



**STAN-EVAL NOTES**  
**CIVIL AIR PATROL VIRGINIA WING**  
**UNITED STATES AIR FORCE AUXILIARY**  
7401 Airfield Drive  
Richmond, Virginia 23237-2250  
August 2012



**Tail Strike Avoidance Training Update:** As previously discussed, we are placing special emphasis on tail strike prevention training. All current VAWG C182 G1000 pilots are required to take this one time training which consists of ground and flight training with a CAP Instructor Pilot in a C182T. There are no exceptions – everyone who wants to retain their flying privileges in G1000 aircraft in VAWG must take the training by 31 October 2012. A syllabus is available on the VAWG Web page as well as a suggested slide deck for the ground training. We have also added a frequently asked questions document on the paperless wing. Limited funding for this training is now available. Requests should go to Major John Payne at Wing.

You are not required to take this training if:

- You are not a C182 G1000 pilot, or
- You are not part of VAWG, or
- You no longer want to retain your C182 G1000 privileges, or
- You become a new VAWG C182 G1000 pilot after 1 August 2012, or
- You have already had the tail strike avoidance training.

Check pilots must include Tail Strike Avoidance as a focus area in any Form 5 (e.g. in any aircraft type) given in VAWG. This does not mean that the Tail Strike Avoidance training must be included in a Form 5 check ride. That is a onetime training requirement. But it does mean that Tail Strike Avoidance be a topic of at least the oral portion of the Form 5.

**Form 5 Clinic:** Our planned funded Form 5 clinic in DAN on 21 July has been postponed due to funding issues. We have tentatively rescheduled this to 20 October. We will have several check pilots and instructor pilots to help you get your next Form 5 done. This clinic is open to any VAWG pilot needing a Form 5 check ride.

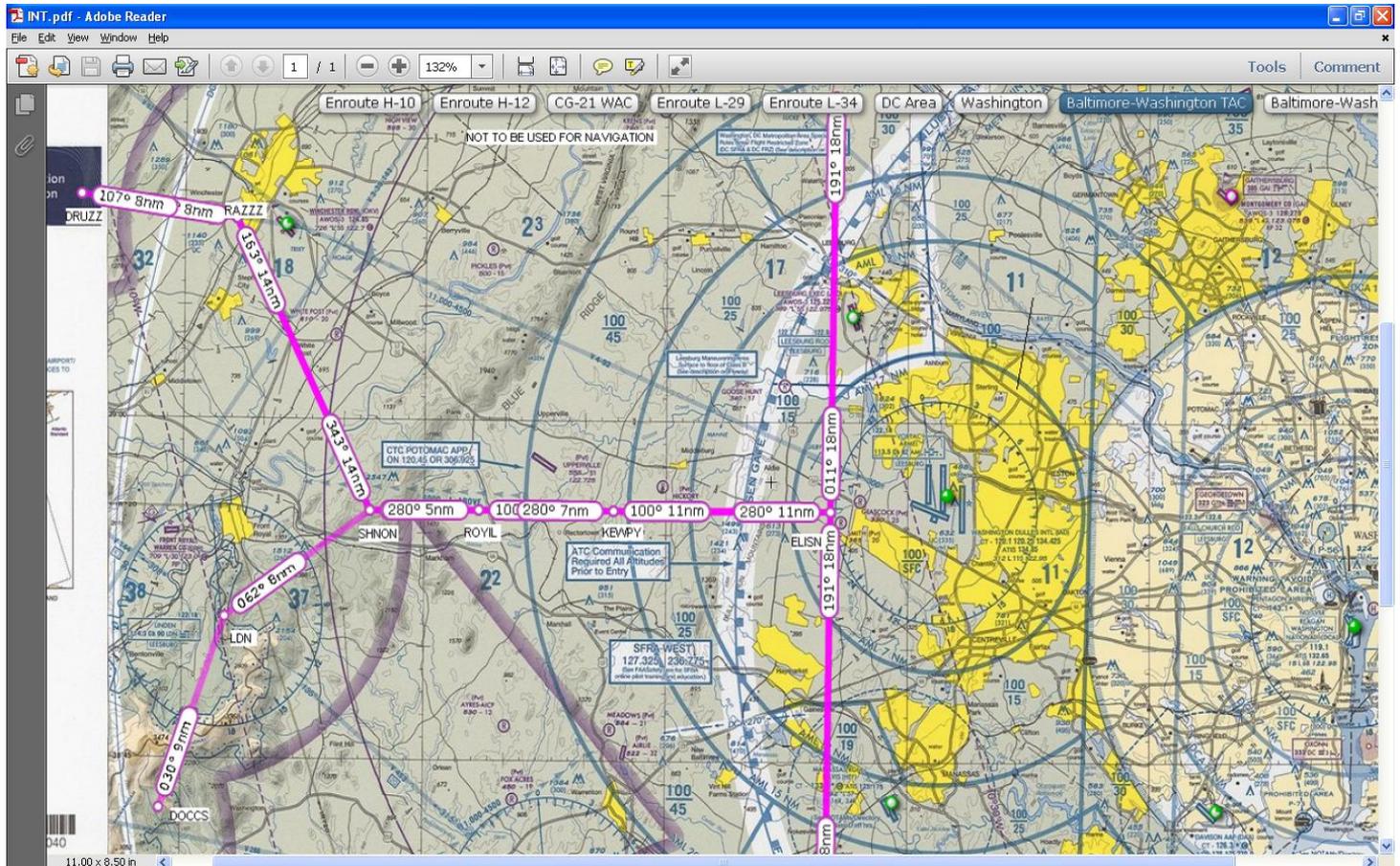
**New NHQ Stan/Eval Chief (NHQ):** Mr. Joe Piccotti has been selected to serve as the Chief, Aircraft Operations and will lead the NHQ Stan/Eval function. Mr. Piccotti comes to the operations directorate with over 25 years of CAP and active duty Air Force flying training in addition to his academic education and professional development experience.

