

SERVING THE SACRAMENTO COUNTY SHERIFF SINCE 1941

Sacramento County Sheriff's Air Squadron Newsletter

THIS MONTH'S MEETING

July 1911:

This month, 112 years ago, at the White House

Over time two pilots have attempted an unauthorized White House landing. One pilot landed there -- with permission.

The date was July 14th, 1911, when Harry Atwood, a Wright Flying School graduate, visited President Taft by landing his Wright Flyer B on the South Lawn.

Atwood had traveled from Boston to Washington, DC. At the time, it was the longest distance ever traveled by airplane. He had only learned to fly three months previously.

The next day, the Washington Post carried the landing news.

"Sailing over trees and shrubbery with the easy grace of some great creature from the skies, Harry Atwood called upon President Taft in the executive's back garden yesterday. He received from the President a medal presented by the Aero club of Washington for completion of a flight from Boston to Washington."

"Atwood's feat was performed for an exclusive few who had gathered near the southern portico of the White House. He received congratulations from the President, officers of the Aero Club, and army aviators."

"Atwood landed within 10 feet of the path that skirts the White House lawn. President Taft had been watching intently, his eyes shaded by his hands, and with a beaming smile welcomed the aviator, as the aircraft came lightly to earth."

"After his flight, Atwood rested for a moment before leaving the machine, spectators crowded around him. Among the first to reach Atwood was his mother, who was escorted to the side of the machine. Mrs. Atwood's eyes were filled with tears as she embraced her son."

The history of flight is amazing!

Dale Terry, Newsletter Editor

Brandon Luke

Chief of Police

Rancho Cordova

July 19th, 5:30 pm

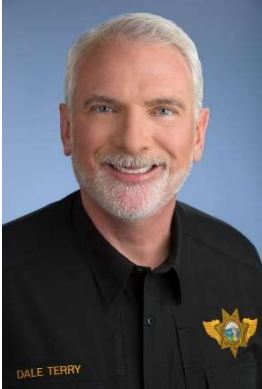
KSAC Squadron Headquarters



Brandon Luke is well known to our Squadron from his prior role as Assistant to the Sheriff. Now, he serves as Chief of Police Rancho Cordova.

He is a 28-year veteran of law enforcement experience, beginning as a State Trooper with the Nevada Highway Patrol.

FRIENDS OF THE SQUADRON



By Dale Terry

(Regular columnist Ron Richey is taking two months off from his regular column. He will return next month.)

Ivan Eakle has been a fixture at KSAC for many years. During that time, he has performed maintenance on many Squadron member's aircraft.

Members trust him with their aircraft and for good reason. Ivan is a "Master Mechanic," having been recognized with the FAA's Charles Taylor award. This award, named after the Wright Brother's mechanic (he developed the Wright's first engine) is considered the top aviation maintenance status in the U.S.

Ivan grew up in Woodland, CA graduating from Woodland High in 1956. Working with his dad in the crop-dusting business, he worked summers as a field flagger. Ivan says, "I have more time in a Stearman hopper than anyone in the country." He rode in the hopper as the team flew from field to field – so that Ivan could serve as flagger.

Later, he attended Sac City College's aviation maintenance program, where only 3 of the original 25 students graduated from his A&P class. This was the first year that jet engine technology was included in the A&P program.

He began his maintenance career at the now gone Capitol Sky Park, located in

West Sacramento, and built by Bob Watts & Jack Rich. The airport was just across the river from downtown Sacramento and served agricultural, recreational, and aerial surveying business.

Ivan worked for Capitol Sky Park, Inc. the on-site FBO. Later, when Capitol's business was to be relocated at KSAC, Ivan turned off the hangar lights and began his career at Capitol's operation at KSAC. He later became a VP in the company.



In the late 70's Ivan bought an existing mobile maintenance company at KSAC from Ed Dueshain. Sacramento County's airport rules were later updated, and Ivan was required to obtain office business and shop space in addition to mobile operations.

Subleasing hangar space from past Squadron member Byron McClusky, Ivan began what we now know as Ivanair.

