



# Sacramento County Sheriff's Air Squadron Newsletter

SERVING THE SACRAMENTO COUNTY SHERIFF SINCE 1941

AUGUST MEETING

## Spy pilots trade stories:

### Why is the U-2 so different than the SR-71?

It did not take long for edge-of-space flying stories to emerge at our July meeting. Guest speaker, Maj. James Drioff, U-2 pilot from Beale AFB traded mission stories with our own Jim Wilson, previous SR-71 driver.

The U-2 Dragon Lady and SR-71 Blackbird were each top-secret aircraft performing ultra-high surveillance.

Both James and Jim helped us understand why the U-2 is still flying while SR-71 aircraft is now out of service.



"Both aircraft evaded interception by flying high, higher than normal fighter jets could reach. But that was no longer an option when high altitude missiles became available," said Jim Wilson.

So why is the U2 still in use? James told us, "Well, because it is still very useful to fly very high and close to the border of enemy territory. It allows you to see further into that territory."

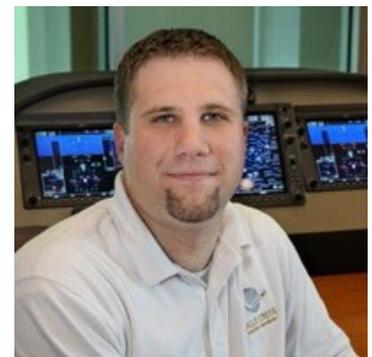


James continued, "Because of the curvature of the earth, the higher you are, the further you can look. (both with radar, optical, infra-red etc). So you can do *surveillance* of the hostile territory from friendly airspace. And what you need is endurance and altitude. Speed is totally irrelevant."

Who would have thought our Squadron would be able to meet with two intelligence gathering pilots – some have termed the "sultans of surveillance."

Dale Terry, Newsletter Editor

### Latest Advances in Avionics



**Jarrett Haffner,**  
**Garmin International, Regional Sales Manager, Southwestern US**  
**Squadron Headquarters, Executive Airport**  
**August 18th, 5:30 pm**

Join us for a "reunion" meeting at our Hut – our first meeting at our Squadron Headquarters in over one year.

Learn the latest news from the leader in general aviation avionics.

## AROUND THE SQUADRON



By Ron Richey

**Chuck Asbury** and **Ulli Luenemann** were recently spotted having dinner at the upscale Mastro's Restaurant in San Francisco which marked fifty years of their friendship and many flying adventures in such places as Germany, France, Switzerland, Greece, Spain, Egypt, Mexico, South America, the Caribbean and of course trips to Oshkosh. Chuck was seeing Ulli off on a six week trip to Germany via KSFO.



**Kelly** and **Jana Couch** flew their Mooney Bravo out to Bozeman, Montana to celebrate the Fourth of July with longtime friends who live out in the countryside, which is a perfect venue for Kelly.....aka....**Doctor Pryo!** Kelly always seems to have lots of stuff that goes Boom and makes large craters in the ground. The bigger the explosion.....the better. It's rumored that Dr. Couch still has all ten fingers.

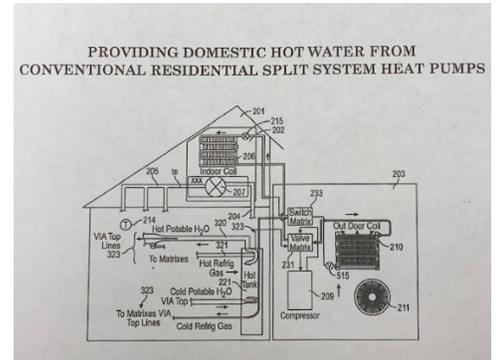


Duke N4567M was seen at the fuel pit at Tillamook Airport (KTMK) where **Steve Cassinelli** was spending serious money on gas. Steve said he is planning on spending a couple weeks up north taking his grandson fishing and kayaking, along with getting reacquainted with his Aviat Husky taildragger.



While we all have been suffering through 100+ degree weather, Steve sent a photo of what he was experiencing and mentioned he was just taking off his sweater.

