



Polar Bears International Brings Us to the Icy Tundra with Wirecast



“Wirecast is a simple yet effective tool that allows us to mimic everything a large television studio would do, but from our remote location.”

- BJ Kirschhoffer,
Director of Field Operations,
Polar Bears International

- ✓ Live streamed educational broadcasts
- ✓ Multi-camera set-up from remote locations

Polar Bears International needed a powerful way to produce and stream entertaining and educational programs live from the tundra during the annual polar bear migration.

The Background

Polar Bears International (PBI) is a non-profit organization dedicated to polar bear conservation and educating people about the effects of climate change on the arctic ecosystem. PBI's free educational broadcasts connect scientists in the field with students from all over the world who want to learn about polar bears, and how they can help.

The webcasts take place from Churchill, Manitoba, Canada from a “Tundra Buggy,” a large tourist vehicle that has the ability to move over the tundra and keep viewers out of harm's way.

The Challenge

Streaming from remote locations can often pose unique challenges. But considering they are surrounded by live polar bears the entire time, the challenge for PBI are particularly wild!

PBI needed the ability to:

- Switch between multiple camera angles during the broadcast.
- Add motion graphics, slides and other video sources for a unique and entertaining educational show.
- Stream live from an extremely remote location

The Solution

PBI chose Wirecast Pro to do the live switching and streaming for their shows.

Their unique set up included:

- Several hardwired Sony PTZ cameras fixed to the outside and inside of the Tundra Buggy, with a control deck to adjust the angles and zoom of the cameras.
- Cameras inside the buggy which record several panelists that are part of the broadcast.
- Video signals captured directly into Wirecast via Blackmagic UltraStudio Mini Recorder or IP via RTSP
- A Peavey audio mixer tied directly connecting to Sennheiser microphones placed just out of camera frame.
- An Apple MacBook Pro running Wirecast Pro.

All of the video and audio mixing happens inside the buggy. One person can manage the entire show from a small desk with the Wirecast computer, the audio mixer, joystick to control the cameras, and a monitor. To bring the outdoors to life they use Wirecast to switch between the outdoor cameras showing the bear action taking place just feet away, the indoor cameras showing the panelists and pre-recorded content.

“Your software is so powerful and Wirecast is all I need to bring the polar bears into thousands of classrooms all over the world,” says Kirschoffer. “I love your product.”

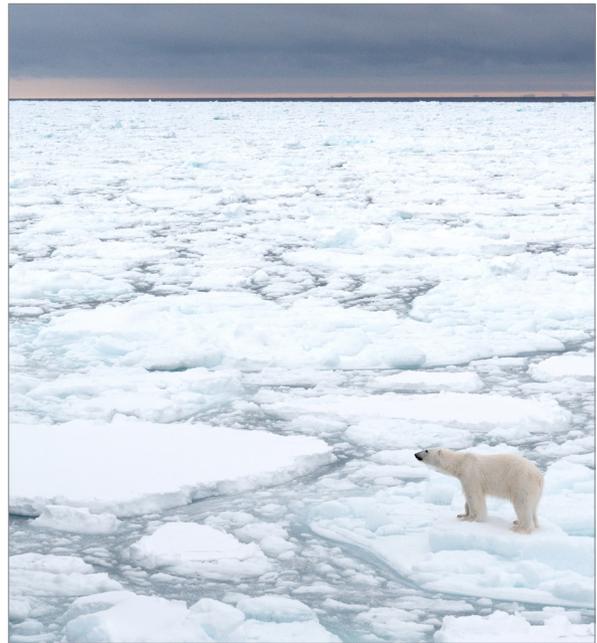
To get their broadcast to the internet:

- Wirecast encodes and streams the broadcast through PBI's private long distance (6 mi range) omnidirectional wireless network. This network allows the buggy the freedom to roam with the bears.
- The signal is transmitted an additional 20 miles to town via a wireless backhaul system.
- It then connects to the internet and completes the distribution to either Wowza or Youtube.

The Results:

The “Tundra Connections” program is entering its 10th season and had 7.5 million viewers in 2017. Ultimately with the help of Wirecast, they want every person to understand their actions can make a difference.

Learn more about Polar Bear International
www.polarbearsinternational.org



A polar bear live from the Tundra



The Tundra Buggy