Researcher Guide to Arctic Logistical Support

Introduction

The Battelle Arctic Research Operations (Battelle ARO) team is pleased to support researcher fieldwork through the National Science Foundation (NSF) Research Support and Logistics (RSL) program. This document outlines processes, timelines, and resources to help research teams in their fieldwork planning.

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Program contacts and requesting help

The Battelle ARO project manager is the primary point of contact for logistics planning, questions, and changes to support. A Battelle ARO project manager is assigned to each supported research project; if you need assistance in identifying the appropriate project manager, please contact Karla College (karla@polarfield.com).

Battelle ARO is dedicated to supporting research teams, but non-emergency and planning communications should take place during regular business hours. Please communicate with the assigned Battelle ARO project manager during US business hours Monday through Friday or during scheduled project check-ins. The program is not staffed for round-the-clock coordination with projects. The 24/7 phone lines provided in the Season Plan document should only be used in an emergency or an otherwise urgent situation, not for making changes to existing plans.

Additional points of contact are available. For inquiries regarding:

Questions or concerns about project management support:
Science Support Manager Sam Dorsi (sam@polarfield.com)

Communication to Battelle ARO program leadership:
https://battellearcticgateway.org/contact-us/

Plans for new proposals and Battelle ARO support estimate letters:
arctic.planning@battelle.org or https://battellearcticgateway.org/proposal-support/

Communication with NSF RSL program officers:
Renee Crain (rcrain@nsf.gov)
Dr. Frank Rack (frack@nsf.gov)
Kate Ruck (kruck@nsf.gov)

NSF Polar Code of Conduct and reporting

The **NSF Polar Code of Conduct** applies to all researchers, contractors, and individuals working at or visiting NSF-managed facilities or deployed to field locations while financially supported by NSF. All participants are expected to understand and abide by the policy.

Polar Code of Conduct:
https://www.nsf.gov/geo/opp/documents/policy/polar_coc.pdf

Science participants who experience or witness violations of the Code of Conduct should reach out for aid to resolve the situation. Available contacts include the researcher home institution, the NSF program officer or RSL program officer, the Arctic Sciences Section Head, the Safety Officer for the Office of Polar Programs, and the Battelle ARO reporting system linked here.

Battelle ARO Reporting Pathway:
https://battellearo.ethicspoint.com/

Orientation and resources

Several orientation resources are available for research teams, including both program-wide and region-specific resources. Information from these resources is not duplicated in the present document. It is important to follow the links below and ensure that all team participants review these additional guides.

Researchers should consult the **NSF Know Before You Go** guidance for Arctic fieldwork.

NSF Know Before You Go:
https://battellearcticgateway.org/wp-content/uploads/Know-Before-You-Go.pdf

The **Battelle Arctic Gateway** contains valuable resources for researchers. These include orientation to Battelle ARO support, NSF-recommended reading, and access to the My Gateway interface for participant profile entry and trainings. Additionally, the site office contact information for safety incidents, Code of Conduct concerns, and telemedicine support.

Battelle Arctic Gateway – Researchers
https://battellearcticgateway.org/researchers/

Alaska

Region-specific information on field support in Alaska is available at the following location on the Battelle Arctic Gateway:

Battelle Arctic Gateway – Alaska:
https://battellearcticgateway.org/location-alaska/

Greenland

Information on field planning and logistical support in Greenland can be found on the Battelle Arctic Gateway:

Battelle Arctic Gateway - Greenland:
https://battellearcticgateway.org/location-greenland/

To help make the season a success, **all Greenland research team participants should review** the **Greenland Guide**. If travelling to the following sites, review the **Summit Station Guide** and the Pituffik Space Base Guide. The Pituffik Space Base Guide is available on the Battelle Arctic Gateway at the password-protected "My Gateway" landing page, accessed at the login link in the top navigation bar; contact the Battelle ARO project manager for assistance. These guides contain vital details on conducting research at these sites, research team responsibilities, and Battelle ARO support resources.

