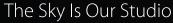
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Scott Gentile's 1959 Comanche 250

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### LETTER FROM THE PRESIDENT

#### Summer is here

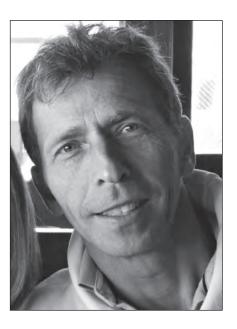
s I write this in late June, summer is definitely here. Deana, Alex and Andre (my twin 16-year-old boys), and I are taking full advantage of the flying season. We've already taken several trips, and we don't miss an opportunity to fly. For us, flying is a "family affair." We're already planning our summer vacation which will include, of course, N9400P.

#### **2015 ICS Annual Convention**

On the evening of June 16, Deana and I flew the "aluminum tube" to Oklahoma City. We traveled via US Airways and American Airlines because I needed to make sure that Deana would return home in time to get back for work. I couldn't be certain that the weather would cooperate with a trip via "Comanche Airlines." Flying the airlines always reinforces my appreciation of General Aviation.

On Wednesday, a major storm was passing Oklahoma City. Some "Comancheros" cancelled their attendance, and some were delayed. By evening time, the skies began to clear and everything was cheerier. For the remainder of our stay, the weather could not have been better. I had an opportunity to greet many of my fellow members as they filtered into our hotel. To me, meeting new friends and reuniting with old ones is perhaps the most enjoyable part of the ICS Conventions. After I attended the Old Board Meeting, we spent time at the Comanche Hospitality Suite to have hors d'oeuvres and meet more friends.

On Thursday, after an early breakfast at the hotel, various seminars were presented. Later, many of us joined the "FAA Tour," while others took the "Shopping Tour." Both groups had a



great time. The FAA tour participants could not stop talking about how wonderful it was! Afterwards, we had just enough time to "clean up" and were off to the "Water Taxi Tour," just a short walk away. Our ICS members and spouses filled two large boats, along

### Comanche Flyer Submission Guidelines

All members are encouraged to submit articles for publication in the *Comanche Flyer*. If you have an article about a maintenance event, trip, piloting technique, or anything else pertinent to Comanche ownership, please share it with your fellow members.

For those with access to the Internet, please submit the article via e-mail, preferably in Microsoft Word. You may also include the article in the body of your e-mail message. Include your full name, as you would like it published, and your ICS number.

Please attach digital pictures, if applicable, in jpeg format. For best results, use the highest resolution setting your camera will allow. Photo files under 500 kb in size typically do not reproduce well.

Although submissions are reviewed for technical accuracy, the information in this magazine is meant for reference only. Any modifications, alterations, or major repairs to U.S. aircraft require FAA-approved data as a basis for beginning work, and as such should not be based solely on information contained in this magazine. The International Comanche Society does not endorse any piloting adverse to published FAA regulations.

Submissions are subject to editing and revision unless specifically requested to be published as submitted. The right is reserved to publish or not, any submission.

Deadline for all submissions is the 20th of the month, approximately 40 days prior to month of publication.

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with knowledgeable and entertaining guides, and floated down the long, man-made "river" which cuts through the Bricktown section of the city. The sights, history, sculptures, stories, and jokes kept everyone's interest throughout. We left the boats and went directly to our respective "Tribe Night Dinner" restaurants. My Northeast Tribe members joined the North Central Tribe for a delicious dinner, intermixed with the North Central Tribe's election of Officers. In the evening, we retreated to the hotel lounge, and then poolside to listen and tell each other a variety of airplane tales.

Friday brought more interesting seminars for those who wanted to attend. Others went on the "Myriad Gardens Tour," which was spectacular. After lunch, many joined the tour at the Oklahoma History Museum. I was personally fascinated by one of the many items on display: a genuine Mercury spacecraft! I must have spent at least half an hour looking closely at its various details, marveling at how two people could squeeze into the small capsule and pilot it back from space down to earth. Our dinner that night, along with the Annual General Membership Meeting, was at the museum. Dr. Bob Fox arranged, among a million other things, to have the Native American Seminole Color Guard do a demonstration for us. Bob Cretney spoke eloquently about his past two years as President of the ICS. Alan Breen and his lovely wife treated us to a preliminary view of next year's ICS Convention in New Zealand. It certainly promises to be a first-class convention! Many of our members told me that they plan to add several extra vacation days, so they can visit Australia immediately before or after. I also had an opportunity to address the members and highlight some of our Society's objectives for the next year. Mercifully, my address was brief.

I woke up on Saturday morning with the bittersweet realization that the hectic convention would soon come to an end. But, there was still another day to enjoy: "Airport Day." After breakfast, Chuck Stroh chauffeured many of us in the "short bus" to the airport. While our ICS Board of Directors met in the conference room of the FBO, the others were busy closely inspecting each and every aircraft on display. Cliff Wilewski, our renowned Comanche maintenance expert, along with his volunteer helpers were busy judging the many Comanche entries in the Flagship Competition. After a refreshing lunch at the airport, many members took the National Cowboy and Western Heritage Museum tour, while others went back to the hotel to "chill out" by the pool. For dinner, we traded in our shorts and T-shirts for slacks, ties, and jackets and walked across the street for the banquet dinner at the Oklahoma City Convention Center. The meal was delicious and many prizes, including an Aspen Glass Display, were raffled off. Pat Keefer, a veteran of many an air race, was our featured speaker. She began by telling us about the "Ninety Nines" Organization and their positive work with women aviators. Her presentation was rife with humor, history, and common sense. She then treated us to a first-hand, riveting account of what it's like to participate in an around-theworld air race in a Comanche. Thank you, Pat! After her presentation, it was time for Cliff to announce the winners of the Flagship Competition. Glen Pruet's beautiful PA24-250 received the trophy for the "Best Single." Ed Pepper took home the "Best Twin" trophy for his spectacular PA30-200 Miller Twin. John and Barb Spoor not only won the "Members' Choice" trophy, but also the Flagship Trophy for their PA24-400. I must admit that I have never seen a more meticulously restored and immaculately pristine Comanche 400! Kudos to all the winners! Your love for

your Comanches is all too obvious. (As a side note, I'd like to thank Pat Keefer again for contributing some of her actual air race winner's trophies as this year's awards to the Flagship winners.)

On Sunday morning at 4:30 am, Butch Baker (his wife, Linda, did so much to organize the convention) was up and out front of the hotel lobby in his Lexus SUV to drive some of us to the airport for our flights home. To say that Butch is a friendly and generous guy is truly an understatement.

On the flight home, Deana and I discussed the amount of work it took to organize this convention. I would be remiss if I did not mention the significance of LaVerne Stroh's contribution to the convention. She (with help from her husband and granddaughter) did the work of a dozen event planners. LaVerne worked tirelessly before, during, and after the convention, and made sure that each and every detail of our stay was perfect. I am awed by her competence, and I am proud and thankful to have her serve as our ICS Secretary this year.

I must confess that my favorite and most memorable times as an aviator and a "Comanchero," have been formed at the ICS Annual Conventions. I chose this month's "Letter from the President" to talk about this year's convention for several reasons. First, I wanted to give those of you who have never attended, and those of you who missed this year, a flavor of what it was like. Second, I wanted to entice everyone to attend next year's convention. Finally, I wanted all of our members to know that you don't have to wait until next year to share the joy and camaraderie with your fellow members. You (and your family/friends) can attend one of the many fly-ins and events organized by your respective tribe. I assure you that that "mission" will be well worth your while!

Av Shiloh 🚱



COVER STORY



# Dream Machine

#### by Tom LeCompte

cott Gentile wants you to fly his plane, N6229P, a 1959 Comanche 250. The CEO of A2A Simulations, Gentile purchased the plane three years ago. Now he has recreated it as an add-on aircraft for Microsoft's Flight Simulator and Lockheed-Martin's Prepared-3D simulators. The Comanche joins the A2A Piper Cherokee, Cessna 172, Piper Cub and Cessna 182, as well as a bevy of warbirds and classic aircraft. For Gentile, the building of the Comanche 250 was personal. This was his airplane, after all, an aircraft he knows inside and out. He not only had to convince his customers this plane flew like the real thing, he had to convince himself.

"There were times during this project that the line between my real flying and my virtual flying were getting blurred," Gentile says. He would go out in the real Two-Niner-Papa while working on his instrument rating and then come home to tweak the flight model

on the simulated Two-Niner-Papa. "It got to be a little freaky."

Gentile, a musician and sound engineer with a background in computers and a passion for flying, has been working in flight simulation since 2001 (see "The Perfect Plane for an Unreal Job," Comanche Flyer, Sept. 2014). Founded in 2006, A2A's mission is to make the most realistic simulations available. A2A aircraft, Gentile says, are built "from the inside." That is, the aircraft are built by simulating the internal systems of the aircraft. For example, the sound of the engine is created not by some automatic sound loop but by the way the engine is functioning. If the engine is making a nice purring sound it's because the cylinders are all firing smoothly. If a spark plug fouls or a cylinder goes, you'll hear it in the simulation; you'll see it through the vibrations in the panel. You will immediately know something's wrong.

The level of immersion for users is unique. There's a preflight routine for each flight and a maintenance hangar where you can change the type of oil, the spark plugs (fine wire or massive?), add speed mods or even change propellers — all of which will have distinct effects on the aircraft's performance. The simulation even knows when you're not flying. Start up the program a year after your last flight and you're likely to have a dead battery.

