Leadership Lessons from the Left Seat

By Frank Burroughs, Ph.D.

Introduction

Learning to fly a fixed-wing aircraft involves a certain amount (some may say a lot) of technical understanding of subjects like physics, meteorology, regulations, and even aviation jargon. In that sense it is like most other pursuits, each having their own technical base and special language. In training to become a private pilot I expected all of that. What I did not expect were so many lessons that apply to the even more complex challenges of leadership of yourself and others. This article is not about aviation although it uses the training process of aviation as the examples and illustrations. So, while some jargon and illustrations from flying are used it is not about that. But if you are a pilot (current, rusty, or even aspiring) I hope you will relate to and enjoy the connections. While a tiny percentage of the population (less than 0.1%) fly themselves around, all of us struggle to some degree with leading ourselves and others. If the lessons about leadership learned in flight training can help us all be better leaders, the 0.1% should not be the only ones who benefit!

CHAPTER ONE: THERE'S JUST TOO MUCH INFORMATION

In every endeavor in life the challenge of dealing with the vast amount of information available is a common denominator. This has always been true, but infinitely more so in today's connected information environment. How as a leader does one ever know enough? How do you create time to lead and teach and mentor when there is always so much more to learn?

How as a leader does one ever know enough?

Flight training usually begins with building a knowledge base of fundamentals necessary to understand how an airplane flies and what the role of the pilot is in that process. The "Ground School" portion of training begins that process but applying that knowledge (even the small quantity one has at the beginning) is critical. Learning about control forces is good but feeling them is even better. Linking "book learning" with experience in a controlled environment is critical to the learning process. The student pilot from the very first lesson sits in the left seat of the cockpit, which is normally the lead pilot (pilot-in-command) position even though he or she is clueless. From that position they will learn to actually become the pilot-in-command by having an

instructor in the right seat allow them to apply (badly at first) what they have learned and link the theory and the practice. The instructor creates a safe but challenging learning environment. As a student you know that no matter what you do, the instructor can recover you from it, but in doing so they will impart some immediate feedback that will stick in your brain. That method of intellectual knowledge linked to the practical experience of applying that knowledge continues throughout the career of a pilot even when there is no instructor seated a foot away. In this fashion the seemingly overwhelming knowledge base required to pass the FFA Knowledge Exam (that's what it is actually called) is possible. It becomes manageable because it is broken into small parts, but more importantly it is linked with application. Another very important phenomenon for leaders occurs here: one begins to separate what is really important to know from that which is merely nice to know. The many facts that will be tested on the FAA exam are not all equally critical to safe flying.

Once in the air the challenge of too much information becomes even more critical. Along with the base of knowledge you carry in your brain will come real-time information about weather, traffic, navigation, engine performance, passenger chatter, etc. In many ways, modern avionics (the instruments that tell the pilot about the aircraft's position, performance, nearby traffic, weather) have the potential to make this worse. Much like your Smartphone, Smart TV, or SmartXXX, there are capabilities that you do not need and cannot process at one time, but once they are there and flashing seemingly vital information in your face they are hard to ignore. Learning to ignore what isn't needed at the time is a critical pilot skill. A phrase taught in flight training is the simple prioritization process to be used when things get too complicated: "*Aviate, Navigate, Communicate*". This reminds the pilot that the first priority is to fly the *#%$ plane! It's surprising in reading accident reporting how often this seemingly obvious priority is forgotten during a crisis. Navigation simply means figuring out where you are and where you are heading. Then correcting if the answer is into the side of a mountain! Finally, communication is simply telling someone (other pilots or air traffic control) where you are and what you are doing. All are important but flying the plane is essential.

So, what are the lessons for leaders we may glean from the feeling of being overwhelmed by information as a student pilot and even as a seasoned veteran in the left seat?

- **When developing others or yourself, link "head knowledge" and practical application a little at a time.**

  No one learned to swim by reading books about it, although books about it are helpful. Likewise, there are many book chapters and videos about landing a plane. Some of the techniques and tips have been very helpful to me but there is no way to learn landing except doing it over and over and learning from your mistakes. Get some (not all!) knowledge relevant to your situation as a leader and apply it. As in flight training, if the first application can be done in a safe, controlled environment that is best. If it can't, at least link the two in a situation where if things go wrong it won't cause great harm to anyone. Role playing a scenario with a trusted friend or fellow leader is a great way to practice and get some feedback before going live.

Because there are so many books and videos on leadership it is tempting to soak in a tremendous amount before applying anything. You will become a better leader through applying what little you know with the intent to learn and change than you will by reading one more book. Your intent as a student pilot or as a leader is critically important. If you enter a learning environment with the intent to change, there is a good chance you will! Check your intent before you watch another video or take another lesson. I often ask leaders who want more depth in a particular topic if they are fully applying what they already know? The answer (and for me also) is usually no. We have a preference for gaining more head knowledge over doing the hard work of applying the simpler things we already know.