These documents include critical information for research teams planning work in Greenland, including:

- Guidance on participant travel, and travel documents (passport and visa)
- Deadlines and requirements for cargo movement on US Air National Guard (ANG), Air Mobility Command (AMC), US Embassy, or commercial carriers

- US Customs arrangements for materials departing or arriving to the USA
- Local Battelle ARO or commercial support resources

Project support timelines

Research teams and their Battelle ARO project manager work together to coordinate detailed support arrangements. This requires timely involvement from research teams. **Please anticipate providing information by the deadlines outlined in the schedule below.** Finalizing information well in advance of fieldwork is important for securing limited support resources, making advance reservations for government cost-efficiency, identifying logistical issues with sufficient time to address these, and meeting NSF deadlines for finalized support plans.

Please note that the Battelle ARO project manager may define earlier deadlines based on their assessment of project needs. For example, in markets with limited aircraft availability, science teams may need to provide detailed fieldwork timing earlier to allow air charters to be secured.

Some dates are expressed relative to the fieldwork start date (FS).

Event	Date	Notes
Development of project budgets for following year	August to September, year before fieldwork	Research teams will be asked to confirm planning details and support scope. The resulting support budget is reviewed by NSF RSL and becomes the basis for activities in the following year.
Draft information needed for field equipment allocations	December, year before fieldwork	
Science team participant data requested	FS – 12 weeks	
Detailed air charter requirements are due	FS – 10 weeks	For locations with limited aircraft availability, this timeline may be 6 months or longer.
Deadline for season plan completion	FS – 4 weeks	Depending on field support complexity, the Battelle ARO project manager may define an earlier timeline for season plan finalization and distribution.
Season plan is distributed	FS – 3 weeks	
Pre-deployment survey	FS – 3 weeks	Optional researcher feedback opportunity.
Fieldwork occurs		
Outbrief	1 week after fieldwork ends	Required researcher feedback for NSF reporting. For projects with year-round support, outbriefs will be sent in September.

Greenland-specific deadlines

~~Some~~ dates are expressed relative to the fieldwork start date (FS).

Event	Date	Notes
Greenland: deadline for fieldwork details	FS – 12 to 26 weeks	Battelle ARO PM will provide project-specific guidance. Precise details on fieldwork timing and participants may be needed many months in advance of fieldwork, to accommodate sequential air charter arrangements and expedition permitting.
Greenland: deadline for submission of expedition permit application	FS – 12 weeks	Review Greenland Expedition Office guidance as additional or different deadlines may apply.
Greenland: deadline for initiating Physical Qualification (PQ) process	FS – 12 weeks	Consult Battelle ARO PM to determine if this medical / dental review applies to project participants.
Greenland: deadline for information on hazardous materials to be shipped via Air National Guard	FS – 8 weeks	Note that this deadline is relative to the transport date of the cargo; if cargo will be shipped via Air National Guard in advance of the field team, the deadline will be earlier.
Greenland: deadline for finalized passport information	FS – 6 weeks	
Greenland: deadline for northbound AMC cargo to arrive in McGuire	FS – 4 weeks	This deadline applies to standard cargo. Materials classified as hazardous for air transport are due 6 weeks before transportation.
Greenland: deadline for all northbound ANG cargo to arrive in Scotia, NY	FS – 3 weeks	Note that this deadline is relative to the ANG transport date of the cargo; if cargo is shipped via ANG in advance of the field team, the deadline will be earlier.

Alaska-specific deadlines

Some dates are expressed relative to the fieldwork start date (FS).

Event	Date	Notes
Alaska: deadline for Toolik Field Station helicopter support details	Mid-March	Teams receiving helicopter support at Toolik Field Station provide Battelle ARO information on destinations, cargo, participant count and timing.
Alaska: deadline for fieldwork details	FS – 6 weeks	Including precise fieldwork timing and participants.

Requesting modifications to project support

Research teams may wish to request different logistical support than was initially planned, such as changes to field locations, number of participants, support resources, or the year in which fieldwork takes place. Battelle ARO staff will work with researchers to document the requested change for review by the NSF. Information on this process follows.