A licensed pilot and former Cherokee owner, Gentile had been away from real flying for several years when he decided he needed to get back into the cockpit, both as a means of transportation and a test bed for his simulations. He wanted a plane with decent speed and good load-carrying ability — four passengers and bags — that wouldn't break the bank.

He looked at the usual suspects: the Cherokee Dakota, Mooney M20, Beech Bonanza, and Cessna 182RG. Like a lot of prospective airplane owners, he had never heard of the Comanche. When he first saw an ad for one in *Trade-A-Plane*, he says, "I thought maybe it was a really old Arrow or something." When he started asking around, some tried to steer him away, telling him he should buy something more common. But the more he looked at it, the more Gentile was impressed.

"After several weeks of pretty intense research, the Piper Comanche was chosen for its high altitude, speed, long range, and load carrying capacity," Gentile says.

Two-Niner-Papa spent most of its life hangared in Southern California, says Gentile. The previous owner, then in his nineties, had it for 20 years and arranged to have the FBO sell the plane for him.

The first thing Gentile noticed about the Comanche, he says, "was how incredibly comfy and roomy the cabin was." The second thing he noticed, "was the tremendous sense of acceleration on takeoff." On that first ride, Gentile recalls a controller asking Two-Niner-Papa to reduce its speed. The pilot demonstrating the plane turned to Gentile and said, "You know you're badass when they ask you to slow down." The way the plane felt, the way it performed, the way it handled and, most of all, the way it looked — like a sixties muscle car with wings — all had Gentile sold.

The process of creating the simulation began almost as soon as Gentile got the plane home. He pulled out the maintenance manuals, removed inspection plates, learned about the plane's systems, and took measurements of every aspect of the its performance. With the help of his mechanic he added soundproofing,

installed speed fairings, and swapped out the McCauley three-blade aluminum propeller with an MT composite propeller, upgrades all of which became options on the simulated Comanche.

Gentile says he has put nearly 500 hours on the plane since he bought it. He's flown coast-to-coast, to the Midwest and Florida multiple times, and all over New England and the Mid-Atlantic. The plane, he says, "just feels right. Not too heavy on the controls, not too light. It just feels great." A perfect IFR platform, Gentile says, "There's something very reassuring about having that big old wing out there."

I met Scott last year, and wrote a brief profile about him for the *Flyer*. Because I was a Comanche pilot and owner, he asked me if I'd volunteer to join his team of beta testers, also (continued on page 8)

Loading the cargo hauler for AirVenture — it's a good thing the Comanche can handle everything.





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mostly pilots, to put his newest creation through its paces.

Over the course of nine weeks, I think I learned as much about the Comanche as I did over the course of five years of actual ownership. "Are the EGT and CHT indication driven by electric probes or thermo-coupled?" asked one tester. "What is the rate at which fuel will drain from the tip tanks to the main tanks?" asked another. The depth of inquiry was impressive. The manual itself runs 100 pages and includes a fascinating history of the development of the Comanche and its rivalry with the Beechcraft Bonanza, along with a detailed operator's handbook complete with checklists, performance charts, and flying tips — a far cry from the thin, 30-page booklet originally produced by Piper.

The result is a simulation that looks, sounds, and flies just like the real thing. The exterior modeling of the plane is exquisite, down to every rivet and chip of paint. The click of every switch, lever and knob is digitally rendered. The performance and flight characteristics are modeled from extensive flight tests and confirmed using the manufacturer's performance charts. A2A gets down to precise nuances such as the noise inside the cabin when the door pops open in flight, the way the plane pitches up slightly when you first lower the landing gear, and the vibrations in the panel at various power and rpm settings. A2A even recreates the emergency gear extension procedure, and includes a feature where you can put the plane on jacks to test the gear extension routine.

A2A unveiled the Comanche in June at a flight simulation conference in Connecticut. A notorious perfectionist, Gentile anxiously set up a station where people could fly the new A2A Comanche. After months of living, eating and breathing his work, Gentile felt he had no perspective left. He felt anything could happen.

Gentile came away pleasantly surprised. The A2A booth drew a steady stream of visitors over the weekend, with a constant line for those waiting to try their hand at the simulated Comanche. "It was neat seeing people flying it," he said. "It was a bit like watching me learn to fly the plane, smooth and stable in flight but tricky to land, especially when it got low to the runway in ground effect." Most people inevitably

came in a little fast and ended up floating down the runway. Or, if they flared too abruptly, dropping onto the pavement with that distinctive Comanche thunk! Some, well ... it's a good thing it was only a simulation.



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#### Donny Nelson - WA

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# ICS 2015 Annual General Membership Meeting June 19, 2015 — Oklahoma History Center, Oklahoma City, OK Candidate Election Results and Budget Approval

#### by Sally Williams, ICS Elections Chair

ongratulations to those ICS members who participated in the electronic ICS 2015 Election. Casting your ballot electronically eliminated the necessity of mailing, organizing, and counting paper ballots — a definite cost and time savings. However, as a reminder, our ICS Bylaws state in ARTICLE VIII, NOMINATIONS AND VOTING how we will decide the election of officers, accept the budget, and establish the quorum for the purpose of holding our Annual General Membership Meeting. This is why you were encouraged to cast your ballot as every vote counts. Electronic voting rapidly indicated the number of members who logged into the ICS website and voted, and through safeguards collected and tallied the ballot results. Thanks to ICS Webmaster Dave Fitzgerald for setting up the electronic voting on the ICS website. The ICS Elections Committee urges you to continue to take part in the future of ICS by casting your ballot in every election.

Following are the 2015 election results as reported at the ICS 2015 Annual General Membership Meeting on June 19, 2015 in Oklahoma City, Oklahoma. Please keep in mind that everyone did not vote on every candidate and/or issue.

Ballots Received: At the close of voting 233 of 1996 current ICS Members in good standing voted electronically resulting in 11.673% of the current membership voting.

#### **ELECTION OF OFFICERS**

President, Av Shiloh (Uncontested)

Total Votes: 224 of 233

96.14%

Total Votes: 9 of 233 ABSTAIN

3.86%

Vice President, Bob Williams (Uncontested)

Total Votes: 223 of 233

95.71%

Total Votes: 10 of 233 ABSTAIN

4.29%

Secretary, LaVerne Stroh (Uncontested)

Total Votes: 222 of 233

95.28%

Total Votes: 11 of 233 ABSTAIN

4.72%

Treasurer, Bob Berry (Uncontested)

Total Votes: 222 of 233

95.28%

Total Votes: 11 of 233 ABSTAIN

4.72%

**Ballot Issue #1:** Approval of the 2016 Operating Budget as published on the ICS website and in the June 2015 issue of the *Comanche Flyer*.

Total Votes: 202 of 233 YEA

86.70%

Total Votes: 5 of 233 NAY

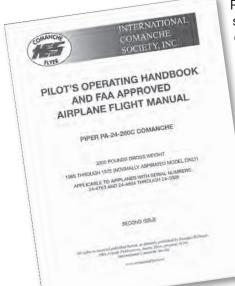
2.15%

Total Votes: 26 of 233 ABSTAIN

11.16%

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Discounted to current ICS members at \$75.00 each, plus shipping (must ask for ICS member discount and provide ICS membership number when placing order). Available only through Webco Aircraft at 316-283-7929 or www.webcoaircraft.com. Available Bound or Unbound/Un-punched.

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	15.)	PA39	3600	1970-72	1605	39-1	155
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#### From the Comanche Website Maintenance Forum

# ENGINE CYLINDER OVERHEATING

e have a Comanche 250 with a Lycoming 0-540-A1D5. In the past year during climb out, we are seeing engine temps climb very quickly to the 400-430°F range. When the airplane levels out, the temps quickly come back to normal ranges. We live at Altitude (6500 ft), but until recently, we have never experienced this before.

Any suggestions would be appreciated.

I too have a 250 and that is definitely high. Which cylinder?

I would start with baffles.

I don't know if the singles have an issue common to Twins. When the

Twin's cowling has been removed and replaced, the forward baffles are frequently pushed so that air gets by them on the outside instead of getting pushed over the cylinders. It has happened so often in the past, our shop now tells us that they have checked and the baffles are positioned correctly.

Hopefully it could be something that simple. I'll be interested to hear if baffles are the answer.

It is usually cylinder 3, 4 or 5.

A dirty air filter also crossed my mind — with the drought air filters can get dirtier faster.

On my 250 the #5 cylinder is always the hottest; sometimes in the summer time it will reach 400 when climbing. What airspeed are you climbing? Being at 6500 MSL would definitely be harder to climb than at sea level, but it does seem too high.

Maybe a quick timing check might be a good idea as well.

Check your baffles. Make sure all of the soft baffle material is pointed in to the pressure so that the cooling air causes it to seal harder rather than pushes it open and letting the air out. Now with that said, your engine has a red line of 500 degrees CHT, and Lycoming says for best longevity keep

normal operating temperatures below 485, and by normal they mean cruise temps. So, check your baffles if you have seen a recent change, and fix what you find. If you don't find anything, fly on! So many people get so worried about CHTs above 400. Most of this comes from reading Mike Bush articles. I like Mike, and he has some very good info, but he is a Continental guy. His numbers and experience lean that direction. The Lycoming engines are designed to run hotter and they do, with no adverse effects. Before the advent of the multi-probe digital engine analyzer, most engines ran hotter but nobody cared, and they still made TBO. Use the tools to help diagnose problems. Don't get wrapped up trying to solve a "problem" you may not have.

