



SERVING THE SACRAMENTO COUNTY SHERIFF SINCE 1941

Sacramento County Sheriff's Air Squadron Newsletter

THIS MONTH'S MEETING

NASA Ames: Working on the future of flight

Just when we thought our Hangar 1 tour couldn't be beaten – along came our NASA visit to Ames Research Center in Silicon Valley. The visit was fantastic.

NASA's work in wind tunnel testing and computational simulations are leading to saving millions of gallons of jet fuel brought about by innovative efficiency measures.



As our group walked through giant wind tunnel buildings, engineers were working on propellers which are being designed to push the boundaries of flight characteristics and noise levels.

Even Artemis I's heat shield went through performance testing at Ames prior to its recent flight around the Moon.

Ames is a restricted access site and not usually available for group tours. So, our Squadron was primed to witness some one-time views. Seeing the largest wind tunnel in the world did not disappoint. Ames' subsonic wind tunnel can test aircraft with wing spans up to 100 feet.

Our group was dwarfed by a tunnel 180 feet high and 1,400 feet long. Standing in front of six 15-bladed fans was like seeing a four-story building towering above our heads. When we entered the fan drive room, we faced six 22,500 -horsepower motors!

Did we come to realize Ames was a national technological resource? Yes, definitely.

The Ames wind tunnels have contributed to the development and advancement of the aviation industry and space exploration. They are key resources facing increasingly fierce international, commercial, and technological competition.

Our thanks to **Past Commander Ken Lux** for arranging this tour.

Dale Terry, Newsletter Editor

Sean Duryee

CHP Commissioner

May 31, 2023, 5:30 pm

KSAC Squadron Headquarters



This month we are pleased that Gov. Newsom's newly appointed CHP Commissioner will speak at our May meeting.

To accommodate Sean's busy schedule, our meeting will be held on May 31st, rather than the usual 3rd Wednesday.

AROUND THE SQUADRON



By Ron Richey

What kind of airplane is that? As our group of Air Squadron members were walking along the outside perimeter of **Hangar 1 on Moffett Field**, (tour arranged by **Past Commander Dale Terry**) a few members spotted a forlorn looking airplane sitting behind a fenced in lot.



It turns out the airplane is **NASA's Quiet Short-Haul Research Aircraft**...aka...**QSRA** designed to navigate inner-city airports in dense population centers. In the late 1970's the concept of small short runway airports called **STOLports** could be built around the country as feeders to the big city airports was being considered.

The performance of the **QSRA** had an approach speed of 65 knots and a takeoff weight of 60,000 pounds, with a takeoff ground roll of 664 feet. Cruise speed was only 160 knots. **FLYING's** online magazine has the complete story on the development of the QSRA. Check it out.



Did **Matt Armenta** really call the **road warriors who drove to Moffett for the Hangar 1 tour**; to brag how it only took the various airplanes and crews that flew over.... about 35 minutes to make it back to Sacramento and how they have already had a fine steak dinner and **ACTUALLY** asked for a position report on the ground pounders?

After over three plus hours on the road and just crossing the Yolo Bypass, it took **Jim Wilson, Gene Winther and John Mitchell** to keep **Ron Richey** from throwing **Kevin Phillips'** (driver) cell phone out the window with Matt chuckling in the background. After spending over **SIX AND HALF HOURS** driving over and back from the Bay Area..... humor was in short supply.

Chuck Asbury missed the Moffett trip due to the fact that he and wife **Reggie** were spending a couple of weeks in **Paris**. His absent excuse better be written in French.



Need to update your CCW? After going online and filling out the appropriate form...your information finds its way to

Kevin Phillips desk for review and background checks.

If you meet the necessary interview, background checks, gun range and safety standards set by the Sheriff's Office and confirmed by Kevin...you will be invited by mail to pick up your CCW permit.

Joe Williams and **Jerry Blalock**, both volunteer their time helping to process your application through the Sheriff's Office CCW protocol. Joe handles interview assignments on Mondays, Jerry hands out new and renewal permits. He does this after checking for printing errors and fingerprinting the applicants. Kevin provides professional guidance to those who work in this area.

