110	8	90	720	camping, climbing
55		1						
								Zodiac,
Akademik		Quark	United					kayak, camping,
Sergey Vavilov	Russia	Expeditions	States	110	9	90	810	climbing,
0.2								
Antarctic		Antarctic						
Dream	Belize	Shipping	Chile	78	14	33	462	Zodiac
		Rederij Bark						
Bark Europa	Netherlands	Europa B.V	Netherlands	48	5	35	175	Zodiac
Bremen	Bahamas	Hapag Lloyd Kreuzfahrten	Germany	164	4	130	520	Zodiac
Dremen	Dunanias			104		150	520	Zoulde
Clelia II	Malta	Travel Dynamics	United States	100	7	80	560	Zodiac
Ciella II	Watta	Dynamics	States	100	/	80	500	Zoulae
Clipper		Quark	United					
Adventurer	Bahamas	Expeditions	States	122	8	90	720	Zodiac
		71	TT. '4 . J					
Clipper Adventurer	Bahamas	Zegrahm Expeditions	United States	122	1	110	110	Zodiac
Delahin	Dahamaa	Hansa	Comment	350	2	200	720	Zodiac
Delphin	Bahamas	Kreuzfahrten	Germany		2	360	720	Zodiac
	T ·1 ·	GAP	G 1	120	10	100	1 200	7 1
Expedition	Liberia	Adventure	Canada	120	13	100	1,300	Zodiac Polar
		Hurtigruten						Cirkle
Fram	Norway	ASA	Norway	317	10	233	2,330	Boats
		Hapag Lloyd						
Hanseatic	Bahamas	Kreuzfahrten	Germany	188	4	150	600	Zodiac
Kapitan		Quark	United					Zodiac,
Khlebnikov	Russia	Expeditions	States	108	4	85	340	helicopte
		Abercrombie						
		& Kent	United					
Le Boreal	France	USA, LLC	States	200	3	200	600	Zodiac

IAATO Mombars Soobarna Tourism - Paninsula Region - 2010-11

Vessels	Vessel Registry	Operator / Charterer	Operator Country	Passenger Capacity	Est. # Voyages	Est. # Average Load	Est. # of Passengers	Activities incl. landings
Traditional V	Vessels			_				
Le Boreal	France	Compagnie Des Iles Du Ponant	France	200	4	180	720	Zodiac
Marina Svetaeva	Russia	One Ocean Expeditions	Canada	100	9	65	585	Zodiac
National Geographic Explorer	Bahamas	Lindblad Expeditions	United States	150	10	130	1,300	Zodiac, Kayak
Ocean Nova	Bahamas	Quark Expeditions	United States	72	5	60	300	Zodiac, Kayak, Camping
Plancius	Netherlands	Oceanwide Expeditions	Netherlands	122	12	70	840	Zodiac, Kayak, Camping, Diving
Polar Pioneer	Russia	Aurora Expeditions	Australia	56	10	54	540	Zodiac
Polar Star	Barbados	Polar Star Expeditions	Norway	105	11	65	715	Zodiac
Prince Albert II	Bahamas	Silversea Cruises	United States	132	9	120	1,080	Zodiac
The World	Bahamas	ResidenSea	United States	651	2	250	500	Zodiac
Ushuaia	Comoros	Antarpply Expeditions	Argentina	84	12	70	840	Zodiac
Ushuaia	Comoros	Students on Ice	Canada	84	2	70	140	Zodiac
Vessel tbd	tbd	Fathom Expeditions	Canada	0	2	40	80	Zodiac
Vessel tbd	tbd	Waterproof Expeditions	Netherlands	0	1	65	65	Zodiac
Vistamar	Spain	plantours & Partner GmbH	Germany	290	2	250	500	Zodiac
Total					183		18172	

IAATO Members Seaborne Tourism – Peninsula Region – 2010-11

IAATO Members Seaborne Tourism – Peninsula Region – 2010-11

Vessels	Vessel Registry	Operator / Charterer	Operator Country	Passenger Capacity	Est. # Voyages	Est. # Average Load	Est. # of Passengers	Activities incl. landings
Air/Cruise								
Ocean Nova	Bahamas	Antarctica XXI	Chile	72	9	62	558	Zodiac
Total					9		558	

## IAATO Member Yachts (all regions) 2010-11

Vessels	Vessel Registry	Operator / Charterer	Operator Country	Passenger Capacity	Est. # Voyages	Est. # Average Load	Est. # of Passengers	Activities incl. landings
Yachts								
Australis	Australia	Ocean Expeditions	Australia	9	3	9	27	Zodiac, kayak, camping, climbing, skiing
Golden Fleece	UK Overseas Territory	Golden Fleece Expeditions	UK Overseas Territory	12	2	6	12	Zodiac
Hanse Explorer	Antigua	Oceanstar	Germany	12	4	12	48	Zodiac, kayak, camping
Pelagic	British Virgin Islands	Pelagic Expeditions	United Kingdom	6	1	6	6	Zodiac
Pelagic Australis	British Virgin Islands	Pelagic Expeditions	United Kingdom	12	2	8	16	Zodiac, kayak, camping, climbing, skiing
Santa Maria Australis	Germany	Sea and Ice Mountain Expeditions	Chile	9	3	8	24	Zodiac, kayak, climbing, activities vary
Seal	USA	Sterna Corporation	USA	6	2	4	8	Zodiac
Spirit of Sydney	Australia	Spirit of Sydney Expeditions	Australia	8	4	6	24	Zodiac, kayak, camping, hiking, skiing, diving
Vaihéré	France	Latitude Oceané	France	10	2	10	20	Zodiac
Vessel tbd.	tbd	High Latitudes	United Kingdom	10	2	6	12	Zodiac
Xplore	Panama	Xplore Expeditions	Panama	10	2	8	16	Zodiac
Total					27		213	

