



U.S. CIVIL AIR PATROL
SQUADRON 442
KERRVILLE, TEXAS

MONTHLY NEWS

“ReCAP ping what you need to know February 2024”

Maj THOMAS KING CAP
SQUADRON COMMANDER

Maj GEORGE OTTO CAP
ADVISOR TO THE COMMANDER

LTC JOHN MURRAY CAP
DEPUTY SQUADRON COMMANDER

1st Lt. MARK DEL TORO CAP
DEPUTY COMMANDER FOR CADETS

Capt DIANN BLACK CAP
ADMINISTRATION OFFICER

Maj JOHN DORIE CAP
SAFETY OFFICER

COMMANDER’S CORNER (Tom King)

Tom welcomed those in attendance at last night’s February squadron meeting, held in-person at the KERV conference room as well as via Zoom. Tom noted that he will be in Colorado visiting his older son when the squadron meets in early March; John Murray (Deputy Squadron Commander) will lead that meeting. This next squadron monthly meeting is scheduled for Wednesday, 6 March 2024 and will be conducted both in-person and via Zoom

DATES & EVENTS TO REMEMBER

WHAT	WHERE	WHEN	WHO
February ES Training Exercise	Kerrville Airport (KERV)	Saturday, 17 February 2024	ES Qualified members
Garmin 1000 Nxi training	Kerrville Airport (KERV)	Monday, 19 February 2024	Squadron pilots
Squadron Monthly Meeting	KERV Conference Rm + Zoom	Wednesday, 6 March 2024	Squadron members and guests

For additional information on these activities, contact either Tom King (210-467-7678) or John Murray (830-285-3248).

ADMINISTRATION (Roberta Himebrook and Tom King)

Roberta reminded everyone to review your CAP Form 45 information and get any changes in that information to her.

Roberta said that the following individuals have earned the basic Red Ribbon or a multiple year attachment for years of CAP membership: John Dorie: 15-year clasp; Dan English: 2-year ribbon; Dennis Finuf: 20-year clasp; Joe McRorey: 35-year clasp. Congratulations to each of these members of the squadron!

TXWG Annual Conference will be held in San Antonio, Texas 2-4 May 2024. The conference will be held at the Marriot San Antonio Airport, 77 NE Loop 410. Group V will play an active role in helping conduct the conference. Our assistance will be requested. The annual CAP National Conference will be held in San Antonio, Texas 15-17 August 2024. This will be a great opportunity to attend a national conference close to home! More on this in the next couple of months.

The squadron bank account is approximately \$7,000 which includes a recently deposited Wreaths Across America check for \$1,500.

OPERATIONS/EMERGENCY SERVICES (Bob Hamm)



Bob said that he continues planning for this month’s ES (SAREX) training mission including the scheduling of air sorties. A total of five SAREX sorties are planned for Saturday, 17 February, operating out of KERV. The plan is, in part, to conduct a route search by magenta line and using cross-track error. Each sortie will also include other search patterns plus AP.

On 19 February, Mike Duc will bring the near-new C172 at the San Marcos Airport (KHYI; N592CP) and Ed will bring the new C172 at the Stinson Airport (KSSF; N271CA) to Kerrville in order to qualify our pilots with the Nxi and Electronic Stability Protection (ESP) systems in these aircraft. Tommy Hayes is working with Joe Sorensen to get qualified in the C172 as well as its Nxi system. Once qualified, these pilots will conduct training on the use of the Nxi and ESP systems for the other air crew members of the squadron.

Bob and Tom King will take N794CA down to Corpus Christi International Airport on 20 February to participate in the Counter Drug/Padre Island National Seashore mission.

Planning for the spring 2024 annual eclipse mission continues this month and in March. This annual eclipse will occur on 8 April 2024. Our participation in this mission will be very similar (but not identical to) the fall eclipse mission last October 2023. Bob, Mark and Tom continue working with the Kerrville-Kerr County Emergency Management team. Our air crews will again provide aerial reconnaissance and aerial photographs along major highways and intersections as well as streets and visitor viewing areas to support Kerrville and Kerr County efforts to analyze crowd sizes and observe critical infrastructure before, during and immediately after the April eclipse. There will be a qualified aerial photographer on every mission to obtain customer requested photographs.

The 166th AVN BDE training exercise (U.S. Army ATC training) will take place in May. Bob and Tom will fly in this exercise on 5 May; Hayes together with either Gary Black or John Murray will fly in the exercise on 11 May. Each day's participation involves flying first to Temple, Texas. Then over to Ft. Cavazos (formerly Ft. Hood) where each CAP aircraft will fly continuously around the traffic pattern to give the Army ATC trainees practice working with multiple aircraft. The exercise will also include diverting a single CAP aircraft at a time to conduct a PAR approach under the control of these Army ATC trainees.