Zach is spot on ... check your baffles. I always claimed that like Hans's mine are as tight as a frog's butt. However, having not flown lately, I have been running the engines up about 1x per month for 15 to 20 minutes ... as we are starting to get some non-frozen tundra weather here ... I noticed that on my right engine ... #2 and #4 were running about 30 to 40 degrees warmer than 1 & 3 ... the left engine was normal.

Well guess what, during re-installing the cowling last spring, I had not gotten the nose pieces back on and had a piece of baffle in-op.

Can't stress that enough ... when I had a single 260, #5 was always the hottest until I got the baffle frenzy and tightened them up.

I am seeing the exact problem! On climb out, I've seen 3, 4, 5, and 6 at 440-460 range. The only difference for me is I just had a dual mag change. Timing is solid. Baffles haven't been touched. I don't think I would stress except the problem just appeared from nowhere. Also does anyone have the EI fuel gauge? It is supposed to show HP but I don't think at 3000 the engine will only give 40% power. The engine seems to give excellent power, but the gauge is off. (continued on next page)





Climb out. 25rpm/25map 115-120 mph/knots

From sea level — to cool my CHTs I can only climb at 500 fpm or so and I have to reduce power.

Thoughts?

Read my response above. Baffles baffles baffles! First, your red line is set wrong on your JPI if you are using it as a primary. You should be at a 500 degree CHT redline. Next, if you have a carbureted engine DONT PULL THE THROTTLE BACK IN CLIMB. If your baffles are good, but OATs are high, you can see the numbers you posted in the pic, and what you have left is fuel to cool. Pulling the throttle back in climb actually leans the engine. There is absolutely nothing wrong with climbing at wide open throttle. Why pull the throttle back to 25" only to have to push it back in as you climb. Over square is an old wives' tale. One has nothing to do with the other. You could just

as easily read power in degrees per second and feet of water for example if that was what was used at the time (and then the numbers wouldn't even be close). You want to climb out of the heat as quickly as possible. Just a 10 degree difference in OAT makes a huge difference in cooling efficiency.

An old Piper guy told me to always climb out at 120 knots to keep her cool and it works.

I flew my single in hot humid Florida and on most days a 90 knot climb out after takeoff almost guaranteed a hot engine in my experience.

I have a different problem on my 250. Seems the #2 cylinder is always my hot cylinder in a climb. Puzzling, I would expect the front cylinders to be the coolest.

Baffles appear to be in very good shape.

I do appear to have a cowling that was designed for two exhausts, but I

only have one exhaust installed. Not sure if that has anything to do with #2 running hot.

On a descent, I have the opposite problem; #2 cools much quicker and I get the shock-cooling alert.

Mechanic bore scoped the cylinder and everything looked good.

These postings are provided for informational purposes only. The views expressed in these postings represent the opinions of individual Comanche owners and have not been vetted by the ICS technical committee.

As a responsible pilot and aircraft owner, you should always seek advice from an experienced, trusted source, such as your A&P or CFF-trained CFI, before applying any of the techniques or recommendations presented in these postings.

The postings are printed as they appeared. Due to space considerations, sometimes only selected posts have been published.



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Best wishes for you and yours in 2015, Bob Weber and your Comanche family at Webco Aircraft



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# **Fond Memories of Karl**



Karl in front of his twin N8256Y.

Airport, BC, Canada whilst my wife Jen and I were enroute to the ICS Victoria Convention in 1999. We had flown our PA39, G-SIGN over the pond from the UK. Karl and his wife Judy were in their Miller Conversion PA30, N8256Y.

We had a lot of fun together with our other Comanche friends at the convention and it started a friendship, which persevered until his tragic accident. Karl would fly my Twin Comanche when he visited us in Europe and I would fly his airplane in the US. Karl and his wife Judy flew Karl's Twin Comanche to the 1999 Cambridge Convention here in the UK where he won the Flagship Competition.

Karl and I once flew the Atlantic together in a Twin Comanche I was ferrying from the US to Sweden. Whilst enroute we diverted into Gander from St. John's due to fog. Whilst there we started playing pool together, which we much enjoyed being equally matched. We continued this competition in later years in many hotels in the Australian Outback, once playing on a round pool table in Hughenden. We continued these pool competitions once Jen and I had a second home in Newfoundland,

Canada. Later Karl was to get his own pool table in his hangar at his home in Crawford, Colorado. We played on that too!

Karl and I are very different people, me being from England and Karl a redneck from the Wild West. Despite that we had a very great camaraderie centred on our mutual love of our Comanches. Just this morning I put my aircraft on jacks and remembered that the homemade jacks had welded supports made by Karl. My electric towbar was also welded by Karl when we cut it shorter than it was supplied. I always admired Karl's skill with the manufacture of metal items, especially his artistic skill in the manufacture of architectural metalwork such as lamps and staircases, etc.

My wife and I will greatly miss Karl—he was a very special person and a great credit as a former President of our Comanche Society. We wish the best for the future to his wife Judy and for the speedy recovery of his Granddaughter Amanda who was injured in the crash that took Karl's life.

 $David\ Buttle,\ ICS\ President-2000$ 



Judy, Tom & Barbara James, Karl, and John van Bladeren relaxing in the Hipp's backyard in Redstone,

# Hipp (1946-2015)



Jenny Buttle, Karl, David Buttle, Ben Ayalon, and John van Bladeren at the Blackbushe Airport (London).



Karl and Judy in front of the London Eye.



Karl being inspected by customs at Lelystad, Netherlands.

y wife Judy and I flew our PA 30 to Crawford, Colorado a few years ago to visit with Karl and his Princess Judy. Their spectacular home was still under construction and we stayed in their very spacious hangar. Their airport, 99 Victor, was

alive with airplanes and gliders. The beauty of the mountains is wonderful. We returned in a subsequent year and their beautiful home was finished. Karl had used his talents to make the chandeliers, lamps, and furniture in their home. Crawford is an arid



Karl riding a bicycle in Amsterdam.

community in western Colorado and Karl had designed a very elever water management system for his home and property. The home is designed with huge windows that look out on to the magnificent views of the Rocky Mountains.

We flew to Aspen, Colorado and to Sun Valley, Idaho with Karl and his Princess Judy to see the sights. Many of the upscale stores had Karl's products for sale. "Karl Hipp Designs" included chandeliers, lamps, furniture, and wall sconces. Princess Judy is well known as an interior decorator of upscale homes.

Karl was the President of ICS in 2005, and remained as a Maintenance Resource Director. His twelve "Letter from the President" letters, reflect the mind of a genius. He also had vast knowledge of General Aviation Aircraft. When we were in Aspen, he saw an Eclipse Jet on the ramp and explained to me the issues with the windshield. Karl flew his turbo twin to Duxford, England in 1999 to attend the ICS Convention that was held in Cambridge. His technical knowledge of engine components, hoses, fuel injectors, electrical systems, and landing gear issues was phenomenal.

To many he was a hero, to all of us he was a wonderful friend and we will miss him forevermore.

William Schnauffer IV, ICS #12489

t saddens me that I can no longer call Karl Hipp to discuss the Comanche and the Comanche Society. My first meeting with Karl was in 1996 in Colorado at the ICS convention that year. I arrived in Denver for the convention and Karl wandered up and started talking about his "new" twin Comanche. During that 19-year period, I learned to appreciate Karl's common sense approach to working out problems and his way with words. He had a knack for clarifying the obscure.

The 19 years of friendship produced a good mix of technical information and social exchange. We were both hands on in the maintenance of the Comanche. Karl worked on his Twin Comanche under supervision and eventually earned his A&P. As remote as he was in Western Colorado, it helped to have that A&P license. Karl

sold his twin a couple of years ago, but he never left aviation. He completed a Kitfox and sold it. He built a Zenair 801 that he eventually sold. He also completed a Murphy Rebel and was finishing an RV-6 at the time of his passing.

Socially, Karl and Judy were involved in domestic Comanche flyouts and many flyouts in Europe. I know how much the members in Europe enjoyed his company. Already mentioned by Bill and David in their tributes, Karl flew his Twin Comanche to Europe twice to attend Comanche Flyouts. The first time was with his wife Judy when they flew to the Convention at Cambridge England. The second time, I had the privilege to fly with him. We did it the easy way and went nonstop from St. John's, Newfoundland to Shannon, Ireland. That flyout was to Mâcon, France.

Karl and Judy were involved in the national operation of ICS and, in fact, he was President in 2005. They were going to the National Board meeting because they were concerned about ICS, and he was eventually elected an officer and finally became President. Karl was a man who communicated and had a clear vision of what he was doing.

Karl's contributions to ICS will be missed. I am grateful to look back and call him a good friend.

John van Bladeren, ICS #1282

arl Hipp — an exceptional personality and a true friend
Having to write this in the past tense is particularly sad and painful. It is hard to believe that we cannot just pick up the phone and chat with Karl anymore.

One of his outstanding characteristics was his "down to earth" and very realistic view of things. If he could, he would have looked at this fatal crash as yet another of his several other "off field" landings, yet alas this time with a sad ultimate ending.

We first met Karl and Judy at the 1999 ICS Convention in England. Our friendship grew from then, onwards through several roller coaster times at ICS, into a very firm and dependable relationship. You could turn to Karl at anytime and without hesitation he would have an intelligent answer, a good joke, and sound technical advice ready for you.