Mistakes usually teach us more than getting it right on the first try.

As a leader who may be in a position to teach others, use this same principle. Use the knowledge a learner has (even if it is tiny) in a way that allows them to apply it and learn from that experience. Then challenge them to get some more knowledge and repeat the process. The stickiness of the knowledge goes up as it is applied, even wrongly. Mistakes usually teach us more than getting it right on the first try. What if you simply got lucky on the first try? Challenge to failure, where safely possible, is a proven technique for learning and developing.

- **When you are actually applying your learning (i.e. doing your job) it is important to quickly discern relevant information from what is noise for the given situation. Prioritize the information you need and don't get distracted by what is flashing in your face. "Aviate-Navigate-Communicate".**

The more stressful the aviation or leadership situation, the more likely it is that discerning relevant from distracting will get mixed up. In both environments it is preparation and practice that keep the priorities straight. Prepare for the stress by rehearsing what you will want to know and be disciplined to filter out everything else. Emergency procedures are an essential part of flight training and ongoing good pilot skills. Likewise, when as a leader you face high stress levels have you prepared and practiced what information is needed? Unlike aviation there may not be one single leadership phrase that helps prioritize information, but one that comes pretty close for leaders is: "*What-So What-Now What*". *What*: describe the point; *So What*: why does it matter? *Now What*: where do we go from here? Using this approach, a leader can filter out the usual distractions that are both self-generated and come from others: explanations and excuses. Most of the unhelpful noise comes in these two forms. Explanations purport to be helpful and may be offered with positive intent but usually aren't what is really needed. Excuses speak for themselves and that is exactly who they are trying to protect. Filter out both in search of clarity about what really matters and where we go next. Think about the most inspiring leaders you have experienced. Were they inspiring because they were adept at hearing explanations of what happened? Likely we are more inspired by those who are clear about where to go next to accomplish our purpose.

One of aviation's well-known sayings is that "*A good pilot is always learning*". Likewise, we can say that a good leader should do the same. The caveat is that gaining more information is not learning. Applying new information and learning from that experience is true learning and keeps information overload at bay. Clear awareness of what is important allows one to prioritize which information is critical. There is always more information available, but which is truly critical for your situation? Learning to discern that is a key to being a good, safe pilot and an effective leader.

CHAPTER TWO: PLAN THEN ADAPT

A flight instructor once told me that "*Flying is nothing more than a series of mistakes and corrections*". The sentiment is true, but no one really plans to make mistakes. A better but less snappy version of the saying might be "Flying is a series of the best inputs we can make followed by corrections when we get more data." Long before you climb into the plane there is a lot of planning to do. Routes, weather, aircraft performance and loading, and much more all need to be planned. Contingency planning is built in as well in the form of potential airports to divert to, weather that may need to be flown around, etc. All of this planning is based on the best information available at the time and the smart pilot knows that flying the plan exactly is not likely and adapting will be necessary to stay safe. Sticking to the plan no matter what is a path to disaster. Sticking to principles of good flying however is a must. So, the good pilot plans very thoroughly with the knowledge that deviations are likely and are also planned for. That's the big picture of planning and adapting in aviation. At the micro level, each maneuver requires control inputs followed by a feel for how the aircraft responded to the input. Then may follow more or less input. Even flying straight and level (your first lesson in the left seat) is a bit harder than you think it should be. The tendency of most student pilots is to over control. Too much input one direction is followed by too much the other leading to a pendulum like effect. One eventually learns to provide gentle inputs and correction to the point a passenger doesn't even notice them.

Learning to land during my training provides an excellent (if embarrassing) illustration of this principle as well as the one above about head knowledge and application. Landing is an energy management exercise in that the aircraft at cruise speed and altitude contains a given amount of energy. Landing requires the precise loss of that energy over time and space so that the plane has just the right energy to softly touch down. In addition, there is the directional element. Having the right energy is not enough. You need to be precisely aligned to the runway! Managing the energy loss and directional control is made more challenging by the wind. A headwind changes how fast you decelerate, and a crosswind makes lining up on the runway centerline more difficult. These two interact to add to the fun. Correcting for wind effects changes your energy a little bit. Correcting for energy may change your direction. To me as a student this all made sense, and the books and videos I learned from made this seem pretty easy. Application of that head knowledge was not as easy because even when I planned for a given wind direction and speed the airplane somehow didn't do what I expected. But since I had planned it that way I flew it that way….with poor results. I often was not over the runway or was too high or too slow or too something to make a good landing. I didn't understand because I had all the settings "correct". My instructor endured this for a while, and then one day when I was frustrated again I

asked him if I had set the power wrong on final approach. He asked if I really thought I could set up the plane on final and then it would essentially land itself. I foolishly said yes. That's when I learned that as soon as I provided an input to the plane, I needed to be prepared to correct it. Landing was not setting all the inputs correctly a mile from the end of the runway and then sitting back and watching. This is what I had been doing. Once I learned it was necessary to keep making small inputs all the way to the hangar landings got a lot better. I also learned to anticipate challenges so as to be ready to correct things. It's not uncommon that right before the end of the runway the airplane will get upset by a mysterious gust of wind. That's the last place you want that to happen since you are low on energy (by design) then and very near the ground. As wind blows across objects such as trees or buildings close to the surface it gets disrupted and may blow from a direction you weren't planning for. So even on what felt like a "good" final approach, things went bad right at the end. Expecting that and knowing the kind of inputs it needed was very helpful in reducing stress on my instructor.

