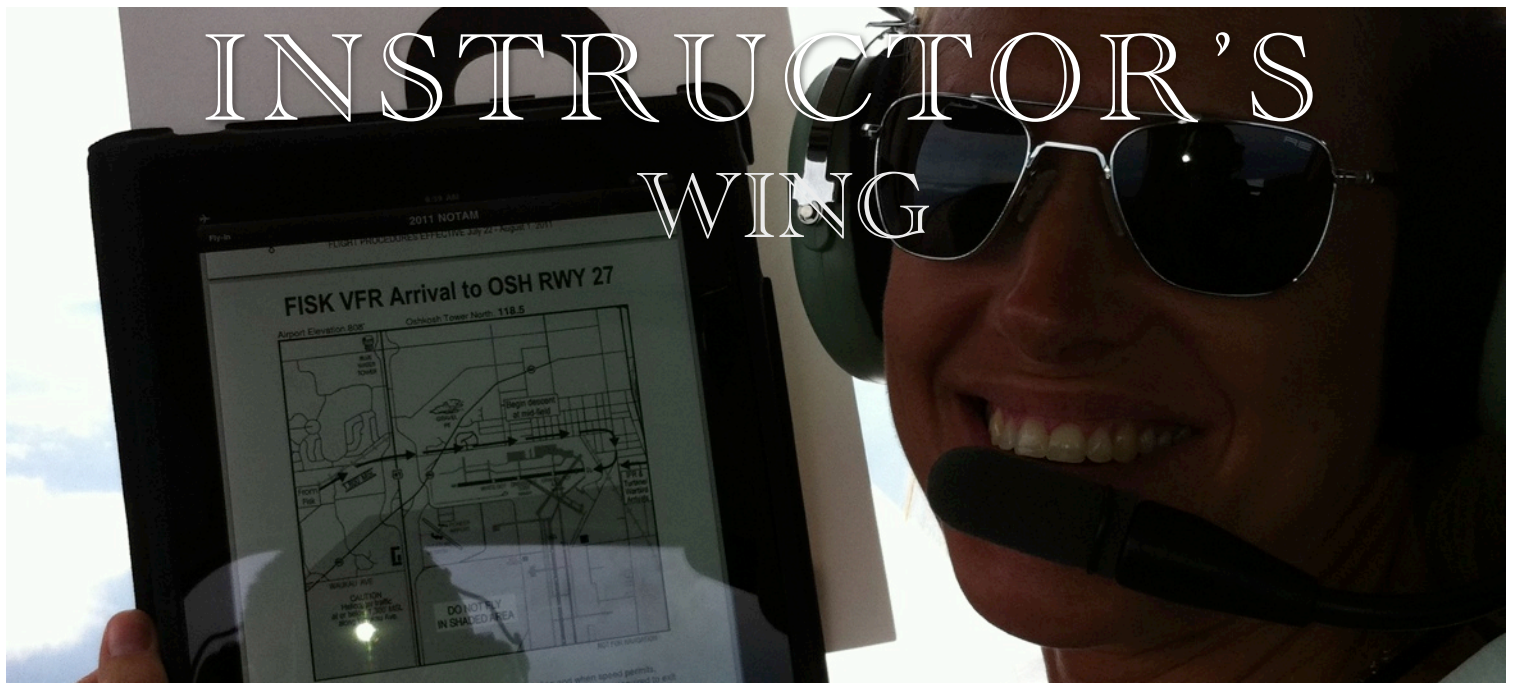


INSTRUCTOR'S WING



TEACHING TECHNOLOGY

After evaluating the flight plan for our trip to Paris France it was time to review the maintenance items that had been deferred (MEL). I quickly pulled them up on my iPad (my airline has been granted Class 1 Electronic Flight Bag (EFB) status for the iPad). Once I found the MEL, I highlighted the item and handed the tablet to my Captain, John. "I did not know you could highlight and tab items like this," he said. John had recently purchased an iPad and downloaded the flight manuals we are allowed to carry, however he was stumbling around with the use of GoodReader, the application that the FAA has approved to view our operating manuals.

On the layover I spent some time with John showing him the nuances of the iPad, GoodReader and other applications he would find useful in flight planning and operations.

Technology is advancing at mach speed. As instructors we owe it to ourselves and our students to introduce this technology in training while under our supervision before they experiment unsupervised.

