



1. Product Overview

AMICO Security developed the ANC[®] Non Conductive fence system as a total perimeter solution to offer a safe, aesthetically pleasing, non-conductive, radar friendly alternative to traditional fencing. ANC[®] is growing rapidly in popularity and has many applications and advantages.

2. Airports and Aviation Sector

As the need for airport security increases, AMICO has the answer. Airports throughout the globe are searching for Perimeter Systems that won't interfere with radar signals. While traditional high security metal fencing systems reflect radar, creating false images, ANC[®] fencing doesn't show this interference. In addition to being safe and secure, ANC[®] provides a clean aesthetically pleasing look that blends into the landscape.

ANC[®] fencing is also used in non-aviation related US Governmental facilities wherever radar is in use for site protection and/or in highly corrosive coastal environments.

3. Summary of Test Data

The ANC[®] Non Conductive fence shows an improvement in monostatic RCS over a similarly-shaped all-metallic version of the fence at S-band (2.7-3.0 GHz) for different incident angles and polarization: at least a 10 dB improvement at normal incidence (i.e., a 90% reduction in scattering), and at least a 5 dB improvement at 40° oblique incidence from the normal (i.e., a 68% reduction in scattering).

The ANC[®] Non Conductive fence shows at least a 19 dB improvement in normal incident transmittance over the all-metallic version of the fence at S-band (2.7-3.0 GHz); that is, the composite fence is approximately 80 times more transparent than its all metallic counterpart.

S-Band	Metal Fence	ANC Fence	Improvement
Normal Incidence RCS	30 dB(m ² /m ⁴)	20 dB(m ² /m ⁴)	10 dB
40 degrees RCS	18 dB(m ² /m ⁴)	18 dB(m ² /m ⁴)	5 dB
Normal Transmittance	-19 dB	>-1 dB	19 dB

4. Environmental Durability

ANC[®] was primarily designed to survive wet, hot and humid conditions in the Gulf Coast and offshore. The material is fiberglass composite with UV inhibitors throughout, designed for extreme sun exposure and the highly corrosive environment.