At the micro planning level, you'll need to learn how to make adjustments that the "passengers" won't notice.

At the big picture flight planning level or the micro picture maneuvering level, it is important to plan thoroughly but plan to change with conditions. Knowing what change may come your way and how to respond to it reduces stress and makes you safer and more confident. Applying these ideas to leadership is pretty straightforward. The big picture (flight planning) is strategy. Your strategy is really just your flight plan to reach your destination within a set of boundary conditions. The paths available to you are limited to what is within your limits (dollars, time, human resources, etc.) just as the pilot's are by weather, fuel, aircraft limits, etc. But within those, adaptations will still have to be made to reach your destination as the conditions you planned for change. Have you ever had your budget "adjusted" during a project? Have you had a key skill position leave the team unexpectedly? Just as in flying try to anticipate as many of those as possible and have your "diversion" plan ready to go. Sometimes you will have to think on the fly but not that often if you really plan well. As a leader you owe it to your stakeholders to do so. You are the pilot in command for your project.

At the micro planning level, you'll need to learn how to make adjustments that the "passengers" won't notice. When maneuvering with your team it's best to make control inputs gently and avoid see-sawing them. Passengers get airsick and lose confidence in the pilot when that happens. Team members might do the same if you are not skillful in making small corrections. This is really the tactical part of your leadership. Strategic changes are likely to be not too frequent but very noticeable by everyone. They should be. Tactical changes are more frequent and may be more effective if they aren't too noticeable. Your skill as a leader in macro and micro planning and adapting is not a trait one is born with. Just like proper flight planning it is a learned skill that requires the use of a lot of resources, thoughtfulness and time. Shortcuts lead to bad outcomes. As a leader, or pilot in command, put in the time to sharpen these skills and invest time in planning for the outcome you want as well as for a few that you do not.

CHAPTER THREE: COMMUNICATE CLEARLY

One of the most intimidating parts of flight training as reported by students' surveys and even some veterans pilots is communication. Why is that? Several reasons come to mind. Pilot to pilot communication and between pilots and Air Traffic Control is done over the radio while you are also flying the plane. Additionally, the jargon and syntax of aviation communication is very specific and is a new language to learn. The idea behind it is to be very concise (no wasted words) and very precise (no ambiguity). If you have ever listened to aircraft communication on the internet or in the plane, you were probably not able to decipher much of what was being said. That is not done to exclude others but to be concise and precise. It is certainly intimidating for a while but after you learn the syntax and jargon it really is amazing how much can be unambiguously communicated with so few words. It is also very easy to pick out student pilots on the radio as well as some veterans who choose to be sloppy or "funny" in their radio calls. The former is forgivable, but the latter is not.

One of the key elements of radio communication with ATC is the readback. The pilot reads back to ATC the instructions given and ability to comply. This simply is a way to be certain that what was heard was correct and that the pilot can or cannot comply with the instruction. If anything was not clear or correct, it can be addressed right then before it turns into a crisis. A pilot may not be able to follow ATC instructions, but she certainly needs to let ATC know she cannot.

As leaders the idea of making communication clear by being precise and concise is very compelling. Whether your world has a lot of jargon or not, you need to let your stakeholders know what you are doing and why with brief, unambiguous language. You owe it to your team members to make expectations of them clear in the same way. A readback approach, adapted to your culture, makes a lot of sense in most cases. Listening to what you just said or wrote as someone else heard it verifies the correct message was heard. If not, there is time to correct before resources are wasted. Likewise, it also gives others a chance to confirm that they can comply with the plan. You as the leader now can know what others heard and whether they can do it. As obvious as that sounds, we all know it isn't that common. Many leaders assume (hope?) that their commands are taken exactly as that, and without asking, believe the exact actions they were thinking about are taking place. In aviation there is no room for hoping a pilot is doing what she said. Everyone in the air must be certain that is what is happening. Is your business able to operate with less certainty? If it is, why would you want it to?