We have always admired Karl for his perception of life and enjoyed the times we spent together with him, including his well-known political views that were not always in line with ours but you just could not resist accepting even adversities from Karl.

Karl was who he was because he had Judy, the very special person just as strong willed, kind, realistic and hospitable, at his side — a perfect entity. Karl is the person most cited by us when we are together with friends. Somewhere along the line the sentence "we have a friend in Colorado, Karl, who …" will flow into our conversation. It will no doubt still happen, unfortunately in the past tense. We will miss Karl but happily we still have Judy, the second half of this strong duo.

Monica Rehkopf, ICS #14462 Friedrich Rehkopf, ICS #9153



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# "A Foreign Affair" Epilogue

#### by Steve Zaboji

In the January 2015 issue of the Comanche Flyer, the article "A Foreign Affair" articulated Ray Bejarano's sale of his prized Twin Comanche of 34 years, N8782Y, to Robert Davies of Wagga Wagga, New South Wales, Australia.

While the sale of a Comanche is not all that uncommon, selling it to a buyer in Australia made it a challenging process. If you haven't read the article or would like to reread it, please go to the ICS website where you can easily find it in the archives.

N8782Y began its exportation journey late last year when Robert and I met in Rockford, Illinois. Heritage Aero completed the Comanche's prebuy inspection, one that facilitated the deal. Together, Robert and I flew 82Y to Tracy, California, where SkyView Aviation was contracted to disassemble, containerize, and ship it to Australia.





Moruya Airport on the coast of New South Wales, a lovely location close by a vacation unit owned by Robert. A sure destination for future flights of 82Y.

#### In Robert's Words

- N8782Y was dismantled and containerized ready for collection in Tracy on the 10th of November; however, due to a delay in the arrival of the container ship, CMA Norma into the Oakland Port, the container was not collected until the 17th of November from SkyView Aviation. The container was loaded onto the CMA Norma and departed Oakland on the 27th of November bound for Sydney via China. The container was off loaded in Tianjin, China and reloaded on the Maersk Gironde arriving Sydney on the 14th of January.
- After numerous phone calls to my customs agent and AQIS, I was led to believe from AQIS (Australian Quarantine and Inspection Service) that they would initially undertake a "tailgate inspection" and only if they had concerns would they require the container be emptied. This would have been a

- major headache had AQIS required me to do this.
- Fees and charges at the port are crazy with every associated entity wanting its pound of flesh (i.e., charging \$500 to relocate the container just a short distance from the Customs inspection site to the AQIS area).

#### **Transport to Moruya, NSW**

• This part of the process was very efficient — the container was collected early in the morning on the 27th of January 2015 and delivered to Moruya on the South Coast of NSW (New South Wales) arriving around mid-day. I had driven from Wagga Wagga to meet the delivery and be on hand to unload the container. We had a window of just two hours to complete this task before the transport was to return to Sydney to deliver the container without bearing additional charges.

#### Reassemble

- From commencement to finalization the reassemble of VH-NEG took about 17-18 weeks, a time frame considerably longer than I had anticipated.
- Soon after the container arrived in Moruya, CASA (Civil Aviation Safety Authority) determined by way of an AD that all aircraft in Australia 15 years or older would be required to replace all primary (AD/GENERAL/87 Primary Flight Control Cable Assembly Retirement) flight control cables by 2018, and then at the expiration of every 15 years. Given my plane was still unassembled and would fall into this AD time frame, it was decided to complete the AD now rather than wait until 2018 when the task would be considerably more time-consuming. While the cables were in generally reasonable condition, the rudder cable was frayed and definitely needed to be



By February 2015 the major components, e.g., engines, wings were back in place.

replaced. The decision to replace all the cables now was a no-brainer to me. Some years ago I was a co-owner of a PA-28 160 Cherokee that my son was learning to fly in. A pre-flight inspection very early in this process (second or third solo from memory) revealed that the elevator was just flopping in the breeze. The cable terminal had completely failed due to corrosion. The removal of the old cables and rerigging the new ones was quite a time consuming process

- The reassembling process picked up a number of issues that were addressed including removal of minor surface corrosion and repaint, replacement of the Lord engine mounts with new ones, and repair of wing wiring looms.
- Additionally, I had installed a new JPI 760 engine monitor and ARC Artex 1000 406 ELT.
- During the reassemble process I travelled to Moruya (a little over an

hour's flight from Wagga Wagga in my 20J Mooney) on several occasions to keep abreast of the work being done on the plane. I had decided to replace some of the linings on the interior side panels and re-whiten the plastic window trims by coating them with a peroxide paste, wrapping in cling wrap and placing in direct sunlight. This process proved reasonably successful and was certainly an improvement on what I had started with. A quick Google surf located a set of new wing root fuselage seals. These were purchased and shipped to me to replace the originals that were quite deformed and brittle.

• On the 13th of March the engines were fired up, and after cleaning the plugs which had fouled a little from the shipping preservative oil, all was good. Compression checks had six cylinders in the low to mid 70s, one at 68, and the eighth at 78; a great result for engines that were close to TBO. I am very thankful to

- Ray Bejarano, the previous owner, for having looked after and maintained his plane so very well over many years.
- I thought I was now on a downhill track, however a few more small hiccups surfaced. The airspeed indicator was reading low and needed an overhaul. As it turned out I used this opportunity to change the dial so that Knots rather than MPH is dominant. The interior was reinstalled and the panel finished. I needed to remove the US registration N-number, repaint that section of the fuselage, and fix the Australian registration VH-NEG.
- The Australian Certificate of Airworthiness and Civil Registration were completed together with additional minor cosmetic work. After downloading current Jeppesen Australia data I replaced the North American data in the Garmin GNS 430W and MX 20

(continued on page 28)





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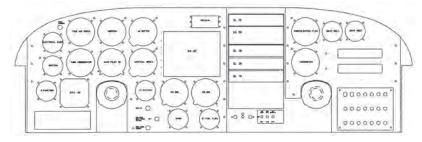


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- MFD. On May 20, VH-NEG had a very successful flight test with all systems working well. Finally it was flown to Wagga Wagga on May 23, a beautiful clear winter day and a 15-20kt tailwind giving a handy 168-170kt ground speed.
- Since arriving in Wagga Wagga a couple other issues have come to the surface. As I write these notes, I'm waiting for an alternator regulator to arrive to replace a faulty one. I have also replaced a vacuum pump that failed. Hopefully these



N8782Y finally together again and on solid Australian ground.



Robert Davies checks off a major item on his bucket list.



Garmins are reprogrammed for Australia.



Shot of the panel shortly after the plane was unloaded.



Sweet memory, Ray Bejarano's beautiful custom model of the Comanche he owned for 34 years.

are just teething issues and once completed VH-NEG will be ready to give me many years of flying pleasure.

#### **Takeaway**

To purchase his Comanche, Robert Davies negotiated a complex international transaction, one that involved an abundance of his time and treasure. His diligence and sacrifice are symbolic of the enduring value of a Comanche, and in his case, one that I am certain he will enjoy for years to come. Sadly, one less great Comanche in the American skies, but VH-NEG will serve as a wonderful representative of American know-how and innovativeness way down under for what I am sure will be decades to come.

As for Ray, the previous owner, he had a plan for downsizing, one that he successfully accomplished by acquiring a beautiful Cessna Cardinal RG. Ray was always very active flying Coast Guard Patrols, a labor of love that he continues today in his more leisurely Cessna.

After 34 years of owning N8782Y I suspect Ray's love for his Comanche will never abate, especially now after his son Mark surprised him on Father's Day with an amazingly authentic model of the plane he loved for so long. Let the props keep on turning.

#### **Keep The Blue Side Up!**

Steve is an ATP, CFII, MEI and a CFF/CPPP instructor. He can be contacted via email at: steve@balatonmarketing.com.



## FROM THE TRIBE CHIEFS

#### TRAINING EVENTS

#### October 9-11 CPPP Training Clinic Lancaster, Texas

The CFF will conduct a CPPP event in Lancaster, Texas, October 9-11 hosted by Bob Cretney. As with previous training events at LNC, the top shelf hangar and classroom facilities at the Cold War Aviation Museum (CWAM) will be

used for ground school. The Dallas area provides a variety of different types of airports in close proximity to LNC, as well as lots of open, uncongested areas for flight training. Fuel at LNC is some of the lowest in Texas and maintenance is available if needed. A great speaker will address us at the Saturday Night dinner. Additional details will follow in future issues. Contact Bob Cretney at: bob.cretney@lecwireless.com or (214) 725-6584.

