



Cabin Connectivity for Smaller Aircraft

Do smaller business jet and turboprop owners suffer in terms of having their cabin connectivity requirements met? Are their needs the same as operators of larger jets? Airtex's David Gray discusses the connectivity balancing act for the smaller aircraft owner...

Whether you're flying an Ultra-Long-Range and Large Cabin jet or a Single-Engine Turboprop, the basic needs of Business Aviation passengers are the same. NBAA analysis shows that US business flights generally average two hours or less, so it could be assumed that all Business Aviation users would like the same services – cabin connectivity included.

For operators of smaller aircraft, however, the considerations become less about what they'd like to have and more about what they need. The reality is that business aircraft can look like expensive acquisitions, and as you help the company CFO understand how it will pay for itself in the mid- and long-term, you will need to account for the costs, including those associated with cabin connectivity.

You'll need to assess what is really important in meeting the business (or personal) connectivity needs of the passengers? Understanding those needs and focusing on what is available for

a specific aircraft type should form a part of your decision-making process at the time of aircraft acquisition or upgrade.

Many airplanes in operation today at the smaller end of the market have a book value of less than \$3m, so an understanding of the value of your aircraft and a proportional investment in the connectivity solution for the aircraft could make sense. Similarly, the direct operating costs of an aircraft tend to be closely linked with the money spent on passenger amenities, such as cabin connectivity.

Market Realities for Smaller Aircraft

In today's business aircraft cabin, ability to text and email seem to be the biggest needs. Trends indicate that people prefer texting over sending email because the brevity of text is succinct in solving or handling an urgent issue. Email, meanwhile, addresses a trail of conversation and related communication between participants.



If your average flight fits the NBAA-reported average of two hours (or less), a value approach to connectivity could fit the bill with text and email connectivity proving sufficient for your business travel needs.

For personal connectivity purposes, internet access can be fun – but there is an associated cost relating to bandwidth usage. Passengers will also quickly notice a significant difference in their internet in-air experience compared to their ground-based experience for all but the more expensive packages.

Without some large antennas (not available to smaller aircraft) and significant cost, it is difficult to duplicate the internet experiences available on the ground.

So what is the bottom line for the operator of smaller business aircraft today? For smaller, less expensive airplanes it may be worth considering restricting the experience to necessary text messaging with limited internet-connectivity (for email headers or emails – perhaps without attachments), thus providing a fast experience for the user that rivals their experience on the ground.

International Solutions

Although Air-to-Ground (ATG) gets regular mentions for those flying smaller aircraft within the United States, Iridium offers service for operators of smaller aircraft anywhere in the world, at any altitude. Adding the Iridium Next bandwidth and speed enhancements may be a smart move for international operations.

As a matter of fact, Iridium Next could be poised to change

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the landscape for smaller aircraft connectivity. The bandwidth looks set to increase significantly and the costs appear to be the lowest in the industry. Everything I'm currently seeing leads me to believe that by the end of Q1 2019 the network will be fully functional and all its features will be released to the industry.

The challenge for operators will be to determine the total investment necessary to get the best service at the best value.

In Summary

It's clear that, considering airframe size/limitations, selecting the right connectivity solution for a smaller jet or turboprop aircraft is a finely balanced process. In addition to establishing what is essential to your operation, the following are the three most important questions an owner/operator should ask themselves during the selection process:

- What is my budget?
- Can I control the usage? (i.e., are there hidden costs or surprise bills that could come from passenger utilization)
- Is there a growth plan with the hardware or company providing the service?

Once you've thought through your needs and answered all of the associated questions, though your chosen solution may not have all the bells and whistles associated with the cabin connectivity of larger aircraft, there should be no reason for passenger dissatisfaction, or hindrance to getting the important business done while travelling aboard the company aircraft. ■

About Airtex

Airtex is a connectivity solution that allows up to 16 passengers aboard an aircraft the ability to send and receive SMS messages anywhere in the world. Using the iridium satellite network, a small Airtex box weighing approximately 1lb is installed on the airplane and connects to an existing iridium phone antenna. Passengers can then connect using BLE (bluetooth low energy) on their phones, downloading the free Airtex mobile app, to send and receive text messages on-board at a cost of ~5 cents.

More information from <http://airtext.aero>