Why is something so obvious so equally rare? Communicating via a word salad is a lot easier than being concise, but it is also less effective and introduces uncertainty. Learning to communicate in the air requires training and discipline. Before you key the mic to speak to other aircraft or ATC you rehearse in your head the syntax and correct details the radio call needs and nothing more. Why not do that as a leader instead of assuming others really want to hear or read a lengthy treatise from you? Rehearse what you are going to say or write and remove anything superfluous or ambiguous. Recalling the "explanations and excuses" from Chapter One reminds us that very few really want to hear those but all of us want to provide them. A simple rule of thumb is to ask yourself how what you are saying or writing helps us move ahead. Explaining

why something didn't happen and why it wasn't your fault doesn't fulfill that requirement. Lengthy and/or ambiguous communications are a sign of lack of training or laziness. As with the pilot example above the former is both forgivable and fixable. The latter needs to be fixed.

CHAPTER FOUR: DEALING WITH DIFFICULTY

Lengthy and/or ambiguous communications are a sign of lack of training or laziness.

Despite the best planning and skill, pilots sometimes find themselves in a difficult situation. Circumstances that were not planned for may arise. Conditions that require more skill or capability than pilot or aircraft possess generate the need to seek help. Unlike your automobile, a pilot cannot simply pull over and call AAA on the cell phone. So where does help come from then? There are usually many excellent resources to help a pilot in trouble, but research shows that the biggest barrier is not availability rather the pilot's unwillingness to ask for help. In most emergencies or accidents, it was learned that the pilot kept to his plan (see Chapter Two) despite the plan not working well. Whether it is ego or fear of doing something different and unplanned, there is a big barrier in aviation to asking for help. Sometimes you can easily help yourself if you are simply willing to.

Another aviation memory device used in this part of training is the "Four Cs": *Climb-Communicate-Confess-Comply.* When you are lost, running low on fuel, flying into weather that you or your plane are not able to handle or any number of other challenges the plan is to climb, communicate, confess and comply. First climb because higher altitudes give you more perspective. You may see a landmark such as a city or river that orients you and allows to get back on course, or at least tell someone where you are. Thus, merely climbing may alleviate your problem and negate moving to the other Cs. Gaining perspective is important. Climbing also increases the range of your radios so that the chance of being heard by those who can help increases. Second the plan calls for communication. Generally, this will be with the nearest appropriate ATC facility, usually Approach/Departure at the nearest radar equipped airport. These resources will be able to help in a number of ways such as telling where you are, how to get around weather, guiding you to a nearby airport for fuel or repairs, etc. But to do that requires the third C. You must "confess" that you are lost or flew into weather you should not have. As strange as it may sound this is hard to do. As mentioned above, the ego is a big barrier. No one who envisions herself as a competent, professional pilot wants to admit to anyone, let alone over the airwaves, that she made a mistake or miscalculation, or simply got lost. But confess you must if ATC is to be of any assistance. Finally, you comply with the instructions given. Why wouldn't you? If you are lost and someone is telling you how to get home of course you would comply. That is probably the easiest part because the ego has already taken its hit from confessing. However, there are cases where the instructions don't make sense to a pilot who is disoriented. It may seem that ATC is flying you the wrong way. Becoming disoriented, especially under stress is a common problem, but at this point you must trust those you have asked for help.

There are many syndromes to which pilots are especially susceptible. One of them is "get-there-itis". The desire to complete the mission on time and prove our abilities and not disappoint those

we are flying is a powerful incentive to violate a principle. I am ashamed to say that even this early in my flying career I have fallen into this syndrome and I knew I was doing it! This short story illustrates almost every failure mode in the previous chapters as well as "get-there-itis".

In the final stages of training before you attempt the FAA Practical exam (which means you fly maneuvers with an FAA designated examiner if you pass the oral exam earlier in the day), you must complete what is called the "long cross country". It does not mean you fly coast to coast. In the vernacular it simply means flights longer than 50 nautical miles that land at a different airport than they originated. Specifically, the "long cross country" involves flying to two different airports and then-returning to your original departure point. This is all carefully planned down to minute and gallon of fuel. I did all the preflight planning twice to make sure I had not missed anything and then reviewed it with my instructor who said it was fine. Since this involves essentially flying a big triangle you are going to encounter different winds on each leg. I received a full weather briefing from Flight Service as I built my plan so I could account for fuel burns with tailwinds on one leg and headwinds on the last one. Then I checked with Flight Service again just prior to departure to see if conditions en route had changed. According to all my calculations I had sufficient fuel to make the entire trip plus the legally mandated reserve.

The first leg went well until I was setting up my entry into the landing pattern based on the reported winds a few miles out. I called my entry and landing intentions on the radio and to my surprise a voice replied that I needed to reconsider my landing direction as the winds had completely reversed since I listened to the weather a few miles back. An attendant at the local airport was kind enough to tell me that, as there we no other pilots in the vicinity. As I was already setting up for the planned direction, I had to rapidly rethink my approach and make changes. Luckily, I had been into that airport before and knew what landing the other direction felt like. I changed my entry and landed easily but not in the direction I planned. I was proud of myself for "Planning then Adapting". I also learned that valuable information can come from anywhere. Use it! On the ground I rechecked the navigation plans to my next destination and also recalled that significant turbulence had been reported at my planned altitude on the route I would fly. That really didn't worry me as those reports don't always turn into reality. Plus it shouldn't last long. I departed the first airport under perfect conditions and brimming with confidence.