These advances are not limited to flight planning applications. Electronics are also available that allow students the opportunity to record their lessons, during primary training this can help the pilot review what they missed in the air, saving time and money.



Welcome

With rapid changes in technology lets take a look at the tools and resources students and CFIs have available to better enhance their training environment.

Due to weather Instructor's Wing was unable to interview Les Abend last month, expect his interview in our October issue.

Safe Flying

Ruben Alconero

INSTRUCTOR'S WING

I asked one my primary students, Eric how technology had enhanced his training.

He replied, *"I found the most benefit came from the audio recordings of some of my initial lessons. I think being at the controls, in the air, during the early stages of training almost completely consumes the student. While you may hear the instructor, you probably aren't listening to, or absorbing everything they are saying. I picked up a lot reviewing the audio of specific lessons that I'm not sure I fully understood while in the air. It's great to be able to slow things down to better grasp the topics or concepts".*



Eric utilized an Olympus VN-8100PC digital voice recorder and video recorder adapter costing under a \$100.

After Eric soloed he and I found that video taping the flight provided an excellent opportunity to review his performance. I once again asked him what he found most valuable about this form of technology.



"The video has also served me well in reviewing lessons. I

could review the video and see if I went too long without dividing my attention in and outside of the cockpit. I could see items I missed in the pattern, or diagnosed why a particular landing was good or not as good as I may have liked. One video clip showed two go-around attempts at a local airport.

The first one I properly brought in 10 degrees of flaps, while the second one had me bring in all 30 degrees as soon as I initiated the go-around. The camera shows pretty vividly what is going on. I found this look back feature very valuable as I was unsure why the airplane performed a certain way at times. I did not grasp why the plane was sinking so much on the initial go-around until I reviewed the tape and realized I had retracted "all" the flaps at once. There are more examples, however it boils down to getting that specific lesson or flight over again without having to pay for it a second time."

Eric was utilizing a GoPro Motorsport Hero (video camera) for under \$250.

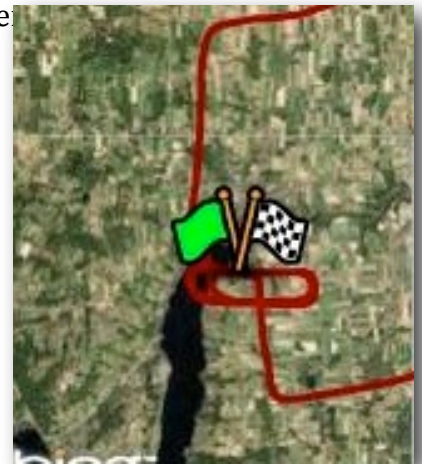


The iPad application MotionX GPS was also utilized during solo flight. This application would draw out the flight track over a Google map image. Perfect for viewing traffic patterns. Maximum/minimum airspeed and altitude information

is also available to the pilot.

One of the features I enjoy most about this app as an instructor is the ability for the student to email the track and flight data when the flight is completed.

I will never forget the facial expressions of some work colleagues when I received an email from Eric on a recently completed solo flight in NY. I was in Dallas during a training event for my airline. During a coffee break I reviewed Eric's flight data. I commented to my training partners that one of my solo students had performed very well! After showing them a digital image of Eric's airwork and explaining he was 1500 miles away they all stared at me with their mouths wide open.



As you introduce technology to your students require them to practice with their EFB or iPad before they utilize it in the airplane.

Are they able to navigate comfortably around the flight planning apps, do they know how

INSTRUCTOR'S WING

out spending long periods of time searching for the controls?

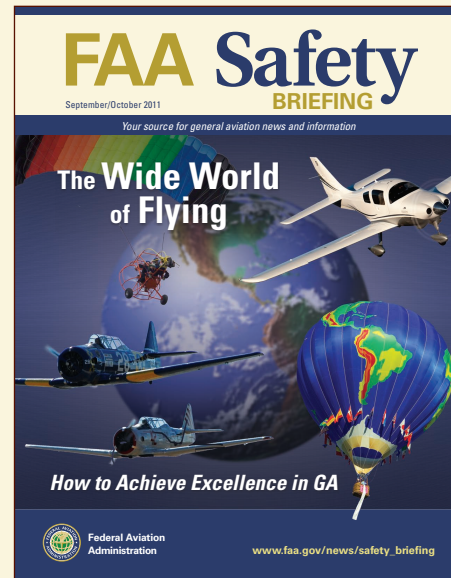
Your student will need to evaluate new concepts in workload management during the various phases of flight.

