



# PCI Race Radios

PCI puts Icom Radios  
to the Ultimate Test

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*Photo courtesy of Jason Zindroski.*

A case study prepared by Icom America Inc.  
Manufacturers of high-performance, award-winning radios for over 55 years.

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## PCI puts Icom Radios to the Ultimate Test

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PCI Race Radios needed a durable radio for the vehicle communication systems it designs and maintains for the extreme off-road racing industry. Icom's IC-F5021 and IC-F3011 series radios proved tough enough to handle harsh desert conditions and breathtaking vehicle crashes while providing clear, reliable communications across expansive remote areas.

### Two-Way Radio is All Business

Considered the leading authority on communications for the off-road racing industry, PCI Race Radios designs specialized two-way communication systems for race vehicles, as well as, systems for motorcycles/quads, support cars and pit crews. With nearly 30 years experience in the industry, the Long Beach, Calif.-based company earned a reputation for unmatched quality and innovation. Its solutions are used in both off-road short-course races, as well as, endurance events like the Baja 500 and Baja 1000.

In an off-road racing environment, teams rely on two-way communications for both safety and race coordination. "Two-way radio is an integral part of off-road racing," says Rich Ronco, owner of Tatum Motor Sports, a Peoria, Ariz.-based company that specializes in building custom high-performance sand cars, race cars, pre-runners and race trucks. "We put communication systems in all of our vehicles. For recreational vehicles, it's fun to talk and communicate with other drivers — it provides entertainment. But in race cars, two-way radio is all business."

Radios convey information between the race vehicle and the support vehicle and pit crews about upcoming fuel and service stops, race position, accidents and other hazards and obstacles. Two-way radios also allow drivers and co-drivers to communicate clearly and audibly inside the vehicle, where breakneck speeds and extreme vibration create a deafening noise level.



### Featured Products:

- F5021 Mobile
- F3011 Portable

Two-way communication provides an important safeguard for racing teams, allowing team members to radio for help in emergency situations. Major events like SCORE International's Baja 500 and Baja 1000 offer the Weatherman Channel, a dedicated radio channel where teams can report emergencies, request assistance and exchange other vital information. Manned by Bob Steinberger, founder and original owner of PCI Race Radios, the Weatherman Channel provides a reliable safety net across remote desert race courses infamous for treacherous terrain, blazing heat, thick dust and flash floods.

“Reliable two-way radio communications provide an edge in finishing a race. In many cases, it can make the difference between a DNF and success at the finish line.”

– Bob Steinberger, Founder of PCI Race Radios



Photo courtesy of Jason Zindroski.

“Having a two-way radio is imperative,” Steinberger says. “Reliable two-way radio communications provide an edge in finishing a race. The ability to instantly transmit a trouble call to a chase vehicle or the pit crew saves valuable time. In many cases, it may make the difference between a DNF and success at the finish line.”

In the world of extreme off-road racing, two-way radio is the lone option for reliable communications. Amateur radio's limited power and range render it ineffective over long distances, and without frequency coordination, interference and airtime saturation pose major issues. Commercial cell phone

service is spotty at best in remote desert settings, and satellite communications are prohibitively expensive.

### Tough Enough to Withstand Extreme Conditions

When designing its in-vehicle communication systems, PCI Race Radios faced the challenge of finding a two-way radio rugged enough to withstand harsh environmental conditions and continuous jarring motion. For example, in extreme endurance races like the Baja 1000 on Mexico's Baja California peninsula, vehicles will often race

continuously for up to 24 hours to cover the 1,061.69-mile desert course, traveling at speeds of up to 120 miles an hour. To survive these conditions, the radio must be able to hold up to extreme heat, blowing sand and dust, flash floods and spectacular high-speed crashes.

Many radios, when exposed to these types of extreme conditions, will simply quit working. Others literally fall apart. “Drivers will hit a bump or collide with another vehicle, and the radio’s buttons will fly off,” Ronco says.

In addition to finding a radio tough enough to withstand these conditions, PCI Race Radios needed a radio with an excellent range and quality selective receiver due to high airtime saturation and interference during large races. “In desert racing, there are so many pit crews and race teams trying to communicate with each other that there is a lot of interference,” explains Ronco, who installs PCI solutions exclusively in the vehicles he builds. “Range is also extremely important. Radios need to be able to transmit at least 25 to 30 miles.”

### Icom Outperforms on Reliability and Durability

PCI Race Radios found its solution in a pair of durable, high-performance radios from Icom America. The company originally selected Icom’s IC-F121 mobile and then moved to the IC-F5021 mobile for its in-vehicle communication system for race vehicles and support vehicles, and the IC-F3011 portable radio for the pit crew, race day organizers and volunteers.

“Icom radios have been the radio of choice in the off-road racing industry in recent years. The Icom F5021 mobile is a workhorse radio with good power and a very good selective receiver.”

– *Scott Steinberger, Owner and President of PCI Race Radios*

With its durable construction, powerful 50-watt output and simple operation, the F5021 mobile consistently holds up to high-speed crashes, constant vibration and extreme weather conditions. Likewise, the F3011 portable offers a rugged body built to Mil-Std. 810 specifications and the IP54 rating for dust protection and water resistance makes it an ideal portable for pit crews and volunteers who need a simple-to-use portable with easy programming options.

“Icom radios have been the radio of choice in the off-road racing industry in recent years,” says Scott Steinberger, current owner and president of PCI Race Radios, and the son of Bob Steinberger. “The Icom F5021 mobile is a workhorse radio with good power and a very good selective receiver.”



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PCI Race Radio’s decision to use Icom radios in its communication solution is grounded in the company’s extensive experience in the off-road racing industry. In addition to building and maintaining radio systems, PCI also races vehicles in extreme off-road events, boasting five Baja 1000 wins and numerous class championships over the years.

Developing and testing its own communication equipment in an actual race environment allowed PCI to fine-tune its products before they ever hit the market. According to Scott Steinberger, Icom radios proved reliable on the race course, with high-power, long-range communications and the ability to cut through the crowded race-day airwaves. And with

a minimal number of knobs and buttons, the Icom radios are simple to use, an important feature in the dangerous, high-speed off-road racing industry, where drivers and pit crews need to focus on their job at hand, not fiddling with a radio knob.

## Unmatched Quality and Innovation

The reliability, durability and extended range of Icom radios, combined with PCI Race Radio’s vigilance to details, have earned PCI a reputation for unmatched quality and innovation. “We’ve earned the respect of the off-road racing industry,” Scott Steinberger says.

The company currently holds about 85 percent of the market for off-road racing communication equipment, and is considered the leading authority on radio solutions for the industry. “Other companies have tried to sell me equipment at a lower price, but the quality is never as good as PCI’s systems,” Ronco says. “I’ve been building vehicles for 15 years, and I’ve used PCI solutions exclusively from the start.”

## Icom: The Radio of Choice for Off-Road Communications

Icom America offers a complete line of highly reliable radio equipment ideal for short-course motor sport racing as well as extreme endurance events. The go-to radio in the off-road racing industry, Icom radios provide excellent durability with the ability to withstand extreme environmental conditions, high speeds and continuous vibration.

User-friendly and compatible with various race intercoms and headsets, Icom America radios can be used in a variety of communication solutions for the off-road racing industry. With loud, clear audio and a powerful range, off-road race teams can depend on Icom for non-stop vital communications.



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