Vessels	Vessel Registry	Operator / Charterer	Country	Passenger Capacity	Est. # Voyages	Est. # Average Load	Est. # of Passengers	Activities incl. landings
Cruise Only								
Celebrity Infinity	Malta	Celebrity/Royal Caribbean	United States	1,950	2	1,950	3,900	Cruise Only
Crystal Symphony	Bahamas	Crystal Cruises	United States	940	1	800	800	Cruise Only
Insignia	Marshall Islands	Regent Seven Seas	United States	777	1	600	600	Cruise Only
Prinsendam	Netherlands	Holland America	United States	800	1	750	750	Cruise Only
Seven Seas Mariner	Bahamas	Regent Seven Seas	United States	700	1	600	600	Cruise Only
Star Princess	Bermuda	Princess Cruises	United States	2,600	2	2,600	5,200	Cruise Only
Veendam	Netherlands	Holland America	United States	1,340	2	1,250	2,500	Cruise Only
Total					10		14,350	

IAATO Large Ships Cruise-Only/Peninsula 2010-11

#### IAATO Members Seaborne Tourism - Continental/Ross Sea - 2010-11

Vessels	Vessel Registry	Operator / Charterer	Country	Passenger Capacity	Est. # Voyages	Est. # Average Load	Est. # of Passengers	Activities incl. landings
One	Russia	Heritage Expeditions	New Zealand	58	3	50	150	Zodiac
Orion	Bahamas	Orion Expeditions	Australia	106	2	100	200	Zodiac
Spirit of Enderby	Russia	Heritage Expeditions	New Zealand	50	3	50	150	Zodiac, hovercraft
Total					8		500	

## IAATO Members Air/Land Based Tourism - 2010-11

Operator	Country	Antarctic Area Visited	Aircraft Used	Est. # of Departures	Est. # Average Load	Est. # of Passengers	Activities
Adventure Network International / Antarctic Logistics and Expeditions	United States	Patriot Hills, South Pole	Ilyushin-76, Twin Otter, DC3 Basler	Varies	Varies	225	Camping, climbing, skiing, marathon
The Antarctic Company (TAC)	Varies	Filchner Ice Shelf, South Pole	Ilyushin-76, Twin Otter, DC3 Basler	Varies	Varies	150	Climbing, skiing, station visits
Total				Varies		375	

## SUMMARY OF ESTIMATES for 2010-11 SEASON (All Tourist Types)

\*Note all numbers and company status are subject to change and are preliminary estimates only

Types of Tourism	Number of Vessels	Number of Departures	Total Number of Passengers
IAATO Seaborne, Landed/Peninsula	28	183	18,172
IAATO Seaborne, Landed/Ross Sea-Continental	3	8	500
IAATO Sailing Vessels/Yachts	10	27	213
IAATO Air-Cruise/Peninsula	1	9	558
IAATO Large Ships Cruise-Only/Peninsula	7	10	14,350
IAATO Air/Land-Based		varies	375
IAATO Air Over-flights/Peninsula		0	0

Total Preliminary Visitor Estimates for 2010-11 Seas	on:
Seaborne Traditional Tourism (with landings)	18,885
Seaborne Tourism Cruise-Only (no landings)	14,350
Air/Cruise	558
Air/Land-Based Tourism	375
Over-flights (no landing)	0
Total	34,168

A Decade of Antarctic Tourism\*, 2003-04 through 2012-13 Seasons

<b>Total Visitors for:</b>	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
	Season	Season	Season							
								(estimate)	(estimate)	(estimate)
Seaborne, Traditional	19,369	22,834	24,956	28,448	31,941	26,648	21,277	18,885	21,810	23,365
Tourism (with										
landings)										
Seaborne Tourism,	4,949	5,027	4,632	6,930	13,015	10,652	15,026	14,350	6,400	7,250
Cruise-Only (no										
landings)										
Air/Cruise			211	174	257	285	345	558	600	650
Air/Land-Based	517	878	1,078	908	439	273	233	375	450	525
Traditional Tourism										
Over-flights (no	2,827	2,030	1,165	1,046	613	0	0	0	0	0
landings)										
Total	27,662	30,769	32,042	37,506	46,265	37,858	36,881	34,168	29,260	33,790

\* Estimates for 2010-11 through 2012-13 seasons are based on tours projected for members of IAATO. At the present time (and excluding a number of 12-passenger yachts), there are no non-IAATO vessel operations planning voyages to Antarctica, to the best knowledge of IAATO.