Flex|Air
Five Attributes of Managed Services That Are Critical to Your Aircraft Mission

Reliable satellite communication is a requirement for today's government aircraft. From enabling en-route connectivity for crew and passengers, to powering intelligence, surveillance and reconnaissance (ISR) applications, having a data connection available at a moment's notice is a must.

However, managing a network and the services necessary to support around-the-clock communications with high-data rate transmissions and global agility can burden internal resources, budgets and manpower. In self-managed networks, over commitments to infrastructure, bandwidth and services are often required to achieve the throughput and resiliency you require.

That is why many government organizations are shifting away from operating their own networks and turning to commercially available — and trusted — managed services. But, not all service offerings are created equal. Below are five attributes to look for from a managed services provider to ensure you get the high-performing satellite communications critical to your mission's success.

1 Guaranteed availability where you need it.

It's difficult to anticipate the demands that will be placed on your satellite equipment and service architecture. Users expect services consistent with what they have on the ground. Whether enabling a senior government leader's video conference while airborne or an aircraft crew's inflight updates, the satellite service must work — wherever the aircraft may go.

Many networks have only a single satellite spread across an entire region such as North America. This results in single thread coverage; a single satellite beam to accommodate all aircraft in the area, which may result in spotty capacity and service interruptions. FlexAir has overlapping satellite beams, particularly in areas of high concentrations of terminals. With multiple beams in set geographies on earth, government customers are assured coverage and connectivity for any operation, conducted in any environment, almost anywhere in the world — without interruption.

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2 **High-data rate transmissions** for any inflight or on-ground scenario.

Your aircraft's data needs can vary widely based on its mission. For example, ISR's bandwidth-intensive operations (full-motion high-definition video, sensor or radar information) require large transmission rates from the platform. While en-route communications, often used by government officials, have traffic demand in the opposite direction. Each mission places different demands on the satellite equipment and service architecture that need to be accommodated in real-time. Broadband usage is nearly impossible to predict, creating a capacity guessing game that takes focus away from the mission at hand.

Intelsat Epic high-throughput satellites concentrate satellite power into small spot beams, improving efficiency and employ frequency reuse, increasing the aggregate amount of capacity. With a bigger channel size of bandwidth going into each Intelsat Epic beam, government organizations benefit from up to ten times the capacity of competitive offerings, ensuring they can support ten times as many users without impacting performance.


3 **Predictable cost structure:** to drive savings.

If you're under pressure to watch costs, paying for underutilized bandwidth or satellite services must be avoided. Ideally, you want flexibility in choosing connectivity types; choices with predictable costs for budgeting and the confidence that the bandwidth is available when you need it.

FlexAir managed services provide pay-as-you-go as well as monthly subscription options and allocate and share bandwidth among defined groups of aircraft as well as between groups. Government users can select several service offerings allowing them to choose the right plan based on their data rate and geographic needs. With multi-layered, seamless, and consistent coverage, government users have the flexibility to optimize their service, provide a predictable cost structure that meets budget requirements, and deliver real value to their government aviation users.
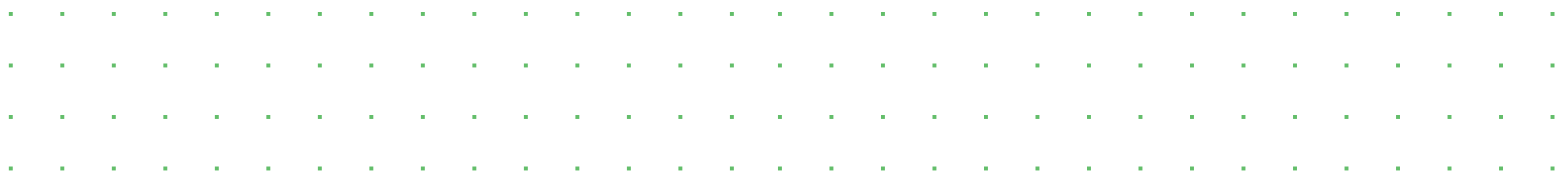
4 **Redundancy and security** you can count on.

You require resiliency that you can count on regardless of traffic volume, inclement weather or other interference that could impact mission success. The design of the satellites as well as the platform must mitigate attempts by adversaries to interfere with satellite signals, in particular for military aircraft in hostile territories.

FlexAir leverages the security enhancements of Intelsat Epic's advanced digital payload. The design of the digital payload enables the user to identify when someone is trying to jam a signal and then quickly switch to a different beam, mitigating any impact from the interference attempt. FlexAir provides additional security as only designated beams with frequency bands carrying authorized signals are cross-connected, and as a result, any interfering signals are muted, analyzed and mitigated.

5 **Support** for multiband and multi-network.

The aircraft of the future will not depend on just Ku- or Ka-band, but rather will be multi-band and multi-network within the bands. For example, large aircraft, which can accommodate multiple and different antennas, could install a Ku-band and Ka-band terminal. However, for specific applications, such as Airborne ISR, Ku-band HTS provides the most resilient, economical and technically superior solution. Regardless of the frequency bands you choose, you want your satellite services of choice to be forward compatible with a multiband approach.

High-throughput satellite (HTS) technology is changing the way we communicate — connecting users without boundaries and allowing them to access broadband connectivity more efficiently in existing and emerging areas of operation. Intelsat Epic is a high performance, next-generation satellite platform that delivers global high-throughput technology. Intelsat Epic's power-concentrated spot beams enable small airborne terminals to leverage satellite connectivity at higher data rates than ever before, and at a lower cost per bit. With six Intelsat Epic satellites and over 50 widebeam satellites, Intelsat's innovative and open approach to satellite and network architecture utilizes frequency reuse technology to provide a host of customer-centric benefits.

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Flex|Air **Managed Services**

Based on the Flex platform, FlexAir leverages Intelsat Epic technology fully integrated with our existing satellite fleet and global IntelsatOne terrestrial infrastructure to provide an affordable, flexible, secure and powerful way to stay connected. It is the only managed service that accommodates different applications and end-user requirements with distinct offerings.

FlexAir enables government organizations to:

✅ Maintain global access with guaranteed availability where you need it in a timely and affordable way

✅ Subscribe to a service enabling immediate access to 3 Mbps from the aircraft with optional scalability to a guaranteed 6 Mbps CIR

✅ Rely on a predictable cost structure with pricing options to meet specific data-rate and geographical needs

Flex|Air **Global Access**

Pay-as-you-go or monthly fee models for corporate and government aircraft for applications such as en-route and transport services

Flex|Air **ISR**

Committed Information Rate (CIR) connectivity in dedicated HTS capacity for applications such as sensor data, video transmission and communications relay

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