



GMF AS-3036 Antenna Upgrade Kit

SATCOM Component Upgrades

The L-3 Communications' GMF AS-3036 Antenna upgrade kit provides a low-cost way to improve G/T performance over legacy AN/TSC-93B Satcom System GMF AS-3036 antennas by as much as 3 dB. The upgrade kit is designed to replace the existing 3036 antenna feed and LNA while maintaining GMF system form, fit and function and transportability. The AS-3036 weight and setup time are not affected by this upgrade.

PRODUCT DESCRIPTION

L-3 Communications' GMF 3036 antenna upgrade kit provides a modified feed horn, filter assembly and enhanced LNA to improve the legacy AS-3036 antenna G/T performance to 23.0 dBi/K. The increased G/T performance results in increased antenna efficiency and decreased system noise. The L-3 Communications' antenna upgrade kit improves G/T by optimizing antenna gain in the receive band and decreasing system noise temperature while maintaining antenna sidelobe performance. This upgrade utilizes L-3 Communications extensive splash-plate feed experience. Similar feeds are in use in deployed manned and unmanned airborne mobile satellite communication systems.

L3 Communications' 3036 antenna upgrade kit can be easily installed in the field by GMF technicians. The antenna upgrade kit consists of the following items:

- Modified antenna feed horn (splash plate feed)
- Low-noise LNA & Filter Assembly
- Mounting brackets and mounting hardware

This improved AS-3036 antenna benefits from L-3 Communications' extensive experience in splash plate feed design. L-3 Comm favors splash plate type feeds wherever small aperture axially symmetric antenna designs are required. The advantages a



splash plate feed offers are:

1. Precise control over aperture illumination
2. Minimal aperture blockage
3. Simple feed installation

Additional improvements to antenna performance are possible by reducing the system noise contribution of the feed, feed filters, OMT and LNA assemblies.

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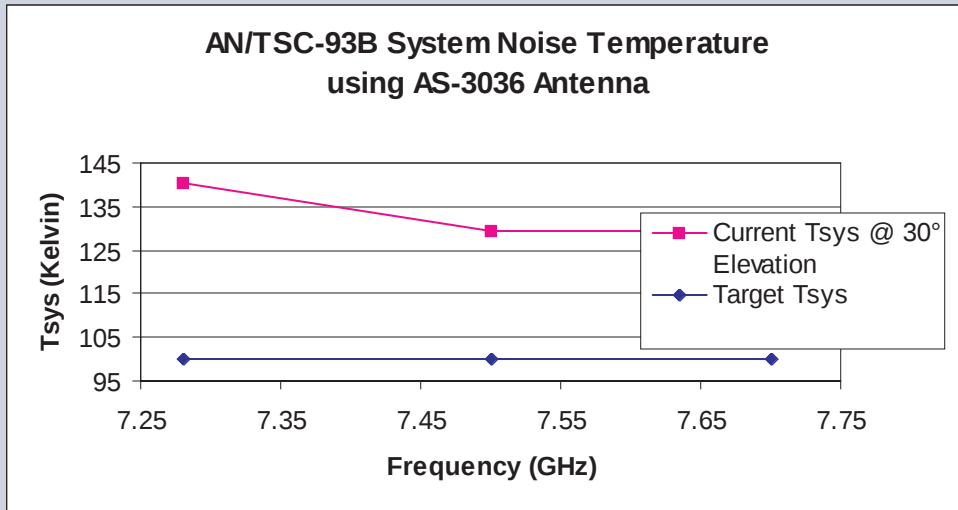
DFOISR Public Release Approval 00-S-2655

SPECIFICATIONS

GMF AS-3036 Antenna Upgrade Kit

PERFORMANCE FEATURES

The figure below shows current measured performance of the AS-3036 antenna and projected performance of the upgrade feed assembly.



For further information on AS-3036 contact:

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