Digital Flying

How I Use Today’s Technology In The Cockpit and Beyond...

mzeroA.com
Acknowledgments

A heartfelt THANK YOU! To my BEAUTIFUL wife. Many of you don’t realize that she is the real driving force behind the business. Every video you see, webinar you attend, and book you read is all her genius...

Jason & Ashley With Pitot and Magneto
About

Jason Schappert has logged over 8,000 flight hours (95% as a flight instructor.) He was named AOPA’s Top Collegiate Flight Instructor in 2008 and is the author of 8 flight training books.

He is the personality behind “Flight Training Radio” the only FAA Approved aviation podcast/radio program good for WINGS credit.

You can learn more about Jason and view his flight training videos by visiting MzeroA.com
Other Great Titles By Jason: (Click Each Image To View)
“Technology Hasn’t Changed The Way We Fly”

Aerodynamic principles haven’t changed... However technology has added “Increased situational awareness”

This increased situational awareness however can lead to cockpit distractions and too much “head down time”

In this FREE report I’ll share:

- How I use an iPad to plan, navigate, and log flights
- Which ipad to buy
- How to mount Your iPad in the cockpit
- Compare and contrast apps
- How to avoid “head down time” in the cockpit
- How to fully leverage technology in the cockpit
- and a TON more...

First A Quick Story:

I’ll never forget... I was a brand new (new to me) aircraft owner while in college. I bought good ole N512R in hopes of starting a small flight instruction business and renting the airplane out to my friends.

Within a week I had that airplane booked full with students and rentals. My very first flight was a rental checkout with a friend of mine from school who was a commercial
rated pilot. “This should be easy I thought to myself.” However my friend had done ALL of his training from hour zero to present in a glass panel airplane.

When we hopped in the plane he looked a bit confused. Reading down the checklist he said aloud... “Heading indicator to magnetic compass...hmmmmm.... You mean I have to manually line up the heading indicator? The airplane doesn’t just know?”

That is how we began our lesson.

Now don’t misunderstand me. I’m a HUGE fan of technology in the cockpit. However it shouldn’t be an all consuming or all eggs in one basket approach.

That’s why I love the iPad. It’s an easy to master platform. It travels with me into any airplane I fly and is a great compliment to any avionics that airplane already has.
The iPad Revolution...

Why an iPad? Call me an Apple fan boy or whatever you want! The iPad simply has the best suite of aviation apps and accessories. Heck they even make an aviation kneeboard for the unit!

Throughout this book I’m going to share with you the apps and accessories I use to increase situational awareness all while still doing the most important thing... Flying the airplane.

Which iPad...

Now here comes the tough part... “Which iPad do I get?” I’ll make this pretty simple and will keep this part updated so if you’re reading this know that this is the most up to date info.

Apple has the original Ipad (iPad 1) an iPad 2 “The New iPad” or what some would call the iPad 3 and lastly the iPad Mini.
I am an iPad mini owner. Specifically a 64GB iPad Mini with Verizon 4G LTE (nerdy huh?)

The iPad mini is the latest model. The reason I chose it was simple. In the Cessna 150 I fly cockpit space is limited. I’m a former iPad 1 owner and user. I loved the device but there just wasn’t room for it on my lap.

The regular size iPads work great in larger cockpits (greater than a Cessna 150) even in 172’s I had no problem with the larger iPad’s.

For those of you that have the cockpit space I would go iPad 3 if you can afford it. The screen size and resolution is incredible. There’s no problems seeing it in bright light. It’s awesome.

For those of you with less cockpit space or that enjoy portability. The mini maybe the best option.
16GB - 32GB - 64GB...
This is your hard drive size which keep in mind is non-expandable. Aviation charts and approach plates are big files. At a minimum I would go with the 32GB just to give yourself the space.

Do I Need Cellular Coverage?
The short answer is no...The apps will run fine without it. However without cellular coverage you’ll need an external GPS in order for the iPad to know your location once out of range from any wifi signal.

The other reason I got the cellular coverage was for those rare times you’re at an airport with no wifi. Or maybe the airport is closed and you need to download weather data and charts. I’ve been stranded one to many time to go without internet :)

Mounting The iPad In The Cockpit
There are MANY ways to mount your iPad in the cockpit. Trust me on this, in owning a Cessna 150 cockpit space is precious. So this is one area I’m an expert in :) ...

In my opinion there is one method that shines above the rest. It makes sense because it flows with how
pilots have been reading charts and taking note for over 50 years.

