

AECO & IAATO POLAR FIELD STAFF STANDARDS



Association of
Arctic Expedition Cruise
Operators **AECO**!



AECO & IAATO Field staff standards
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1. INTRODUCTION

The Association of Arctic Expedition Cruise Operators (AECO) and The International Association of Antarctic Tour Operators (IAATO) have worked in partnership to develop standards for field staff working on board expedition cruise vessels in Polar Regions.

“Field Staff” are the personnel on board expedition cruise vessels which have direct contact with guests. They are responsible for the educational programs on board as well as off-vessel operations on land and/or in tender boats. Field Staff are responsible for guests’ safety during off-vessel operations, which typically include responsibilities such as leading hikes on shore, carrying firearms and other polar bear deterrents, and driving tender boats. Field Staff are often referred to as “Expedition Guides” and/or “Naturalists”. Field Staff are generally headed by one Expedition Leader (EL) and one or more Assistant Expedition Leaders (AEL). The EL and AEL are usually responsible for decision making and are key personnel in expedition cruise operations. Senior Expedition Guides most often have several years of experience in the expedition guiding industry and in the geographic area of operation.

Many Field Staff who are employed by members of AECO and IAATO have an academic background and/or specific experience in the field that makes them valuable assets as communicators and facilitators on ships and on shore landings in remote areas. The diversity of educational backgrounds and/or experience levels among field staff in the industry is very high. Operators will strive to have a team of Field Staff with a diverse range of backgrounds to cover the overall knowledge concerning the Polar Regions such as biology, geology, geography, history, oceanography, history, contemporary science, local knowledge, etc. In addition, these employees must have the competency to safely execute activities for guests. Therefore, there is a need for highly skilled and versatile Field Staff with multiple skill sets.

In recent years, the expedition cruise industry has grown significantly. The growth is expected to continue once the Covid-19 situation is no longer a crisis. An increasing number of ships will be looking to hire qualified staff. Qualifications regarding academic background is likely achievable, however, finding personnel which meet operational requirements and experience levels may be more difficult when the demand for new Field Staff surge. AECO and IAATO have recognized this and are working towards implementing certain minimum standards for Field Staff that will ensure the high level of competency among Field Staff in the future.

Relevant authorities have also identified this as an area of focus for the future and certain levels of competency may become part of legal requirements, which re-enforces the need for a proactive approach by the industry.

Guide education courses currently exist. One example is the Svalbard Guide Training course which provides insights into many of the operational aspects of the expedition cruise industry. Another example is the Svalbard Nature Guide one-year university course. Other educational programs also exist, such as Campus Kujalleq in Greenland, which offers undergraduate students tourist guide related courses. Many general area specific courses such as first aid, power boat- and firearms certification exist but they only supply parts of the overall skill set that an expedition cruise Field Staff needs. The fact remains that these certifications schemes are rarely, if ever, designed to encompass the conditions that expedition cruise vessels may encounter. There is no internationally recognized, widely accessible, educational program that will prepare guides for the ever-changing conditions and challenges that the Polar Regions present. Hence, the need for a more standardized approach to ensure competency among Field Staff is needed. This will help improve the overall safety levels of the operations, enhance the safety and quality profile of operators, and emphasize the responsible approach that the industry consistently strives to achieve since the infancy of expedition cruising.

AECO and IAATO have been an advocate and producer of standards since many years. This has resulted in guidelines, field operations manuals, Field Staff assessments - all of which can be categorized as industry standards. Field Staff have been partly included in this ongoing work via some of the AECO and IAATO working committees. Also, AECO and IAATO have held bi-annual Field Staff Conferences since 2013, with participation of Field Staff from various members. During the 2015 event in Toronto, Canada, the desire for AECO and IAATO to look into developing a set of common standards across the operators was expressed. Part of these discussions led to the later formation of the Field Staff driven Polar Tourism Guides Association (PTGA). The PTGA now offers guide qualification assessments and vetting in various areas within the operational sphere of expedition cruise operations and have kindly shared experiences to enhance the work towards setting minimum standards for field staff.

