

# How Sensear Delivered Safety and Clarity on the Ice for the Australian Antarctic Division

**Client:** Australian Antarctic Division (AAD)

**Industry:** Aviation

## Overview

Supporting aircraft operations on a glacier in Antarctica means battling brutal cold, logistical complexity—and nonstop noise. For Micky Loedeman and his team at the Australian Antarctic Division, hearing protection was a must. But traditional solutions muffled team communication and made dangerous work even harder.



Enter Sensear: hearing protection headsets that worked in one of the **most extreme environments on Earth**—offering clarity, comfort, and control right on the ice racks and turbine-level fans.

## The Challenge

Wilkins Runway is a 4,000-meter glacial ice airstrip, 3.5 hours from the nearest station and thousands of miles from civilization. During aircraft turnaround operations, ground crews are exposed to intense noise for up to two hours at a time.

- **Extreme Environmental Conditions:** Operations took place at 700m elevation, far from the main station.
- **Prolonged Aircraft Noise:** Auxiliary power units (APUs) ran the entire time aircraft were grounded.
- **Need for Communication:** Crews needed to talk via radio and face-to-face while wearing full PPE.
- **Hearing Damage Risk:** Traditional hearing protection didn't allow communication, leading to unsafe workarounds.
- **Remote Site Logistics:** Gear had to work reliably in a remote, self-sustaining facility staffed by 8 people.

As aviation operations pushed into the world's most extreme environments, the Australian Antarctic Division turned to Sensear to keep ground crews protected, connected, and performing under pressure—even on a glacier.



## The Solution

AAD implemented Sensear SM1 series headsets, enabling:

### What Made the Difference:

- **Full Situational Awareness** while using Two-way radios or Bluetooth® devices
- **Clear Face-To-Face Conversation** without removing PPE
- **FM Short-Range Communication**—ideal for 1:1 comms within 50 meters
- **Rugged, Over-Ear Design** built for harsh field conditions
- **Future-Ready** planning for IS headset deployment in hazardous zones

## The Results

After adopting Sensear, the AAD saw major benefits:

- **Higher Usage Rates:** More workers chose to wear protection due to comfort.
- **Reliable Communication:** Radio and verbal instructions remained clear throughout operations.
- **Operational Confidence:** Crews stayed safe without compromising awareness.
- **Positive Adoption:** The trial approach helped gain full buy-in from remote teams.

## Looking Ahead

As aviation teams push into the most extreme and remote environments on Earth, Sensear's high-noise communication headsets are becoming essential equipment. From ice runways to glacial fueling zones, crews now operate with greater clarity, protection, and confidence.

## Conclusion

Whether fueling a jet on a glacier or coordinating emergency procedures from a snow-covered outpost—

**Sensear makes it possible.**

Sensear enables remote aviation crews to stay safe, speak clearly, and operate confidently—no matter the conditions.

**“Sensear met all our requirements for hearing protection, comfort, and communication—and was within our budget.”**

**- Micky Loedeman,**  
*Ground Support  
Supervisor, Australian  
Antartic Division*

### Global Sales Headquarters

Sensear Inc.  
1141 East Main Street, Suite 201  
East Dundee, IL 60118  
United States of America  
Toll-Free: 1-888-973-6732

### Corporate Headquarters

Sensear Pty Ltd  
4 Hehir Street  
Belmont, Western Australia 6104  
Australia  
Toll-Free: +61 8 9277 7332

**[www.sensear.com](http://www.sensear.com)**