The second leg went as planned and the turbulence was waiting for me just where the reports had said it would. It was much worse than I assumed it would be and made it hard to fly straight and level, so I didn't. Training had taught me not to try to fight the turbulence as that leads to lots of control inputs that ultimately are futile. The idea is simply to keep the nose approximately level and fly through it. Then correct your course if needed. I followed that training and, besides feeling a little sick, finally saw my destination airport off the nose right where it should have been. This airport had multiple runways so selecting the best one for the wind was easy and I landed softly. So far, so good. Two legs and two opportunities to put my training into practice successfully! I was getting a bit fatigued as it had been a long and trying day, but I had the final leg to complete and I knew the forecast called for a headwind so it would be slow flying. That last sentence is filled with messages I should have heeded at the time. Being fatigued I wasn't

thinking about anything except completing the last leg ("get-there-itis") and because I had planned everything carefully, I didn't see any reason to stop and get any perspective on the situation. My plan said I had enough fuel so why check? I didn't. The weather forecast predicted headwinds and I had calculated that into my fuel requirements. So I taxied back to the end of the runway and took off.

Taking off into a stiff headwind made the plane jump off the runway which felt good. What didn't feel good was trying to get any groundspeed and make progress toward my home airport. The headwinds were about twice what was predicted, and had I checked that while on the ground a few minutes ago I could have realized that I was going to burn more fuel that I had onboard. But I didn't. I also did not turn back and get fuel. Get-there-itis had me in its grip. Plus, I was sure the winds would subside en route as the forecast had said. This was just a temporary condition. Watching the fuel gauges drop rapidly while the ground below seemed to stand still pushed get-there-itis to the background for at least a few moments. Training kicked in again and I realized I had planned for problems by having airports to divert to identified along my route. I even knew which ones sold fuel. Now I just needed to select one and land. Easy, except once I knew that there was a way out get-there-it-is appeared again. As the alternate airport appeared ahead of the left wing just seven miles away, I also could see familiar landmarks near my final destination only twenty miles away. Looking back and forth between fuel gauges and fuel supplies and home created a three-way tug of war that with each passing minute made me more certain I could make it. I also began calculating my glide distance should the engine quit. Once I reached a distance where I knew I could glide in I focused on approaching to land if I was powered or not. Once I entered the landing pattern under power, I knew everything would be fine. I even had enough fuel to taxi to the hangar. Once there I actually looked inside the wing tanks and saw metal not liquid, meaning I literally had made it on fumes. Certainly not legal, and certainly not safe, and absolutely avoidable. In fact, it was avoidable at several points. My planning was good, but my adapting was not. Even when adapting was considered there was no follow through on the new plan. Knowing what to do but failing to act results in the same outcome as not knowing. Looking back, I clearly should have checked the winds before taking off on the final leg. When I realized what the winds were, I should have turned back and fueled. When I selected an alternate airport to fuel, I should have committed to land there instead of just identifying the possibility. Instead I stupidly thought that calculating glide distance made more sense! I didn't even need the Four Cs because I knew where I was and how to respond…. I just didn't. Even good planning and knowing how to adapt to changes in reality won't help if you are too stubborn or stupid to do anything different.

The application to our leadership of the concept of using Plan then Adapt when Dealing with Difficulty is likely straightforward following this sad story. But let's look again at the Four Cs applied to leaders in difficult situations. As in my story, the first idea is to see if you can adapt and not need to use the Four Cs. If you can adapt your original plan, then commit firmly to act on the new one. Being alone in the cockpit made this difficult. Had there been someone with me I am certain I would have explained to them the situation and what we needed to do, and then done it. So, find a way to make a commitment to act on your adaptation and then follow through. Having done that, if you are still in trouble then Climb. Remember one of the main reasons for

climbing was to gain perspective and see if things look different from a higher altitude. The same principle works for leaders. Get above the current problem and circumstances and see if a new perspective brings a new path forward. Sometimes you can do this on your own but often climbing means seeking perspective from others. Many times, a higher-level question is exactly what is needed to get perspective. At a low level we may ask the wrong question or be focused on the wrong goal. Maybe we need to ask, "What am I really trying to accomplish here?" Using my story, I defined success incorrectly as getting home on one tank of fuel or getting home on time. The day did not start with those as goals. It started with safely completing the three legs. Where did I lose that fundamental idea? The same place most leaders lose their fundamental idea: in something that seems more urgent or attractive and feels more important than the real goal. This is why getting higher for perspective is so critical.

Often the new plan and its execution will involve others and it's more than just a courtesy to let them know something is changing.

