

Why Upgrade Your Private Jet's In-Flight Entertainment System?



How passengers experience entertainment during flight has changed and is continuing to evolve. If you're looking to upgrade your private jet's in-flight entertainment system, you probably want to know what options are available and what factors to consider before making a purchase.

What are In-Flight Entertainment and Cabin Management Systems?

In-flight entertainment (IFE) is the audio-visual entertainment system onboard the aircraft. Generally, IFE includes Wi-Fi internet connection (allowing passengers to watch content or work from their own devices), onboard TV monitors and streaming services (for movies, TV, and/or music), and audio systems. Some media storage may also be available.

IFE systems are controlled by the aircraft's cabin management systems (CMS), which controls various electrical systems in the cabin, including lighting and temperature.

What are Some In-Flight Entertainment Upgrade Options?

IFE software and equipment range from large-screen TVs to internet connectivity for handheld devices (e.g., phones, tablets, etc.) and everything in between.

These commonly sought-after IFE upgrades include:

- Moving map displays
- HD/LCD TV screens
- Movie/TV streaming options
- High-speed internet



- Device connectivity
- Email access
- Voice/text connectivity
- USB chargers

Upgrading to these services may include either installing software or equipment, or both, into the aircraft's cabin and existing CMS. Depending on the type of upgrade, you'll either replace the CMS or add IFE-only upgrades to the existing CMS.

IFE/CMS Upgrade Options

Obsolescence is the most common reason to upgrade an IFE system. If you're operating an older aircraft outfitted in the 1980s or 1990s, you already know that your CMS is obsolete. Older cabin IFE/CMS providers, such as Audio International, Baker Electronics, and Pacific Aviation Systems, have all gone out of business.

If these companies' systems and products (such as VCR/CD-changer equipment, non-LCD/OLED TV monitors, sound systems, and control panels) are still installed on the aircraft, a major overhaul of the CMS will be required to support newer IFE equipment or software.

Below are a few current companies that offer CMS/IFE renovations:

- Honeywell International offers the "Ovation Select" CMS that typically replaces the Baker Electronics systems
- Collins Aerospace offers the "Venue" CMS

- Alto Aviation provides CMS with an audio system that typically replaces Pacific Aviation Systems and Audio International systems
- DPI Labs also offers a CMS that typically replaces Audio International and Pacific Aviation System

IFE-Only Upgrade Options

You don't have to wait for your aircraft to be filled with archaic IFE/CMS systems to upgrade to the latest IFE technology. Some IFE-only options are available and can be installed, provided the upgrades are compatible with the existing CMS.

Below are a few common IFE-only systems:

- AirText currently offers in-flight text/voice and moving map capabilities with more options becoming available in the near future
- Gogo Business Aviation provides Wi-Fi internet systems for domestic travel only. They currently offer the AVANCE L3/L5 system. The upcoming AVANCE 5G/X3 system is to be released mid-2024.

Do In-Flight Entertainment Systems Require Mandatory Upgrades?

IFE systems do not require any mandatory upgrades by the FAA (or equivalent). Most IFE upgrades are based on passenger needs, provided they meet certain approvals.



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Most CMS/IFE systems are considered to be FAA Chapter 25 Equipment and Furnishings and can be installed as a “major alteration” with FAA DER approvals. A couple of examples are:

- Wi-Fi installations require Transmitting Portable Electronic Device (T-PED) certification, demonstrating that the aircraft can tolerate the use of portable electronic devices (PED)
- Larger Satcom system upgrades also require a supplemental type certificate (STC) as in Honeywell “JetWave,” Collins Aerospace “Luxstream,” or Viasat

You can continue to use older entertainment systems as long as they function properly and are serving you and your passengers. However, you may want to upgrade if the needs of your passengers change or if you decide to sell your aircraft.

Pricing In-Flight Entertainment Upgrade Considerations

IFE (and CMS) upgrades are expensive, typically ranging from \$60,000 to \$650,000. The cost to upgrade an IFE system will vary based on what systems meet your passengers’ needs, aircraft type, and what is being upgraded.

Passenger Needs

Who is going to be spending the most time in your private jet’s cabin? Does each passenger need a display screen on which to stream

content? Do they need Wi-Fi connectivity for their personal devices? Or do they just want surround sound for the entire cabin? Once you’ve identified the needs and expectations of those onboard, you can begin to determine what product will best serve you and your passengers.

Aircraft Type

The type of aircraft - how it is used and how many people are onboard - will factor into what IFE upgrades should be made, how much equipment needs to be installed, and ultimately, how much it will cost.

If you want everyone on the aircraft to have the same accessibility to IFE, then each seat will need to be equipped with IFE capabilities. Generally, the more seats on an aircraft, the more expensive the IFE upgrade.

Amount of Work

Updating IFE-only systems will be less expensive than upgrading both the IFE and CMS, but it will not always be an option. Do some research or talk with your trusted maintenance facility to understand what systems are compatible. This will help you to avoid paying for systems your aircraft cannot support.

Also, some IFE/CMS installations are more affordable than others, depending on who the manufacturer is and what they include for upgrades. While price is often a major factor in



deciding on a product, be sure that a new CMS is capable of supporting the IFE upgrades you want now and in the future. This will help you to avoid paying for a system that does not provide long-term buyer satisfaction.

Some Friendly IFE Advice

1. Discuss customer needs and do a full aircraft evaluation to determine if the desired IFE systems can be supported on the aircraft
2. Install IFS systems during cabin interior upgrades and/or a scheduled maintenance event to minimize downtime
3. Stay with a few compatible IFE/CMS vendors as much as possible. These systems are usually software-driven on a proprietary digital bus, as in "RS-485," making it difficult to mix other vendor systems
4. Take the advice of the professionals at your maintenance facility or center of IFE outfitting whom you trust with your aircraft

Check Out Our Other Resources:

Should You Have Wi-Fi on Your Corporate or Charter Jet? What Operators Should Know About Cabin Connectivity

(cla.ero/cabin-connectivity/)

True Blue vs Garmin vs Guardian Avionics: Which USB Charger is the Right Choice for Your Aircraft?

(cla.ero/usb-chargers-for-aircraft/)

Four Reasons to Upgrade an Aircraft Cabin Management System

(cla.ero/upgrade-cabin-management-system/)

When is the Best Time to Refresh Your Aircraft Interior?

(cla.ero/best-time-refresh-aircraft-interior/)



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