DATE	TRIBE	EVENT/LOCATION	INFO SOURCE/HOST
Aug 15	NW	Renfro/Sergeant Hangar Annual BBQ Puyallup, WA (KPLU)	Dennis Springer, (503) 559-8760, DJ8161P@comcast.net Bill Case, (503) 260-2473, billcase01@msn.com
Aug 16	MS	Breakfast in Airport Restaurant – 9:30am Jefferson City, MO (KJEF)	Pat Donovan, (636) 462-8370, pa24pilot@centurylink.net
Aug 22	MS	AOPA Fly-In Minneapolis, MN (KANE)	Pat Donovan, (636) 462-8370, pa24pilot@centurylink.net
Aug 22	SE	Lunch Fly-in Greenville Downtown Airport (GMU), Greenville, SC	Charlie Littwin chas4949@roadrunner.com
Sept 3-7	EU	Greenwich Fly-in London, England	Lynn Selby and Graham Balls gr.balls@btinternet.com
Sept 13	NW	Doug & Marsha Kempf 2nd Annual BBQ La Center, WA (Daybreak Airport, WA46 – private strip)	Dennis Springer, (503) 559-8760, DJ8161P@comcast.net Bill Case, (503) 260-2473, billcase01@msn.com
Sept 13	MS	Lunch at Airport Restaurant – 11:30am Alton, IL (KALN)	Pat Donovan, (636) 462-8370, pa24pilot@centurylink.net
Sept 16-20	NW,SW	Reno Air Races Joint Event with SW Tribe	Dennis Springer, (503) 559-8760, DJ8161P@comcast.net Bill Case, (503) 260-2473, billcase01@msn.com
Sept 25-27	SC	Hot Springs Fly-In Hot Springs, AR (KHOT)	Hugh Hunton, (318) 925-2302, hhunton@comcast.net Clara Hunton, (318) 423-8322
Sept 26	MS	AOPA Fly-In Colorado Springs, CO (KCOS)	Pat Donovan, (636) 462-8370, pa24pilot@centurylink.net
Oct 9-11		CPPP Training Clinic Lancaster, TX	Bob Cretney – (214) 725-6584 (cell) bob.cretney@lecwireless.com
Oct 24	MS	Lunch at Lambert's – 11:30am Sikeston, MO (KSIK)	Pat Donovan, (636) 462-8370, pa24pilot@centurylink.net

 $<sup>\</sup>ensuremath{^{\star}}$  The following Sunday is the raindate.

#### **NORTHWEST TRIBE**

August 15, 2015 Renfro/Sergeant Hangar Annual BBQ Puyallup, WA (KPLU)

Featuring antique aircraft & street rods on the airport ramp.

September 13, 2015 Doug & Marsha Kempf 2nd Annual BBQ La Center, WA (Daybreak Airport, WA46 – private strip)

Wonderful grass strip, and picnic on the Lewis River.

September 16-20, 2015 Reno Air Races

Joint Event with SW Tribe

#### **SOUTH CENTRAL TRIBE**

September 25-27, 2015 Hot Springs Fly-In Hot Springs, AR (KHOT)

Come join the South Central Tribe fly-in to Hot Springs, Arkansas, September 25-27. Lodging will be at the Arlington Resort Hotel & Spa nestled in the historic downtown district of Hot Springs National Park. In order to get the group rate, reservations must be made by August 25: 1-800-643-1502 or 1-504-623-7771. When calling ask for the Comanche Society fly-in rate, which is \$102 for a single and \$112 for a double. There will be plenty of activities to choose from such as a tour of the Fordyce Bathhouse Museum, shopping, a tour of the Arlington Hotel, ride the Ducks (World War II landing crafts), a winery tour, a visit to the Mid-America Science Museum (the largest hands-on science center in Arkansas and the state's first Smithsonian Affiliate), or

you may choose a bath and a massage at the hotel. If you would like the bath and massage, you must make a reservation for it (the cost is \$70.00). This can be done at the time you make your hotel reservation or when you arrive.

Friday night will be a fabulous seafood buffet at the hotel. A live band will be playing in the lobby for your listening or dancing pleasure. Saturday morning you can eat breakfast either in the hotel or at The Pancake Shop directly across the street. Lunch will be on your own. After a fun-filled day, we will attend The Five Star Dinner Theatre for a tasty meal and performance (there will be more information about this event later). Sunday morning we will depart for home after breakfast.

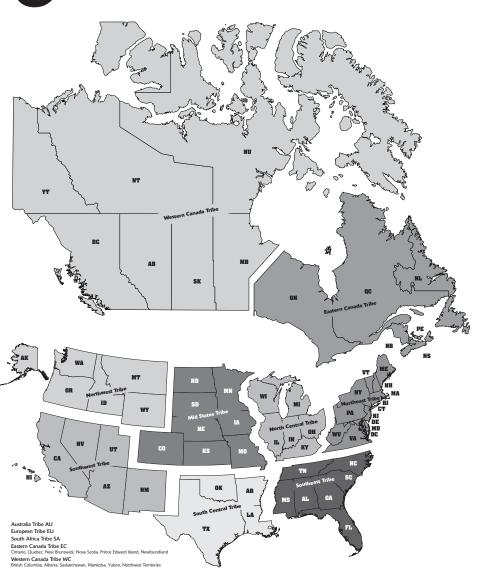
Airport information: Hot Springs Memorial Airport (KHOT) 123.0 mc. There will be a discount on fuel and the overnight charge will be waived.

Please email or call Hugh Hunton at *hhunton@comcast.net* or (318) 925-2302. You can also call Clara Hunton at (318) 423-8322. No money will be collected prior to the fly-in; however, the Huntons will need to know if you are attending along with any additional guest(s). This information is needed to order the dinner theatre tickets for Saturday night.

#### Weekend or Saturday Lunch Fly-Ins

One of the most enjoyable aspects of owning and flying your Comanche is the ability to travel to Comanche functions and experience the camaraderie and knowledge of other owners. Some events are purely social, others include seminars (mostly technical and/or knowledge-based), and the remaining are a combination of both with attractions for the entire family. If it is difficult for you to attend a full weekend fly-in, you may find a Saturday lunch gathering with that same Comanche camaraderie of sharing flying stories, hangar talk, and lunch more to your liking. Make plans to attend as many of these events as you can. Whether your

REGIONAL TRIBE ORGANIZATION



own Tribe or any of the other Tribes are hosting it, you are welcome to attend. The friendships you will make at these events will be lasting memories. And if you have a favorite destination in your region, think about hosting one of these events yourself. If not in your region, just contact the fly-in coordinator in that particular region and discuss it with him/her. Should you need a little help getting started and/or tips on organizing either type of Fly-In, please contact Bruce Thumann at bruce@contractbuilderssupply.com or (713) 875-3056.

#### Tribe Email Updates

If you are not receiving the South Central Tribe's Fly-In and/or Tribe-specific email notices and would like to, please email Bruce Thumann at bruce@contractbuilderssupply.com. He will make sure to amend the SC Tribe email list to include your address. Most updates will be for upcoming events that will also be located in the ICS National Newsletter; however, some may be important last-minute details not appropriate for the National Newsletter.

(continued on next page)





**Tips Manual** 

**Creech Manual** 

Landing **Gear DVD** 



**Knit Polo** (light blue, mens with pocket, ladies no pocket, 65% poly, 35% cotton)



**Coffee Mugs** 



**Decal, Patch** 



**Lapel Pins** 





**3 Button Placket Shirt** 

Polo Shirts (with pocket)

**Stone Washed Denim Shirt** 

**Mens Ultramarine Knit Polo Shirt** 

Code	Item	Price	Qty	Total
ICS11	<b>Tips Manual</b> Easy to use, fold flat spiral bound, 365 pages. Updated version due soon.	\$65.00		
ICS23	Care and Maintenance of the Piper Comanche Single (Creech Manual) Donated by Maintenance Director and life-long member, the late Bill Creech. Tips on care and maintenance of your Single Comanche. 2013 edition revised by Cliff Wilewski	\$25.00	EVIS	ED
ICS35	Landing Gear DVD Watch complete gear removal from the airplane and 1000 hour gear AD performed and hosted by Hans Neubert and George Mahurin. 2 hours.	\$25.00		
ICS09	Mens White Polo Shirt with pocket Circle selection: Single S M L XL XXL Twin S M L XL XXL Both S M L XL XXL	\$35.00		
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ICS36	Men's (New Style) Light Blue Polo Shirt Easy Care 60/40 cotton/poly blend, stain release, wrinkle resistant, uv protection, curl free collar, 6.7 ounce, 3 button placket, bone horn buttons, straight bottom, rib knit collar & cuffs, reinforced side vents, taped neck & shoulders.	\$38.00		
ICS32	Ball Cap Circle selection: Tan Blue Circle selection: Twin Single	\$14.00		
ICS34	<b>Visor</b> Ultramarine (blue) Sun Visor with ICS logo. Hook and loop type closure. 100% cotton.	\$14.00		
ICS26	Coffee Mug Circle selection: Single Twin	\$7.50		
ICS10	<b>Lapel Pin</b> Circle selection: Single Twin Logo	\$5.00		
	Decals (price for 2)	\$5.00		
ICS05	Decais (price for 2)			
ICS05	Cloth Patch	\$6.00		
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#### **SOUTHEAST TRIBE**

August 22, 2015 Lunch Fly-In — Greenville Downtown Airport (GMU) Greenville, South Carolina

The next lunch fly-in will be at the conveniently located Runway Café. This is another great location where you can park right in front of the restaurant ... sorry, no free food here! If landing on Runway 1-19, the restaurant is by the A3 taxiway on the south ramp. Be careful — there are three airports all very close to each other, two are towered and the third, GSP, is a class C. Here is a chance to brush up on your airspace skills while filling your belly with good food! No cost or pre-registration is required, but plan on arriving around 11:30am. Please drop Charlie or Phillip an email if you plan to attend.

#### Lunch Fly-ins - Hickory and Greenville

Please email Charlie Littwin at *chas4949@roadrunner*. *com* and let him know which event you will be attending.

#### South Carolina Breakfast Club

This is still a great low commitment fly-in. We will continue to join the South Carolina Breakfast Club (for breakfast) on occasion. The meal is about \$7.00 — this is a well-organized event. If you have not been to one give it a try, they are a lot of fun. Here is the link: http://www.flyscbc.com/. Hope to see you there.