Being a member of the Air Squadron does not give you any extra points or special consideration.....Kevin and crew run a very tight operation.

Kelly and **Jana Couch** are in the final preparation stages for their appearance at annual **Winnemucca Balloon Festival** held mid-May. Their balloon **Sierra Blue** is listed on the brochure for the event (top row, far right).



Safety Brief:

Automation Bias



By Hunter Jefferson, CFII

Ever felt behind the aircraft or that the glass cockpit is capable of so much more than you understand?

This can lead to a feeling of complacency and relying on the systems.

Nearly every new aircraft is equipped with some sort of automation system or glass cockpit and older aircraft are constantly being upgraded with the latest technology.



I was recently flying on an instrument cross country with my flight instructor using CFI's Technically Advanced Aircraft (TAA), Cessna 172. The aircraft is equipped with a Garmin 750 and autopilot.

I elected to fly the TAA aircraft to better prepare me for a transition from flying helicopters to flying in the airlines. On the day of my cross-country, the winds were turbulent and gusty, leading me to rely heavily on the autopilot coupled with the 750.

Relying too much on the autopilot and systems onboard is known as automation bias.

According to the FAA's AC 61-98D, "Automation bias presents a new breed of accident by creating the potential to erode a complacent pilot's manual flight skills. Automation bias refers to the willingness of the pilot to trust and utilize automated systems while feeling that the automation is more capable than the pilot."

In a 2019 Aircraft Handling and Manual Flying Skills report, IATA said "the continuous use of automation does not strengthen pilots' knowledge and skills in manual flight operations and in fact could lead to degradation of the pilot's ability to quickly recover the aircraft from an unusual attitude."

So, what can we do to help us deal with automation bias?

Here are some tips from the FAA.

1. Fly manually on VFR weather days to maintain manual flying skills.
2. For instrument training, become comfortable flying instrument approaches and holds without the use of autopilot.
3. "Manage automation by making use of all systems, cross-referencing data provided by the various systems, and monitoring and managing flight progress such as waypoints or checkpoints."

This technique enhances our situational awareness which in turn will help us identify any automation failure if one should occur.

In an automation failure, the pilot should be able to address the failure in any situation.

So now that the weather is nice, with very little winds, head out and practice some approaches -- manually!





Commander's Column:

After April showers

Happy May!

I hope everyone has been able to get out and enjoy this nice weather after having such a soggy start to the year!

Excitement is building on great upcoming events.

On May 21st, the Squadron will be represented along with the SSO at California Capital Airshow's Positive Altitudes event. The Airshow uses this yearly opportunity to introduce students to the world of aviation.



Andrew Bates and Lisa Simpson are coordinating our participation. We will have a nice banner; Squadron stickers and other swag kids will love.

It would be great to have members provide a static display of owned aircraft. Are you available? Contact Lisa or Andrew.

On May 31st, we have our monthly hut meeting. This date is a departure from our standard 3rd Wednesday due to having to work around our guest speaker's busy schedule. We are fortunate to have the newly appointed commissioner of the CHP, Sean Duryee, as our guest speaker for this meeting!

On June 29th, both Shawn Britton and I will represent the Squadron at the Asian Peace Officer dinner/banquet.

I have been in contact with Josh DeJesus at the Sheriff's Department, and this is a great opportunity for our Squadron to achieve more visibility with other local law enforcement agencies. Josh has explained that all the top brass from the SSO, SAC PD, Elk Grove PD, some LEO from Yolo County and even our District Attorney will be there.

Our attendance will highlight Squadron involvement with the Sheriff's Office and specifically our community outreach goals. This will be a fundraising event for the APO, and they'd like us to participate by offering a flight to the lucky winner of the raffle. I'm offering up a Bay Tour flight by one of our Squadron "aces."

Coming up on September 19th is our annual Fleet Review with Sheriff Cooper. Ken Lux is working on engaging a top-notch speaker.