It is in this light that the members of AECO and IAATO set out to generate a set of Polar Field Staff Standards, which create a foundation for qualifications and knowledge outside the scope of traditional educational backgrounds. The intention is not to design a set of courses, operated and hosted by AECO or IAATO, but to set minimum standards which can be achieved by Field Staff, independent of nationality, with direct, tailor made input from employers. This will benefit the guests on board, Field Staff, individual AECO and IAATO members, as well as the expedition cruise industry as a whole.



It is important to realize that assessments and documentation of staff skills and training levels is not a part of this project. Much will depend on local authorities and other regulating bodies and the different ways that documentation may need to be presented. Implementation and documentation of the standards is the responsibility of the members.

2. METHODS

In January 2020, a survey was designed by the AECO secretariat and distributed among members of AECO and IAATO. This survey included 13 questions related to various aspects of field staff standards, including suggestions on what areas could benefit from a minimum standard and how members expect such standards to be administrated.

3. SURVEY

In January 2020, a survey was forwarded to all relevant members of AECO and IAATO. A total of forty (40) different operators responded to the survey. The questions in the survey were designed to mandate the subsequent workshop and guide the workshop participants towards membership driven content and format.

3.1 KEY RESULTS OF THE SURVEY

- Vast majority were in favor of standards being developed
- Standards can include both minimum education levels, in-house training, and experience
- Standards should require in-house or outsourced training following specific polar standards in addition to established certification schemes
- Standards for firearms should require inhouse or outsourced training following specific polar standards in addition to established certification schemes
- Operators should be responsible for ensuring that their staff live up to the standards



Areas with a majority vote (less one*^I) was identified by the survey and were included in the workshop agenda.

3.2 AREAS WHERE STANDARDS ARE REQUIRED:

The Survey Monkey respondents indicated that Field Staff Standards are needed in the following areas:

- First aid
- Crisis management
- Marine radio/communication incl. satellite phone
- Navigation incl. GPS, charts, compass options)
- Zodiac driving
- Firearms
- Polar bear safety
- *Onboard ships safety

Please refer to the complete Monkey Survey results in Appendix 1.

4. WORKSHOP

Due to the Covid-19 situation worldwide in early 2020, an in-person workshop in Iceland was changed to a two-day online workshop. A total of sixteen (16) different members signed up for the workshop (some members of both AECO and IAATO) and appointed one qualified person each to attend the online workshop. The participants have extensive background in the expedition cruising industry. Most with several years of field experience in both the northern and southern hemisphere and many with managerial experience.

The workshop ran over two days with groups sessions of approximately four hours per day. The topics identified in the Survey Monkey as requiring specific standards were examined by the workshop participants in pre-assigned groups. Three independent groups each took notes in their own respective Google Doc.

^I 45% of respondents felt this area should have a defined standard.

Each group discussed and decided on which key parts of knowledge and skill field staff must have within each pre-determined area. From that, a minimum standard for each area was defined.

The results were collated by Troels Jacobsen, AECO Field Operations Manager, and distributed to the participants for comments.

4.1 PARTICIPANTS

GROUP 1

Stefan Kredel, Silversea. Senior Director Expedition Development and Operations

Nick Lewis, Antarctic Logistics & Expeditions. Mountain Operations and Travel Safety

Elise Grøndahl, Albatros Expeditions. Operations Manager

Jonathan Zaccharia, Grand Espace, Expedition Leader

Jason Edmunds, Adventure Canada. Expedition Leader & Operations Specialist

Hayley Shephard, Polar Latitudes. Vice President Expeditions Operations

Terry Shaller, IAATO secretariat

GROUP 2

Robin West, Seabourn. Vice President Expedition Operations

Aaron Lawton, Viking Cruises. Operations Manager

Adam Turner, Oceanwide Expeditions. Operations Manager

Nathan Russ, Heritage Expeditions, Director of Operations

Brandon Harvey, EYOS. Director Expedition Operations & Program Development

Troels Jacobsen, AECO secretariat

GROUP 3

Niki Trudeau, Quark. Director, Expedition, Team Engagement & Development

Mariano Curiel, Antarctica XXI. Director of Expeditions Operation

Shaun Powell, Lindblad. Field Staff and Operations Manager

Arne Kertelhein, Lloyd. Expedition Leader

Tudor Morgan, Hurtigruten. Expedition Operations Manager

Susan Adie, IAATO secretariat

Zoom hosts facilitating the technical aspects were Melisa Nacke and Ann Eileen-Lennert, AECO Secretariat.

