

GLOBAL LINK NARROWBAND.

INTEGRATION WITH THE KYMETA U8 OSPREY.

PARABOLIC-CLASS PERFORMANCE. FLAT-PANEL RELIABILITY.

GEO SATCOM solution delivering parabolic-class performance with the reliability advantages of flat-panel electronically steered antennas (ESAs) for remote and unmanned operations.

Integrated with the Kymeta U8 Osprey, Global Link restores the link performance typically associated with parabolic systems — without the electro-mechanical failure points and maintenance burden of mechanically steered antennas.

THE CHALLENGE

Remote and unmanned GEO SATCOM sites traditionally relied on mechanically steered parabolic antennas for high receive gain and strong link performance. However, motors, tracking assemblies and other electro-mechanical components introduced frequent failure points and created operational risk at unattended locations, often resulting in connectivity loss, downtime and expensive maintenance deployments.

THE TRANSITION

To improve reliability, deployed systems transitioned to the Kymeta U8 Osprey flat-panel ESA architecture, eliminating moving parts and significantly reducing maintenance requirements. While this improved system reliability, the transition from parabolic antennas to flat panels reduced receive gain and link margin, impacting throughput and resilience in degraded conditions.

THE SOLUTION

Global Link Narrowband is deployed today to recover the performance typically lost in the transition from parabolic systems to flat-panel ESAs. Through real-time coherent signal combining and adaptive recovery, the system restores link margin, throughput and resiliency while preserving the operational advantages of the flat-panel architecture.

THE IMPACT

The combined solution delivers a more reliable GEO SATCOM architecture without the traditional performance tradeoff associated with flat-panel systems. The architecture maintains connectivity during terminal failures, supports swap-and-operate maintenance without recalibration, and automatically restores combined performance — reducing downtime, simplifying field operations and improving mission continuity.

The result: Parabolic-class performance, flat-panel reliability, built-in redundancy and uninterrupted operations in remote and unmanned deployments.