Research teams receive logistical support based on specific scope approved by NSF. This is typically identified during the proposal phase and is formalized as a baseline at the time of award. When Battelle ARO project managers receive a request to modify project logistical support, they work with the research team to clearly define the requested change. If a requested change deviates from the original science plan or is outside of the NSF-approved logistical support scope, approval from NSF is required. In this case, the research team is typically asked to initiate a request to NSF:

- Communicate with Battelle ARO project manager as described above.
- Email the project's NSF science program officer, copying the NSF RSL program officers, and ideally the Battelle ARO project manager.
- Outline the science justification for the change.
- Communicate scope details if provided by the Battelle ARO project manager.
- Identify if the requested change applies to only one year, or to all years of the project.

This requested change is reviewed by the NSF program officers, and a decision is issued. Depending on the request, the review may take from a few days to several weeks. If directed by NSF, the Battelle ARO program manager updates the support budget, and works with the science team to implement the revised support.

Health and safety

In the event of an emergency in the field, contact the home institution Health and Safety Contact and the Battelle ARO regional emergency contact, per the project season plan.

Research team home institutions are responsible for managing risk to persons and property, and insurance coverage for these, per NSF General Conditions (GC-1 Article 51). This includes all medical costs and medical evacuation expenses in the event that participants become ill, injured, or require emergency transportation. Research teams are strongly encouraged to consult with the relevant offices in their home institution regarding medical evacuation, liability, and workers' compensation insurance. Medical evacuation insurance is an allowable grant cost and is strongly encouraged.

Research teams are encouraged to develop a Field Emergency Action Plan (Field EAP) that addresses all participants and institutions. The Field EAP is intended to (1) consolidate information on the research team participants; home institution contacts; and safety/insurance resources prior to deployment; and (2) to pre-plan and guide the response to an emergency in the field.

The research team PI must provide a Project Health and Safety Emergency Contact. This individual should be familiar with the project's field activities and Field EAP, and they should be available at all times to receive emergency communications from the field team. In the case of a project with multiple institutions, the Project Health and Safety Emergency Contact would coordinate a response among the institutions.

In some situations, the Battelle ARO Emergency Operations Center (EOC) would be tasked with responding to an emergency. The grantee institution remains responsible for all costs associated

with an emergency response. Additionally, the grantee institution is responsible for onward medical transportation or other arrangements after a SAR response.

Project risk assessment, risk assessment calls and Arctic Field Training

Although each science team and their home institution are responsible for their safety in the field, Battelle ARO offers multiple services to support field safety planning. For more information, please contact the Battelle ARO project manager.

For each project, Battelle ARO project managers complete a **risk assessment document** that outlines some of the hazards that apply to the specific project and possible mitigations. This is not intended to be comprehensive, but to communicate best practices for common hazards. The science team is encouraged to expand upon this list by identifying additional risks and mitigations.

Additionally, Battelle ARO and the NSF encourage a **mediated risk assessment call** in advance of deployment to discuss hazards associated with the work and possible risk mitigations. This discussion is an opportunity for the science team and Battelle ARO staff to collaboratively review project field risk topics. It is intended to supplement the science team's own internal discussion and planning for field risk management. Research team participation in a risk assessment call is optional. Notes about the risk assessment call meeting, or the researcher decision to decline, are documented in the season plan.

Finally, Battelle ARO offers **pre-deployment instruction on field safety topics** through the Arctic Field Training (AFT) program. Trainings are led by field safety specialists and training topics are tailored to the needs of individual field teams. Training durations range from an hour to several days. Battelle ARO offers AFT sessions both in person and remotely and these should be scheduled well in advance of the field season to ensure availability.

Medical kits

Standard medical kits with first aid and over-the-counter drugs are available upon request. Medical kits do not include prescription drugs; PIs who want to include prescription drugs must contact their personal physicians. The kit will be issued to the PI or lead field team member and will become their responsibility for use in the field. The kit must be returned to a Battelle ARO office at the end of each field season.