After all these years of maintenance, which aircraft are the most difficult to work on? Ivan says, "high performance Mooneys and Aerostars are rough – they are guaranteed 'knuckle-busters' given their tight cowlings."

What aircraft does he love to fly? He says' "The F33 and V-tail Bonanza's are my favorites."

Ivan has recovered downed and broken aircraft from all over the U.S. and

Mexico. "During the national fuel shortage, a pilot was flying in Mexico and ran into fuel starvation. He landed OK but when I went down to recover the aircraft, the Mexican police told us there would be a fee to be paid before departure. The "bite" was due to taking a worker away from his job. How so, I asked? Well, the policeman said that due to high winds a worker was required to sit on the airplane wing to hold it down. So, the worker was not able to work at his regular job. The "bite" was paid, and we returned the aircraft to Sacramento."

Picking up an airplane which had gone down in central Nevada due to mechanical trouble, Ivan tells the story that "I had repaired the aircraft after a long day of labor. I told the pilot it was good to fly. 'No way,' the pilot said. 'You fixed it, you fly it back to Sacramento.' I was bone tired, but I jumped into the airplane and made it back home."

Past Squadron member Hardie Setzer was one of Ivan's regular customers. Ivan recalls that Hardie's avionics issues were legendary. The Richey family and Chuck Asbury also provided business for Ivan's operations.

What does the future of aviation maintenance look like? Ivan reports that parts availability is still a major issue following COVID factory closures.

Is aviation maintenance still fun for him after over 50 years of work? "Gosh, yes!" he says.

Recently Ivan received lens implants, so his eyes will be good to keep searching out maintenance issues for several years to come.

He is a long-time friend of the Squadron.

Safety Brief:

Oxygen systems



By Hunter Jefferson, CFII

Flying helicopters over the last 15 years has been thrilling, but I never flew at high enough altitudes that required oxygen.

Now that I am flying airplanes and will be going on farther flights at higher altitudes, attention to oxygen use is more important.

Last month I had the opportunity to fly at 10,500' and although this is lower than the required altitude of 12,500' for pilot oxygen use, my flight made me think about O2 symptoms and proper use.



If you're thinking about taking a flight high enough to require oxygen, here are a few reminders.

According to the FAA, 12,500' and below, one does not need oxygen. 12,501-14,000', oxygen is required for the crew if over 30 minutes at this altitude. Any time above 14,000-15,000' oxygen must be provided and used by

the flight crew and anytime above 15,001' all occupants must use oxygen.

Some general precautions with all types of oxygen include:

- 1) Keep equipment clean.
- 2) Protect your oxygen mask from direct sunlight and dust.
- 3) Inspect oxygen storage containers.
- 4) Mix and match components with caution.

Oxygen systems are broken down into 3 different components: storage system, delivery system, and a mask or nasal cannula.

Storage systems may contain either gaseous aviators breathing oxygen (ABO) which has more stringent standards than medical or industrial grade oxygen, Liquid aviators breathing oxygen (LOX), or sodium chlorate candles as solid-state oxygen.

Delivery systems include Continuous Flow, which does not need complicated masks, but is wasteful because it does not stop providing oxygen. Another system is Diluter Demand which gives on-demand oxygen to prevent throwing away excess oxygen. Lastly, Pressure Demand, which is a forceful oxygen flow that slightly inflates the lungs which in a sense pressurizes the lungs to a lower altitude.

Masks include nasal cannulas, oral-nasal re-breather, quick-don mask, and airline drop-down units.

With all these components, the FAA recommends the PRICE check:

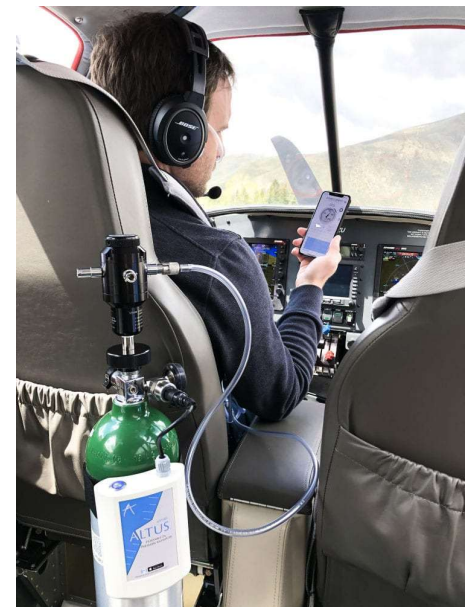
P - Pressure, make sure there is enough oxygen for the flight.

