

UNITED VIRTUAL

The Shield



December 2007

Special Holiday Issue!

Vol.4 Issue.1

SEASON'S GREETINGS!



Feature Story:

A Bumpy Ride

How Simming Can Lead to a New Career in Aviation

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Above photo courtesy of Ross Paulson; cover photo courtesy of Jeffrey Groeneweg, cover illustration by John E. Hall

LETTER FROM THE PRESIDENT

Welcome to the holiday edition of United Virtual Airlines' own in-house magazine, "The Shield"! I'm writing this after spending the day shoveling the seven inches of snow we got in Chicago recently. The newspaper and local news have coverage about delays and cancelled flights at O'Hare and Midway (which got 10.1 inches of snow). There is no question that December has arrived in fine style.

Soon we have an event that's become an annual tradition here at UVA — the "Home for the Holidays" Saturday Scramble. We've had a fair number of signups so far and hopefully the event will be as good as the ones we've had in the past. We're looking to do some similar things through 2008, so stay tuned.

Virtual Airlines really take on a life of their own ... they are almost a living creature and UVA continues to grow and develop. We've got a lot of new staff on the team and some old staff in new positions. They bring an exciting view and enthusiasm to UVA that is critical to our continued growth and success.

We're bringing 2007 to a close but have some exciting things planned for 2008 — not just events, but some upgrades for the VA and possibly even some new software. It truly is the next step in UVA's evolution and I am very excited as we continue this exciting journey.

As always, we don't have a lock on good ideas or improvements and are all open to the suggestions and talents of the greater UVA community. We actively solicit your input and will be conducting a survey next month to get that input. That said, if you've got an idea, don't wait for the survey. Send us an e-mail, post in the forums or write an article for this magazine! It may be you who comes up with UVA's next great idea!

Remember that UVA is nothing without you — the pilots — who make this a living, breathing online community. As always — "It's time to fly!"

all the best,



David R. Klain
President and COO

LETTER FROM THE EDITOR

A favorite saying of journalists is that newspapers aren't much different from sausage. The consumer doesn't much care how it's made; they simply want to enjoy the final product. With that in mind, I'll spare you the nitty-gritty of how these 15 pages came together. But this has been a joy to put together, working with some really cool folks.

As Dave said in his letter, our VA is nothing without its membership. So too is the VA's publication. I welcome any and all ideas, thoughts and compliments. I thought about writing that all complaints should be addressed to assistant editor John Hall, but I'm happy to handle those too! (Don't worry, whatever you write, I've probably been called worse.) Whatever your concern — content, presentation — I'm only an e-mail away.

I hope our stamp on The Shield comes through clearly. The design is original and hopefully we can tweak it each month. Why do that? I've found that my greatest joy in newspapers comes in finding the unexpected: a feature story that really grabs my interest or a photo that captures a moment in a way that words never could.

We hope that you'll find that same joy with The Shield and, over time, build that anticipation of the arrival of a new issue.

Big thanks for this issue go out to Jim Davey, who wrote our featured story about his journey from Flight Simulator to a real-world pilot's license (page 6). Many thanks to the photographers who were gracious enough to let us use their work. Most importantly, thanks to you for reading.

I hope we don't disappoint.



Brian Hunsicker
Editor



Photo courtesy of Sean Norman

PHONETIC ALPHABET

A	Alpha
B	Bravo
C	Charlie
D	Delta
E	Echo
F	Foxtrot
G	Golf
H	Hotel
I	India
J	Juliet
K	Kilo
L	Lima
M	Mike
N	November
O	Oscar
P	Papa
Q	Quebec
R	Romeo
S	Sierra
T	Tango
U	Uniform
V	Victor
W	Whiskey
X	X-ray
Y	Yankee
Z	Zulu

FEATURED STORY



A BUMPY RIDE

Inspired by his time as a virtual pilot, Jim Davey went looking for a real-world license. But he found the process wasn't always smooth

— By Jim Davey, UAL4597 —

Like many other Flight Simulator enthusiasts, I've had a long-time affection for anything aviation related, with no real rhyme or reason as to why. I started messing with Microsoft Flight Simulator 98 back in late 1999, with the specific intent of joining a virtual airline that I had discovered on the internet. The early days of flying those planes by the autopilot, learning about ILS frequencies through other VA members, learning the “lingo” of online ATC (SATCO) - it was all fantastic immersion into what “real pilots” must experi-

ence! Over time, I learned more about weather reports, airways, aviation history, and became a bit better at “flying” the simulator. I felt I had a decent understanding of how to fly an aircraft, but still wanted more.

