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# **Land-Based Tourism Facilities**



# Land-Based Tourism Facilities

## IAATO

The range, scale and scope of IAATO Members' land-based activities are described. Details of IAATO Members' land-based activities are given. Some of the points raised in "A Suggested Way Forward," provided at the end of ATCM XXXI IP084, are addressed in an attempt to assist in the definition of terms used when describing land-based activities.

### **Introduction**

For several years, Treaty Parties have deliberated over the potential installation of permanent land-based facilities developed solely for support of tourism activities.

The environmental, political and legal ramifications of land-based tourist developments were brought into focus by New Zealand at the Antarctic Treaty Meeting of Experts in 2004 (ATME 2004 Paper 07. *An Analysis of the Existing Legal Framework for the Management of Tourism and Non-Governmental Activities in Antarctica: Issues, Some Proposals and Comments*). These issues have been further addressed by papers presented at subsequent meetings, for example, ATCM XXVIII WP012 (New Zealand) *'Land-Based' Tourism in Antarctica*; ATCM XXIX WP015-Rev 1 (New Zealand, Australia) *Regulation of Land-Based Infrastructure to Support Tourism in Antarctica*; ATCM XXIX IP085 (IAATO) *Land-Based Tourism and the Development of Land-Based Tourism Infrastructure in Antarctica: an IAATO Perspective*; and ATCM XXXI WP021 (New Zealand) *Control of Permanent Land-based Facilities in Antarctica*.

At ATCM XXXI in Kyiv, during the discussion on *Non-Governmental Land Based Infrastructures*, Japan stated that it "...would welcome IAATO and ASOC to come to ATCM XXXII with as much information as possible and an analysis of land-based facilities." (ATCM XXXI Final Report, paragraph 251).

This Information Paper aims to describe IAATO Members' land-based activities such as overland expeditions and camps, including land-based activities supported by ships and yachts; address some of the points raised in "A Suggested Way Forward" given at the end of ATCM XXXI IP084 *Land-Based Tourism and the Development of Land-based Tourism Infrastructure in Antarctica: An IAATO Perspective*; and propose scenarios of how land-based tourism may develop in the future to support ATCM XXXII WP010 *Strategic Vision of Antarctic Tourism for the Next Decade*. IAATO is aware of land-based activities and the use of facilities for tourism purposes by non-IAATO members. In order to understand the scope and scale of all land-based tourism, IAATO welcomes the work by ASOC to identify the full range of these activities (ATCM XXXII IP023 *Tourism and Land-Based Facilities in Antarctica*).

### **What is Land-Based Tourism?**

IAATO noted in IP084 (ATCM XXXI, Kyiv) that clarification of which activities constitute "land-based tourism" would be useful. For the purposes of this paper, IAATO proposes to use the following definition for land-based tourism:

- "Land-based tourism" is any activity that requires passengers and field staff to be on land for more than 36 hours (excluding emergencies) and that necessitates sufficient equipment for sustained support – for example food, shelter and safety equipment.

The intention of this definition is to exclude short-term organized overnight stays that are sometimes operated as a shore excursion of a normal ship cruise<sup>1</sup>. It does, however, include any groups that are put ashore to camp, climb or undertake other activities that require more than one night ashore.

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<sup>1</sup> Some IAATO members offer their passengers the opportunity to experience a night ashore by establishing a temporary camp for up to eight hours. Typically, passengers and guides are landed after their evening meal and are picked up before breakfast the following

This definition of “land-based tourism” also excludes the brief use of national program facilities such as wharves, jetties and runways, wherein the underlying characteristics of the tourism activity are not defined by those facilities. (For example, IAATO Member Antarctica XXI utilizes the prepared gravel runway at Teniente Rudolph Marsh (SCRM), King George Island, for the exchange of passengers onboard their cruise vessel.) In all these cases, the facilities have been constructed by a national operator for servicing or support of station research activities. IAATO Members only use these facilities with the prior agreement of the relevant station for visitation dates and arrangements, and only in a way that the station’s normal logistic and scientific activities are not compromised.

### ***IAATO Members’ Land-Based Activities***

Adventure Network International/Antarctic Logistics & Expeditions (ANI/ALE) is the only IAATO Member that operates significant land-based activities.<sup>2</sup> The original company, ANI, was a founding Member of IAATO and was taken over by ALE in 2003. The number of passengers taken by ANI/ALE to Antarctica in 2007-08 was 260.

In addition to these figures, IAATO estimates – on the basis of annually generated camping statistics – that approximately 15-20 persons are engaged on multi-day camping expeditions each season. Traditionally, IAATO has not differentiated in its published tourism statistics between short-term organized overnight stays and those expeditions that camp, climb or undertake other activities on land that require more than one night ashore.

In addition, some IAATO Members, including ANI/ALE, are contracted to provide logistic and SAR support to private expeditions that are permitted or authorized in their own right by a national authority. An example of this would be a kayaking expedition which goes through permitting / authorization with their own National Authority, but travels to Antarctica with an IAATO Member vessel.