Communicate may be a natural next step from Climb, as mentioned above. Ask others for their perspective or to check and challenge yours. After you have worked through the problem and have a new plan, Communicate can also be part of making a public commitment to do something different. Making your adaptation go from a possibility (as I had done) to a new plan that will be executed may require others knowing about it and helping you stay accountable to follow through. Often the new plan and its execution will involve others and it's more than just a courtesy to let them know something is changing. This is especially true if you will need their help to execute the new plan. In Chapter Two it was noted that strategic changes may not be frequent, but they should be known and noticed by many. Chapter Three is a good reminder that communicating a change in strategy needs to be both precise and concise, unlike most strategy documents.

Confessing is a word with connotations that are not helpful. The root meanings of the word are simply "agreeing together". Taken that way we simply want to gain agreement about the situation. If a pilot "confesses" to ATC it isn't for the purposes of being chastised. Rather it is agreeing with ATC that you are lost and getting ATC as much information about your situation as you have. So it's telling the whole truth for the purpose of getting home safely! When a leader loses her way, she needs to regain perspective on what the real purpose is (Climb) then agree together with resources that can help her achieve that purpose by guiding her out of her situation. Simplified, it is just asking for help as you explain your situation. But as with pilots, leaders are sometimes trapped by an ego that makes this very hard to do. Many books and articles have been written in the past two decades that essentially put forward the idea that the single biggest failure mode for leaders is self-interest that is out of balance with the interests of the organization's mission or of other people. Behind self-interest is the ego. It is not possible, or even healthy, to eliminate self-interest but it needs to be in proper relationship to the interests the leader is called to serve. Many problems a leader faces are made worse because of the unwillingness to ask for help by agreeing together. Confession is good for the soul but it's essential for a pilot in trouble or a leader who has lost her way.

Compliance is also a word that many find distasteful. No adult wants to be told what to do. In modern western culture independence is valued over compliance. Once again, the ego may get in the way. It's probably easier to comply when your life is truly on the line. Lost in the clouds at night it is easy to get your ego out of the way and fly the heading you are told. In business it may be tougher to feel that same sense of urgency and set aside what you think or feel and do what someone else tells you. And in reality, the business world seldom tells you what to do, so compliance in this realm really means being able to accept the suggestions of others and implement them even if you must repudiate your previous position. That does require putting your pride aside and being humble enough to put achieving the goal ahead of your ego. As in many endeavors it is true that you need to be humble or you will get humbled. Humility is yet another word that isn't very popular and that's a shame because it is mostly misunderstood from a leadership perspective. Humility in a leader does not mean someone who is weak or unwilling to take a stand and it certainly cannot mean acting as a "doormat". It is simply the opposite of overwhelming self-interest. The great English writer of the last century, C.S. Lewis, said it best when he wrote that "Humility isn't thinking less of yourself, it's thinking of yourself less." A leader whose first instinct in good times or bad is to consider the impact on others before themselves is a leader who has self-interest under control.

So, there are the Four Cs for dealing with difficult situations. In short:

- **Climb-get above the immediate situation and gain perspective**
- **Communicate-ask others for help**
- **Confess-agree together about the reality of the situation and your part in it**
- **Comply-have the humility and courage to do something different**

The leader's attitude toward even seeing a problem, then acting with humility to solve it is more important than any of the Cs. In fact, without that attitude none of the Cs will work.

CHAPTER FIVE: RECOVERY FROM UNUSUAL ATTITUDES

Believe it or not the chapter title is also the title of one of the required elements of the FAA Practical (actual flying) exam. It isn't about the pilot's mood rather about the aircraft's position relative to the horizon and direction of flight. One of the most critical pieces of information a pilot must be aware of is the attitude of the aircraft. If that is misunderstood or not known at all then lots of bad things can happen. Without getting into the technical details a plane, like any object, orients in three axes. The point is that coordinated flight requires these axes to be in balance and working together during turns, climbs, and straight and level flight. One of the required test elements is the ability of the pilot to recover quickly from the plane being upset from straight and level. The test requires the student to have their vision limited while the examiner makes turns, climbs, descents, etc. long enough to completely disorient the student. Then the student is allowed to view only selected instruments while making quick corrections that will recover the plane to straight and level flight. This seems easy because even with your eyes closed you can determine if the plane is climbing and turning left or descending and turning right. Then you preplan your corrections so that when you open your eyes you already know

what to do. Except it doesn't work that way. After enough ups and downs and lefts and rights the human inner ear and brain lose track of which way is up. I'm told it takes seven changes to lose track, but I don't know if that is true. What I do know is that you will not be correct in guessing what the plane is doing based on what you feel. My instructor sunk this lesson in by having me initially not worry about controlling the plane just concentrate on whether we were climbing, turning left, etc. Never did I guess correctly. Then I reversed roles and he never guessed correctly. The point is that you cannot trust what you think or feel about the aircraft's attitude. Your senses under certain conditions will always lead you astray. You must depend on facts as presented by your instruments. Thus the key to passing this part of the exam is to know which instruments to look at and act on what they tell you, so your preparation is in knowing where the artificial horizon data is displayed on your aircraft and how to read it quickly. Looking at the fuel gauge or exhaust gas temperature would not be helpful at that moment.