Last year, I finally convinced my ever-loving wife to let me take an introductory flight at the Cessna Pilot Center in Frederick, Md., KFDK. In her eyes, allowing me this one indulgence would then relieve her of having to listen to me ramble on about aviation. Her plan backfired in the most exciting way!

Photo courtesy of Jeff Rodeback



The introductory flight was pretty basic to me: takeoff, straight and level flight, normal turns, and some demonstrated steep turns. After what seemed like the shortest 30 minutes ever, it was time to return to the airport. Speaking with the instructor for a few minutes after the flight, I started to think that perhaps a career change was indeed possible. So I went home with the information given to me by the school, and discussed the prospect with my wife. After some convincing, I was able to set up a meeting with the Chief Instructor at the flight school to start my training.

Unfortunate events conspired to derail the training before it started. A work accident (I'm currently a firefighter/paramedic) left me sitting at home for several months with a broken ankle. I was determined, however, to become a commercial-rated pilot, and no broken ankle was going to stop me! After I had healed enough to pass a flight physical, I started my flying lessons; finally, my dreams of being a "real pilot" were coming to fruition. The day finally came for me to meet my instructor. He was an interesting fellow, and we got along right off. He was very up front about his goals of working for something other than a flight school, but explained that while he was teaching me, he would be entirely devoted to making sure I received the best instruction he could give. Unfortunately, the first two lessons focused on an introduction to basic general aviation, the four fundamentals of flight, and no flying. It was disappointing, to say the

Maybe there was more to this flying than I had experienced in Flight Simulator.

least.

When it finally came time to start flying, I had my first decision to make as a pilot: What aircraft to train in? My introductory flight had been in a Cessna Skyhawk, with the fancy G1000 glass panel display, but he mentioned the Piper Archer III. I took a look at the aircraft, and thought, "Yes, I'd love to try it. It looks like a 'real' airplane!"

He walked me through the first pre-flight inspection, and I started to get an idea that maybe there was more to this flying than what I had experienced in Flight Simulator. The amount of things you needed to have or check was impressive: details just about checking the fuel and the different colors and what happens

when they're mixed. I hadn't expected any of this!

The first couple of flights were basic flying — straight and level, climbs, descents, level turns, and climbing and descending turns. It was all pretty simple and easy to accomplish.

I lucked out my first few flights and had a rare combination of clear skies with no turbulence.

The third flight is when I started to realize that there was more to flying than I had ever experienced. It was a typical mid-Atlantic day — clear and bumpy — and the lesson plan called for an introduction to slow flight and stalls. I don't remember a whole lot about the slow-flight portion of the lesson, other than the psychological we're-going-to-stall-and-crash thoughts every time we'd hit some turbulence. Remember, you're in a small aircraft, with new physical sensations, at an unnatural pitch angle, with the stall warning going off, and being rocked around by turbulence! The only thing I could think of was, "Stall warning! Bad!"



After about a half-hour of slow flight and stalls, my instructor announced I'd also have my first introduction to instrument flying. "Piece of cake," I thought to myself. I knew what the instruments were, I knew how to read them. It'd be easy! Well, interpreting the instruments, and keeping them steady while they jump around (it's no where near as smooth as FS represents it to be) was pretty demanding; the 0.4 hours of instrument flying felt like an hour! The instructor decided he'd tortured me enough for the day, so it was back to the airport for a couple of landings.

I should mention that landing a real aircraft isn't as easy as it appears to be in Flight Simulator. "How hard can it be? Over the runway, cut the power and flare," I thought a few days before when he had

me try my first landing. How foolish of me! Landing, as written by so many aviation authors, is the definition of a good pilot to the passengers. Who cares if you have just successfully avoided huge thunderstorms, instrument failures, poor climb performance while taking off in a mountain valley... if you bump them on landing, you're obviously a poor pilot. It really is an art form, and not as simple as it would first seem. To date, I've completed 164 landings. Even after that many landings (which really isn't a lot in the larger scheme of being a professional pilot), I still have the occasional "carrier landing," as my instructor called them. There have been a few where I was sure I had damaged the plane, blown out a landing gear strut, or caused a tire to explode. It's

*Finally, it
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solo flight.*

amazing what the engineers at Cessna and Piper have done in expectation of young student pilots!

