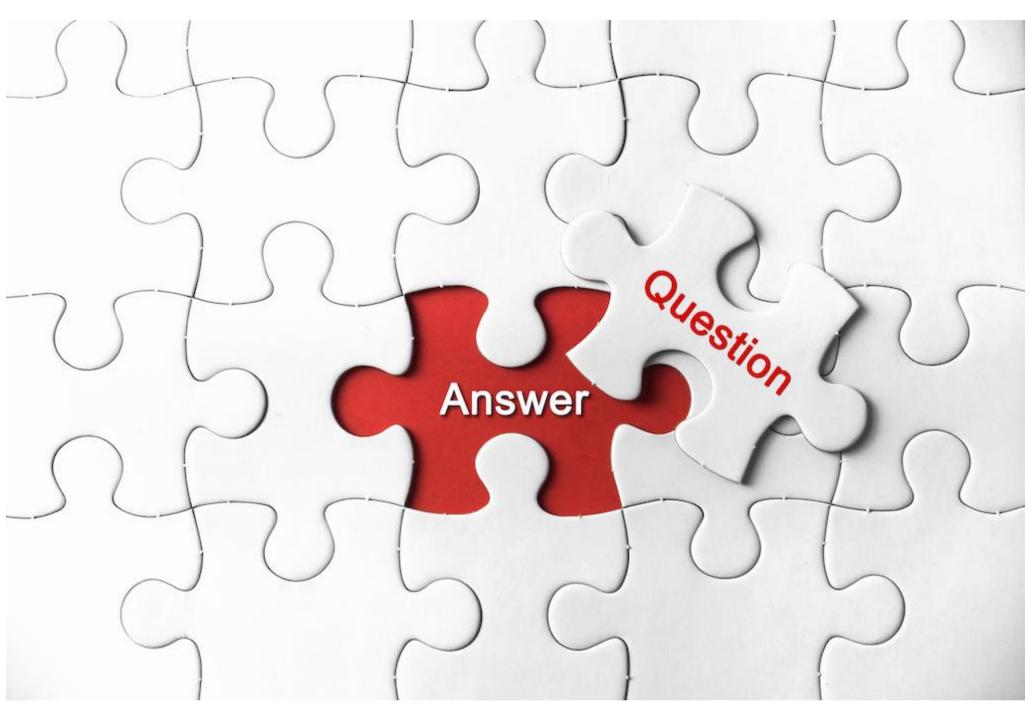
New Pilot on the Block, Part 1

James Albright July 13, 2022



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Congratulations on the new job! You have a lot of challenges in front of you, but with the right attitude and some effort you can progress from the newest kid on the block to one of the organization's star players. But remember that you have more than the airplane to learn. You also have to learn company procedures and how to deal with the people with whom you work.

The normal progression for new pilots is to go to aircraft initial training to get whatever ratings and licenses are needed to legally fly the aircraft. Then you return to the flight department where you get immersed in local flight procedures and company standard operating procedures (SOPs). Along the way, you learn about your peers, your managers and those who will be working for you.

Getting Ready for School

You may be reluctant to ask the pilots in your flight department about the training to come, fearing that you may appear intimidated by the training or somehow unqualified for the job. But if you don't ask, you could be setting yourself up to make the same mistakes they might have made. I have always asked, but I tended to ask the wrong questions. "How was it?" "It was OK, same old stuff." "Was it hard?" "Not really." "What should I study?" "Everything."

Even the right questions posed to the wrong person can yield useless answers. Try to identify someone who attended the course recently and ask specific questions that can't be answered with a shrug of the shoulders and simple responses. For example:

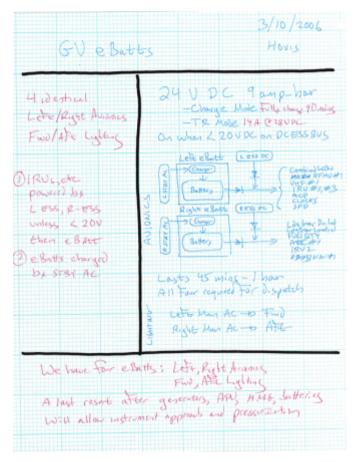
- (1) Are any of the aircraft systems unusual compared to what I've flown in the past? How so?
- (2) Will the training emphasize aircraft systems, avionics or flight procedures? Will the training neglect any of these?

- (3) Do you have any study guides or other reference materials I can borrow?
- (4) Did the training let you down when preparing for the written, oral or flight evaluations? How could the training have been better, and how can I make up for these deficiencies?
- (5) What can I do in training to better prepare me for this job?