Each year, our Fleet Review involves significant planning. Vice Commander Shawn is working with me to coordinate tasks and we are seeking an interested member who would like to share the Air Boss hat with Lisa Simpson this year.

There are some exciting events in planning now ...

Later this year we are thinking of a flyout trip to either (or both) Mojave Air

and Space Port or SpaceX in Hawthorne, CA.

Then to wrap up our year we are planning a "Family Day" in November – weather permitting. Our goal is to host a BBQ at the Hut. 2023 will be a terrific Squadron year and it will be great to share our successes with loved ones and friends.

I hope that gives everyone an idea of where we are going this year. If you have any additional thoughts, feel free to reach out!

Thanks!

Doug Hunting
Commander
Sacramento County Sheriff's Air Squadron
www.sacairsquadron.com



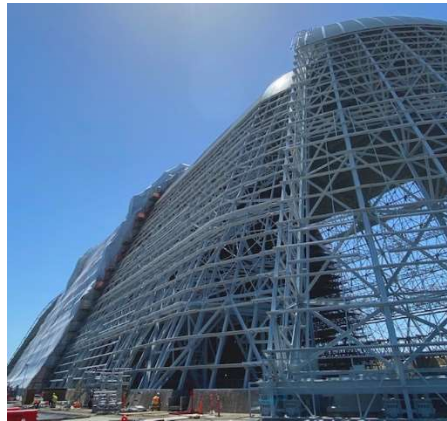
I am really excited by the work being carried forward by our Scholarship Committee. **Vice Commander Shawn Britton** reports that an initial applicant field of over 20 youth has been narrowed to 8 candidates who will be interviewed on May 13th.

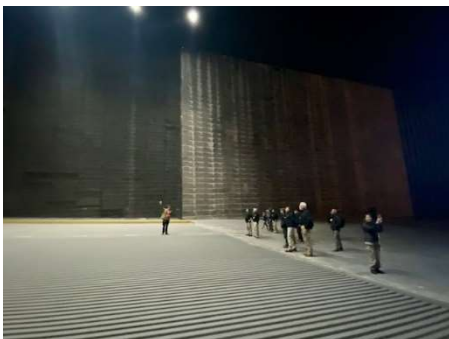
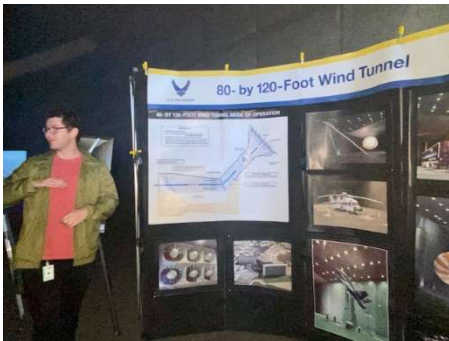
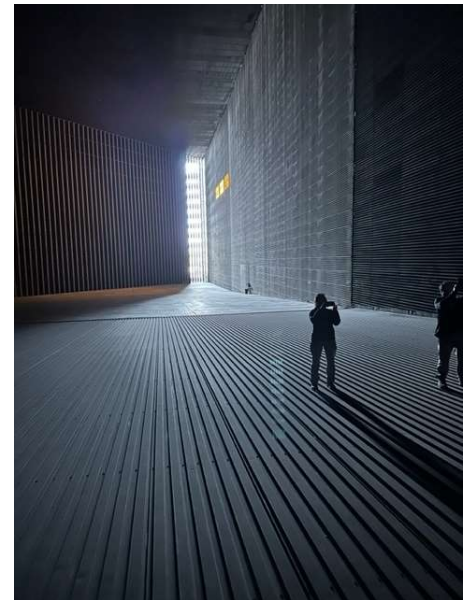
Results from these interviews will be used to select finalists who will be put forward to our Executive Committee for financial awards.

Stan Stewart and Dale Terry will serve as the first round of mentors to the award winners.



Photos from Hangar 1 by Tim
Pinkney





Photos from Ames Research and
Moffett Air Museum by Tim
Pinkney and Dale Terry