KA-350ER Global Xpress Satellite Terminal Installation/Integration

FAA STC SA04080NY

SNC is uniquely qualified to perform satellite terminal installations for Inmarsat Global Xpress (GX) with exclusive rights to the STC, mature engineering data and trained technicians. This capability provides high-performance, reliable and affordable airborne satellite communications to maintain real-time digital communications with mission partners and disseminate perishable intelligence. This functionality combined with the unique GX subscription-based satellite service increases capability while reducing costs by approximately $2M over five years.
KA-350ER Global Xpress Satellite Terminal Installation/Integration

SNC is a pioneer in aircraft modification and airborne satellite terminal installations with more than 40 years of experience and 80 satellite terminal installations in 11 different configurations. We integrated this capability with our AS9100-compliant processes to provide a cost-effective approach to modernize your aircraft with the GX certified satellite terminal. SNC can perform all required aircraft modifications and component installations on KA-350 ER aircraft per FAA Supplemental Type Certification (STC) SA04080NY.

Features and Benefits

**Reduced Costs.** Our trade study revealed approximately $2M cost savings over five years with scalable Inmarsat GX subscription based managed satellite service when compared to leased dedicated space segment.

**Increased Resiliency.** GX uses current generation satellite technology with modern bandwidth efficient waveforms and complements Government SATCOM to provide optimal redundancy, diversity, security and scalability.

**Highly Reliable.** GX can provide access to Public Internet or secure dedicated backhaul to customers networks.

**Partnership.** With GX tier 1 Value Added Reseller (VAR) Satcom Direct Communications® for service activation/air time/network access.

**Fully Functional Terminal.** The airborne satellite terminal includes the SNC Common System Radome (CSR), Orbit MPT-46WGX antenna system and Inmarsat G MODMAN modem and all support components.

Success Story

As a part of an internal project, Team SNC modified our Contractor Owned/Contractor Operated AISR platform “Charlie” aircraft and **installed the satellite terminal in less than one month.** With support from our partner, Satcom Direct Communications®, the satellite terminal was operational within minutes of initial power on. Multiple successful flight tests were conducted demonstrating high quality Full Motion Video streaming over the GX satellite network, public internet and ultimately into a private network.

Technical Specifications

- Globally available Committed Information Rates (CIR) 8 Mbps Forward Link (FL) x 4 Mbps Return Link (RL).  *Higher data rates available.*
- Orbit MPT-46WGX antenna MTBF 22,487 hours
- Inmarsat G-MODMAN modem MTBF 26,836
- Orbit/Inmarsat satellite terminal components are RTCA DO-160G qualified
- Interoperability Features: The Orbit MPT-46WGX antenna can operate in both commercial and government Ka satellite band. Certified for use on Inmarsat Global Xpress and designed to meet the requirements of WGS.
- FAA STC SA04080NY for GX Satellite Installations on Aircraft

System SWaP

<table>
<thead>
<tr>
<th>Component</th>
<th>SWaP</th>
<th>Weight</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antenna</td>
<td>19.3H x 19.7D (swept vol)</td>
<td>31 lbs</td>
<td>*via KPSU</td>
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<tr>
<td>KPSU</td>
<td>13&quot; x 11&quot; x 3.5&quot;</td>
<td>11 lbs</td>
<td>220W</td>
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<tr>
<td>Modem</td>
<td>1RU x 19&quot; x 24&quot;</td>
<td>14.8 lbs</td>
<td>&lt;140W</td>
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