R - Regulator, inspect the regulator for proper function.

I - Indicator, Don the mask and check the flow indicator to ensure a steady flow of oxygen.

C - Connections, ensure all connections are secured.

E - Emergency, have oxygen systems in the aircraft ready to use for emergencies that require oxygen (hypoxia, smoke and fumes, rapid decompression)



As we enter the summer months, weather is improving, and many Squadron members are getting their planes ready to fly those longer and higher altitude trips.

Thanks to Tim Pinkney for many photos used in this month's Newsletter.



Commander's Column:

Reaching out to other audiences

The key purpose of marketing is to get people interested in a product or service.

That is exactly what our Squadron has been doing of late as we expand our reach to other Sacramento area audiences.

We want to talk with people about our group!



Last month Past Commander Terry and I represented our Squadron at the annual Asian Peace Officers Association banquet. Our group received significant recognition at the event, with our logo prominently displayed.

Over 400 people attended this event (including Sheriff Jim Cooper and many SSO leadership). We enjoyed the chance to tell our Squadron story. We proudly donated a Bay Tour flight to the silent raffle, helping the association raise funds for their commendable efforts.



During the banquet I spoke with Sheriff Cooper about potential future collaborations – providing transportation for both him and Under Sheriff Ziegler.

And in May we participated in the Capitol Air Show's Positive Altitudes event at Mather. The show's Executive Director Darcy Brewer was our presenter last month and I spoke with her about our potential help at this year's show.



Our May participation in Positive Altitudes continued our work to support the Capital Air Show team's support of our community. As aviators, we are reminded of our crucial role in nurturing and guiding aspiring pilots toward successful careers in aviation and STEM disciplines.



Everyone had a great time at last month's meeting with Darcy giving us a great insight into her aviation career and upcoming 2023 Air Show.

Participating at last month's Aerospace Museum of California's Hero's mural event was another outreach work of our group. Ken Lux presented our \$3,000 contribution to the Museum's Summer Kids Camp.



Enjoy flying this month!

Doug Hunting, Commander



JIM PHILLIPS: VIEW FROM THE LEFT SEAT

(Ed. Note: Long time Squadron member Jim Phillips has a wealth of aviation stories gained over his many years of flying. Periodically he will share these stories in this column.)

Flying with a broken crankshaft

My professional life involved refrigeration engineering. And I was privileged in 1989 – 1990 to serve as President of the three-state International Refrigeration Service Engineers Society (RSES). My RSES region was composed of 38 chapters covering California, Arizona, and Nevada.

In March 1989 I needed to attend a Tucson, AZ RSES regional meeting.

After departing KSAC, my first stop was at Pine Mountain Lake Airport. The purpose of this stop was to enjoy a wonderful turkey dinner at the airport's Corsair Restaurant.

The food was great and with a full stomach I jumped in my C182 and departed for Tucson. I climbed to 11,500' over the Sierras, flew north of Nevada's restricted areas and then headed south keeping Hwy 95 in sight.

Then, without warning I heard a very loud bang. Felt unusual vibrations. A red light came on telling me the alternator had failed and oil pressure was dropping rapidly.

I throttled back to reduce vibration, called ATC approach, and advised them that my airplane had engine trouble. I requested a vector to North Las Vegas Airport, picked up a squawk code and asked for help upon landing.

Fortunately, the engine kept running. And I was able to maintain altitude until directly over the airport. I received permission to land, circled down, landed, taxied to transient parking, walked over to the pilot's lounge, called a motel and taxi – and decided the best strategy was to have a good night's sleep. Back at the airport the next morning I taxied over to a local FBO for evaluation. They found an alternator belt had come off and there was serious engine damage.