I’m talking about a kneeboard. Believe it or not they do make an iPad kneeboard. The model I use is called the iPro Aviator/M (M for mini) however ForPilotsOnly makes them for all shapes and sizes of iPads. If you’re interested in seeing my video showing how I use the iPro Aviator/M In the cockpit CLICK HERE. Or If you’d like to learn more about their kneeboards click on the image below...
Which Apps?

Through the rest of this book I’ll share with you the apps I use to make the most out of every flight and increase situational awareness.

Every app I recommend includes exclusive training and instruction on how I use it to be more organized and productive before, during, and after each flight.

“Want To See My App Comparison Video?”
+ Dozens of Other iPad Training Videos?

Simply CLICK HERE and Share This eBook With Your Friends For Instant Access...
Obtaining Weather Info

“It’s better to be on the ground wishing you were in the air. Then in the air wishing you were on the ground.”

In this chapter I’ll share with you:

- How I use my iPad to obtain weather info
- What I use to make go and no go decisions
- How easily I file a flight plan from my dining room!

Textual Weather

There a few apps I LOVE to check weather on:

AOPA’s FlyQ Pocket (iPhone) and FlyQ EFB are two of my favorite places to check weather. One of my favorite features on the FlyQ EFB is the wind optimizer display (pictured below). Allowing you to visually choose which altitude is most efficient for your flight. Having been someone who use to do this “the old fashioned way” I think AOPA really knocked it out of the park with this feature as it was a big selling point for me.
AOPA’s Patented Wind Optimizer As Seen On Their FlyQ EFB App
The other big plus about the FlyQ EFB is its airport layout. On a single page I’m able to see METAR and TAF info along with animated local, regional, and national radar (more on this in the next chapter) The other big feature I like is the one click 7 day forecast. You and I both know that in aviation we don’t always get to leave on the date or time planned.
Foreflight is another goto app of mine. I’ll talk about it in greater detail under the “Navigating with the iPad section. Because if there is one area I’ve found Foreflight to lack is their user manual. For a visual learner like myself there just aren’t enough step-by-step walkthroughs. So I’ll do my best to fix that while showing a few features I use.

The Airport Page...

If using Foreflight my day with almost always start on the Airport Page (pictured below) I commonly refer to the page as an “enhanced AFD” I enjoy being able to see at a glance not only the weather at my airport but nearby airports as well. (I use to previous do this by typing in the 10 nearest airports on aviationweather.gov!)

If you’re unfamiliar with the airport you can easily see what services they offer and download any taxi diagrams or approach plates.

My ONE GRIPE with this page is how I receive the METARS. Once again call me “old-fashioned” but I like reading RAW METARS. I can’t stand when they are translated. Honestly it’s harder for me to decipher what’s going on. I’m so use
to ready METARS in their raw form. You can get them in the RAW format however default is their translated version.
Radar & Charts

I’m very much a visual learner and always need to see that “big picture” when it comes to weather. I love my full motion radar and PROG charts. I strongly believe this step is CRUCIAL for all preflight planning.

Below are a few places and apps I use to get my visual weather.

Foreflight certainly curbs my visual appetite. As you’ll see below their radar symbolism is simple awesome showing you past, present, and future storm tracking. In addition they show what I call “Visual PIREPS” right their on the screen.

Foreflight’s radar is a quick and easy way for me to get a great overview on what to expect or better yet... If i’m staying on the ground or not. :)

Digital Flying
The Prognostic (PROG) Charts on Foreflight also follow suite. Allowing you to see in the future (up to 36 hours) at various altitudes with the same benefits as listed above.

Foreflight also give you access to all of NOAA’s great data including:
Turbulence, Icing, AIRMETS/SIGMETS, Winds Aloft, Infrared (great for checking cloud overlays and fog)
AOPA’s FlyQ EFB is another favorite of mine when it comes to visual weather cues. I want to make a clear (unscientific) observation. All the apps I mention offer the ability to overlay this visual weather data over just about anything: sectional charts, Low enroute charts, etc...

However from my experience AOPA’s overlay feature is simply the fastest. Those of you that have been with apps like Foreflight from the beginning with an iPad 1 know how sloooow the loading time was when getting weather overlays. Each app has come a long way. However as I’m writing this (and FlyQ EFB is brand new at this point) AOPA has the fastest gun in the west and speed is king in the days on digital flying.
Garmin is “relatively new in the aviation app department however certainly not new in aviation navigation. Their new “Garmin Pilot” app will come as very “familiar” to those long time G1000 or 430/530 users. That is the one thing I love about Garmin, once you learn how to use one of their devices they others seem to follow a similar suite and you’re able to work through them.