What does one do after being retired for many years and your birth date was 90 plus years ago? If you are **Jim Phillips**.....you file for and receive a patent on your design and modification of a standard household heating and cooling heat pump system which produces potable hot water as a by-product...as in.....almost free hot water for home use.....or heating a swimming pool.



In his spare time, Jim has produced a very detailed historical report on the Nut Tree celebrating its 100 year anniversary which was published in the June issue of the Pine Mountain Lake Aviation Association's newsletter.

For the past eighteen years or so, **Stan Stewart** has been participating in the 'mass Beechcraft arrival formation' flying into the annual EAA Air Adventure at Oshkosh, Wisconsin.



Initially Stan was a rookie participant and over the years has advanced to an advisor and formation clinic pilot for the folks who want to fly in the large Beech formation which can have as many as 100+ airplanes.

Stan practices with a group of 8-10 Beechcraft owners on the west coast known as the **Beech Boys**, the folks in the Midwest call themselves the **Beech Nutz**, in Texas...it's the **Texas Vee Tails** and the east coasters are known as the **Sopranos**. The group meets up in Scottsbluff, Nebraska to plan out their huge formation and the positioning of each aircraft for the KOSH fly over. For Air Adventure 2021.....over 90 Beechcraft airplanes arrived in the mass formation. (Photo shows Stan taxiing to parking at Oshkosh.)

## Safety Brief:

### How to plan for a turnback



By Bill Cox, CFII

There is an altitude at which every pilot can make it back to the airport. But unless you know what that altitude is for your aircraft, and have validated your ability to accomplish the maneuver recently, you have no business attempting it. And it's not a 180-degree turn back to the airport. It's a series of turns, and you're doing this when your heart is beating off the charts.



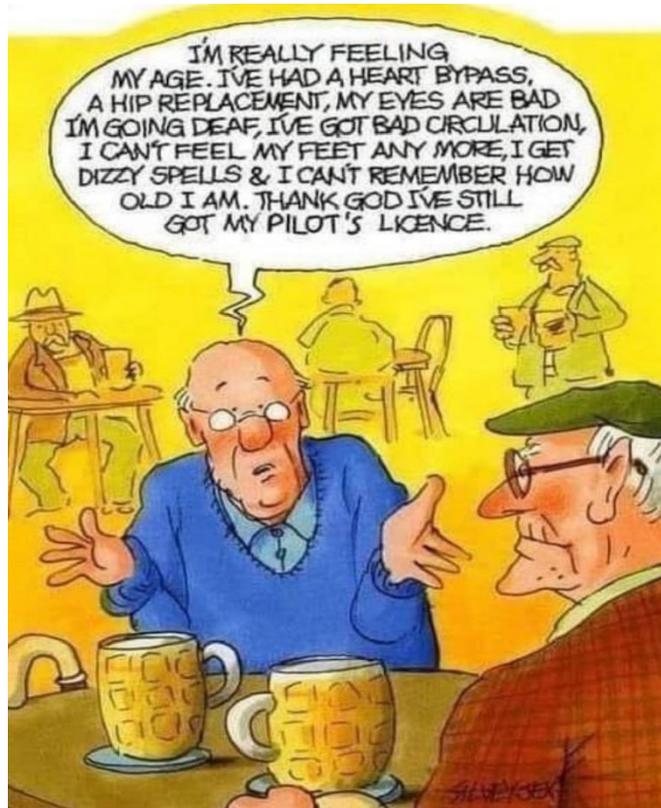
A big key to successful execution of engine failure on takeoff is a pre-brief on every takeoff. It only takes a second but it does prepare us mentally for the possibility of an engine failure and sets us up to make our first step the right one rather than the wrong one. So, we need to assess our best landing options on each and

every takeoff and give a short 10-second briefing. 'If I experience an engine failure on takeoff, this is what I'm going to do ...'

If obstacle clearance isn't an issue, climb out at  $V_y$ , best rate. Be aware of the safe altitude that will enable you to turn back to the airport, and monitor closely until you reach this altitude. Make your choice simple in the case of an emergency, and if it's marginal you have no business turning back to the airport.

Statistics tell us that the tendency to turn back is overwhelming. It takes a lot of discipline to lower the nose and accept the fact that we're going to make an off-field landing. So let's look at that and make sure that we're ready mentally to do just that. Because turning back to the field is all too often a fatal choice.