Incident / near miss reporting

Researchers should report all near misses, injuries, safety incidents, hazardous conditions, property damage, or environmental damage to ~~the~~ Battelle ARO promptly after an event (within 24 hours if possible). The report can be to the Battelle ARO project manager, the Battelle ARO site supervisor at staffed locations, or the online portal on the Battelle Arctic Gateway website. If safe to do so, please capture photographs to aid in communication. Information from these events is used to improve safety systems, reduce risks, and support education.

Incident reporting – click "Report an HSE Mishap"
https://battellearcticgateway.org/researchers/

Permitting

Research teams are responsible for meeting permit requirements related to their fieldwork. Permits for fieldwork can be time-intensive to secure, and lead times may be as long as one year. Research teams are encouraged to be proactive in identifying permit requirements and to start the process early.

Researchers must communicate all permitting requirements and submission / approval / denial milestones to their Battelle ARO Project Manager. Permitting compliance is required of all projects receiving NSF RSL logistical support.

Research team permitting must encompass the logistical support activities for the project, as coordinated by Battelle ARO or other partners. This may include contractor fieldwork in advance of the science team's fieldwork, such as for establishing fuel caches, performing remote construction, or snowmobile/aircraft activities in support of these. Be sure to discuss permit planning with the Battelle ARO project manager.

Region-specific pages on the Battelle Arctic Gateway, linked in regional orientation above, and the guides linked below, contain additional permitting details for the named locations.

Battelle ARO Alaska Environmental Compliance guidance:
https://storymaps.arcgis.com/stories/5bd6be1d389d4e65b089ad971c281a48

Battelle ARO Greenland permitting guidance:
https://arcg.is/0XfOXv

Participants

During planning for each field season, the Battelle ARO project manager will request information about the research team participants travelling to the field. The project PI or field team lead will provide participant names and email addresses via a secure form.

All research team participants will be issued an account on the Battelle Arctic Gateway platform (https://battellearcticgateway.org/). This enables several functions: (1) direct entry of required additional participant information into the secure program database that Battelle ARO manages for the NSF, (2) access to trainings, including both optional trainings or any that NSF may require in the future, (3) access to project dashboard information and reporting resources.

Changes to participant lists should be communicated to the PI as soon as identified.

Travel by family, volunteers or non-program participants

Research team participants may wish to be accompanied by children or non-program participants during fieldwork. This requires specific NSF approval and restrictions apply.

Examples of non-program participants include but are not limited to the following:

- Minor children of program participants
- Spouses or family members not recognized as field team members by awardee institution

- Project volunteers not recognized as field team members by awardee institution
- Community members requesting transportation between villages
- Media representatives unless coordinated with NSF

It is prohibited for NSF or Battelle ARO to fund travel or other expenses associated with a non-program participant accompanying a researcher. Travel costs and liability associated with accompanying the fieldwork are the responsibility of the non-program participant or the institution.

Only program participants are allowed to travel in chartered aircraft, chartered vessels, or other non-commercial modes of transportation. NSF approval is not available for non-program participant travel in chartered transportation.

Researchers requesting accompaniment by non-program participants should request a form from their Battelle ARO project manager and submit the following:

- Signed Battelle ARO waiver document 'Release of Liability and Indemnity for Family/Friend'
- Proof of medical evacuation insurance
- Letter of support from awardee institution, and employer, if different.

Submitted requests are reviewed by NSF RSL and a decision is issued to the researcher.

Season plans

A season plan is prepared by Battelle ARO for each year of fieldwork for supported projects. This season plan outlines the planned fieldwork, field team participants, travel itinerary, and support arrangements. The season plan is distributed to all members of the field team, the PI and other named grantees, the home institution emergency contact, NSF program officers and health and safety staff, and members of the Battelle ARO team with involvement in or oversight of the planned support.

Research team involvement is necessary for development of the season plan, and completion of the plan is a requirement for receiving field support. The Battelle ARO project manager will contact research teams to request detailed input for developing the plan, and to request review of the plan once a draft is assembled. Please heed deadlines that they provide. Research teams should respond promptly to avoid delays and resulting risks to field support.