All activities, equipment and procedures used by IAATO Members in support of land-based tourism are reported to the relevant national authority, detailed in environmental documentation and included in Advance Notification.

### ***ANI/ALE Land-Based Activities***

ALE/ANI’s operations are entirely supported by air; each season ALE/ANI charter aircraft suitable for intercontinental flights, and ski aircraft for flights within Antarctica.

ALE/ANI operates a seasonal intercontinental air service from early November to late January between Punta Arenas, Chile, and Patriot Hills, Heritage Range, Ellsworth Mountains, landing large transport aircraft, such as Ilyushin IL-76 or Lockheed Hercules L-381G on blue-ice runways.

Ski-aircraft, typically De Havilland DHC-6 Twin Otter, are used to transport clients, expeditions and research groups within Antarctica.

ALE/ANI use a naturally formed blue-ice runway at Patriot Hills for landing intercontinental flights. The blue-ice runway was certified by Dirección General de Aeronáutica Civil (DGAC) in 1987. ALE/ANI also operates a variety of tractors and snow blowers for aircraft support such as loading/unloading, placement of caches, and for supporting long-range expeditions and overland traverses.

The numbers of passengers taken by ANI/ALE to Antarctica since 1996 are given in **Table 1**.

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morning. Camps are usually placed on snow and located away from any breeding colonies or concentrations of wildlife. No food is consumed at these camps, although emergency survival food is taken. Any waste generated is removed.

<sup>2</sup> IAATO membership application for another significant land-based operator, The Antarctic Company, based in South Africa, is pending.

**Table 1 Passenger Numbers by Year for ANI/ALE**

<i>Year</i>	<i>No. Passengers</i>
2009-10 <i>estimated</i>	225
2008-09	270
2007-08	260
2006-07	204
2005-06	212
2004-05	221
2003-04	119
2002-03	180
2001-02	159
2000-01	127
1999-00	139
1997-98	131
1996-97	91

The main operational camp for ALE/ANI's seasonal activities is based at Patriot Hills, adjacent to the blue-ice runway. The camp is opened in November and occupied through January. It is completely removed just before the final flight. Delicate items and equipment needing repair are returned to Punta Arenas, other camp equipment is cached at the location for winter storage.

The camp can accommodate up to 100 passengers and staff and has emergency food and shelter supplies for up to 200 people. The camp is constructed from large insulated Weatherhaven® tents with solid floors for messing and rest areas, workshop, communications, toilet and washing facilities and storage. Staff and passengers are housed in one- or two-person tents. Patriot Hills has the main HF radio and satellite communications for maintaining contact with aircraft, remote camps, program groups, expeditions and Punta Arenas Operations Office. Renewable power sources, e.g. solar panels and wind generators, are used, backed-up by gasoline generators. ALE/ANI removes, as far as is practicable, all human and other waste from Antarctica by air to Punta Arenas. Grey water from the kitchen and washrooms is filtered and drained into a snow pit.

ALE/ANI has caches at Patriot Hills of their main camp tents and equipment, and retains a store of emergency food and safety equipment. They also maintain fuel caches at Patriot Hills, Thiel Mountains and elsewhere. These caches have a dual role of providing fuel for long distance flights and as a backup for SAR in the sector.

ALE/ANI's programs are operated within the general area of the Ellsworth Mountains including Vinson Massif, the sector to the South Pole, the Filchner–Ronnie Ice Shelf including Berkner Island, the coast of Coats Land, the Ross Ice Shelf and the general route from Ross Island to the South Pole.

Within this general area of operations, ALE/ANI operates standard programs, such as flights and overland ski expeditions of various durations to the geographic South Pole, ascents of Antarctica's highest mountain, Vinson Massif, ski expeditions in the Ellsworth Mountains, etc, and offers logistic support to private expeditions that wish to travel in ALE/ANI's area of operations. ALE/ANI also offers support to National Operators and peer-reviewed scientific expeditions.

Tourists and expeditions on ALE/ANI's overland and flight programs to the geographic South Pole enter ASMA No. 5 *Amundsen-Scott South Pole Station, South Pole* and may visit Amundsen–Scott Station (USA). The station lies within a few tens of meters of the geographic South Pole. A total of 92 ANI/ALE clients visited the geographic South Pole during the 2007-08 season, the majority of whom were given tours of Amundsen–Scott Station by station crew. ANI/ALE provides pre-season notification to the USA of numbers and proposed arrival dates for visitors and update these routinely as expeditions approach the geographic South Pole. Station visits, typically, last three to four hours but expeditions may camp at a site designated in ASMA No. 5 while they await suitable weather for a pick-up by an ALE/ANI aircraft.

