

## An Elegant Solution - Replacing My Avidyne With Foreflight!

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I'm an "old-timer" and so is my 2002 Cirrus SR20. I'm on my second engine and considering everything that has transpired I've been a happy camper these past seventeen years. Well, you can add one exception to that "*happy camper*" moniker – the frustrations I began encountering a couple of years ago when my Avidyne 5000 MFD first started going south.



Figure 1 Avidyne with early screen "burnout" – later followed by black.

The problems started with some screen flickering and then the MFD developed what I described as partial screen burnout. Finally, about three months ago, I turned on the avionics master switch and nothing! The system had power but the screen display was black.

About 12-14 months ago, in advance of the above noted total screen failure, I began proactively seeking out solutions and asking about repair costs. I liked the Avidyne for the most part and I was certainly willing, within reason, to invest some funds in getting the unit repaired.

### Are You Sitting Down?

I vividly recall my last conversation with an avionics shop in Tampa. I had sent photos to the shop and described my problems. I told them I was interested in getting it fixed and what would it cost me?

The shop's manager asked me, "*Are you sitting down?*" That's never a good start when you are talking about costs. I said "yes" and he proceeded to tell me it would cost \$7,192 for Avidyne to repair it and as I recall there was little if any guarantees that came with that repair costs. By the way, I don't think those figures included shipping. As a small business owner myself, I think I would have tossed in the shipping costs! <g>

Oh, there was some good news, he added. For only \$500 and some change (He was being sarcastic, I think) I could sign up for the Avidyne Aeroplan Warranty program and pay \$7,700 and that not only would repair my MFD but it would include a three-year warranty. He even sent me a 10-12 page Avidyne legal document outlining what was and was not covered. "*What a bunch of c%\*p,*" I thought.

Avidyne totally lost me as a customer that day and will never win me back. If you're a fan of Avidyne, more power to you, but I'm not, and there's nothing that can be said or done that would ever convince me otherwise.

### ForeFlight & Guardian to the Rescue!

Other than an operating engine, nothing is more important or critical to my flying these days than my copy of ForeFlight installed on my iPad 6. I never fly without ForeFlight. In fact, it's a rare situation when there aren't two copies of ForeFlight in the plane – one copy installed on my wife's mini-iPad and another copy on my own iPad 6.

My iPad is normally inserted into a RAM mount connected to a series of alternating swivel mounts which are in turn fastened to the bolster containing the master, avionics, and light toggle switches.

So, while I love ForeFlight, I still had the nagging problem of an inoperative Avidyne sitting in my panel, and nothing to replace it with.

I had resigned myself to either looking at a black screen if I left the Avidyne in place, or a black hole in my panel (if I removed the Avidyne), until one day, while leafing through an aviation publication, I came across what I thought might be the perfect solution to my Avidyne problem.



Figure 2 New Guardian Avionics panel mount with slide-in iPad 11" Pro

## Combining ForeFlight & Guardian

There it was! An advertisement by a company called Guardian Avionics, in Tucson, AZ. <https://www.guardianavionics.com/> The company appeared to have exactly what I was looking for – an iPad mount that could totally replace the blank hole that would be left if and when the Avidyne was removed.

Not only did it appear that Guardian manufactured exactly what I was looking for (a mount that would hold a decent size iPad at a combined cost (including a new iPad) far below what it would take to replace the Avidyne on a like for like basis.

Equally important, I wanted the new installation to look as professional as it could, and I wanted the gaping hole that would be left by the removal of the Avidyne to be covered completely.



Figure 3 Guardian Mount into which iPad slides.

Guardian Avionics manufactures a variety of panel mounts for various size iPads and iPhones. After some research and numerous phone calls involving both Guardian and a local avionics shop, I settled on a Guardian iPad Pro 11" panel mount. (P.S. Forget the 12" option. It presents too many additional concerns and challenges not worth dealing with, especially so when the difference in size between the 11" and the 12" IS NOT even 1".)