Everything on the Garmin app is very intuitive and icon driven. Making for a beautiful interface.

As an added plus for those of you that are NOT iPad driven. The Garmin App is also available on Android devices.
The Garmin Pilot app is nice. However I personally find myself using it least. It’s not because it’s not a great app. It’s mostly because there isn’t much it does differently.

By that I mean there is nothing I cannot do on Foreflight or AOPA’s FlyQ EFB that I can do on Garmin Pilot.

The real advantage Garmin Pilot has is it’s Android compatibility. Which opens up an entirely different market.

“Want To See My iPad Weather Video?” + Dozens of Other iPad Training Videos?

Simply CLICK HERE and Share This eBook With Your Friends For Instant Access...
Navigating With The iPad

“A pilot must fully understand basic pilotage and dead reckoning before he can step into this new world of digital reckoning™” - Jason Schappert

In this chapter I’ll share with you:

- How I use my iPad to navigate the skies
- How to stay organized in the cockpit
- Using the iPad for both VFR and IFR flying

Staying Organized In The Cockpit
The iPad helps cockpit organization tenfold! With out having charts and flight computers literally flying all around the cockpit. Now again as if I haven’t said it enough. Don’t misunderstand me... I may be a part of what I’m calling “Pilot 2.0” however I still carry the old school sectional charts and approach plates as a backup. I even have my classic e6b floating around in the back of the plane :)

Again I can’t stress this enough if you’re not using a mounting system in the cockpit might I suggest getting an iPad kneeboard. If you haven’t seen the video yet, check out me showing you how I use my iPro Aviator/M kneeboard in 512R. CLICK HERE TO WATCH
Keeping Your Eyes Outside The Cockpit

The iPad is beautiful! I understand why you don’t want to take your eyes off of it! :) However you’re still hurtling forward in excess of 120kts+ through the sometimes “friendly skies” It’s important to keep your head on a swivel.

Remember the Delta pilots who past their airport of intended landing by a few hundred miles in late 2009? The reason... Pulling out their personal laptops during the flight.

It’s important to realize that a sterile cockpit goes beyond what’s said in the cockpit. A sterile cockpit must now encompass what’s viewed and when on your iPad.

Dealing With Sunglare

One complaint I commonly hear is pilots having an issue with sunglare on the iPad while flying. First I can say
having flown with the “Retina Display” on the new iPad that it oddly enough greatly reduces these problems.

For those of us with standard display iPad’s the most common solution is to buy a screen cover/protector designed to combat sunglare.

**I’ve listed one I use below:**

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*iPad Sunglare Clear Screen Cover 4 Pack*

**ALSO AN IMPORTANT NOTE ABOUT GLARE:**

Earlier I told you guys about the iPro Aviator/M kneeboard from ForPilotsOnly. It's what I use for my iPad mini. They also have a mount for the mini called the *iPro Navigator*. This includes an articulating clipboard that can be positioned on top to block direct sunlight. It's a great way to help prevent overheating.
Navigating With Foreflight

Foreflight for myself was really the original aviation navigation app. I remember way back when we first departed on our flying across America trip (We took my Cessna 150 from Daytona Beach to Catalina Island and back) Foreflight was an amazing part of that even back with the first generation iPad.
I’m Giving Away An iPad Mini
It’s Easy & FREE To Enter...

Simply Click Below And Follow
The On Screen Instructions.

CLICK HERE TO ENTER!

Good Luck!
Navigating With Garmin

As I’ve mentioned earlier... If you know how to use a Garmin product (430/530 etc) You’re going to dive right into the Garmin Pilot App and know what’s going on.

Garmin has really done a great job of making their products seamless across so many mediums.

I encourage you to check out the video below:
“Exclusive iPad Training Webinar”

5 Advanced iPad Flying Tips & Tricks

Learn To:
- Make Cross Country Diversions On The Fly
- Make Seamless IFR Flights With The iPad
- Ask Your iPad Related Questions

and the best part is...

The Webinar Is FREE!

Sign Up Using The Button Below

REGISTER NOW
IFR Flying With The iPad

The iPad for me has proven to be an IFR workhorse. Now let me share something first...

Just because I have all my charts downloaded to my iPad doesn’t I still don’t carry paper charts. I use my iPad to make sure my charts are always up to date and get the best info. However If I ever got into a jam (dead iPad battery etc) I want to know I have a backup.