### *For those of us nearing our physical exam ...*





## Vice Commander's Column:

### The future of avionics

Commander Ken Lux asked me to chair our August meeting – and I look forward to seeing everyone at the Hut – our first meeting there in over a year.

Our August speaker is **Jarett Haffner**, Regional Sales Manager of Garmin's Aviation Division serving the Southwestern United States.



There is no question where general aviation avionics development is heading: more intuitive interfaces, more touchscreens, capable new sensors, and improved automation. The result is going to cause pain for pilots who don't like change but also deliver vast improvements in safety.

Mr. Haffner will be providing us an informational presentation about the advances in avionics and the benefits of embracing newer technologies to enhance our situational awareness and decrease our workloads as pilots.

With newer, more comprehensive avionics, we as pilots have all the same, if not more, information available to us with a less demanding scan of various "steam" instruments.

Yes, moving towards an "all glass" cockpit is expensive, but these advances reduce mechanical errors and provide more redundancy in the event of analog system failures as well as reduce pilot workload.



Most, if not all of us, are already familiar with using GPS direct routes to our destinations. Add a WAAS capable GPS, and your navigational accuracy is significantly improved from about 65 feet to approximately 5-6.5 feet in both horizontal as well as vertical dimensions. Using a WAAS GPS for approaches allows for much lower minimums on instrument approaches. Down to 200ft in some instances!

VORs have been the tried and true ground-based navigational aids that have helped us get to our destinations since they were deployed in 1946. However, operating the VOR network in the US is *really* expensive with estimates of \$110 million per year!



The FAA has been hard at work for many years on their NextGen and Performance-Based navigation systems. These systems are based on Area Navigation (RNAV) with the intent of making air travel much more efficient from takeoff to touchdown. Part of this initiative is to systematically decommission many of the legacy VORs in favor of using WAAS enabled GPS units.

RNAV systems have enabled the creation and usage of "T" routes which provide a more direct and efficient route as well as lower MEAs since we are no longer limited to VOR reception.

Avionics capabilities are advancing rapidly, and although pundits speculate that this is all an effort to eliminate pilots from flight decks, there is no doubt that pilots are enjoying this technological renaissance, and the result is a significant improvement in safety.

Our speaker recently attended EAA AirVenture and is ready to give us the latest updates on what Garmin has in store for our cockpits.

*Let's Fly!*

**Doug Hunting, Vice Commander**



## CHUCK ASBURY: VIEW FROM THE LEFT SEAT

(Ed. Note: High time Command Pilot Chuck Asbury will periodically contribute to the Newsletter with views on aviation, interesting travel stories and commentary on flying both yesterday and today.)

## Challenger crash at Truckee Airport

The Twin Turbo Jet Challenger 605 that crashed at Truckee on July 26<sup>th</sup> was a nimble fourteen passenger plane attempting to land in VFR conditions on a 7,000 runway. Flight logs show the jet, which seats up to 14 people and a crew of two, was traveling from the Coeur D'Alene Airport in Idaho and was scheduled to continue to Thermal in Riverside County before heading to Van Nuys Airport in Los Angeles.

While the airport elevation is 5,904, density altitude this time of year may have readily been on the order of 8,000 feet at the time the approach was initiated at this technically challenging airport. Truckee tower was reporting 2-4 miles viz with the runway 11 localizer approach in use. This approach has no vertical guidance. Tower reported they never saw the airplane.



With only six souls on board, and some 2,600 pounds of fuel consumed during its 527nm, hour and one-quarter flight from Coeur d'Alene Idaho, it's fair to say the plane was relatively light. With perhaps a thousand pounds of fuel remaining on board it probably weighed in at about 33,750 pounds at the time of the accident, or something on the order of 7,000 below its design gross weight of 41,400 pounds, with twin turbofan engines sufficiently powerful to readily handle the existing conditions.

The NTSB will produce an initial "probable cause" report within thirty days, and the final report will made in twelve months.

It does not challenge the imagination to determine what happened. From the safety of my living room chair it is easy to say the plane departing controlled flight ending in a low AGL stall-spin. Components to the equation are; High altitude airport, hot day, high density altitude, technically challenging airport with approach to match, fast airplane, stall-spin, leaving 6 dead.