Fumbling around with a moving map display as your student levels off is the last thing they need to be doing. Building proper cockpit etiquette "must" be developed early on to ensure safe habits are established down the road.

These new tools can increase your students situational awareness exponentially, however make certain they do not allow themselves to become distracted from their primary role of "flying the airplane."

I encourage all pilots, CFIs, and students alike to review FAA Advisory Circular 91-78 (Use of Class I and II EFBs).

Paper charts are no longer *required* if the pilot has an electronic version available, however AC 91-78 suggests that pilots consider a secondary source of aeronautical information. This secondary source could be paper charts or an onboard electronic display that is available on certain aircraft like our club's Cirrus SR20.



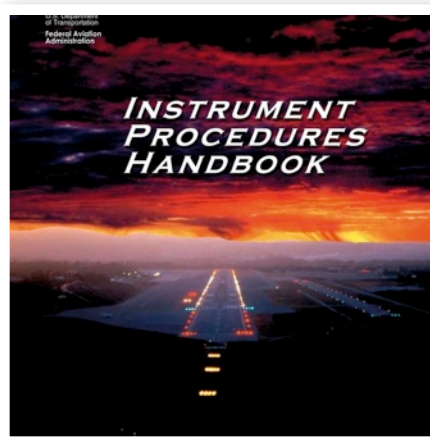
FAA SAFETY

If you were not aware, an excellent bimonthly publication is available to pilots entitled "FAA Safety Briefing".

Goto the link below and download a copy to your iPad, or subscribe to a print version for your flying club, flight school or FBO.

http://www.faa.gov/news/safety_briefing/2011/

FREE DOWNLOAD BOX



<http://www.instructorswing.com/files/FAA-H-8261-1A.pdf>

I consider it my responsibility as a professional instructor to make certain my students have all available resources and tools at their disposal to become proficient, safe pilots.

Have students utilize electronic moving maps is just as important as knowing how to fly a cross-country leg with simple dead reckoning and pilotage. In fact students with EFBs will do just that with me. On a select cross country flight they are allowed to use all the functions of an application such as Foreflight on one leg, and nothing more than a paper aeronautical chart on the return.

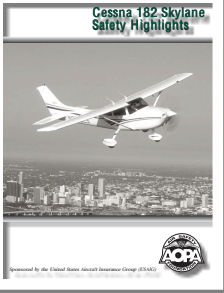
A brave new world of flying is upon us. Do not get left behind. I encourage you to share your tips, stories and lessons learned from the use of new technology with fellow pilots. Start teaching technology today.

Train Like A Professional, Fly Like a Professional.....

INSTRUCTOR'S WING

Safety Highlights.

A friend and student of mine recently purchased a used Cessna 182.



He asked me where he could find information on the aircraft, statistics, and operating techniques. I

recommended the AOPA Safety Highlights for his plane.

Whether you plan on buying a plane or would simply like to become more familiar with the aircraft you fly I recommend picking up a copy.

They are available for:

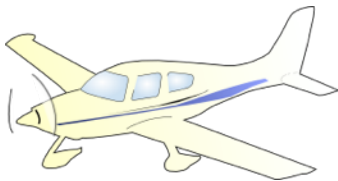
[Cessna 172 Skyhawk](#)

[Beechcraft Bonanza/Debonair](#)

[Cessna 182 Skylane](#)

[Piper Cherokee and Arrow](#)

They can be found at AOPA Online.



Ask the Instructor-

Do you have a question you would like answered in the next issue?

Please contact:

Ruben Alconero AAflyer@mac.com



Next Issue: Lunch with Les
Instructor's Wings will bring you an interview with Flying Magazine's Les Abend

On Deck: Pilotage
With my project of "Building a Better Pilot", we will take a cross country trip with a primary student in a J-3, equipped with a simple sectional chart, road map and magnetic compass. In this modern day of GPS I still like to teach the basics, you never know when you may need to use them.



Tailwinds and Blue Skies