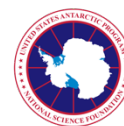




**The U.S. National Science Foundation  
Office of Polar Programs  
United States Antarctic Program**



## **USAP Extreme Cold Weather Clothing Policy**

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### **Document Details**

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### **Document Release History**

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1	February 2017	Initial release
2	January 2025	Policy update; document imported into new template

Consult the Master List for the most current version.  
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## **1. Purpose**

This document establishes the official National Science Foundation (NSF) policy regarding Extreme Cold Weather (ECW) clothing for the United States Antarctic Program (USAP).

## **2. Scope**

This policy covers both the issued and personal ECW clothing required for USAP-sponsored travel to and from Antarctica and deployment to U.S.-managed Antarctic stations and vessels.

## **3. Applicability and Compliance**

This policy applies to all USAP personnel, whether directly supported or hosted by the USAP, who are deployed to U.S.-managed Antarctic stations, field camps, and vessels. Each of these USAP participants is required to adhere to the terms of this policy.

This policy does not apply to USAP participants deployed to other governmental stations, field camps, and vessels as part of another national program. These participants will follow the policies of the host country.

This policy does not apply to personnel while actively operating aircraft or serving as flight crew. Flight crews will follow the operational clothing guidelines of their parent organization.

Where job-specific personal protective equipment (PPE) requirements are not compatible with this policy, PPE requirements supersede this policy. Participants should note that in some cases, the Antarctic Support Contractor and/or partners may choose to have the clothing distribution center issue PPE if approved to do so by NSF. Those distributions are not governed by this policy, nor do those distributions constitute ECW.

## **4. Responsibilities**

All USAP participants deploying to U.S.-managed Antarctic locations or vessels are responsible for ensuring they have the required clothing. Personal clothing must be adequate for both work and emergency situations in the Antarctic environment.

The Antarctic support contractor is responsible for developing procedures to implement this policy.

The USAP is not responsible for loss or damage to personal clothing and will not repair personal clothing. The USAP is not responsible for injuries associated with inadequate personal clothing.

## **5. Policy**

The USAP ECW clothing policy directs all participants to have a basic level of protection for emergency or survival situations that may be encountered in Antarctica. The USAP provides

most ECW clothing and provides guidance for the clothing that individuals are responsible for purchasing.

This policy identifies the composition of USAP-issued and participant-owned ECW clothing, and it outlines the requirements for clothing that must be worn or carried during specific activities.

### **5.1. ECW Clothing Policy**

Participants must wear clothing appropriate for the conditions they are likely to encounter while in Antarctica. Participants must follow the ECW clothing requirements for specific activities in section 5.3 of this policy.

This policy represents the minimum level of compliance required for the USAP. A USAP organizational entity may have a more restrictive ECW policy for its personnel.

Organizations may implement more restrictive ECW policies at their own cost.

### **5.2. ECW Clothing System**

The ECW clothing system is a multi-layered insulating system that protects participants from the environment during emergency or survival situations. Participants can combine components to meet their individual needs in a wide range of conditions. The basic components are an insulation base layer (long underwear), a mid-weight insulating layer, a heavy insulation layer, a wind/water-resistant layer, insulated gloves or mittens, UV/cold-protective eyewear, and insulated boots.

Participants are required to have all ECW items in their possession before they deploy to Antarctica.

The Antarctic support contractor will develop an ECW gear standard, including the basic components and accessories, for each USAP location.

#### **5.2.1. Issued Clothing**

The USAP will provide all components of the ECW clothing system except for socks, sunglasses, and insulation base layers; gender- and size-inclusive clothing will be provided. First-year participants and participants spending the winter at Amundsen-Scott South Pole Station must take the full complement of USAP-issued clothing.

#### **5.2.2. Participant-provided Clothing**

USAP participants must supply their own socks, sunglasses, and insulation base layers (long underwear) to fulfill the ECW clothing requirement. These components are not reimbursable.

Participants who have recently deployed to Antarctica through the USAP may substitute some or all of the USAP-supplied ECW gear with their own clothing. Participants may wear their own clothing without USAP waiver or

inspection. However, participants must attest that participant-owned ECW is equivalent to or exceeds the performance of USAP-issued clothing. It must keep participants warm and dry in the extreme Antarctic environment and must be rated to exceed the expected conditions. If participants are uncertain about equivalency after reviewing relevant procedures, they are encouraged to use USAP-issued ECW clothing.

The Antarctic support contractor will provide guidance to participants regarding acceptable items. The purchase and use of participant-owned ECW clothing is optional and is not reimbursable.

### **5.3. ECW Clothing Requirements for Specific Activities**

#### **5.3.1. Fixed Wing Flights**

##### **5.3.1.1. Intercontinental Southbound**

All participants are required to wear ECW clothing on aircraft bound for Antarctica. Participants must be dressed for the conditions they will encounter onboard and when exiting the aircraft.

In order to prevent overheating, flight crew may authorize passengers to remove layers during aircraft loading or during transit and to dress again prior to descent for landing.

##### **5.3.1.2. Intercontinental Northbound**

All participants are required to wear ECW clothing for takeoff on northbound flights from Antarctica. If flight crew and space allow, passengers may remove ECW clothing during the flight once cruise altitude is reached, as long as the removed items fit in the dimensions allowed for hand-carry luggage. If a flight turns around and returns to Antarctica, ECW must be donned prior to descent.

##### **5.3.1.3. Intracontinental**

All participants are required to wear ECW clothing for takeoff and landings on all intracontinental fixed-wing flights. Passengers must be dressed for the destination environment.

If flight crews allow, passengers may remove parkas, as long they remain accessible.

#### **5.3.2. Helicopter Flights**

All participants are required to wear ECW clothing for helicopter flights. Helicopter passengers must be dressed for the conditions they will encounter when exiting the aircraft.

If flight crews allow, passengers may remove parkas, as long they remain accessible.

#### 5.3.3. Local Travel

Participants traveling on established routes away from McMurdo and South Pole stations must maintain awareness of weather conditions and carry or wear appropriate ECW clothing.

Participants traveling on the sea ice or away from well-traveled established routes are required to have a full set of ECW clothing with them.

#### 5.3.4. Palmer Station and Research Vessels

Peninsula-based participants are required to carry an extra set of ECW clothing, excluding windbreaker, rain gear, and boots, when working in small boats or ashore in the marine environment. Participants must bring two complete sets of insulation base layers, socks, and an additional hat. Participants will be issued a second set of mid-weight layers and gloves.

## 6. Policy Review

This policy is valid until rescinded. It will be reviewed at an interval of not more than five years.

## 7. Glossary

- **ECW:** Extreme Cold Weather
- **NSF:** National Science Foundation
- **USAP:** United States Antarctic Program
- **UV:** Ultraviolet

## Signature Approval

Approved by:

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