As my time with my instructor increased, I became more comfortable with slow flying and stalls; these were my personal barriers during my private pilot training. It easily added about seven or eight hours to my training because I could not get to a point where I was comfortable flying in that configuration. As the lessons went on, my instructor added new and interesting aspects to the flying: short-field operations, soft-field operations, engine-out procedures, and ground reference maneuvers were all practiced.

Finally, it came time for my first solo flight.

Unlike some other student pilots, I knew my solo was coming up. It was in our lesson plan, and my instructor had mentioned it a few times. The only trouble was waiting for a day in February for the wind to be below

the 10-knot limitation imposed for student pilots at the flight school. After about a week, the weather was scheduled to cooperate enough for me to get my first solo in. My instructor and I took off for three touch and goes — so he could be sure that I was "in the game" that day — then he had me taxi back to the school and endorsed my medical certificate, which also functions as a student pilot license. The first time it actually occurred to me that I was by myself was when I rotated off the runway on my first takeoff. The actual thought was, "Oh great, now I have to get this plane back on the ground myself!" After three uneventful takeoffs and landings, I taxied back to the flight school, and had many congratulations from other students and instructors! It was



a great feeling!

About two weeks later I had my first experience with the “other side” of single-engine general aviation. It was my second scheduled solo flight (more takeoffs and landings) and my instructor was just watching from the fence while he talked to a friend. I had completed three landings and was applying the power on my fourth takeoff when a warning light came on the annunciator panel, “ALT FAIL”. Being quite early into the takeoff roll, with a 5200’ runway, it wasn’t difficult to just stop the plane and taxi off. Looking over at

the ammeter, I could see that the battery was discharging. I returned to the flight school and discussed the situation with my instructor. Although disappointing that the flight had ended so soon, it was a good experience in abort-

ing takeoffs any time there’s a question about the abilities of the plane. Could I have made it around the pattern for a safe landing? Most likely, but why risk it when you’re able to safely stop in the runway remaining?

The lessons continued, more of the same but with the introduction cross-country navigation and night flying. The FAA regulations require student pilots to log a certain number of flights as “cross country” flights, meaning you need to land at a point at least 50 nautical miles from your departure point in a straight line. Instead of using a GPS or even airways, students are first taught pilotage and dead reckoning, flying by reference to a chart and your compass. As for night flying, it has to be experienced from the cockpit. There’s not

really any way to describe it. The views are fantastic, the ATC frequencies are quiet, and the air is as calm as can be. The lesson plan called for a night-time cross-country flight with an instructor, and my instructor and I decided that flying through the DC ADIZ (Air Defense Identification Zone)/Class B airspace to the other side of the Chesapeake Bay would be a good experience. The flight was excellent, with ATC routing us right over downtown Baltimore, then straight over BWI before sending us off on our way to the Easton (KESN) for a few landings. Coming back, it was straight over BWI again, then directly to Frederick, Md. The ability to see the beacon at FDK while we were still over BWI was amazing. To that point, it was the most fun I’d had flying.

A couple of days later my instructor called to tell me he was leaving.

Unfortunately, a couple of days later my instructor called me to tell me he was leaving the area. He’d received a job offer in California and couldn’t pass it up. He was handing me off to his roommate — another instructor at the

flight school — who was up to date on my progress, meaning it would be a seamless transition. With the current state of the airlines and the shortage of commercial pilots, this is to be expected now. People can go through three or more instructors while taking their private pilot lessons. I was about to learn how this sets people back.

I met with my new instructor about a week and a half later. According to my lesson plan, I was supposed to have my first solo cross-country flight. I had diligently plotted out my course to Reading, Pa. (KRDG) the night before, and was ready to launch into the skies to visit the museum at the airport there! I showed my new instructor all of my planning, weight and balance information (never had to



worry about THAT in Flight Simulator!), and fuel requirements. Then I got the “Ok, let’s go!” Eh? This is supposed to be a solo flight. I’m ready for this, I’m pumped up for it, what does he mean ‘Let’s go’? Well, I got to learn that “seamless transition” turns into “I want to observe you performing regular maneuvers (stalls, slow flight, steep turns) and on a cross country to make sure you can correctly do it.” Never mind that I had just logged five hours in cross-country piloting just before my former instructor left; this new instructor had been at the