Ground School and Note-Taking

Most aircraft training begins in the classroom and is followed by the simulator. (Actual training in the aircraft is usually saved for after formal type-rating training.) After two or three type ratings, it would be easy to be lulled into complacency. "I've done this before." You may be tempted to think the first few days of class are unimportant and that you don't really have to worry until you get into the simulator. I've heard this from a lot of fellow students: "I learn better by doing than thinking." This is precisely wrong.

The sooner you get the "book learning" down, the easier the flying will be. For example, memorizing aircraft limitations may seem mundane and, in the days of computerized jets, unnecessary. But knowing flap airspeed limitations will make your very first approach and landing easier. The syllabus at your next course may not be perfectly designed, but it has been used before. Attempting to learn as the course is designed should be a good start and that usually involves a lot of note-taking. Unfortunately, most of us have never learned how to do this effectively.



Cornell Notes example: Gulfstream GV emergency

batteries. Credit: James Albright

As is typical with most engineering students, I took notes in college, writing things as quickly as I could during class, not applying any mind-power to what was happening at the moment of notetaking. The act of writing shut down further learning until the writing was complete. These notes tended to be sloppy and, as a result, useless for later reference. Lost on many of us is that note-taking serves two purposes. Yes, you can refer to the notes to remember something previously taught and serve as a study guide for exams. But there is another purpose: The very act of taking the note helps you to learn.

I've found the best technique to do this is with a system invented by a Cornell University professor and since given the name "Cornell Notes." The crux of the method is that you are in class to learn, and your notes only capture the "gist" of what is being said. Contrary to my previous methods, the only real verbatim note-taking involves those things that you might not be able to get anywhere else. Once the notes are taken, you fill in any missing details preferably right after class but certainly no later than at the end of the day.

You prepare your notepaper by drawing a line across the top, above which you give the notes a title and add the date and the person giving the class. You draw another line across the bottom, below which you can add any concluding thoughts following the class and your further research. Then a vertical line separates the middle section. The notes you take during the class go to the right and any further research goes to the left. I find it helpful to use one color for the "live" notes and another for any additions after class. The result is that you can pay closer attention during class, you fill in any notetaking gaps afterward, and you end up with a final product that can be better organized and provide easier-to-use study material--

weeks, months and even years later.

The technique paid dividends for me when I went through GV initial in 2006. I was pleased to see Gulfstream had finally fixed the Rube Goldberg-esque electrical systems of earlier aircraft. Just about all the GV aircraft systems were models of efficiency and elegant design. I grasped everything quicky until the instructor explained the emergency batteries. He led off with a list of components that seemed unrelated. Most of the class dutifully copied the list, which was also in our manuals. I think most of us, myself included, were confused. The instructor thought about it for a few seconds and then drew a diagram that didn't appear in any of our texts. I noticed many of my fellow students were still busy writing down the component list and specs and few bothered with the diagram. I copied the diagram precisely and later filled in as many details as I could. My classmates got bogged down by details when the big picture was truly more instructive. A few weeks later, in the simulator, my simulator partner still struggled with the system until I showed him my diagram. "My" diagram was passed from student to student and years later during recurrent, the instructor referred to it as my creation. Of course, it wasn't. The only credit I deserved was that I captured another instructor's ad hoc effort onto paper.

The Simulator

Simulator time is expensive and is therefore limited. There are few things more frustrating than watching a pilot struggle with basic cockpit systems checks that should have been mastered in the procedures trainer or on the Day One



U.S. Air Force C-130J simulator. Photo credit: U.S. Air Force

simulator ride, robbing them of instrument approaches or emergency procedures on Day Four or Five. It is trendy for training programs to publish a list of training objectives for each event, and it is tempting to skip over these for the meat of the material. But it is a good idea to look at these to self-evaluate your progress. If you don't feel you've achieved a training objective by the time the syllabus calls for, you should put in some time and effort to fix this before your next sim period.

I learned this lesson early on when my Air Force pilot training class transitioned from the slovenly subsonic Cessna T-37 to the sleek and supersonic Northrop T-38 Talon. After my first simulator session, my instructor said that the sooner I had every

cockpit switch position memorized, the sooner I could get on with really learning to fly the jet. So, I spent the weekend building a cardboard mockup of the cockpit and practiced basic procedures "in situ" before my next sim session. Getting the switchology down early made the next steps easier and allowed me to graduate to the next lesson sooner. I soloed early and graduated from basic aerobatics while most others were still trying to pass the first check ride. When I eventually struggled in the formation phase, I was so far ahead of the curve my instructor had more time to devote to the hard stuff, since the easy stuff was already mastered.

