



Steve Klingensmith, of North Carolina based RCS Wireless Technology, installs two-way radio and cellular solutions for companies throughout the Southeast and purchases equipment through TESSCO. For over 50 years, RCS Wireless Technology has serviced customers with advanced safety, security and business communications needs. The markets they serve include educational and healthcare facilities, government and the public safety industry, the transportation and utilities industries, as well as law enforcement, fire, EMS and other first responders..



For 30 years, TESSCO has been providing solutions, products, services and support for the organizations that build, maintain, use and resell wireless with the motto, Making Wireless Work®.

Big or small, immediate or staged, TESSCO is the source for complete wireless systems kits, tools, or device accessories, providing access to the broadest, most in-depth product offerings and choices in the industry. TESSCO specializes in product consolidation which reduces costs to their customers through a seamless procurement process.

## Challenge

Increasing cellular signal coverage in separate 30,000 square feet and 50,000 square feet areas of an aviation maintenance company's partly underground hangar dedicated to consumer airline plane refurbishment.

## Solution: SureCall Force-5™

- 3G and 4G voice and data cellular reception in 30,000 and 50,000 square feet areas
- TESSCO's cost-effective cellular amplifier and accessories solutions

## The Challenge

Klingensmith and RCS Wireless Technology received a project outfitting a 30,000 square foot area and 50,000 square foot area of an airplane maintenance company's hangar with cellular reception. The company's engineers and workers communicate with iPads while retrofitting airline passenger planes with satellite TV monitors on the seat backs. Even though a portion of the hangar was below ground level and received a poor cellular signal, they wanted 3G and 4G connectivity and didn't want the communications transmitting through their Wi-Fi network.

As the amplification solution, RCS Wireless Technology suggested Cellphone-Mate's Force-5 five band amplifier as the part of the solution to perform the task and the airline maintenance company agreed. RCS suggested the Force-5, part of Cellphone-Mate's SureCall product line of amplifiers, because it covers 2G through 4G coverage for all the major carriers up to 80,000 square feet. Klingensmith had found out about the Force-5 through his supplier, TESSCO, which stocks all the cellular amplification and two-way radio accessories RCS Wireless Technology needs to outfit their customers with enhanced communications solutions.

Although the customer wanted coverage for a large area, they only had a limited budget so Klingensmith's creative configuration skills were put to the test. With a little homework and rolling up his sleeves, Klingensmith came up with a configuration involving the SureCall Force-5 and a combination of 6-7 wide-band omni antennas in the middle of the desired coverage area and wide-band directional panel antennas encircling the outer areas of the coverage area's perimeter. Because the two areas were separated, Klingensmith was worried that the Force-5 would not be able to increase cellular coverage with all the cable, splitters and attenuation needed for the project that sometimes reduce an amplifier's power. When he tested the installation before the final launch, he found the Force-5 more than adequately provided cellular signal throughout the coverage area.

## Result

With the installation of a Force-5 cellular amplifier, antennas and other accessories from TESSCO, Klingensmith and RCS Wireless Technology were able to cost-effectively provide the airline maintenance company with over 90,000 square feet of 3G through 4G cellular coverage. And because word gets around, he's already gotten other projects that will need the Force-5's capabilities and TESSCO products.