Something I LOVE that Foreflight offers for it’s highest subscription level is “Georeferenced Plates” Nothing is cooler than looking at my approach plate and seeing where I actual am in relation to my fixes.

(Image Example On Next Page)
As of right now just the government issued “NACO” charts are available and for obvious reasons because they are free to download as compared to “Jepp” charts/plates.

The most important thing I find in making the switch (paper to iPad) in relation to IFR flying is to get as familiar with the app of your choice as possible.

Intercepting the localizer inbound in solid IFR is no time to be learning how to open the approach plate :) 

A lot of these apps (I know Foreflight and AOPA’s EFB for sure) Either have simulators or can connect to your computer while you fly Microsoft flight simulator or X-Plane.

This is a GREAT way to practice you IFR flying with the iPad.
Logging Flights On The iPad

“I never thought I needed a backup logbook until the day mine went missing! Try explaining that one to the FAA! YIKES!” - Robert Williams Private Pilot

In this chapter I’ll share with you:

- How I use my iPad to log flights and create a reliable backup
- Track my hours and flying trends
- Stay on top of my currency

Why You MUST Have A Digital Backup
Having lost my logbook early on in my training you guys all I know I’ve always been a back advocate for keeping a digital backup. So much that I sought out some of the best programmers in the county to help me create a digital logbook that surpasses everything.

What I Use
The App is called RunwayLog. RunwayLog does so much more than just store your flight data. It helps to keep you out of trouble! It has currency reminders to help you remember when your flight review is due or if you’re current to fly passengers. The data is backed up every hour and is fully exportable to PDF or CSV (Excel). One of my favorite
features is the “Where I’ve Been Map” It’s a really neat way to showcase your flying career with friends and fellow pilots. (pictured below)

It also lets you attach pictures from your flights and have your instructors e-sign right their on your mobile device.

So now your hours, endorsements, photos, and currency are kept safe.

Check out my exclusive RunwayLog training video below...
Click Below To Start Your Free Trial of RunwayLog:

“When was the last time you backed up your logbook?”

RunwayLog backs up your Logbook EVERY HOUR!

- Log flights on Your Mobile Device
- CFI’s Can Digitally Sign
- Interactive Map Showing Airports You’ve Been to
- Attach Inflight Photos To Specific Entries
- Be Alerted When Your Currency Is Expiring
- Track and Post Your Flying Trends
Always Learning

“A Good Pilot Is Always Learning™” - Jason Schappert MzeroA.com Trademark

In this chapter I’ll share with you:

☑️ How I use my iPad to continue my flying educations
☑️ How to get more great eBooks like this one
☑️ Using the iPad for your flight training

eBooks

You must enjoy eBooks because you’ve already made it this far! The iPad is even changing the way we learn and flight train.

We live in an instantaneous world with information at our finger tips. One of my goals for MzeroA.com is to spearhead that knowledge through the use of eBooks.

Below is a list of a few of my Best Selling titles feel free to click on the book image to learn more about each book.
Flight Training Radio

Every Monday (without fail) at 3pm eastern time I host “Flight Training Radio” where we talk about various flight training topic and I share some of my insights from over 8,000 hours of flight instruction. The show is 100% LIVE so
listeners can call in with their questions or send them to me via Facebook or Twitter.

For those that are members of my Online Ground School or exclusive “Pilot’s Inner Circle” actually earn FAA WINGS Credits just for listening to the show.

**NOTE:** FAA WINGS Credits are like CEU’s towards renewing your pilot certificate in place of a flight review.

That show is LIVE every Monday at 3pm eastern time

You can listen LIVE by [CLICKING HERE](#)
or you can listen to previous shows by [CLICKING HERE](#)

**Online Ground School**

I’m proud and totally blessed to share with you that we have the #1 Rated Online Ground School in the world.

No other Online Program has helped more students Pass their checkride. In fact we have a [100% pass rating](#).

To back that up Online Ground School members get my “Pass Your Checkride or I’ll Pay For It” Guarantee. Which as you may already know by the stat above has never happened because of our stellar pass rating.
If you guys LOVE my free videos floating around in cyberspace on my website and YouTube. You’ll love the over 300+ full HD videos inside of the Online Ground School. Plus hundreds of webinars (past, present, and future LIVE webinars)

If you’re currently preparing for a checkride or written test I HIGHLY encourage you to checkout our #1 Rated Online Ground School

Pass Your Checkride Or I’ll Pay For It! #1 Rated Online Ground School

Questions?

Comments?

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