Vehicle usage

Battelle ARO maintains third-party liability automobile insurance for provided vehicles. **Drivers and/or their home institution are fully responsible for all costs associated with damage to program vehicles in their possession or control. Drivers and passengers in Battelle ARO vehicles must also have coverage from their institution's workers' compensation insurance or their personal insurance and should carry a copy of this information.** Participants must be at least 25 years old to drive vehicles provided through the program, including NSF-owned vehicles and Battelle-ARO-rented vehicles. **In the event of an accident or vehicle damage, promptly follow guidance provided under "Incident / near miss reporting" in this document.**

Drivers are responsible for ensuring that the vehicle is operated in compliance with all applicable laws, regulations, and program policies. Any violations, fines, or penalties incurred during use of the vehicle will be the responsibility of the driver or their home institution.

Use of NSF-owned vehicles must be coordinated in advance with the Battelle ARO Project Manager. Usage will be tracked by Battelle ARO for billing purposes. NSF vehicles are not to be used for recreational travel. For fieldwork in Greenland, most available vehicles have manual transmissions.

Travel expenses

Arrangements for commercial air flights and commercial lodging during travel are typically the responsibility of the science team and are paid through the science grant. However, in some cases, Battelle ARO support may include specific travel components.

All travel expenses covered through Battelle ARO logistical support are subject to government travel regulations. These requirements apply also to costs paid directly by researchers and reimbursed by Battelle ARO. For example: expenses must be approved in advance, costs documented with itemized receipts, and travel selections made for cost efficiency following specific rules. Travel costs that do not comply with government requirements cannot be reimbursed.

Researchers should consult their Battelle ARO project manager and Battelle ARO season plan to understand what logistical support for travel is approved, and researchers should closely follow project manager guidance to ensure that their travel costs remain reimbursable.

Additional information is available in the 'Guidance for Researchers on Travel Expenses', available through the Battelle ARO project manager.

Feedback and outbriefs

The Battelle ARO team welcomes your feedback and several pathways are available. This includes both on-demand contact options, as well as annual NSF-required reporting.

Feedback anytime

If you have planning inquiries or time-sensitive support needs, your Battelle ARO project manager is the primary point of contact.

If you have feedback about project management, or need additional assistance, please contact the Battelle ARO science support manager, who supervises the project manager team. See the contacts section of this document.

Additionally, feedback to Battelle ARO can be provided at any time through the following web form. Submissions are received by the Battelle ARO program leadership.

Battelle ARO feedback form:
https://battlearcticgateway.org/contact-us/

Pre-deployment survey: feedback as the field season approaches

Are your needs being met in advance of the field season? Has planning met your expectations? At the time that the season plan is distributed to stakeholers, research team participants will receive a link to a project-specific '**predeployment survey**'. This is an opportunity to share feedback in advance of fieldwork. This feedback is reviewed by the science support manager and Battelle ARO leadership.

Annual outbriefs: required reporting after the field season

Each year, Battelle ARO requests annual feedback on the support received by all projects. **This 'outbrief' feedback is an NSF-required reporting action** for compliance with the Government Performance and Reporting Act of 1993 (GPRA). Your input is valued.

After the completion of fieldwork, or in the fall for projects with ongoing winter support, research team PIs will receive an email from the Battelle ARO project manager containing a link to the project-specific survey interface. PIs may complete this survey independently or with the assistance of the field team.

One measure of Battelle ARO performance is a count of the number of productive days the project has in the field while relying on the Battelle ARO facilities or support, and any lost productive days resulting from issues with Battelle ARO support scope. Please provide this detail where requested.

This feedback is reviewed by NSF RSL program officers and Battelle ARO leadership, and it is used for:

- End-of-season reporting for the NSF,
- Federal reporting requirements,
- Self-assessment and improvement,
- Budget preparation for next season, if applicable.

Additional questions

If you have additional questions not answered here, please contact your Battelle ARO project manager, or consult the "Program contacts and requesting help" section of this document.