**Post Sortie Data within 72 Hours:** As a reminder, CAPR 173-3 requires that all sortie data, including cost data, must be entered into WMIRS within 72 hours of sortie completion. Timely sortie data entry is critical to ensure remaining funds can be released to other missions during this high ops tempo period. It also ensures that you don't have to pay out of your pocket which happens if you don't get the paperwork in place in time.

**Who the Heck is Roger? (Capt S. Parson):** If it isn't true, it ought to be. Ever wonder why aviators say "roger?" A very plausible explanation arises from aviation's early days, when the emerging industry adopted customs, procedures, and terms from more established industries. One such industry was the telegraph business, which of course operated in Morse code. Given the uncertain quality and reliability of such transmissions, standard procedure upon successful receipt of a message was for the receiver to transmit a single letter – "R" – to signify that "I have received and understood your last transmission." Voice communications being similarly subject to garbles, early aviators and their ground-bound interlocutors needed

a similar protocol. As it was not possible to transmit a Morse coded "R," they did the next best thing by transmitting the word "roger," which was at that time the phonetic alphabet version of the letter "R." Then, as now, it is simply an acknowledgement that "I have received and understood your last transmission." So now you know. And "R" you not grateful that aviation adopted this practice before the phonetic alphabet "R" changed from "roger" to "romeo?"

**KIAD Arrivals Changing (SM M. Kemp):** Pilots flying in Northern Virginia should be aware that arrivals into IAD from the west are changing effective July 26. The current SHNON arrival from the west which brings the airliners in just south of Upperville is changing. The new Arrival (GIBBZ) brings the airliners in further north and south of Upperville than what you may be used to seeing, so keep a sharp eye out. Most of the time the big iron won't be below 6,000' until within the class B airspace, but may be lower if cleared for the "visual" into IAD.