airport when we had done the day flight and had been informed by his roommate about my progress. So, a little resentful, I logged three hours of dual time with my new instructor, who seemed more interested in

just sitting there enjoying the views instead of giving any pearls of wisdom. When he would ask questions, it would be non-flight related in nature, such as “What pressure should the main landing gear wheels be inflated?” I don’t know, and I don’t really care while I’m flying. If it’s not looking right during the preflight inspection, I’m going to get a pressure gauge, then look up the information in the aircraft operating handbook! Finally, after demonstrating to him that I could indeed get to Reading without getting lost, he signed off for my solo cross-country flight (student pilots need to have their flight planning reviewed and approved by an instructor, with an endorsement in their logbook making them “legal” to fly the flight by themselves).

*It seems during
our lessons, he’s
just there to be
legal.*

The visit to Reading was nice. The Mid-Atlantic Air Museum is very interesting, and they allow you to get up close to the aircraft to get a good view of them. I’d recommend a visit if you are ever in the area.

A few days after my flight to Reading, I was discussing with my instructor about cross-country flying, and diversions, in preparation for a check flight with the Assistant Chief Instructor. I mentioned that I hadn’t gone over diversions with my former instructor, and was hoping for some actual “hands-on” diverting, nothing big, just the opportunity to do it once. The next flight is when my suspicions started to rise that perhaps this new instructor was only out to build hours on my dime.

We took off from Frederick on a cross-country flight planned to Cumberland, Md., normally a 30-minute flight at most. The plan, I thought, would be a diversion back to Frederick a few minutes after takeoff.

That’s all I wanted — the opportunity to do the diversion calculations in flight. What actually happened though was a diversion to Hagerstown (KHGR) with six landings there, then a long flight around the north side of the Camp David (P-40) restricted airspace to Frederick. By this point in my training, I’m starting to get a little frustrated with my instructor. It seems during our lessons he’s just there to be legal, and not actually doing anything, but he won’t sign off for me to do my final cross country flying to get my license!

Speaking of the check flight earlier, the school is an FAA-approved “Part 141” flight school, meaning they have more regulations to follow during flight training than the normal “Part 61” flight school.



Part 141 schools tend to follow a published syllabus, and you complete your training in a certain order, compared to training under Part 61, where you're free to practice whatever you and your instructor feel you need work on. The advantage of Part 141 training is the FAA requires a lower amount of flight time to be eligible for your license, the disadvantage is if you get stuck on a certain topic, you cannot move on to a different topic until you understand the topic that is causing you problems (no jumping around the syllabus). My stage check went well, with me performing acceptably, with the exception of my landing. Up to that point, my landings had been getting better, but that particular landing ended up flat (landing on all three wheels at the same time).

A few days after my stage check, I was scheduled to fly on another solo cross country, to KABE, Allentown, Pa. It's a longer distance, and is again to a towered field (like Reading was), so it will count for several requirements for my training. My regular instructor wasn't at the school to endorse my flight, so another instructor looked over my planning. Her first comment was "Why aren't you landing at Lancaster on your way back? That would meet all of your cross country requirements and save you some money, since you wouldn't need to do another cross country?"

This was a revelation to me. She was actually interested in me being able to combine the flights and get more bang for the buck out of the flying. Off I went to Allentown, with a stop at Lancaster on the

way back. Or so I thought...

Fifteen minutes into the flight, after getting flight following from Potomac Approach, I get a warning light on the annunciator panel: "VAC FAIL." I have a couple of options: I'm only 15 minutes from Frederick, compared to 40 minutes from Allentown, but the vacuum instruments aren't required for VFR flying. The aircraft also has an alternate vacuum pump, which is activated with a simple push of a button. Do I continue? I am right over an airport that I'm familiar with — do I land immediately? Do I return to Frederick? It wasn't a hard decision. I turn around for Frederick, and notify ATC of my situation. Immediately, they ask if I need any assistance, am I declaring an emergency, all of the impor-

Do I continue? Do I land immediately? Do I return to Frederick?