If you or your team or project is in an unusual or uncoordinated situation, how do you recover from it? What role do your feelings or senses play in what actions you take? Unlike flying there is sometimes a role for a leader's intuition or judgment to play in recovering from a place you don't want to be. But similar to flying you must really be discerning on whether and when to trust feelings and to know when your senses are lying to you. At worst case it can't hurt to at least look at what your instruments are telling you. You may choose to disregard that information but do so very thoughtfully. In recovering from unusual attitudes in an aircraft the data you need (horizon reference primarily) is easily and quickly obtained and correction is usually one or two actions. The leader's reality is more complicated in that data is not so easy to obtain and actions not so simple and immediate in effect. But it still helps to know what "instrument" may give useful information. So, what are the kinds of instruments a leader may have to help them recover? How do find and read them? Referring back to the last chapter, a great place to begin is to gain perspective by getting a little higher above the problem(s). This often involves inviting others to be "instruments" for you. What readings can they give you? You might actually collect real data on team performance or conduct an employee survey. But whether hard data (like a survey) or soft data (like the perspective of others) the real issue, as in flying, is whether you trust the data enough to act on it. If you cannot overcome the bias of your personal feelings (your inner ear) you will ignore the data and fly into the ground. One of the greatest causes of aviation accidents is "loss of horizon/spatial disorientation". Many pilots believed their senses more than their instruments and mistook the ground for the sky. It seems unlikely but it is sadly true. As a leader at least gather what your instruments can tell you and factor it into your recovery. A common resistance is that instruments can fail or be in error. While possible, it is very unlikely, and given that we know for certain pilots cannot trust their own senses it is far better to assume the instrument is right. Likewise, the leader who is ignoring data because "instruments might be in error" is usually saying "I don't like what they are telling me" and allowing ego to drive the decision.

CHAPTER SIX: PICK UP A SIX-PACK

The question of interpreting and trusting your instruments assumes that you actually have some! For decades general aviation aircraft were equipped with what is commonly called the "six-

pack" of instruments. There certainly could be more and usually are, but the six-pack is the display right in front of the pilot that gives the six most critical pieces of information. Learning to correctly scan these is a vital part of training. Knowing which information is most critical for the phase of flight you are in is one of the key lessons. Sometimes airspeed is critical to the point of nearly ignoring everything else. In other phases of flight attitude might be critical (see Chapter Five). The point is you have instruments and you scan them in a particular way for the information that is most needed at the time. More modern aircraft have moved away from the six-pack in favor of the "glass panels" which are digital displays of the same information but in a different arrangement. One of the features of the integrated glass panel format is the AHRS. This is the Attitude and Heading Reference System. The six-pack has an attitude indicator and a heading reference as two separate round gauges that give the same data to the pilot. The question AHRS answers is "*What is my attitude and where am I heading*?" Now that sounds like a question any leader ought to be asking many times a day. Unfortunately for a leader the answer usually can't be determined with a quick glance at a screen or gauge. But the answer is just as critical as it is to the pilot. We already know that spatial disorientation is a leading cause of aviation accidents. Pilots can lose the horizon, but they can also mistake some other image (cloud layer, water) for the horizon too. In either case, when a pilot is certain about something that isn't true there is going to be a problem. The same is true for leaders. The solution is to get a six-pack (or glass panel) and learn to scan it. What is your Leadership AHRS? How do you know what your attitude is and where you are headed? Few variables impact a leader's effectiveness more than these two, so why do we not take more care in getting that data?

"What is my attitude and where am I heading?"

Knowing what our attitude actually is represents one challenge, but often we really know. The greater challenge is acknowledging the impact our attitude has on our purpose. Even if our instrument (brain) gives a correct reading on our current attitude it may equally lie to us about the impact via rationalizing a justification for that attitude. "*I have a right to be….*" is usually an indication that we know our attitude isn't what it needs to be, but we enjoy having it. That justification often fails to account for the effects our attitude has on others and our goals. When we have a functioning instrument but fail to act correctly on what it tells us, we put our airplane in jeopardy. How then does a leader not merely scan the instruments but act on what they see in a way that is best for completing the mission? This is where the Heading part of the instrument can help. Knowing our attitude and where we are heading may alleviate the problem of allowing attitude alone to dictate actions. As a leader asking where the current attitude and direction are leading may motivate us to change something. Implied in this is that one actually already knows where they want to go! If that is not clear, we have an entirely different leadership challenge. Having a clear destination for your enterprise and valuing that destination more than your self-interest (Part Four) is the key. Your purpose in life, or just in your job, is often in competition with your short-term self-interest. Knowing that allows you to plan ahead to keep them in correct balance so that the "I deserve to feel this way" thinking is just that. A fleeting thought that does not turn into behavior.