ALE/ANI typically run eight to ten passenger flights a season with an average capacity of 30 passengers on each flight. In addition ALE/ANI operate a number of flights to bring hazardous cargo, e.g. fuel and oil, and general freight to Antarctica. The number of extra flights for any particular season depends on ALE/ANI's

own operational requirements and requests by national operators for cargo delivery. During the 2007-08 season ALE/ANI made a total of 18 intercontinental flights, including nine cargo/hazardous flights.

### **Other IAATO Members' Land-Based Activities**

Other land-based activities by IAATO Members are primarily camps providing a base for climbing or ski mountaineering trips on the Antarctic Peninsula. These are supported by ships or yachts and are, typically, of short duration. The location of these activities is subject to suitable landing and camp areas and access to mountain peaks.

These activities take all their supplies and camp equipment ashore, remove everything, including all waste at the end of their expedition. Some grey water and liquid human waste may be disposed locally. In very exceptional circumstances, expeditions have placed caches for use in a subsequent season but, more usually, expeditions occur during a single season.

IAATO Members may also provide logistic support for overland expeditions. For example, expedition caches may be placed or expeditions landed or embarked for an overland traverse. In these cases, IAATO Members may be contracted to provide logistic support but are not involved in the expedition itself.

Short-term climbing, ski-mountaineering and camping expeditions on the Antarctic Peninsula have no requirement for any facilities ashore, such as caches, permanent facilities, etc. Some expeditions may take advantage of the runway at Teniente Rudolph Marsh (SCRM) for access.

Since 1994-95 season, the occasional private kayaking expedition has taken place along the Antarctic Peninsula, operating under an authorization granted directly to the private expedition, but usually with access to and from the Antarctic provided by IAATO Member vessels. These expeditions camp ashore each night, although rarely camping at the same site for more than one night. Similar to climbing expeditions kayakers take all their supplies and camping equipment with them.

### **Discussion and Next Steps**

IAATO Members have, since 2004-05, supported between 200-300 land-based tourists each season, the great majority of which are undertaken taken by ALE/ANI. These numbers, compared to ship-borne tourism (32,198 in 2007-08) are modest. However, the geographical spread of their activities is relatively extensive. As indicated above, ALE/ANI's activities occur in the sector of West Antarctica from the Ellsworth Mountains to the geographic South Pole. ALE/ANI's activities also cover overland ski and vehicle expeditions from Ross Island to the geographic South Pole.

### **Future Scenarios for Land-Based Tourism**

Various Parties at ATCM XXXI (Kyiv) subscribed to the proposal by UK to consider future scenarios for the development of Tourism. IAATO has participated in this debate and supports many of the general principles given in ATCM XXXII WP010 *Strategic Vision of Antarctic Tourism for the Next Decade*.

The heightened awareness of Antarctica brought about by media attention to global warming and, in particular, the highly successful IPY has increased the desire in many people to visit Antarctica, especially deep into the continent. The trend in the general tourism market, however, is for shorter visits to Antarctica.

Current economic forecasts indicate that there will be a contraction of the tourism market over the new few years. There will also be a disincentive for major long-term expeditions, such as treks across Antarctica, because of the increasing cost of providing logistical support deep in the continent. Future scenarios for land-based tourism will therefore largely depend on the ability to gain access to the interior by air and the consequential cost to the participants. It is possible that a development by a national operator of, for example, an all weather runway, could provide further access to the continent.

With that said, IAATO fully supports ATCM XXX Resolution 5: *Tourism in the Antarctic Treaty Area* (2007, New Delhi). Similarly, we reaffirm our statement from ATCM XXXI IP084 (2008, Kyiv) that Members are clear that none is currently interested in promoting or funding the construction of major facilities such as "hotel" accommodations; not only would this conflict with IAATO Bylaws that ensure all

activities have a less than minor or transitory impact, but there is the potential to contradict the very “wilderness and aesthetic values” that are a key element in visitors’ desire to see Antarctica.

### **Proposed Definitions of Terms**

IAATO also suggested in the above-mentioned IP084 (2008, Kyiv) that developing definitions for terms such as “land-based tourism” and “permanent infrastructure” would assist the debate on land-based tourism.

As noted earlier, for the purposes of this paper, IAATO has used the definition for land-based tourism of “*Any activity that requires passengers and field staff to be on land for more than 36 hours (excluding emergencies) and that necessitates sufficient equipment for sustained support, for example, food, shelter and safety equipment.*” IAATO would like to further assist the debate by proposing a definition for “Permanent Infrastructure”:

- A “Permanent Infrastructure” is any structure or facility established in Antarctica for the duration of its useful or predicted working life that will require remedial actions to reinstate the original environmental state once the infrastructure has been removed. Examples include buildings, wharves and jetties, and graded runways on exposed ground.

IAATO questions the use of the term semi-permanent because it believes it does not represent a useful category. By definition, any facility that is not permanent is temporary.

IAATO welcomes discussion on these proposed definitions in attempts to define “Land-Based Tourism” and “Permanent Infrastructure.”