tant questions. No, no, and I'm fine, I can actually see Frederick airport from where I am - but thank you! I land at Frederick, and I have to say, the staff was outstanding. The front desk staff immediately started

coordinating with the maintenance staff, getting me switched into a different Archer, and I was taking off for Allentown again within 30 minutes. The flight was a lot of fun, I got to see a few jet airliners — an MD80 and a couple of regional jets — at Allentown (compared to the Beech 1900s at Reading and Lancaster), and no further mechanical difficulties. I also had plenty of time to think about what the other instructor had done for me, as compared to what my instructor was trying to do. When I got back to the airport, I sat down with the Chief Instructor to discuss my questions and concerns. In the end, it was decided that since I only had one more dual flight before my final stage check - with the Chief Instructor this time - and my FAA



check ride, it'd be more cost effective to stick it out with my current instructor.

About a month later, I was scheduled to take my check ride with the FAA examiner. I had already finished the written exam with an excellent score (I missed one question about reporting DWI convictions to what department of the FAA; I don't know, I don't drink). I felt I was about as prepared for my check ride as I could be. The oral exam went well. The examiner was more interested in making sure I knew my regulations, and learning the stuff I didn't know rather than failing me. The flight was pretty basic. Her one "gotcha" trick during the flight is her cross-country diversion. She asked for a diversion to an airport out to the west. I had been told by the Chief

Instructor during my final stage check that if she asked for that diversion, to look at my sectional first. So, taking a glance, I noticed that if I had turned immediately, I would have gone straight towards the Camp David restricted airspace! The rest of the flight was pretty simple: slow flight, stalls, steep turns, a go-around during landing, and a short-field landing. After shutting down the engine, she turned to me, shook my hand, and said, "Congratulations, you passed!"

It was one of the greatest feelings I'd ever experienced. I was a pilot!

Since then, I've looked at flight simu-

lation differently. Did it help with my real-world training? Yes and no. One thing to remember is when you get your private pilot rating, you're certified for VISUAL flying. The instruments are there mainly to help you with your visual flying. When I started the training, my instructor had to actually bring a couple of pieces of paper out and cover up the instrument panel, because I was so accustomed to flying by instruments alone in the simulation, that it automatically carried over to my real-world flying. That, in combination with my psychological hang-ups about slow flight, probably added about 10 hours to my training. The thing that the simulator helped with most was the basic control of the aircraft and keeping the flying coordinated. This is

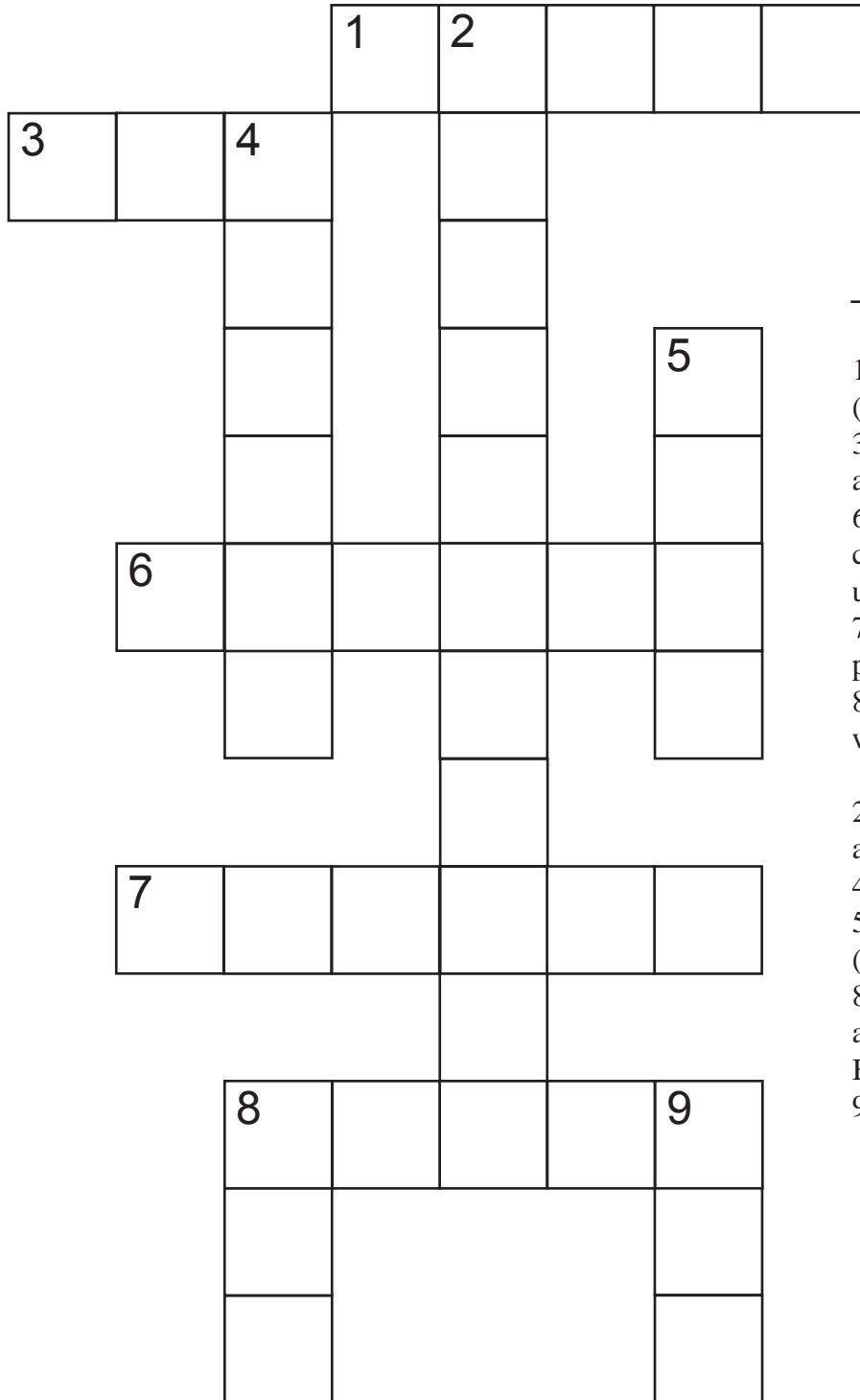
*Did flight sim help
me with my real-
world training?
Yes and no.*