In Part 2, we'll discuss preparing for your flight evaluation and learning your new employer's SOPs.

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New Pilot on the Block, Part 2

James Albright July 14, 2022



Ryan Nugent (left seat) and the author (right seat) complete a Gulfstream GVII preflight under Greg Bongiorno's watchful eye. Photo credit: James Albright

<u>In Part 1</u>, we discussed getting ready for training at your new employer.

The first time you take a flight evaluation, you can be forgiven for some nervousness. It is your first time, after all. Of course, you also can be forgiven for some nervousness on every flight evaluation that follows. But the sooner you learn the secret to all flight evaluations, the sooner you will be able to deal effectively with that nervousness. What is the secret? Let me start with a clue. The most nervous check ride I've ever had was the first one I had to give as the flight examiner. Here is the secret:

The primary purpose of a check ride is to evaluate the training program, not the student. If the student fails the check, it is because the training program failed the student.

So, what does this mean for you when learning to fly a new aircraft? With very few exceptions, your instructors want you to succeed and if you are at a loss to understand what is expected of you, the question "what do I need to do to pass?" can yield surprising results. If the evaluators see that you have put in the effort, they will be inclined to give you leeway when needed.

It is tempting to push the academics aside with the excuse you are a "doer" and not a "thinker." But acing the written tests or the oral portion sets you up for the "halo effect." When the examiners see that you put in the effort to learn the material, they will be inclined to say any hiccups in the simulator or airplane are slight aberrations, not patterns of deficiencies. Anyone can have a bad day in the jet, but you have control over your study efforts. Ask for practice exams. If they don't have any, ask for a sit-down session with an instructor for an impromptu quiz. This will give you a chance to test yourself under a spotlight and will help identify any weaknesses that need further study.

An oral exam is your chance to not only show mastery of the material, but confidence in that mastery. Here again, ask for a practice session. If the instructors aren't available, find an already qualified pilot. If none of them are available, try a fellow student.

The flight examination, in the simulator or the aircraft, is likely to have a planned scenario or one of several planned scenarios. Asking others for a play-by-play of their experiences can help you anticipate what you need to be good at. A practice session just prior to the event can also be very helpful.

Through each evaluation event, it is key to understand that the system wants you to succeed, and the system will provide clues to you about what it takes to succeed. But what if this isn't true? We've all heard stories of check rides where the system was out to get you. I think this is extremely rare, but it does happen. If you are certain your evaluator has this kind of mindset, it might be time to ask for a change of evaluators. But be mindful that this might set you up for another evaluator who wants to vindicate his peer. In any case, understand that as long as you did your part, a failed check ride shows the system failed, not you. Add the experience to your learning process and press on.

My last type rating was in the Gulfstream GVII and it was going very well. The aircraft was so new it hadn't yet been certified and the instructors were learning it as we were. We were told most check rides took 2 hr. per pilot and that it wasn't uncommon to need more time. I flew the first session and was paired with an excellent pilot who was making my life very easy. We had sailed through every scenario and only had one event left: the no-flap approach and landing. I looked at the clock and realized we had been at it for just over an hour. The examiner said, "You two are doing so well, you know what is coming next, so let's skip the preliminaries. Just fly me a no-flap landing and we'll call it good." So, I briefed the other pilot that we would simply land with the flaps up and I didn't call for any checklists. I failed to remember that in this fly-by-wire aircraft, the flight control system assumed a contaminated wing below 200 KCAS with the flaps up, unless the wing anti-ice was on. When I let the speed fall below 200 KCAS without the anti-ice the examiner spoke up again, "This was my fault, I shouldn't have led you to this maneuver without the checklist. Please run the checklist." We did so and caught our error. The examiner wanted us to pass. He could have busted us, but it would have been messy, and he had already seen that we knew what we were doing. During the debrief, he said it was the best check ride he had ever given in the GVII.

But what if you do bust the check ride because you had a bad day, because the other pilot had a bad day, or even if the training program let you down? No matter the reason, your employer spent a lot of money to get you qualified. Your employer wants you to succeed and would rather spend a little more money for some retraining and a recheck, rather than having to start over. Having a good attitude at this point will serve you well.

Getting Up to Speed With SOPs

When you come home from type rating training, your next task will be to learn and understand any standard operating procedures (SOPs). Your performance as a crewmember depends on knowing what is expected of you and what to expect from others; this is a fundamental tenet of effective crew coordination. You should never have to guess at procedures. Having a standardized mental model for everything you do will eliminate the guesswork. SOPs provide a consistent, standardized model of each task that must be performed by each crewmember during each phase of flight and during any reasonably anticipated abnormal, non-normal or emergency situation. SOPs must be kept current and may be individually developed by the operator or by incorporating those procedures found in their aircraft operating manuals into their daily operations. Once established, the SOPs must be applied with consistency and uniformity throughout the operation.