If you don't know what instruments you have to get a read on your attitude and heading, you are flying blind as a leader. Picking up a six pack isn't as easy as a trip to the convenience store, but it is essential. You might begin by looking at inspiring leaders around you and even asking them what kind of six-pack they are scanning and how they insure against self-interest over-ruling what their instruments tell them. No matter what else you do get really clear on your destination. Heading information is useless unless you know where you want to go. Those looking to you to lead them have to be certain you know where you are taking them. And it is easy for them to detect that you don't know. If that happens your leadership challenge just got a lot tougher.

In summary:

- **Get clear on your destination**
- **Scan your instruments for attitude and heading**
- **Act on what you see**

CHAPTER SEVEN: CHECKLISTS

The use of lists to perform inspections and maneuvers is integral to aviation. There is almost nothing a pilot does before, during, and even after flying that isn't covered by a written reference that is used to verify the action was done correctly. Do pilots have terrible memories, or are they just too reckless to be left to their own devices? Of course, these are not the reason for reliance on checklists. These references are used for two reasons: there are a lot of items to inspect and actions to perform, and the risk of doing them incorrectly or forgetting them completely is simply too great to accept. That's said, it is well known that the checklists are not used consistently by all pilots. Sometimes they have enough experience to know from memory exactly what to do. Other times they forget and nothing bad happens, so it becomes a habit. And there are, as in any field, those who are too smart for checklists. Do checklists make you a safe pilot? No, they make you a safer pilot than without them but your judgment along with the written references combine to make you a safe pilot.

Good leadership is not achieved by robotically following a list of required actions or practices. But there are best practices and checkpoints that help a leader use her judgment to achieve the best results. Unfortunately, they are not written on handy laminated cards like a pilot's. They are bound up in thousands of volumes of "leadership" books, TED talks and many other places. And most valuable of all are the ones in the heads of great leaders who are probably close to you today. Thus we are really responsible for creating our own leadership checklists gleaned from all these sources. These then become our tools for ensuring we don't violate a principle even as we may modify a plan. Please create your own leadership checklists and combine them with your judgment to inspire those you lead. Below is a framework for doing that allowing you to elaborate it to fit your needs. Be sure to build in how you will be accountable for adhering to the principles in your checklist so that you don't follow the example of some pilots who discard the lists and "wing it". Those who are counting on you to safely land them deserve better and you can inspire them to excellence when they move to the left seat.

LEADERSHIP PRINCIPLES CHECKLIST FRAMEWORK

1. Self-Interest in balance.
    a. What are my motives?
    b. Who or what am I serving?
    c. Is my ego prepared if I have to "lose" for the sake of the purpose?
2. Clarity of destination
    a. Do I (and others) have a clear picture of where we are going and why?
    b. How committed am I (we) to that destination versus our commitment for the route?
    c. Are the where and why compelling enough to make the route tolerable?
3. Readiness to adapt
    a. Do I have alternative routes ready that I am committed to?
    b. Is "get-there-itis" affecting me?
    c. How will I move from identifying the need to change to committing to change?
4. Checking my progress
    a. What is my AHRS?
    b. Am I scanning it frequently?
    c. Am I making frequent corrections to my attitude and heading and are they working?
5. Communicating
    a. Who do I need to communicate to?
    b. Do they know where I am and what my intentions are?
    c. Are my communications precise and concise?
6. Challenges
    a. When things aren't going well, am I getting higher to gain perspective?
    b. What is the balance of trusting data or feelings to understand the situation?
    c. Am I confessing to get agreement on the situation and my behaviors?

About Forward Momentum, LLC

Forward Momentum, LLC is a woman-owned small business (EDWOSB/WOSB) and Project Management Institute® (PMI) Global Registered Education Provider (REP). Since 2000, Forward Momentum's real-world experiences, coupled with practical application of theory, have helped realize project management, leadership and learning potential within commercial, government and non-profit organizations. As a boutique firm, we pride ourselves in understanding your business, analyzing your learning and development needs, and driving efficiencies and growth through consultative engagement.

Let us show you how our approach can optimize your learning experience, improve your processes or empower your team by emailing dobusiness@forwardmomentum.net.

Visit www.forwardmomentum.net or www.linkedin.com/company/forward-momentum to learn how our experience can maximize your bottom line.

About the Author

Frank Burroughs, Ph.D. is an experienced leader with a passion for helping others achieve more as leaders. With over three decades of accomplishment in a Fortune 100 environment he combines the rigorous thinking of advanced training in science with the intuition needed to engage and challenge those around him. Experience in leading large, multi-disciplinary scientific teams through technically, and sometimes emotionally, challenging initiatives prepared him to design and implement enterprise-wide leadership development and talent practices that combine real-world experience guided by the best science available.

Frank currently leads Clear on Purpose, LLC, http://www.clear-on-purpose.com a leadership and talent consulting company. Frank would love to hear from you at info@clear-on-purpose.com