probably due to my home setup, with my full set of CH Products controllers (yoke, rudder pedals, and throttle quadrant), and I'm not sure everyone would have the same type of transition to the basics of flight. I also look at the

comments on various flight simulator forums about simulated flying versus real flying, and I think that most of the pro-sim views are from people who have never experienced being at the controls of a real aircraft. These people profess their knowledge of how "Sub-alternator 259" interacts with "Valve 84D," but they lose the bigger picture in the process. Flying isn't about the technical aspects involved with various airframes, it's about the joy of being in the air, free to choose your own destination, feeling the controls and forces as you fly.

Was it worth it? Absolutely!

CROSSWORD PUZZLE



CLUES

ACROSS

- 1 — Ceiling and visibility unlimited (The sky is clear and OK)
- 3 — Uses ground based aids to check the accuracy of navigational plotting
- 6 — Method by which an individual aircraft can be contacted by Oceanic FIRs using specific aircraft codes
- 7 — Directional steering dictated to pilots by ATC
- 8 — A spoken position report with weather information

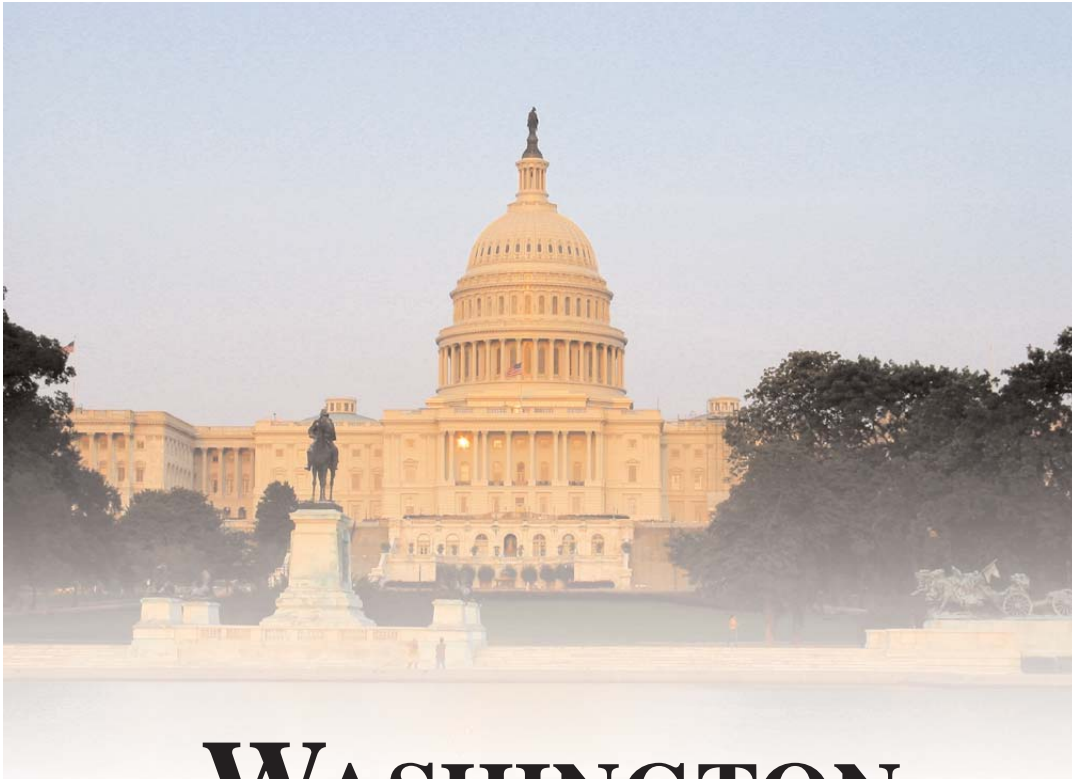
DOWN

- 2 — Any one of warning, caution, or advisory
- 4 — Plain language weather phenomena
- 5 — Coordinated universal time (UTC/GMT)
- 8 — Used to power lights, air cond, etc., and to help start the jet turbines on Boeings, etc.
- 9 — Passengers

ANSWERS

8: AIREP
 7: Vector
 6: SELCAL
 3: IRS
 1: CAVOK
 2: Annunciator
 DOWN:
 ACROSS:
 Don't think we didn't notice...
 You're not cheating, are you?

KNOW YOUR DOMICILE



WASHINGTON

- **Population:** 581,530 (city); 5 million (metro)
- **Location:** On the eastern seaboard along the Potomac River between Maryland and Virginia
- **Founded:** Sept. 9, 1791
- **Nickname:** The Nation's Capital
- **What makes it notable:** Location of the nucleus of the U.S. federal government, including Congress and many governmental agencies
- **Iconic structure:** The U.S. Capitol
