

GODDESS in the

MAKING ACRONYMS WORK FOR YOU

Inset: Pilot and Co-Pilot discuss the preflight checklist. Photo: US Air Force





Research has shown that use of the word "acronym" has grown exponentially since the 1950's. One can only surmise that the rapid growth in aviation training over a period of time is one of many reasons for the ubiquitous nature of acronyms.

An acronym is merely an abbreviation formed from the initial letters of other words and pronounced as a word.

Anyone that has a pilot certificate at the student pilot level or higher has invariably been inundated with an assortment of these "study aids" during their training.

Essentially, an acronym is a form of a mnemonic. A mnemonic is traditionally a pattern of letters, ideas, or associations that assists in remembering something; the word itself is derived from the Ancient Greek "goddess of memory" Mnemosyne.

Time and Place

Acronyms have their place in aviation but not all of them belong in all phases of flight. Let me explain; as a flight examiner the test standards require that I quiz applicants on questions pertaining to airworthiness and specifically the necessary equipment required to be operable during day, night, VFR and IFR flight. Generally speaking, applicants are "spot-on" with these questions. Their response normally includes one of the classic acronyms used to remember required equipment. (TOMATO-FLAMES, GRABCARD, etc.) These particular acronyms are several

letters in length and require one to take their time in reciting each piece of equipment associated with each letter. Again, this generally works well while sitting at the conference table during the oral portion of the exam. However, ask something like this while in flight and applicants often get 6-7 letters into the acronym before their mind drifts to a point where some begin to start over and over. I have no science to back it up, albeit it may very well exist, but trying to recall information by means of an acronym with way too many letters can be difficult for many people while flying a helicopter.

Practical Use

What applicants seem to do better with is those acronyms that are shorter in length, 3-4 letters maximum; something that they can mentally rapid-fire at the appropriate times.

It was this observation of the "practical" use of acronyms that gave birth to developing 3 key acronyms of my own that I use on a nearly daily basis, outside of the exam room and as a professional pilot.

The first acronym that can save a lot of headache is "PAD". It stands for <u>P</u>ower, <u>Altitude</u> and <u>Destination</u>.



Whether air medical flying, law enforcement or any other type of flight profile getting from point A to point B in a safe and expeditious manner is typically the main priority. After takeoff, set Power to maximum allowable "cruise" power to ensure you get to the destination as quick as possible. Next, ensure you are at the correct Altitude necessary for the flight, taking into account obstacles enroute, airspace considerations, etc. Finally, ensure that you are correctly tracking to your **D**estination. All of this sounds simple in nature but air medical flying entails numerous distractions that must be mitigated. Any air medical pilot that hasn't found themselves a bit "off course" on one or more occasions would likely be fibbing.

Don't kick the Can

There has been debate about the safety aspects of Dual Pilot IFR flying compared to Single Pilot IFR helicopter operations. I can appreciate the crux of the debate but having flown single pilot in the IFR environment during air medical operations I can attest that it can safely be accomplished. I can also attest that helicopter single-pilot IFR flying can be a "handful" for the most skilled pilots; especially while conducting Point In Space (PinS) instrument approaches. This high workload environment brings me to the next acronym that I rely on a great deal in the single-pilot IFR arena. The acronym is "CAN" and I continually do a "CAN" check while flying IFR. This particular acronym, stands for Course, Altitude and Next.



Point in space departure procedures and approach procedures involve a lot of flying from waypoint to waypoint in rapid succession. To stay ahead of the proverbial curve required for these procedures try doing a "CAN check". Ask yourself, what is the correct Course I should be on? Am I on it? What is the correct Altitude I should be at? Am I at it? And finally, what is Next?

Where will my autopilot turn me next? What course and altitude should I expect at the next lea?

Respected and highly acclaimed fixed-wing instructor and author Rod Machado in his must have "IFR Survival Manual" summed up some necessary self-talk dialogue that he feels is necessary for safe instrument flying; it consist of three simple questions one should ask themselves. Where am I going? How do I get there? And, what do I do next? Following the CAN check can essentially answer these questions.

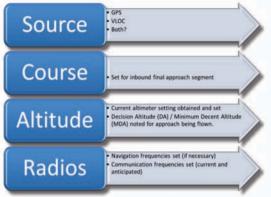
Some surprises in life can be great, like a surprise birthday party; to the contrary, some can be less than desirable. I can't think of one surprise I would like to get while in the clouds! Utilizing the CAN acronym can help prevent you from getting any unwanted surprises while in the high workload single-pilot IFR environment.

We all have scars

Like the previous acronym the next one I will discuss is also one that I frequently rely on during IFR operations. It can be used as a quick "go-to" for numerous scenarios including the follow-up to an inadvertent entry into instrument meteorological conditions (I-IMC) after basic rotordisc level procedures have been accomplished and you need to execute an instrument approach.

Additionally, this particular acronym (we are getting to it) is an excellent tool to utilize when you have set up an instrument approach in your GPS/VLOC receiver and things just aren't matching up with what you expected; a troubleshooting "tool" if you will. Several instrument rating applicants could have easily avoided a notice of disapproval on their flight exam had they used this one 4-letter acronym on the practical flight portion of their exam.

This final acronym is "SCAR" and it represents Source, Course, Altitude and Radios. The Source comes into play when you decide on what type of approach you are going to execute; is it GPS/RNAV based or is it a traditional ground based approach like an ILS approach? Or, is it



an approach that will utilize GPS/RNAV guidance for a portion of the approach and then switch to V/LOC mode? (the subject of a future article). The bottom line is, to fly an instrument approach correctly; you must be getting the appropriate information from the correct "source".

Next comes the Course. What is the inbound course for the approach you are executing? If it is a ground based approach (VOR, LOC, ILS, etc) you will need to set that particular course on your OBS, HSI or navigation display screen.

Altitude is next and for obvious reasons is critical to the successful outcome of an instrument approach for a plethora of reasons. You must know your decision altitude (DA) for the precision approach you are flying or the minimum descent altitude (MDA) that you can legally descend to for a non-precision approach. If you are flying an IFR certified ship you will most likely have a radar altimeter available and you should set it to the decision height (DH) for a precision approach as a backup reminder. But remember, the radar altimeter may and most likely will audibly alert you prior to reaching the actual decision altitude (DA) where terrain leading up to the approach end of the runway is less than level. This is elementary, but it's worth underscoring here; obtaining and setting the correct altimeter setting is paramount for safety.

Finally, we come to Radios for the last word in our list. It includes setting the radios for the appropriate navigation frequency for those ground based approaches you may be using. And finally, setting the needed and anticipated communication frequencies for any type of approach to include ATIS and AWOS frequencies in the standby.

What were we talking about?

It has been said that the memory is one of the first things to go. I don't even remember what this article was supposed to be about! In all seriousness, acronyms can be a real life saver, literally and during a flight exam for an applicant with checkride-itis. Feel free to use what has worked for me as outlined in this article. but remember it has to work for you, and the laws of acronyms (if there was such a thing) says that you can tweak anything you need to make it work for YOU. As with so many things in life, what goes in has a direct effect on what comes out. Make it a good one!



A Police Pilot and Tactical Flight Officer (TFO) navigate through the busy airspace over Los Angeles, CA.