

Iridium® Enables Safe and Connected Off-Road Rally Racing

Partners: Yellowbrick, Roadpost, Icom, and Rock Seven

“We use Iridium in a robust and global way. We don’t just do tracking, we need communications between our staff, and we need an open communication line between the organization and the drivers competing. There was no question; we wouldn’t use anything other than Iridium and Iridium Connected products.”

— Emily Miller, Founder of Rebelle Rally



160+

geofenced checkpoints
for competitors

36

teams competing outside
of cellular coverage at the
2020 Rebelle Rally

200+

Iridium and Iridium
Connected devices used at
the 2020 Rally

AT A GLANCE:



THE CHALLENGE

Off-road rally races require clear, reliable communications ensuring the safety of both the competitors and the rally producers.



THE SOLUTION

Creating a communications ecosystem of Iridium and Iridium Connected® devices allowed both competitors and organizers to feel safe and connected when the race took them beyond the reach of cellular coverage.



THE IMPACT

With a comprehensive solution comprised of communication and tracking devices enabling enhanced safeguard measures, the Rebelle Rally was able to use more accurate scoring and tracking data throughout the race, and provided a safer experience to participants.

Iridium Product: Iridium Extreme® PTT
Iridium Connected® Products: YB3i Tracker, ICOM IC-SAT100 and RockAIR
Embedded Iridium Modules: Iridium Core 9523 and Iridium 9602
Services Utilized: Iridium Short Burst Data® (SBD®) and Iridium Push-To-Talk



THE CHALLENGE

A female-led off-road rally, the Rebelle Rally breaks barriers year after year, encouraging women to compete in this extreme adventure, regardless of previous motorsports experience. One of the keys to making competitions like this possible is reliable, real-time communications and tracking services; however, they are traditionally unreliable, slow to provide tracking updates, and not robust enough to fully support the various data needs of competitions like Rebelle. Spending eight days in the California and Nevada deserts, 36 driving teams and the entire Rebelle Rally staff navigated hundreds of kilometers each day in search of checkpoints and camps well outside of cellular coverage. The central need for the drivers and the organization is dependable safety through constant tracking and open lines of communication.

THE SOLUTION

Using the Iridium 9555, the ICOM IC-SAT100, and the YB Tracker, the Rebelle Rally team created an end-to-end solution revolving around Iridium's reliable services, enabling the base camps to provide live tracking and scoring for their audience, while ensuring the safety of their competitors through daily check-ins over Iridium PTT and access to a satellite phone in case of emergencies. Rebelle also put redundant Iridium Connected systems in place as a safeguard for the unlikely event that a team's tracker became non-functional.

Rebelle organizers worked extensively with YB Tracking to program a private scoring database, which interfaced with each tracker and connected the tracker into the scoring system, concurrently updating stats and scoring throughout the days over the Iridium network. The Rebelle Rally also built a bespoke vehicle data interface populated by data transmitted via Iridium, allowing for the collection of real-time vehicle data without on-site testing by engineers.

THE IMPACT

Using Iridium's truly global network, Rebelle Rally created a customized communications ecosystem that enabled real-time connections, scoring, and tracking like rarely seen in off-road rally racing. The participants were able to race the extreme course with confidence that Iridium calling and push-to-talk services could quickly and reliably connect them to the race organizers or emergency services if necessary, while fans were able to follow their favored teams in real-time and track their scores on the Rebelle Rally website throughout the week.