- **Other places of note:** The Washington Monument, a towering stone structure that sits opposite the Capitol on the National Mall; the Lincoln Memorial, a tribute to the country's 16th president; the Vietnam Veterans Memorial, a black granite tribute to the fallen soldiers of that war; the White House, the president's residence; the Pentagon, which houses

the leaders of all branches of the U.S. military and is the world's largest office building; and Arlington National Cemetery, the final resting place for 300,000 American soldiers and leaders

- **Nearby major colleges and universities:** Georgetown University; George Washington University; American University; the University of Maryland (College Park, Md.); George Mason University (Fairfax, Va.)
- **Major professional sports teams and events:** Washington Redskins (NFL football); Washington Nationals (MLB baseball); Washington Wizards (NBA basketball); Washington Capitals (NHL hockey)
- **How it came to be:** With Philadelphia unfit to continue as the U.S. capital, Congress authorizes President George Washington to select a new site in 1790. Washington selects

a 10-mile Maryland square that stretches across the Potomac into Virginia. Pierre L'Enfant laid out the city and the cornerstone for the White House is laid in October of 1792.

- **Famous D.C. natives:** Dave Chappelle (comedian, actor); Duke Ellington (jazz composer); Marvin Gaye (singer); Samuel L. Jackson (actor); Henry Rollins (musician)
- **Things you might not have known about Washington:** As we noted earlier, the original boundaries of D.C. stretched into Virginia, specifically into part of the city of Alexandria. That portion of land was returned to the Commonwealth of Virginia in 1846.
- **Mayor:** Adrian Fenty
- **Signature event:** Presidential inauguration (once every four years)
- **DOM:** Graeme Florance
- **Assistant DOM:** Adam Kercher

HAPPY LANDINGS



SEASONS' GREETINGS

FROM ALL OF US
AT THE SHIELD

*May these holidays find you
with plenty of fuel, seamless
takeoffs and smooth landings...*

Photos courtesy of Gary Chambers (top)
and Jens Brueggehofo