

JET

Jamming Evaluation Tool

Jamming Evaluation Tool (JET) is a GUI-driven simulation tool that evaluates the impact of jamming on transponded satellite communications and estimates the benefit of traditional anti-jamming (AJ) measures including frequency hopping, partial payload processing, and antenna-based AJ approaches.

Features

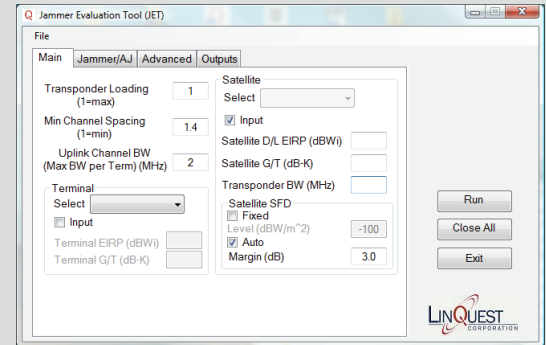
JET is a high-level link budget tool that estimates the per-terminal and aggregate impacts of jamming and allows the user to assess the tradeoffs and benefits associated with the use of a protected satellite system. Features include:

- The ability to save, recall, and easily change any parameter to see impact of any variable on system performance under jamming
- Graphical channel/jammer plot shows location and magnitude of jammer
- Outputs show benign and jammed per-terminal data rate, Pr/No, link margin, and aggregate results for entire transponder
- Calculates benign and jammed transponder bandwidth efficiency (b/s/Hz)

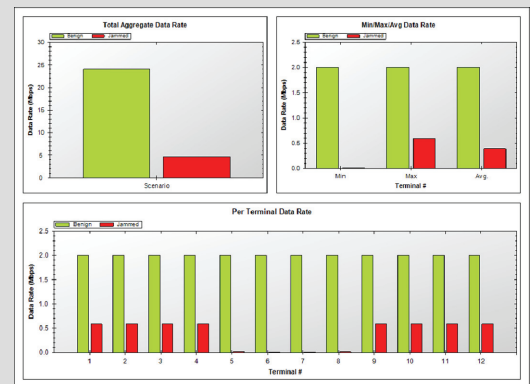
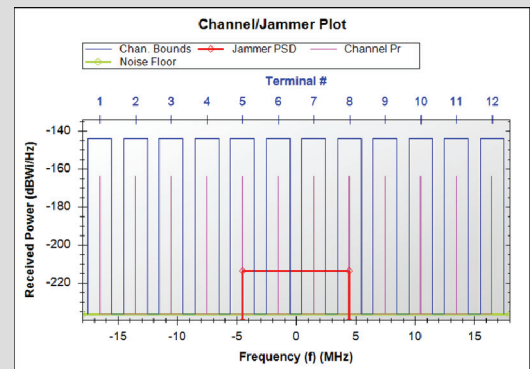
Applications

JET supports high-level system design trades related to when and how to utilize the commercial versus protected SATCOM resources, including:

- Estimating the impact of jamming on commercial communication satellite systems
- Estimating the benefit and resource cost of protected versus commercial satellite systems in the presence of jamming
- Designing a system to incorporate some or all AJ features of a protected satellite system
- Evaluating how to divide user and network traffic between protected and commercial satellite systems



Graphical Interface



Sample JET Output Charts