Ideally, you will find detailed procedures in your aircraft manuals that are supplemented by your company's operating manuals. Knowing which to follow can be a source of some debate.

• Aircraft-manufacturer-provided SOPs-Depending on the age of your aircraft and
how much it has been modified beyond the
manuals provided, you may find very
detailed and pertinent SOPs in airplane
flight manuals (AFMs), aircraft operating
manuals (AOMs), pilot operating hand
(POHs) or other materials issued by th



Photo credit: James Albright

aircraft manufacturer. In some cases, however, these manuals will be out of date, no longer applicable, lost or not up to current best practices.

- Training vendor SOPs--A training vendor may provide a robust set of SOPs that it might offer as a suggestion or as mandatory to pass a check ride. I've been a part of flight departments that adopted these procedures completely, rationalizing that we wanted to "fly like we train." I tend to look at them as suggestions, worthy of consideration after the manufacturer's inputs.
- Company-provided SOPs--Your company should have a stated position on SOPs that could be as simple as, "Follow the flight manual." Company SOPs may also specify everything you need from start to finish.

The first step in learning a new set of SOPs is to ask a seasoned veteran in the flight department about what is expected. Don't be surprised if you get a noncommittal answer; it could be that the SOPs are so ingrained that they never think about them. You might be better off asking a few specific questions:

- Are there any regular briefings prior to starting the preflight or starting the engines, before taxi, before takeoff, before descent, before an approach, before landing, after landing, after the flight is completed?
- Are there any recommended callouts during takeoff?
- Does a pilot who is not the pilot in command (PIC) have the authority to call for a takeoff abort or to execute an abort without the PIC's concurrence? If not, what is the protocol?
- What callouts are expected during approach?
- Who handles the radio, and which radio is normally used for ATC communications?
- How is automation handled between pilots and does this change if the autopilot is engaged? What about the autothrottles?
- How are altimeters set when issued a new setting before the transition altitude or level?
- Is there a specified protocol for cockpit duties when issued a new altitude clearance?
- Are there any airfield specifics that change any of these procedures?

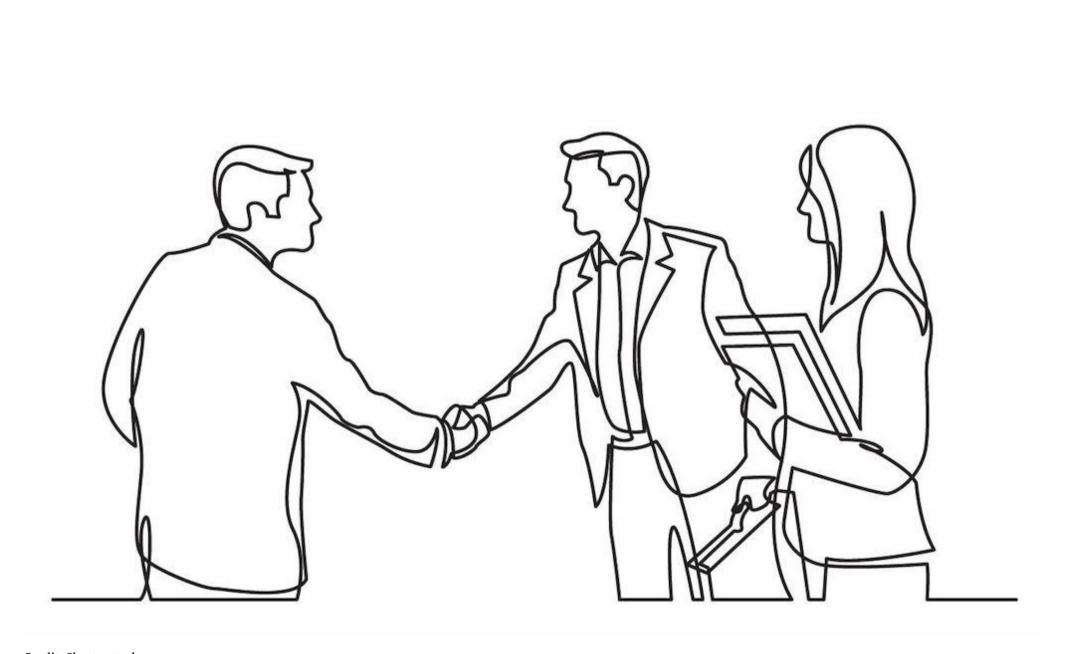
Once you've identified the applicable SOPs, the best way to learn them quickly is to write them down. Keep a notebook with the SOPs and expect to edit as your understanding improves. Your notebook is a work in progress and can be as simple or detailed as needed.