Phillip Hobbs
ICS SE Tribe Chief
Matthews, NC
(704) 651-9417
Phobbs1@carolina.rr.com

Editor's Note: Tribe Chiefs and Fly-In Coordinators, remember to send in your calendar of fly-ins and more detailed information, as it becomes available, so it can be published in the Flyer.



# My Greatest Adventure

by Clyde Davis



nce we've flown our Comanches for a while, we have many stories to tell. Some of them relate to our flying exploits and experiences (good and bad); others describe, in sometimes-exaggerated terms, the adventures our planes have taken us to. This story is of the latter type (without exaggerations, I promise).

I purchased my Comanche, a 260B, in August of 1989. My then partner and I flew commercially to Detroit to pick up N9063P at a small airport in Southern Michigan. Over the next weekend, we brought her home to Fullerton, CA — my first truly cross country flight. That particular adventure whets my appetite for the incredible experiences our Comanches make available to us.

Since that time I have logged nearly 4000 hours in 63Papa, travelling to nearly every state and literally all four corners of the US as well as Alaska, Canada and Mexico. Great thrills included the Alaska flight, flying the Canadian Rockies from Victoria to Calgary, flying the Hudson corridor (pre-9/11), and landing at airports that brought back memories such as Duluth,

MN (my childhood home); West Lafayette, IN (my college town); and my First Flight (no explanation needed). I also luckily departed Palo Alto just seconds before the 1989 San Francisco earthquake ... heading into eerie, total ATC silence.

But the flight that most likely will always rank at the top of my list occurred back in January 1995. It was not the flying experience that made it so special (although that was great), but rather the amazing adventure opened up by the versatility and capabilities of the Comanche.

I had been involved with a Southern California volunteer group called Corazon. The primary effort of this group is to build a house each Saturday for a destitute family in Tijuana, Mexico. On one of these trips, I realized I could not contribute much as a builder, but I could contribute as a pilot and offered my services to the head of the group. To my surprise, within a few months, he had taken me up on my offer.

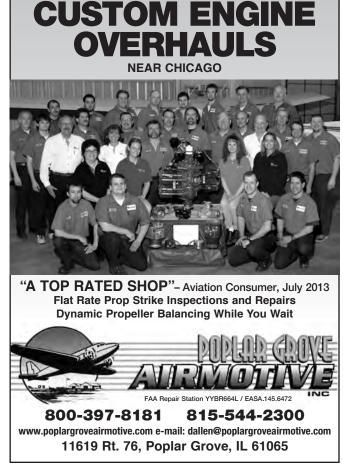
A woman in Orange County, CA had learned of a native Indian tribe in the state of Chihuahua, Mexico, that was starving to death. The Tarahumara tribe lives in and around the Barrancas del Cobre (Copper Canyon) in the Sierra Madre Mountains of North Central Mexico. They are a very primitive race that eschews nearly every aspect of civilization. They dress in bright blouses (the color defines their tribe) and wear loincloths. Their only visible connection

to civilization is the soles of their sandals, which are made of tire tread. Known as "the runners," they can run tens of miles a day through the forests of their native mountains. The Barrancas del Cobre is said to be four times the size of the Grand Canyon, stretching nearly 600 miles from Creel in the northeast to Los Mochis on the Sea of Cortez. The Tarahumara inhabit the cooler, more humid floor of the canyon during the hot, dry summers and the rim of the canyon during the cold winters.

Since the Tarahumara do not utilize irrigation, they are subject to crop failure during extended drought. During 1994-1995, a severe drought left the tribe in perilous straits. One particular tribe that included seventy families sent a letter (signed by the head of each family with a thumbprint) to a local Jesuit priest, Father Verplancken, who ran a clinic for the Tarahumara in Creel. In the letter, the families said that their tribe was near starvation and they were in desperate need of help. In parallel with the Tarahumara's plea for help, the head of Corazon, John Torrence, had coincidentally contacted Fr. Verplancken with an offer, funded by the Orange County benefactor, to donate money to purchase food for the starving tribe. But the money was not to be sent through official government channels (where it would probably be confiscated); it was to be delivered directly to Fr. Verplancken, who would then purchase and deliver the food to the desperate tribe. This is what prompted John's call to me.

(continued on next page)













At the time, while I was certainly open to the humanitarian adventure, I had never flown to Mexico and certainly not into a dirt strip in the mountains at over 7000 feet. This described the airport at Creel. But when I found out Creel was located in the middle of drug country and that unfamiliar airplanes were subject to gunfire, flying there was immediately ruled out. Instead, I opted to fly into Chihuahua, rent a van and drive the four hours to Creel. Three of us would go — John, my neighbor Jim Dority, and me. We were accompanied by \$10,000 in John's money belt and a trash bag full of stuffed animals, which took up most of the baggage area. The plan was to make the trip in two legs: Chino, CA to El Paso, TX and El Paso to Chihuahua. We set out early on a Friday morning. The trip was uneventful; I had travelled to El Paso many times on business and literally knew the route by heart. The leg from El Paso to Chihuahua, however, was new to me — flying over barren, trackless desert, with no navaids for 180 nm. Despite a strong westerly crosswind I was very proud to be right on course when we finally picked up the Chihuahua VOR. We were greeted at the airport by the dead airplane graveyard.

We rented a van and bedded down in Chihuahua for the night. We hit the road in the dark at 4AM the next morning. We were to meet the Father at 8AM in Creel where we would hook up with a truck carrying 10 tons of food to the Tarahumara tribe. We passed time on the long drive by joking around ... "What is your favorite Mexican movie?"

Tongue-in-cheek answer: "The Three Amigos." I quickly became the film's villain "El Guapo" and John became "El Fayo." Actually the roles should have been reversed.

"What is your favorite Mexican song?"

"Guantanamera."

"That's not Mexican, that's Cuban."

"But I'll bet everyone in Mexico knows it."

Sure enough, everyone we asked during our trip could sing, hum and/or dance to the song.

About halfway through the trip we turned off on a side road to head into the mountains toward Creel. A bonfire in the middle of the road illuminating men in fatigues with bandanas covering their faces and machine guns in their hands immediately stopped us. We soon found ourselves spread eagle against the side of the van, being searched for weapons. It was the Mexican military looking for gunrunners going into the Sierra Madre. Thankfully they did not search us thoroughly enough to find the money belt. If they had, there's no telling where we would be today. The rest of our trip to Creel was uneventful.

When we reached Creel and met up with Fr. Verplancken, we found out that the truck with supplies had already left. The plan was to meet the tribe at the end of an old logging road when the sun was at its highest (the Tarahumara have no watches). We set out immediately in Fr. Verplancken's

four-wheel drive vehicle to catch up with the rest of the group. Our route took us on dirt roads along the edge of the canyon. Suddenly, the brake pedal went to the floor, our brakes had failed. After cautiously bringing the vehicle to a stop, the four of us crawled around it and eventually found a hole in a brake line. "No problem," said the Father. "When we catch up to the truck the driver will fix it." But where will he get the parts, I thought. After careful driving along the edge of the canyon we finally caught up to the truck, along with an advance party of the Tarahumara. They, along with the tribe's sheriff, were there to guide us the rest of the way.

The driver of the truck fixed our brake line with a tree twig and extra brake fluid (no kidding). The Tarahumara climbed on top of the truck and into our vehicle, and we continued on. All of a sudden there was wild gesturing with pointing toward a path leading off the rough dirt road we were on. This was the logging road. It was extremely rough and so full of Z-turns that it took us four hours to travel six miles. In some places the wiry Tarahumara would throw boulders off the road to make it passable; in other places they threw boulders back onto the road to fill huge ruts. Fr. Verplancken was the only one who spoke their dialect. To them questions such as "How much farther?" or "How is the road ahead?" were met with shrugs and stares; they never took that road. Unexpectedly the truck started to slide toward the edge of the road; it was in loose shale. Like it or not, we had reached the end of our journey.

What would happen next? We didn't have to wait long to find out. From the surrounding woods emerged many Tarahumara with their burros. Unbeknownst to us, the end of our journey had closely coincided with the end of the logging road — the designated meeting place. Tough, rangy Tarahumara men quickly set about unloading 80-pound bags of rice, beans and corn from the now helpless truck. This effort was made even more impressive by the fact that these men barely weighed 100 pounds themselves. The bags were piled neatly at the edge of the road. The next step was for them to load the bags onto their burros before the tribe started a six-hour trek to their village on the edge of the Barrancas del Cobre. But that long journey would have to wait until daylight the next morning.

Our next task was to get the empty truck turned around and free of the shale it was trapped in. The Tarahumara came to the rescue. After several failed attempts, with seemingly

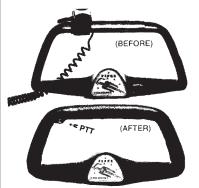
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half the tribe on the truck bed and the rest pushing, the truck broke free and reached solid ground. I have to admit I had concerns about the truck rolling over and injuring someone during this effort. Where would we get medical help in this remote place?

Darkness was now setting in and it was time for us to head back to the relative civilization of Creel. The narrowness of the road and the arrival order of the vehicles dictated the order of our departure — Fr. Verplancken's four-wheel drive vehicle first and the truck second. The problem this presented was that Fr. Verplancken's vehicle was nearly out of gas with no reserve fuel; if it had run out we would have been stuck. Ingenious as these people are, however, I'm sure they would have solved the problem. As we drove away, Fr. Verplancken commented that he had told the tribal leaders they were to use the corn only for food, not to brew beer. He lamented, however, that they had probably fired up the stills already.

