



## THE TSAATAN TRIBE: IRIDIUM EXTREME® PROVIDES SAFETY AND REASSURANCE IN RUGGED MONGOLIA

*“The phone has been very useful in our lives. Being able to call for help ASAP means more than anything. I can say some of our elder members feel much more calm and secure when we migrate to further grounds. We can continue our lives without worry and fear, all thanks to Iridium.”*

—Zaya, Tsaatan Leader

### THE CHALLENGE

Khövsgöl Province, in northern Mongolia near the Russian border, is one of the most rugged and remote places in the world. Located about 650 miles from the Mongolian capital of Ulaanbaatar, Khövsgöl is home to one of Mongolia’s last

nomadic communities, the Tsaatan. The name “Tsaatan” translates literally to “reindeer people,” and it fits: The Tsaatan are reindeer herders who move four or five times a year throughout the region to graze their herd and to hunt for food (they use their reindeer for everything except meat).

Tourists who brave the seven-and-a-half-hour horse ride to reach a Tsaatan camp might meet Zaya, who was born in Mongolia but raised in Colorado. After attending university in Beijing, she joined the Itgel Foundation, a nonprofit organization which describes its mission as “protecting the cultural and environmental legacy of Mongolia through grassroots projects of sustainable development.” As part of a visit to study the Tsaatan and learn how the Foundation could help preserve their culture, Zaya helped establish the Tsaatan Community & Visitor Center in the village of

### BACKGROUND

- **The nomadic Tsaatan tribe** herds reindeer in remote regions of northern Mongolia. Confronted by tourists and other outsiders, the Tsaatan people struggle to balance safety with their efforts to preserve their lifestyle. Connectivity is essential when disaster strikes, but most of the region where they herd has no cellular coverage.

### CHALLENGES

- In the rural taiga of Mongolia, radios and cell phones are not reliable enough to count on when an emergency arises.
- Zaya, the current Tsaatan leader, needed to find a tool that gives the Tsaatan tribe the best of modern connectivity while also being rugged and portable enough for their nomadic lifestyle.

### BENEFITS

- The Iridium Extreme® handset is small and extremely durable. It empowers the Tsaatan people to keep practicing their nomadic lifestyle with the knowledge that they have reliable communications in an emergency situation.
- The programmable SOS button on Iridium Extreme makes it easy to quickly call for help.

Tsagaan Nuur. The visitor center is intended to allow the tribe to benefit from tourism instead of being exploited by it: living a traditional nomadic lifestyle isn't easy with the modern world encroaching everywhere, and Zaya wanted the Tsaatan people to maintain a healthy relationship with tourists while keeping their boundaries and traditions intact.

Zaya eventually decided to stay, marry a Tsaatan man, and become a reindeer herder herself. With her knowledge of the outside world and her can-do spirit, Zaya quickly became someone the other Tsaatan turned to for help solving day-to-day problems. When the tribe's chief died, they quickly decided that Zaya should fill the role.

The tribe has the support of the Mongolian government, but living nomadically in such a remote area comes with some trade-offs, one of which is access to medical care. The Tsaatan have no physicians and do not live near any settled areas, so their only way to get medical advice has been through a very unreliable two-way radio. When a two-year-old with what first appeared to be a common cold passed away in the Spring of 2013, Zaya felt that their inability to reach a doctor over the radio had cost the child his life. As the college-educated daughter of a doctor, she couldn't leave the modern world that far behind her. Zaya looked for a tool that would give her tribe the reliable connectivity they would need to keep up their nomadic lifestyle with peace of mind.

## THE SOLUTION

"That day," Zaya said, "I realized we really need a better communication tool." Terrestrial cellular networks cover only about 20 percent of the planet's surface, and northern Mongolia lies in that other 80 percent where cellular signals do not reach.



Zaya had noticed that many of the tourists who visited the Tsaatan camps carried Iridium® satellite phones and had reliable service throughout their travels. Unlike terrestrial cellular networks, which are limited to where a provider can build a tower and connect it to the local telephone system, the Iridium network relies on a constellation of 66 cross-linked satellites in Low-Earth Orbit, covering the entire planet's surface 24 hours a day, 365 days a year.

Zaya immediately saw how the technology could help improve and even save lives among her adopted

tribe. She contacted Candy Krebs of Portland, Ore., who had visited the Tsaatan on a trip to Mongolia the year prior and had stayed in touch. Could Candy get Zaya an Iridium phone? Candy came through with Iridium Extreme, a compact, easy-to-use handset designed to survive almost anything the harsh Mongolian wilderness can dish out. Built according to military durability standards, Iridium Extreme is dustproof, shock resistant and water resistant. The simplicity of the device's design means that even someone who rarely handles electronics can quickly learn how to use it, especially since the programmable SOS button makes it easier to call for help. Its diamond-treaded, tapered grip helps you keep it in your hand, even when you're riding a reindeer or setting up a Mongolian yurt.

## THE IMPACT

Having a reliable source of communication with the outside world has changed the Tsaatan people's lives for the better. Knowing they can reach help in an emergency—whether it's an illness, a bear or moose hunting accident, or an attack from the ever-present wolves that stalk their reindeer herds—has brought peace of mind to the tribe.



Tsaatan Children Begin Learning About Herding at a Young Age

Somewhat ironically, the addition of modern satellite communications technology has allowed the Tsaatan to continue their traditional way of life as one of the planet's last truly nomadic peoples. The group has found a balance where they can have the advantages of the most reliable phone coverage available without it infringing upon their traditions. Even when members of the tribe leave, such as when several teenagers enrolled in university, their families can now keep in touch. For that, Zaya, with one foot in the modern world and one foot in her yurt in the Mongolian taiga, is grateful.

Enabling Product: Iridium Extreme®  
Iridium Core Component: Iridium Core 9523 Transceiver