The 11" Guardian panel mount combined with the iPad Pro 11" is the perfect solution. Take my word for it, if you own a Cirrus 20 or 22 with the original panel cut-out designed for the Avidyne 5000 (see photos) you can have a panel installation identical to or better than what is depicted in the photo above.

And best yet, when I tallied all the numbers, it looked like I could get the entire project completed, including an almost new iPad Pro 11" with Wi-Fi which includes the GPS chip, for slightly less than \$1,800. Yes, this project cost me almost exactly \$1,800. Below is the breakdown of my costs:

- |   |                |
|---|----------------|
| 1. iPad Pro 11", (Renewed)...                         | \$750          |
| 2. Guardian Mount for iPad 11" smart panel mount...   | \$499          |
| 3. Cutting mounting plate and installation charges... | \$500          |
| <b>Total Costs...</b>                                 | <b>\$1,749</b> |

### Local Avionics Firm Completes Installation

My challenge was to find a local avionics shop that could take the new Guardian Avionics iPad Pro 11" mount and figure out a way to mount that in the hole in the panel left by the removal of Avidyne. It turned out to be easier than I thought.

### Sebastian Communications

I ended up dealing with a local firm named Sebastian Communications, Merritt Island, FL. I flew the plane to their location and Carl, the owner, pulled the Avidyne out and took some measurements. For additional information you can reach Sebastian at 321-453-6894 or you can email Carl, the owner, at [carl@sebcomm.com](mailto:carl@sebcomm.com).

Guardian Avionics, in the meantime, did its part by shipping me a sample mount to demonstrate exactly how it would work and fit.

Sebastian Communications decided to leave the existing panel cut-out alone. You will notice angle cuts at the four corners, and then an indent along the upper right side. That is the opening you see when the Avidyne was pulled out of the panel.

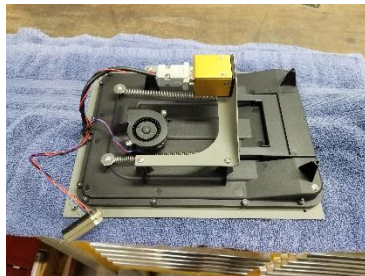


Figure 5 Backside of Guardian Mount fastened to metal plate

Carl's solution was elegant in its simplicity. He basically cut a rectangular plate that overlapped the outside dimensions of the vacant "Avidyne hole" by approximately  $\frac{1}{2}$ ".

He drilled a total of eight holes, four to mount the Guardian Mount to his metal plate and then four additional holes which were used to mount the combined metal plate and Guardian mount to the panel.

By the way, all of the work undertaken by Sebastian Communications was considered to be a minor alteration, and required no special paper work. Remember, that my Avidyne displayed map and weather information only. No engine instruments or related data.

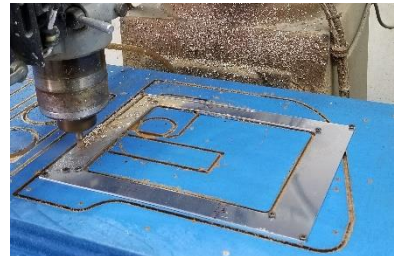


Figure 4 Mounting Plate to hold Guardian Mount.

### **How does it all come together?**

The iPad Pro slides into the panel, right to left. The right side of the mount is spring-loaded. When installing the iPad, you simply slip it in on the right side which is spring-loaded. You push the iPad the right, and then when it is clear on the left side you push it down, and it slides to the left, where it connects to internal power. Faster than it took to write this sentence.

By the way, the Guardian mount has a small fan installed on the backside (an option) that cools the iPad Pro, although so far I have not had any issues with heat.

The same thing for glare, no problems yet, although if it becomes a problem I am prepared to apply a glare shield cover to the iPad if and when the problem arises.



*Figure 6 Guardian Mount into which iPad Pro fits and connects to power.*

**ADDITIONAL INFO** – For additional information, feel free to contact me by email at [johnstewart@printingresearch.org](mailto:johnstewart@printingresearch.org).