Our fuel problem was solved when we reached the beginning of the logging road and found a small shack by the side of the road that sold gas. In addition to the shack, the "station" consisted of a 50-gallon drum located on top of a small hill. Fuel was dispensed via gravity. After fueling I asked the attendant where the restrooms were. He looked at me and then all around, and while smiling said (in Spanish), "Anywhere you want."

The rest of our journey back to Creel was uneventful although each of us later admitted to unsuccessfully fighting sleep so that we could keep an eye on Fr. Verplancken's driving as he careened along the narrow road. It also dawned on us that we had not eaten anything all day except for a few Peppermint Patties we had shared with the advanced group of Tarahumara. Adrenalin had kept us going all day. We arrived back in Creel after 10PM and slept in the parish guest (read bunk) house that night. I don't think I have ever slept more soundly.

The next day (Sunday) found us bumming around Creel after attending morning Mass at the adjacent church. Jokingly, our plan for the day was to gather everyone in Creel at 3PM in the town square to sing "Guantanamera." Everywhere we stopped we would extend that invitation.

Even though all responses were "si," I was never sure whether we were taken seriously or not. At any rate, our quest was cut short when a local looking for help found us "Gringos." An American woman had broken her ankle stepping off the train that transports tourists and their RVs through the Barrancas del Cobre. "Could we take her back to Chihuahua, or even El Paso?" In her condition we could not get the three of us, plus her and her husband into 63Papa so we took them back to the Chihuahua airport in our van and made sure they got on the first flight to El Paso.

Our flight back on Monday took us a different route. After departing Chihuahua we flew over miles of hop fields (that area produces great beers) and then across the Sierra Madre where we had experienced such a great adventure just two days before. Our port of departure from Mexico was Hermosillo. From there we crossed the Sea of Cortez, flying up both the east and west coasts of Baja and eventually finding our way back to Chino. On the way we overflew both Ensenada and Tijuana (my first glimpse of both from the air) — two cities where I would experience many future adventures.

In that I had safely transported him to Creel and back (mostly, according to him, because of his help), John Torrence invited me to visit an American run orphanage in Vincente Guerrero, BC. This small fishing town, about 90 miles south of Ensenada, had several dirt strips. Thus began another chapter in my Mexican adventures. Eventually, another pilot and I (we kiddingly called ourselves the Corazon Air Force) would, almost monthly, transport children from the orphanage to the Shriner's Hospital in Los Angeles for medical treatment. This continued for several years until a career change caused me to move out of the Southern California area.

Years have gone by and flying hours have piled up but I will always be most grateful for the unbelievable experiences I had on what I call "My Greatest Adventure." After our return we "debriefed" at a dinner with the woman whose compassion had triggered the trip. During dinner she asked if we would do it again. Without pause and in unison we responded, "In a heartbeat." Unfortunately, an adventure like that is almost certainly a once in a lifetime occurrence.



# Fuel Selector Dilemma

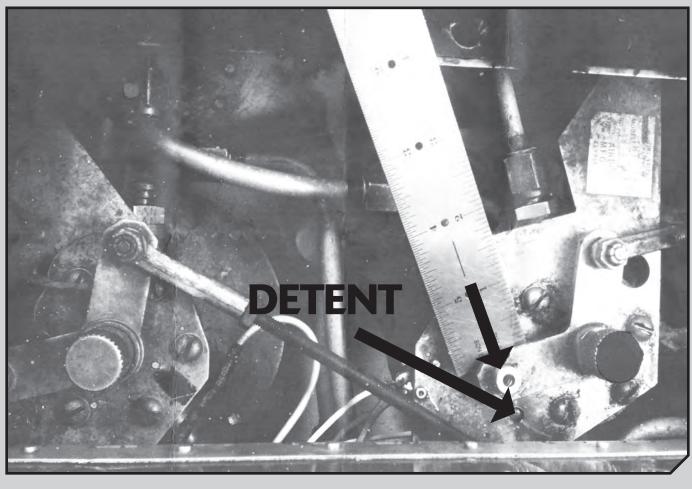
#### by Terry Rawlins

uring a recent flight from France to the UK, I had just flown past Deauville on the French coast and the time came to reselect the fuel from AUXs to MAINs. The left hand went with no trouble, but the right-hand selector was jammed and would hardly move

at all; in fact, it was stuck on the AUX. After a few minutes, the tank ran dry—the engine didn't stop, but wind milled. As I could not move the selector at all, I could not Cross Feed, so there I was out over the Channel on one engine. I initially elected to turn and divert to Deauville, but

after a while decided to get the aircraft on the ground so I went to Le Havre.

After a long phone chat with my engineer we decided to fill the AUXs and fly back to the UK on AUXs, and treat the fuel in the Right-Hand Main tank as unusable.



When I got to my engineer's facility he and his partner came up with the solution (more to follow below) that the small ball, which sinks when you select AUX or MAIN, was not moving, and so the selection could not be made. However, a liberal dose of the Aviation equivalent of WD-40 solved the problem and, in fact, the whole of the right-hand selector is now easier to move. My engineer made the comment that although this type of

lubrication is not in the Maintenance Schedule, they are going to add it to things to be done.

The flight back to my UK base that evening and the flight down to France the next day were non-eventful.

#### The Solution to the Problem

Photo 1 (taken by my engineer) is the area beneath the fuel drain cover on another aircraft. Photo 2 is the diagram from the Service Manual. You can see the elongated L-shaped arms positioned at 10 to 2 or 20 past 8. One end attaches to the link to the fuel selector; at the other end (arrowed on the ruler) you can see a silver-coloured cap. This cap contains a ball bearing and a spring. The purpose of this is for the spring to force the ball bearing into the appropriate Detent/plunger (small brass plunger in the small hole) to activate micro switch which switches over the signal from the appropriate Tank to the Fuel Gauge so the Single Fuel Gauge (per side) indicates the quantity of fuel in the tank selected and being used.

With my situation, the ball bearing and spring in the right-hand unit seized when the AUX tank was selected, which meant that the Fuel Selector could not be moved.

The fix was to lubricate the ball bearing and spring in the jammed unit, which freed them.

The irony is that these micro switches are not used on my aircraft because I have the Aerospace Logic Digital Fuel Gauges that permanently connect to the fuel tanks.

[Technical Advisor's Note: All twin owners should be aware that the top of their fuel selectors need to be kept clean, and free of dirt and debris. Additionally, only a dry film type lubricant such as silicone or PTFE-based sprays should be used on the selector arms, as they will not attract dirt like petroleum-based lubricants will. Remember these selectors are under the floor but far from impervious to becoming fouled with everyday grit and grime. Periodic cleaning and lubrication is easily done by the owner through the drain access panel on the floor aft of the "dog dish."]

#### PIPER TWIN COMANCHE SERVICE MANUAL

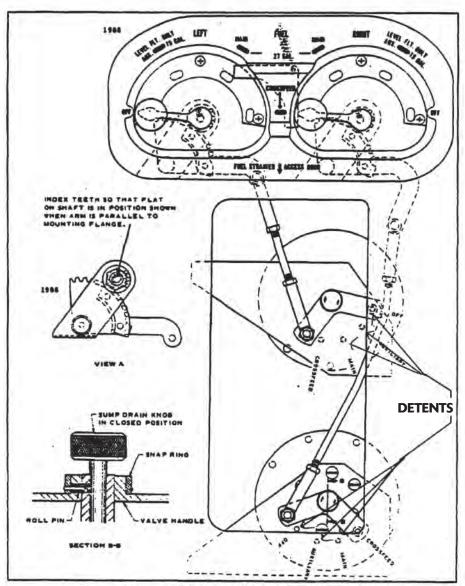


Figure 9-12. Fuel Selector Valve Control Installation

Issued: 12/29/72



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by Dr. Jerrold Seckler

f all our sense organs, it could be argued that the ear is the most complex. It consists of three distinct parts, the outer, middle and inner ear.

The outer ear, also called the pinna, is the part of the ear we see sticking out from the sides of our head. It collects sound waves and channels them into a tube, the ear canal, that ends at the boundary of the outer and middle ear called the tympanic membrane, or eardrum. Sounds cause the eardrum to vibrate, and these vibrations are amplified and passed through the middle ear by three small bones that transmit the vibrations to the actual hearing organ, the cochlea, in the inner ear. This organ contains fluid and many cells that have fine "hairs" sticking up from the cell surface. The vibrations transmitted from the middle to the inner ear cause movement of the fluid, which in turn stimulates the tiny hairs on the cochlea cells to generate an electrical current

that travels from the inner ear to the hearing center in the brain.

There are other parts of the ear as well, such as the Eustachian tube, which is necessary to balance the pressure between the outer and middle ear (that's what gets blocked during rapid descents), as well as the semi-circular canals which play an important role in balance. For now, let's just concentrate on hearing as it relates to FAA certification.