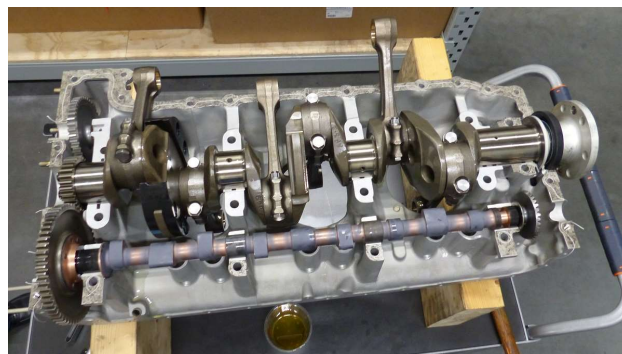
The engine was pulled and sent for a firewall-forward overhaul to an engine shop in Palo Alto. When the engine was disassembled, they found that the crankshaft was broken.

How was I able to stay airborne until landing in North Las Vegas?

The answer was that the break had occurred in an area where one section was supported in place by two main bearings. The other section was also supported by two main bearings. Unbelievably, the crankshaft remained in alignment, even though it was broken.

The problem crankshaft was sent to Continental for evaluation. They found that the crank had stampings indicating that it had been magnafluxed and received ultrasound testing and had checked OK at the time of its last factory overhaul.

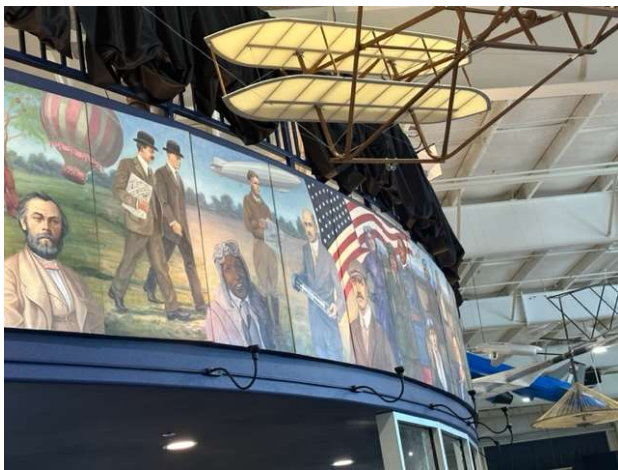
There is no way to test someone's reaction to an emergency, except, I didn't dirty my shorts!



New Museum Mural

Our Squadron participated in a key Aerospace Museum of California event last month – the unveiling of Hidden Heroes of Aerospace Mural.

The new multi-panel mural was a collaborative effort between American River College (ARC) and the Aerospace Museum of California. Using four student artists, painting was conducted at the Museum over many months.



The mural concept was inspired by an outside exhibit which highlighted many pioneering black aviators and other historical figures who were not recognized in many history books.

During the mural unveiling ceremony, our Squadron was able to officially recognize our first scholarship winners – **Sophia Barton** and **Tenley Ong**. **Shawn Britton**, Scholarship Committee Chairman presented over-size checks to each recipient.

In addition, Past Commander **Ken Lux** presented a \$3,000 donation from our Squadron to the Museum's Kids Summer Camp program. **Tom Jones**, Museum Executive Director thanked our Squadron for the contribution.

Chief Deputy Don Donelli represented the Sacramento Sheriff's Office and described the Department's goal of reaching out to Sacramento area youth. Donelli said, "We see scholarship programs like Sacramento Sheriff's Air Squadron and summer programs offered by the Aerospace Museum of California as key efforts to keep youth engaged in outstanding educational activities."



The mural unveiling event and financial presentations were a reminder to all attendees of the value in Science, Technology, Engineering, Art, and Math (STEAM) education.

Overall, the mural takes the viewer through 26 panels beginning with early flight using Chinese kites and ending with James Webb Space Telescope.

Tom Jones spoke to the audience, saying: "The Museum is committed to telling the stories of these 'hidden heroes' ensuring that their stories are preserved and shared for future generations."

