My NASA Data - STEM Career Connections

Meet Christy Hansen, Project Manager for Operation IceBridge

**Job Title**

Project Manager

**Bio**

**What do you do?** My name is Christy Hansen, and I’m the project manager on an airborne campaign for Earth science called Operation IceBridge.

**What kinds of questions do you ask when conducting your research?** So essentially what this airborne campaign does, is it flies up to nine different geophysical instruments installed on the aircraft so for part of the year up in the Arctic, up north, between March and May, we fly this airplane over the Greenland ice sheet, collecting data on the changing ice sheets, the sea ice, and the glaciers. And the idea is collecting data and showing over a long time series, how is the ice sheet changing, maybe we can find out why it's changing. IceBridge teams are all over the country. We have scientists, instrument managers, we have a data center, we have aircraft offices all over. So they really needed someone who could kind of bridge the gap between all those communities so, the work was getting done and it's a hugely successful mission, but maybe I can help make things efficient, help with their documentation, and things like that or ... so really, each day, I just I stand back and I look -- where can I help? Because these are super smart people. Where can I help and not get in the way?

**Describe how you work within a larger team?** It's like magic watching the teams work together.
We have the aircraft team. They know what to do. They're keeping the plane safe. They make sure everything's configured correctly on the plane. The instrument teams. They're operating their laser altimeters, we have four radar systems. We have a magnetometer and a gravimeter. They know what to do, they're on the plane. So it's like a well-oiled machine, to get out there and think, look at all these teams. How are they working? Are they working together well? Does anyone need anything? And it's all coming together for a common goal of we're going to go out there, we're going to work our butts off, collect this data, publish this data, and ultimately learn more things about the Earth and maybe things we can do to understand, you know, future sea level rise or climate change.

How long have you worked with NASA? I've been working at NASA here for almost 11 to 12 years, and my whole career before IceBridge was all space flight related. So I worked the Space Shuttle program and space station. And then I was looking around to try something different, and I thought, "airborne campaign?" "What is this, what is this Operation IceBridge?" And then I learned, here at NASA, it's amazing how much work is being done, using aircraft. Yeah, so it's been pretty much like a huge whirlwind because this is only my fifth month on the job and literally a month into it I flew to Greenland and supported the mission there for three weeks.

What do you like about your job? I've never been to Greenland before, and but I've done mountaineering in my past so I've always been interested just from an adventurous side in climbing on the ice. So, when I found out about IceBridge and a way to bring my, you know, science engineering -- and right now it's more project management work -- and mesh that with being on the ice or being around ice, I couldn't even find a better match than IceBridge. Other than work, the coolest thing I did when I was there, one weekend we kinda had off. It's not trivial getting out to the edge of the ice sheet, and then you get there and you see literally, the edge of the Greenland ice sheet. Which I had imagined being just like this flat natural curve-down, but it was literally a huge ice wall. So, they even warn you -- don't step onto the ice sheet 'cause huge pieces of ice could fall on your head. Anyway, we went there and I thought it would be cool to collect "ice samples" for my friends. So I had my mountaineering Nalgene bottles and a little knife and etched off some pieces of it and brought it back to the U.S. so I could give little Greenland ice sheet samples out to everybody, so that was a cool, a really cool day.

Multimedia Resources

- [Earth Science Week 2012: Christy Hansen](#)