There are two main types of hearing loss – conductive and sensorineural. Conductive loss results from any condition that impairs the transmission of the sound wave from the pinna to the cochlea. Common causes include plugging of the ear canal by wax, otosclerosis (stiffening of the bones of the middle ear) and infectious processes in the middle ear. Sensorineural hearing loss is due to a problem in the inner ear, most usually deterioration of the hair cells that convert the vibrations of

sound into electrical signals that travel to the brain. As we age, all of us experience some degree of hearing loss. This is exacerbated by prolonged or very sudden loud noise exposure, ear infections, genetics as well as multiple other factors. Pilots have been especially prone to decreased hearing because of the high noise environment of the cockpit. Hopefully, the emergence of high quality ANR headsets over the last 15-20 years will minimize this risk for the new generation of pilots who have not flown without hearing protection.

Most pilots intuitively understand that good vision is necessary for a pilot, but what about hearing? What are the FAA standards, and, if a pilot does not meet them, can he still get a medical certificate?

Interestingly, hearing loss is not a disqualifying condition for any category of medical as long as the amount of loss is not to a degree that makes normal communication impossible. Even then,

pilots who are totally deaf may still qualify for a medical certificate.

Unlike visual testing, which is fairly thorough, the test for hearing is quite simple and straightforward. For all classes of medical, all the applicant needs to do is demonstrate the ability to hear a normal spoken voice with his/her back to the examiner from a distance of six feet. What that means is simply that during the exam, the examiner should have you turn your back to him

and he/she will, from a distance of six feet say a few things and then ask you what was said. Note that unlike with the eyes, the ears are not tested separately. You do this test using both ears. Even if you are totally deaf in one ear, you may pass without difficulty.

If you cannot pass that test, there are other options. For example, you may choose to have audiometric testing. If you do, you must demonstrate the following thresholds:



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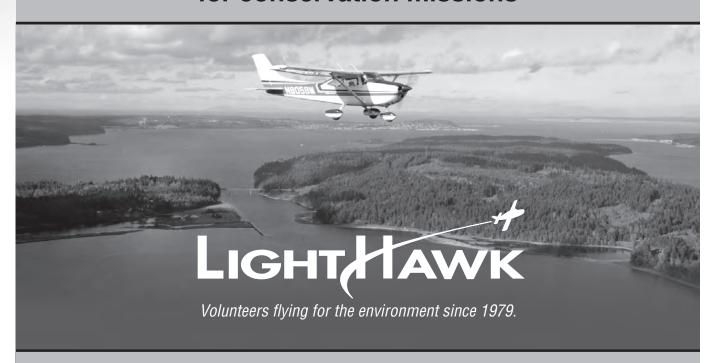
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Condition	500 Hz	1,000 Hz	2,000 Hz	3,000 Hz
Better Ear	35 dB	30 dB	30 dB	40 dB
Worst Ear	35 dB	50 dB	50 dB	60 dB

What this test measures is the softest sound you can reliably hear at different frequencies. A whisper is about 20 dB, and a jet engine is roughly 180 dB. The frequencies, measured in Hertz (Hz), correspond to pitch, with higher pitched sounds having a higher frequency. In this test, both ears are measured and you have to be able to hear a 35 decibel (dB) tone at 500 Hz, a 50 dB tone at 1,000 and 2,000 Hz and a 60 dB tone at 3,000 Hz in your worst ear, and 35, 30 or 40 dB tones at those frequencies in your better ear in order to pass.

If you can't pass the standard hearing tests, you may be able to meet the standards using a hearing aid. If so, there will be a limitation on your certificate stating it is "Valid only with use of hearing amplification." Note that it does not require you to use your hearing aid in the cockpit. Any form of amplification, including a headset, will meet the requirement.

Persons who are deaf and cannot meet the hearing standards are still eligible for a medical certificate. They must be able to demonstrate to the FAA their ability to 1) detect an engine failure by a change in vibration or instrument scan, 2) stall recognition by aerodynamic buffet and visual cues, and 3) recognize retractable gear emergencies by visual means, if applicable. Such a certificate will contain the

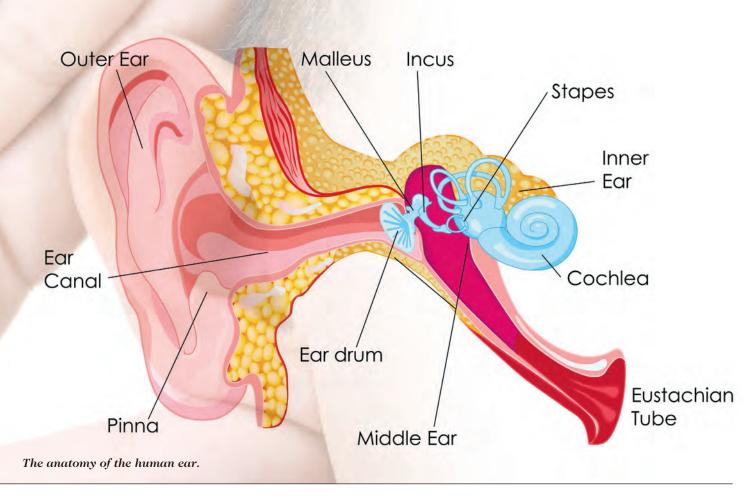
limitation "Not valid for flying where radio use is required."

As long as no radio communication is required, such persons can get second class certificates and fly commercially in such jobs as banner towing and agricultural application. Currently there are several hundred deaf pilots in the United States.

About the Author: Dr. Jerrold Seckler has recently retired after practicing medicine (urology) for over 40 years and as an active AME for 25 years. He has almost 6,000 total hours, 1,700 of those in his 2001 Cirrus SR22. He is a CFII, former COPA Board Member and a ground instructor at COPA CPPPs.

The items discussed in this column are related to experiences by Dr. Seckler in his many years as an AME, and made hypothetical for the article. Any information given is general in nature and does not constitute medical advice.









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- AIRFRAME DAMAGE HISTORY, Any Damage History e.g. Gear Up Landing
- TOTAL ENGINE TIME, Total Hours On Engine Since Factory New or Remanufactured
- ENGINE TIME SINCE TOP OR MAJOR OVERHAUL
- PROPELLER TIME, Total Time On Prop Since New or Overhaul
- ANNUAL INSPECTION DATE
- FLIGHT INSTRUMENTS, Standard Gyro Panel, Electronic Flight Instrument System
- RADIO / NAVIGATION EQUIPMENT LISTING, Communications & Navigation Equipment Listing e.g. GPS, ILS, VORs
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- SPECIAL EQUIPMENT LISTING, Engine Monitor (EGT, CHT, Fuel Flow, etc.)
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#### **Abbreviation Key:**

A/C	Air Conditioning	ILS	Instrument Landing System
AD's	Airworthiness Directives	LE	Left Engine
ADF	Automatic Direction Finder	LOC	Localizer (Runway Centerline Guidance)
AH	Artificial Horizon	LORAN	Long Range Navigation System
A&P	Airframe & Powerplant Mechanic	M/B	Marker Beacon
Al	Aircraft Inspector	MDH	Major Damage History
A/P	Audio Panel	NDH	No Damage History
AP	Autopilot	NM	Nautical Miles
CDI	Course Deviation Indicator	NAV	Navigation Radio Receiver
CHT	Cylinder Head Temperature	OAT	Outside Air Temperature
COM	Communication	OH	Overhaul
C/R	Counter Rotating	PET	Piper Electric Trim
C/T	Carburetor Temperature	RB	Rotating Beacon
DF	Direction Finder	R/C	Rate of Climb
DG	Directional Gyro	RE	Right Engine
DME	Distance Measuring Equipment	RG	Retractable Landing Gear
EFIS	Electronic Flight Instrument System	RNAV	Area Navigation
EGT	Exhaust Gas Temperature	SB's	Service Bulletins
ELT	Emergency Locator Transmitter	SCMOH	Since Chrome Major Overhaul
E/P	External Power Plug	SFN	Since Factory New
F/D	Flight Director	SFRM	Since Factory Remanufacture
FGP	Full Gyro Panel	SMOH	Since Major Overhaul
FWF	Firewall Forward	SOH	Since Overhaul
GPS	Global Positioning System	S/N	Serial Number
G/S	Glide Slope	SPOH	Since Propeller Overhaul
GSP	Ground Service Plug	ST0H	Since Top Overhaul
H/P	Heated Pitot	TB0	Time Between Overhauls
HP	Horsepower	TT	Total Time
HSI	Horizontal Situation Indicator	TTAE	Total Time Airframe and Engine
IFR	Instrument Flight Rules	TTSN	Total Time Since New
IMC	Instrument Meteorological Conditions	XPDR	Transponder

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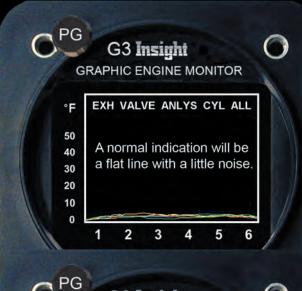
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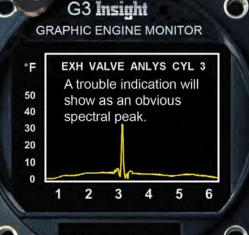


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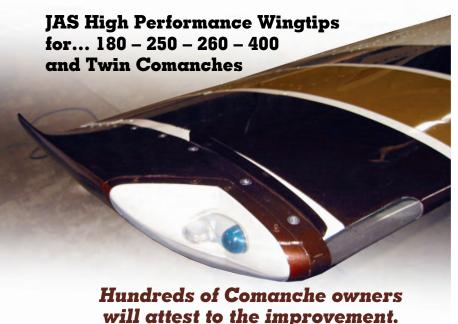
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