4.2 RESULTS

The collated workshop results showed strong similarities between groups for the individual areas of interest despite groups being completely independent. This indicates that standards are not necessarily company nor product dependent but rather more general in scope. Results are presented in detail below with a suggested minimum standard for each. How to achieve the standard is also listed along with the skill sets that need to be included in any of the identified standards.

On two occasions discussions led to comments and/or recommendations to members and AECO and IAATO Secretariats. These are marked with red fonts.



FIRST AID

Standard suggested:

Basic first aid course plus in house (or similar) training on the prevention of hypothermia.

Staff intended to comply:

All field staff

SKILLS NEEDED

- Basic ABCD (Airway, Breathing, CPR, Defibrillation) CPR (cardiopulmonary resuscitation)
- AED (automated external defibrillator)
- Response to drowning
- Anaphylaxis
- Hypoglycemia
- Stroke/heart attack
- Wound care
- Fractures, sprains, and strains
- Treatment of chock
- Shock training
- Sun damage (incl. eyes)

CRISIS MANAGEMENT

Standard suggested:

Standards of Training, Certification and Watchkeeping for Seafarers (STCW), Crowd & Crisis Management (online) OR equivalent internal or external training

Staff intended to comply:

All field staff

SKILLS NEEDED

- Knowledge of techniques for effective crowd management
- Knowledge of role within crisis management team
- Knowledge of emergency equipment carried on land
- Leadership, fellowship, situational awareness
- Ability to diagnose the situation/concern/hazard/danger
- Ability to choose the appropriate turnaround step
- Re-assess situation and ongoing next steps
- Debriefing and learning lessons from crises/incidents
- Understanding of risk and safety management (hazard mitigation in polar environment)
- Access to decision making tools such as weather, ice charts



MARINE RADIO

Standard suggested:

Recognized operator's license (Royal Yacht Association (RYA) Radio course, Restricted Radiotelephone Operator's Certificate (ROC), Canada, OR equivalent).

Satellite phone - in house, logged (will likely be covered under Global Maritime Distress and Safety System (GMDSS) training in the future)

Staff intended to comply:

Radio:

All field staff carrying a radio

Satellite phone:

All field staff

SKILLS NEEDED RADIO

- Basic radio protocol
- Using control features (High/low power, squelch, lock and unlock, changing channels etc.
- Radio care
- Understanding limitations depending on environment and geographical location
- The theory behind it (difference between marine channels)
- The use of repeaters (if appropriate to organization)
- Etiquette and safety
- Phonetic alphabet

SKILLS NEEDED SATELLITE PHONE

- Basic use of satellite handheld phone - function, storage, care, recharge
- Ensure list of numbers is included relevant to the operational area



NAVIGATION INCL. GPS

Standard suggested:

Logged experience and ship/company-specific related training

Recognized existing qualifications already in place can be accepted (such as but not limited to International Federation of Mountain Guides Associations (IMFGA), Mountain Leader (ML), Summer Mountain Leader, PTGA)

Staff intended to comply:

All field staff on shore or driving tender boats

SKILLS NEEDED GPS

- Demonstrate understanding of the use and function of the device (GPS, Compass)
- Understand system of coordinates (decimal degrees, degrees, minutes, seconds, etc.)
- Understanding of situations in which device can be used
- Ability to navigate in low visibility with GPS device
- Ability to lay tracks & mark waypoints
- Demonstrate understanding and use of nautical charts, topographical maps
- Understand the function of mud maps
- Ability to communicate location or find location using latitude and longitude
- Charts projection
- Chart datums
- Symbols and abbreviations
- Tides and ranges- where to source information and project heights etc. and apply in practice
-

SKILLS NEEDED COMPASS

- Understand points
- Understand true/magnetic and apply declination
- Steer/walk a compass course
- Understand 'pacing' to estimate distance travelled (including timing)
- Able to read a map/chart? And orientate compass to map/chart if required

TENDER BOAT DRIVING

Standard suggested:

Powerboat certification such as RYA II, Small Vessel Operator Proficiency (SVOP), OR equivalent AND in-house training according to “list of skills” and driving ability assessments (logged)

Staff intended to comply:

