



## IRIDIUM PILOT® AIDS ANTARCTIC RESCUE OF STRANDED AMERICAN SCIENTISTS

*“We used Iridium Pilot to connect, through voice and data, with both the coordinators afloat and the scientific personnel on the ground. We count on the communication service provided through the Iridium® satellite constellation to bring coverage to the southernmost Argentine bases in Antarctica.”*

—Carlos Recio, ARA *Admirante Irizar* Captain

### PARTIES INVOLVED

- **Tesacom Group** is a regional pioneer in Internet of Things technology and a mobile satellite leader in Latin America, committed to providing customers with end-to-end communications solutions. Tesacom also develops mobility and interoperability networks, multimedia solutions, hardware, and software.
- **The US Office of Polar Programs** supports Arctic and Antarctic science by providing researchers with funding, polar facilities, and operational support.
- **The ARA *Admirante Irizar*** is an Argentine naval ship that came to rescue a group of scientists after receiving a call through their Iridium Pilot onboard.

### CHALLENGES

- A wall of ice separated a team of American scientists from their own ship, stranding them on Joinville Island and forcing them to wait for a rescue.
- Antarctica has some of the most inhospitable conditions in the world: sheets of ice, blizzards throughout the year, and extreme low temperatures.
- There is a limited number of service providers that offer connectivity throughout Antarctica.
- Parties in the U.S. and Argentina needed to locate the nearest vessel capable of carrying out a rescue mission.

### BENEFITS

- As an Iridium® service provider, Tesacom offers global connectivity to its customers in the Argentine navy.
- Iridium's L-Band signals are unaffected by extreme weather conditions and provide connectivity even at extreme latitudes.
- Iridium Pilot enables both voice communication and broadband data connectivity. This combination of services was essential to the rescue mission.
- Iridium Pilot is easy to install and does not require an external antenna.

## THE DANGER

In March 2018, a group of five Americans conducting research for the U.S. National Science Foundation's Office of Polar Programs found themselves stranded on Joinville Island near the tip of the Antarctic Peninsula. The four scientists and one additional staff member were unable to return to their own ship, research vessel *Laurence M. Gould*, due to a wall of ice in the Weddell Sea blocking its path. In such a remote location, hundreds of miles from the tip of South America, the crew had no option but to call for help and wait to be rescued.

## THE RESCUE

The scientists contacted the US Antarctic Program, which then reached out its Argentine counterpart. Argentina's Ministry of Foreign Affairs facilitated a rescue mission remotely from offices in Buenos Aires by contacting the Argentine naval icebreaker *Admirante Irizar*, which had Iridium Pilot onboard. Officials in Buenos Aires called the crew on *Irizar* through Iridium Pilot to stay in touch with its captain until the rescue mission was complete.

**“ Whenever our customers are out at sea in the Antarctic region, they use Iridium because there's no better communications solution for their needs. ”**

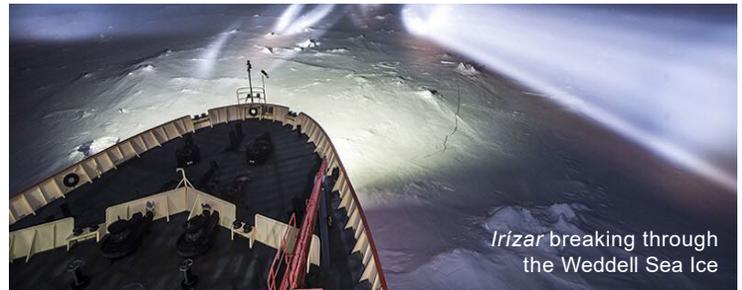
—Viviana Fonseca,  
Tesacom CEO

Tesacom, an Iridium partner that provided Iridium Pilot to *Irizar*, has been working with the Argentine Navy for more than a decade to deliver the most advanced and reliable maritime communication available. In the Antarctic region,

Iridium Pilot installed on *Irizar*



Service Provider: Tesacom Group  
Enabling Product: Iridium Pilot®  
Iridium Core Component: Iridium Pilot® Satellite Terminal



*Irizar* breaking through the Weddell Sea Ice

Iridium provides naval ships with the coverage they need: Iridium Pilot allows for up to three independent voice lines, which can be used simultaneously, as well as data connections through standard IP at speeds of up to 128kbps. The ability to communicate with multiple groups at once proved vital to this rescue mission, since *Irizar* had to be in communication with the ministry in Buenos Aires, the group stranded on the island, and the USRV *Gould* concurrently.

## THE IMPACT

Captain Recio and his crew aboard *Irizar* saved the lives of the five stranded Americans, thanks to their reliable communication channels. A helicopter airlifted the team onto *Irizar*, where they remained until weather conditions allowed for their safe return to their own vessel. The international cooperation needed for this rescue mission was only possible because of connectivity through the Iridium® network: the omnidirectional satellite antenna in Iridium Pilot performs even in extreme weather conditions, and the Iridium constellation in Low-Earth Orbit provides coverage even in the Antarctic region.

“This was a case of how, with the best coverage and technology, [the *Irizar* crew] completed its search and rescue objectives,” commented Roberto Darias, Director of Business Development at Iridium Satellite LLC.

USRV *Laurence M. Gould*

