

Barrow #1

(Sounds of wind, blowing snow, music)

Title

Barrow, Alaska

Northernmost town in the USA

Radio announcer

“Outside here in Barrow, a little warmer than Pluto. Clear, 28 below. Winds westerly. Wind chill, 48 below. The local news coming up.”

Title

January 23<sup>rd</sup>, 2008

First sunrise after  
65 days of darkness

NASA and university researchers  
gather to explore Sun-Earth interactions  
and Polar Science.

(Music)

EARL FINKLER (Radio announcer)

“Jay, you’re with NASA, I understand?”

JAY FRIEDLANDER

The scientists I work for are all studying the aurora and its effects on the Earth. And this is a place where, and especially last night, we went out and saw some really incredible auroras. And to just come up here, and see those lights in the sky, flashing out over the Arctic Ocean, that’s why we were here. I mean that, like, just made it all worth it. And, yeah, the science conference is going to go on until Tuesday. We’ve got talks going on. You can check it out on the web. I think you have the web site there...

FINKLER

“Polar Gateways 2008”... if you start there, you can find your way.

Title

Website address

(Music)

Titles zoom up:

Sun-Earth Connections

International IHY webcasts

Exploring the Solar System

Robots on Icy Moons

The Aurora

Community Outreach

FINKLER

“Now let’s go to the Earth weather here... up in the Arctic.”

Compressed audio, as heard over radio, of NOAA weather forecaster

“The forecast for the Northern Arctic coast, including Barrow...

For today, becoming mostly cloudy, highs near 15 below, NW winds... 20-25 below, variable winds.”

JOHN COOPER

This conference was called “Polar Gateways Arctic Circle Sunrise” partly because we agreed that we would meet, beginning on January 23<sup>rd</sup> of this year, 2008. Because that is the first day of official sunrise in Barrow, Alaska. So this week that we are meeting from tomorrow through the middle of next week is the first week of sunrise in this region of the Arctic.

RICHARD GLENN

What we had yesterday, and there are similar weather conditions, is that below the cloud layer, but eabove the horizon, was a wedge of red. And you might see something like that today.

RICHARD GLENN (addressing then confernce)

“Good morning, everyone, welcome to Barrow. I’m dressed here in the Barrow equivalent of a suit jacket. And it has the advantage that if for whatever reason I have to walk home from here, I’ll be a lot warmer than if I wore my Sears suit jacket.

This is a great opportunity for all of us. In a few hours, if you open up the windows here, off to my left, you’ll see the Sun making its creep above the horizon. Which is a beautiful sight, when the weather lets you see it. In addition to studying things related to the Sun, this is a great place to study polar processes in general.

This issue of putting our communities together with visiting researchers has deep personal meaning to me as well. And I hope that you become familiar with the history of research that has taken place here in Barrow.

(Music)

GLENN SHEEHAN (Addressing the conference.)

“I’m Glenn Sheehan, I’m the Executive Director of the Barrow Arctic Science Consortium. I get calls, I guess, every week, from production crews, or reporters, or who knows who, or politicians or scientists that haven’t worked here before. Very few of them are aware of the fact that there is scientific data that has been accumulated here since 1881 that is still used by scientists today. A lot of them don’t understand that the people here in Barrow, that live here and have lived here for thousands of years, have been critical to the accumulation of this data. And remain critical to it.

(Music)

LAURA THOMAS (driving)

My name is Laura Thomas, and we are headed in to Brower’s Café which was the area where the original IPY buildings and out-buildings are still remaining today.

THOMAS (on the frozen sea ice)

I would say with the wind chill it’s maybe 60 below. At temperatures like this, I mean, the polar bear are out, but it’s pretty quiet and still. And you can also tell temperature, if you’re walking outside, by how the snow sounds underfoot. So when it’s really cold, you can kinda hear it, it really crunches, kinda like Styrofoam.

(Sound of footsteps on icy snow)

THOMAS

This is the site in 1881 during the first International Polar Year, where Lt. Rae and the rest of the US military folks established the scientific monitoring station. So we know that a lot of the buildings that we can see around here... the sheds over here, Brower’s Café, they’re part of the 1881 IPY complex buildings. In fact, the one on the left, with the white “kunnychuck” (sic) or mud-room, you might say down south, that might actually be the original 1881 building, where we have pictures of a weathervane, of the building.

SHEEHAN

The idea was... eventually they would gather all this information from all the different IPY stations around the world, and they could look back and see what was happening on a particular day, during IPY.

They decided, let’s find the bottom of the permafrost – there’s a good experiment. So for two years they had the men digging down to find the bottom of the permafrost.

THOMAS

So they only got down about 15 or 20 feet during the first year, in 1882. And in the second year, they were able to dig down a further 10 or 15 feet, to a total depth of about 35 feet. Well, what we now know from permafrost investigations is the bottom of the permafrost right here is actually probably about a thousand (1,000) feet down.

SHEEHAN

So when they left, they left the biggest ice cellar in Barrow at the time, so that was a nice “infrastructure contribution” to Barrow! And science has been, in fact, making infrastructure contributions ever since.

In Barrow though, in fact, almost everything worked. That’s why you don’t hear so much about Barrow. Nobody died, everything worked. Well, one of the reasons nobody died and one of the reasons everything worked was that these folks were working with the people who lived in Barrow, the native people who worked and lived here.

THOMAS

This part of the world is inhabited, and people are doing science here for thousands and thousands of years. And it’s because of the Inupiat’s interest in science and ability and willingness to cooperate with Western scientists that we do have this really rich record of scientific data going back.

HARRY BROWER, Jr.

As part of my living and growing up here in Barrow, working with scientists is how my father did before, as I was growing up. I seen him working with the scientists, and interacting and taking scientist out, doing their research, bringing them back safely. And the scientists are able to come back and provide their results from the research that was conducted. And then coming back to the community and sharing that information.

RICHARD GLENN

There’s always learning going on in both directions. And there’s just too many examples to name. This is not a one-way street. People learn from both sides.

JOHN COOPER

There were subsequent International Polar Years in the 1930s, and the International Geophysical Year in 1957-58, and we’re now 50 years later, here.

What they are is windows of time where we have very intense, coordinated international research activities going on, in places like this, in Barrow Alaska and other places around the world. So it’s an opportunity for groups of people, scientists from various countries to get together and plan coordinated campaigns in a very intense, collaborative manner. And they can produce great results.

(Music)

End credits