**Working with Ground Teams (Capt M. Conner):** One of the challenges an aircrew has is coordinating properly with ground teams (and vice versa). Air crews use a very different language and different ways of navigating when compared with ground teams. Telling a ground team that there is something interesting 30 DME miles on the 270 radial from FAK isn't very helpful. Trying to translate this into something a ground team can use can be a challenge.

Some things to keep in mind when working with ground crews:

- Ground teams on foot move slowly, especially in rough or difficult terrain.
- A ground team in a van moves a little faster, but is constrained by roads and traffic.

- Ground teams can usually work in worse weather than you, but not always. Hazardous road conditions may prevent ground teams from deploying. Other adverse weather (e.g. extreme heat, cold, storms, flooding) may limit ground team mobility.
- Ground teams often work in UTM coordinates but hand-held GPS units can nearly always convert UTM coordinates to latitude and longitude.
- The sight picture they have of the area is radically different from yours. What may be obvious to you may be invisible to them and vice versa.

Some guidelines for working effectively with ground crews include the following:

- Get ground qualified yourself so you have a better feel for what it's like to be part of a ground operation.
- Review ground signals. We usually don't need this but in a real crisis, they can be very handy.
- If possible, speak directly with the ground teams you will be working with before you depart to go over all the necessary coordination. This will avoid a lot of confusion once you are in the air.
- Do a radio check with the ground team before departure or as soon as you know which team you will be working with.
- Bring roadmaps with you so you can translate your position into landmarks they can relate to. The DeLorme maps are very useful as they are easy to correlate to grids and have good details. If you are really good, you can give them a sense of what roads or trails to use to reach the objective. A ground team in a vehicle moves much faster than a team on foot so helping a ground team get close to a search objective in a vehicle can dramatically decrease the time required to reach a search objective and begin providing aid to survivors.
- Bring a lat long to UTM converter with you (your iPad, iPhone, or Droid have these apps). This makes it easy to give and receive positions in UTM coordinates.
- If you use lat long, make sure you are using the same format. For example, is it DDD MM SS (degrees, minutes, and seconds) or DDD MM.M (degrees, minutes, and decimal minutes) or something else? This has been a source of great confusion.
- Make sure the same map datum is being used by air crews and ground teams. This should be worked out at base, but it is best to check and be certain that everyone is using the same reference.
- Let ground teams know a little in advance when fuel or other factors will require an air crew to leave a search area. If possible, let ground teams know when they can expect another air crew and the call-sign of the new aircraft in the search area.
- Let ground teams know about expected weather changes. Teams in a valley or deep woods may have little or no warning of approaching storms.

And of course, if you are the pilot, use your observer and scanner. You need to fly the airplane vice do the coordination!!!

**Hold for Release! (LtCol G. Jackson):** Getting your IFR clearance at a towered airport is pretty straight forward. You call clearance delivery, copy it down, and then call ground for taxi. But having the clearance doesn't mean you are cleared for takeoff. Only the tower can clear you for takeoff and only after you are cleared for takeoff is your clearance "active".

At non towered airports getting a clearance is a little more troublesome. We usually have two options.

1. Takeoff VFR and get the clearance in the air. This is usually the most efficient but requires you to remain VFR until you contact ATC, get a squawk code, and are cleared. Obviously, if you have IFR conditions on the ground, this is not an option.
2. Get your clearance on the ground. How you get it depends on the particular airport. There may be an RCO that you can get it through or you may have to talk to flight services on the phone to get it. But in EVERY case, a clearance on the ground will end with the phrase "Hold for release".

“Hold for release” just means you are not authorized to takeoff (yet). You must be given a release time and a void time. After the clearance is given, a typical exchange might be “You are released 1205Z. Void time 1215Z. If not off by 1215Z, call xxxx by 1230Z. Time now 1200Z.” What this means is that it is now 1200Z but you are only allowed to takeoff in the window from 1205Z to 1215Z. If for some reason you don’t get off at that time, you need to call xxxx to let them know. Otherwise they have to assume you have crashed and will initiate search and rescue procedures.