All field staff/crew driving tender boats

SKILLS NEEDED

- Demonstrate pre-driving boat and equipment checks
- Understanding basic troubleshooting with zodiac and engine
- Be able to maneuver zodiac in limited space (e.g.. approaching gangway, marina deck, and land)
- Knowledge of what actions/precautions to take when weather/visibility deteriorates (use of radar reflector, GPS receiver)
- Understanding tides, weather, wind, current, local conditions
- Understanding of company protocols such as buddy system, etc.
- Ability to tow (incl. accepting, securing towline & towing at a safe speed) and understand the general principles of being towed
- Knowledge of how to anchor
- Shallow water driving / approaching shoreline
- Man overboard (MOB) recovery
- Assessment of ice conditions/movement/risk
- Appropriate use of kill cord
- Launch and recovery
- Wildlife awareness
- Awareness of local regulations and AECO/IAATO guidelines

FIREARMS

Standard suggested:

License to acquire/carry/possess a firearm is advised but not an absolute requirement where a practical internal or external training course that includes the listed competencies will be sufficient (i.e. Canadian Firearms Safety Course (CFSC) plus (PAL), Canada, National Rifle Association (NRA).

Any training must be fully auditable and include training reports. Some jurisdictions have very stringent laws regarding firearms, where this is the case the mentioned training would suffice.

Experienced staff- Internal/external refresher training and verification of skills.

Staff intended to comply:

All field staff handling firearms

Note to operators:

License does not replace experience and in recognition of this, operators are encouraged to supplement experience with licensing.

Third party person for verification/training.
Designated firearms manager in-house to ensure standards met.

Recommended for firearm carriers to practice/train with the rifle model they will be carrying.

Recommend pre-season (pre-trip) meeting of rifle handlers and bear monitors to sort responsibilities and chain of command.



FIREARMS-CONTINUED

SKILLS NEEDED

- Safe handling incl. muzzle control
- Safe transport and storage
- Load/unload/half load of firearms
- Principles of marksmanship
- Training on larger caliber relevant to areas of operation
- Behavioral aspects of bear encounters- stress/panic/freeze etc.
- Safe handling of ammunition



POLAR BEAR SAFETY

Standard suggested:

In house or external training according to “list of skills”

Staff intended to comply:

All field staff on shore in the Arctic

To be considered:

Commercial Bear Viewing Association of British Columbia (CBVA - <http://www.bearviewing.ca>)
PTGA - “Operations in Polar Bear Environments” OR equivalent.

Recommendation:

Engage in dialogue with CBVA to be able to use training material (footage, etc.) for development and/or investigate what training options they offer (if online/affordable a recognized scheme could possibly be made standard).

SKILLS NEEDED

- Basic bear biology
- Bear behavior and analysis (specific to region)
- Understanding potential for different types of conflict
- Landing site management and risk assessment (from bear safety point of view)
- Landing site knowledge - safe and unsafe zones, extrication (evac routes), observational skills, situational awareness
- Passenger / Group management in polar bear setting
- Crisis communication skills
- Company contingency plans for site evacuation
- Understanding/comply with regional legislation and laws for operating in polar bear habitat
- Commitment to minimal impact/harm (intention is zero impact)

***ONBOARD SHIPS SAFETY**

Standard suggested:

Operators to comply with relevant flag state requirements and associated practices.

Include staff in onboard crisis management training.

Staff intended to comply:

All field staff



5. CONCLUSIONS AND WAY FORWARD

Standardized Field Staff standards are necessary for the expedition cruise industry in order to uphold best practice in light of the growth that is expected. The efforts embedded in this report show that the industry can work together despite the competitive nature of the market and be proactive in generating a baseline for what is required of Field Staff on board expedition cruise vessels while allowing for companies to differentiate and stay competitive. The Field Staff standards reflect a responsible industry with an interest in working for improved safety throughout the Polar Regions. AECO and IAATO hope for continued cooperation with authorities around the world to this effect.

The findings of this report provide the foundation for AECO and IAATO to evaluate, adjust, and implement Field Staff Standards.

AECO and IAATO wish to thank the memberships for strong participation in this work. We would also like to thank the PTGA for their engagement which has been very helpful to the workshop.



i. APPENDIX

SURVEY RESULTS