In Part 3, we'll discuss making a good first impression with your new coworkers.

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New Pilot on the Block, Part 3

James Albright July 15, 2022



Credit: Shutterstock

In Part 2, we discussed preparing for your flight evaluation and familiarizing yourself with your employer's SOPs.

There is an old saying in both military and civilian flight departments that generally holds true: "Hire the person first, the pilot second." Of course, a basic level of pilot performance is assumed, but people skills tend to be more important than pilot skills. If you can't get along...you won't.

Your first few weeks in a new job can be critical; they can set you off on the right foot that will win allies and ease your progress from novice to master. Or they can earn you enemies who will unconsciously (or consciously) throw roadblocks in your way. Which way you go depends both on you and them. As is often said, you only get one chance to make a good first impression.

ADVERTISING

Making a good first impression in a new environment is a learned skill. I find that some people are natural at it--others, not so much. But those who lack the skill may not realize just how bad they are at it. Take, for example, the basic handshake.

Some men consider the handshake to be an early chance to establish alpha male status and have perfected techniques to get the "upper hand" in the handshake. Their techniques involve moving their hand toward yours quickly and starting the grasping motion early, so as to put you in the embarrassing position of having only your fingertips grasped in the so-called "limp fish" handshake. Here's how to avoid that:

- Stand up straight.
- Make and maintain good eye contact.
- Offer your open hand so the palm is out vertically and the thumb is pointing straight up.
- When you first feel contact, push your hand forward until the webbing in your hand makes contact with the webbing in theirs.
- Grasp firmly but not so much as to cause their hand to deform.

Shake twice, release.

In these days of pandemic pandemonium, we can avoid the competitive handshake altogether with a fist or elbow bump. But if a handshake is offered, you need to reply in kind. No matter how you do this, make sure you make good eye contact.

The art of maintaining good eye contact isn't as simple as you might think. In general, you want to be looking at another person's eyes when first introduced and whenever they begin speaking or say something with added emphasis. Should you look at them when you are speaking? Usually, but maintaining a "laser lock" as you speak can be seen as a bit creepy or as an attempt to intimidate.

You know you should "stand up straight" but often end up with your shoulders angled forward and neck angled down with your head in an unattractive tilt. You are also probably aware that none of this looks good. Whenever you are being introduced, having the conscious thought, "shoulders back," can do wonders for your posture and the chances of making a good first impression.

You are who you are and changing your facial expression to be someone else can do more harm than good. Somebody who never smiles can be seen as someone who will never be pleasant; but somebody who only smiles can be seen as somebody who doesn't take life seriously enough. Clearly there must be a balance. A genuine smile shows up in your eyes. If you have difficulty with his, stand in front of the mirror and tell yourself to smile. Now do the same thing while telling yourself something that genuinely pleases you or makes you laugh. The next time you are introduced to someone, duplicate the latter, not the former.

You know what a confident voice sounds like. You also know what your voice sounds like. If the two ideas don't match, there are ways to fix any problems. In the short term, realize that volume, tempo and articulation are things you can fix right now if you are conscious of your deficiencies. Record your voice and play it back. Would that person impress you?

- Volume. A person an arm's length away from you should be able to hear everything you say. If not, you are speaking too softly. A person two arm's lengths away should not be able to hear you. If so, you are speaking too loudly.
- Tempo. Most of us can comprehend around 120 spoken words a minute. Slower than 100 words a minute will try the patience of most listeners. Faster than 180 words per minute will be hard to understand and may make the speaker seem nervous.
- Articulation. Does she sell seashells by the seashore? You don't need to be a master of tongue twisters, but if you've ever been accused of mumbling, try to finish every word with an emphasis on each ending, especially those with consonants.

Expect the Best From Others; Present Your Best to Them

As you make your way from novice to seasoned pro in your new flight department, it makes sense to seek mastery of your aircraft and the operating procedures needed to fly the aircraft safely. But the minute you think you have all the people figured out, you will discover you are wrong. I try to remember that everyone I am working with has their own motivations that may or may not align with my own. Part of my role as a leader, a peer or a friend is to help steer those motivations toward those of the group, while trying to help each individual along the v

Of course, this isn't everything you need to go from the newest kid on the block to the seasoned master, but it should get you started. The extra effort you show in your first few months will set you on the right path and should make the rest of your tenure in the new job go smoothly. Now, go out there and do it!

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