What’s going on here? When the clearance is given, that just specifies the initial altitudes and route to be flown. It’s not authorization to takeoff. What you are not seeing is all the local IFR traffic that ATC must keep you clear of. The takeoff window is specified so that the area around you will be clear when you take off and allows enough space and time for you to be radar identified so that ATC can assume responsibility for keeping you clear of other traffic.

If you do not hold for release but decide to takeoff outside of the window given, you are putting yourself and others in danger of a mid air collision. Taking off when told to hold for release would be a serious error and could result in your losing your flight privileges assuming you survive.

The temptation might be that you are given a hold for release but then realize you are VFR and could takeoff. Once you have been given a hold for release, the only way for you to take off VFR outside of the time window given is to call ATC (or flight services) back and cancel your request. If you foolishly take off VFR when given a hold for release and call ATC after takeoff, don’t expect a pleasant response from ATC.

**Crew Resource Management CAP Style:** We’ve all been trained to use crew resource management (CRM). There are many excellent articles and guidance for CRM from the FAA, AOPA, and other organizations. CRM is important to CAP because we often undertake complex missions that require close coordination amongst the pilot, the observer, the scanner, mission base, ground crews, and other aircrews. CAP has made CRM a little easier because the roles of each crew member has been somewhat defined. CRM should be part of the mission brief before any sortie.

The figure below shows the expected crew for typical missions we fly (this is not complete but representative).

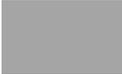
	Pilot	Co Pilot	Observer	Scanner	Archer Op
Proficiency Flying	Required	Optional			
Check Ride (F5/F91)	Required				
Transport Mission	Required	Optional			
ELT Mission	Required		Required	Optional	
Visual Search Mission	Required		Required	Required	
Photographic Mission	Required		Required	Optional	
Archer Mission	Required	Optional	Optional		Required
HLS Mission	Required		Required	Optional	

 Required
  Optional

The crew composition is usually determined by the mission. Once you know what the crew is, you must consider what tasks must be done and who should do them. The table below shows typical tasks and assignments. For CAP, there are typical crews and typical assignments that makes CRM fairly straight forward. We should do what makes sense for the mission at hand. There are always exceptional circumstances that may require we do things differently. But in any case, every crew member must be aware of what is expected, accept their task assignments, and be qualified to do them.

	CAP Tasks and Assignments										
	PIC	Nav	ATC Comms	CAP Comms	Planning	PreFlight	PostFlight	Msn Mgt	Logging	Scanning	Photos
Pilot	Primary	Supporting	Primary	Supporting	Shared	Primary	Shared	One of these	Supporting		
Co Pilot		Supporting	Supporting	Supporting	Shared	Supporting	Shared	One of these	Supporting	Supporting	Supporting
Observer		Primary		Primary	Shared	Supporting	Shared	One of these	Primary	Supporting	Primary
Scanner					Shared	Supporting	Shared	One of these	Supporting	Primary	Supporting

	Primary		Supporting		Shared		One of these
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**Government Accountability Office (GAO) Study of CAP:** The GAO, the investigative arm of the U.S. Congress, is conducting a congressionally mandated study received from the House Appropriations Homeland Security (HLS) Subcommittee to evaluate (1) CAP's current missions and resources and its capacity to take on additional HLS related responsibilities; (2) the extent to which CAP and the Department of HLS currently coordinate missions and activities; and (3) the extent that CAP and the Department of HLS have assessed the potential costs, benefits and feasibility of using CAP more for various missions. This study is ongoing and will involve site visits and interviews at the wing and squadron levels. CAP units will be notified in an appropriate manner from CAP NHQ of any impending visits.

**Articles for the VAWG Stan Eval Newsletter:** We are always looking for brief articles of interest to VAWG pilots to include in this newsletter. CAP has many very experienced pilots and aircrew who have useful techniques, experiences, and tips to share. Please send your contribution to [steve.hertz@ngc.com](mailto:steve.hertz@ngc.com). If your article is accepted, you will get a pro rata share of the VAWG Stan Eval Newsletter subscription fees.