AIRCRAFT MAINTENANCE (Tommy Hayes)

The squadron airplane (N794CA) airplane was not flown during January and thus had 0 flight hours. The total number of (Hobbs) flight hours on N794CA for FY2024 is currently 54.5. The airplane is once again airworthy with a new mixture control cable assembly. The stand-by altimeter was also replaced making the airplane both VFR and IFR capable. The next 100-hour inspection will be due in a little more than 20 hours (tach).

CADETS (Tom King for Mark Del Toro)

Because of weather concerns and travel, the AE presentation that Tom and Bob were to give last month will instead be given on Monday, 19 February. Squadron AE Officer Scott Purdy will also participate in this activity. The topic is "Use of Aviation Sectionals and Navigation". The intent is to coordinate this presentation with near-future cadet orientation flights ("O-flights").

There will be no cadet orientation flights sooner than 23 February. Bob is working with Marquel McNeill, squadron O-Flight Coordinator, on schedules for cadet orientation flights late this month or in March.

Scott Purdy is planning another CAP-provided STEM kit activity with the cadets for later in the month.

Mark Del Toro and the cadets made a road trip to Temple to participate in orientation flights in a U.S. Army Blackhawk helicopter on Saturday, 20 January. All said it was quite an experience!

The cadets are also planning a road trip to Houston and the NASA Space Center on 24 February. They are also working on a "PICO balloon" launch, the date yet to be determined. A PICO balloon is an ultra-lightweight plastic balloon suspending a tiny, lightweight amateur radio transmitter. Sounds like a very interesting project for the cadets!

If you have any interest in participating on any of these cadet activities (or other cadet activities), please contact Mark Del Toro, Deputy Commander for Cadets. Your participation would be greatly appreciated!

SAFETY (John Dorie)

John discussed the importance of airspeed and stalls. He defined various airspeeds such as indicated airspeed, calibrated airspeed, etc.



Lift keeps an airplane airborne. Lose that lift; stop flying. That's really only good when you're inches above the runway surface and landing the airplane. Stall speed refers to the minimum speed at which an airplane must fly to produce lift. Airplanes produce lift in response to the air moving over/under their wings. At high speeds, the fast-moving air "lifts" the airplane so that it doesn't fall to the ground. At low speeds, on the other hand, the lack of air movement will result in little or no lift being produced, in which case the airplane may stall.

Regardless of their respective size, airplanes must stay within a certain angle to maintain lift. If they exceed this limit, their lift will decrease. This can lead to the airplane stalling. When an airplane stalls, it will no longer

produce lift. As a result, the airplane's altitude will decrease as gravity pulls it down. Pilots can prevent stalls, however, by staying above their airplane's stall speed.

All airplanes have a specified stall speed. Stall speed is simply the minimum speed needed for an airplane to produce lift. If an airplane drops below its specified stall speed, it will no longer produce lift. Stall speeds vary depending on many factors, some of which include the airplane's weight, dimensions, altitude and even the weather dimensions. Regardless, airplanes must fly faster than their respective stall speed to maintain lift.

Stalls occur when the angle at which an airplane flies exceeds a limit. Being that angle attack is responsible for stalls, you might be wondering why speed is important. Well, speed affects an airplane's angle of attack. If an airplane flies slowly, it will require a greater angle of attack to produce lift. Eventually, the required angle of attack will be so excessive that the airplane won't generate lift. Thus, pilots use stall speed to ensure that they don't slow enough that it causes a loss of lift.

The airplane's wing always stalls when it exceeds its critical angle of attack. And that can happen even if the airplane is pointed straight down and approaching VNE. OK, so what do the stall speeds published in the pilot's operating handbook mean? These only apply for the stated conditions: typically level flight, maximum gross weight, and most forward center of gravity, with flaps retracted (VS1) or in the landing configuration (VS0). Factors such as total weight, load factor, power, and center of gravity location affect stall speed, and sometimes significantly. Bottom line: watch your (stall) speed and angle of attack; keep on flyin'!



Remember that TXWG mandates that all members must participate in the monthly safety briefing prior to participation in any squadron activity including air operations. This participation must be documented. Your signing in at the monthly squadron meeting completes this requirement. You need no more safety briefing for this month. If you cannot attend a particular monthly meeting, respond "RECEIVED" to the e-mail to which the monthly newsletter is attached. And you'll get credit for the safety briefing.