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is the official monthly member publication of the International Comanche Society P.O. Box 1810 Traverse City, MI 49685-1810 U.S.: 888-300-0082 Other: 231-946-3712 Fax: 231-946-6180

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The Comanche Flyer (ISSN 08994223, USPS 2-324) is available to members; the \$25 annual subscription rate is included in the Society's Annual Membership dues in US funds below. Comanche Flyer is published monthly by Village Press

Dave and Marcia Gitelman's 1961 PA-24

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Postmaster

Send address changes to the above address. Periodical postage paid at Traverse City, MI 49686

	Volume 34, No. 7 · July 2007	lyer
	vww.comancheflyer.com Published By the International Coman	che Society Inc
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Letter From The President



s I am writing this month's column, the Annual ICS Convention is fast approaching. Time to start finalising your arrangements, and making the necessary bookings. There is a large contingent coming from the local tribe, and if this pattern holds, this should be a strong and successful convention.

We are finalising our trip to the U.S. at the moment, and like most international visitors also plan to spend additional time in the U.S. doing a bit of touring, and catching up with friends.

Upgrades and Retrofits

In this month's column, I thought it might be timely to talk about the sort of equipment which is reasonably available and adds to the capability and amenity of our aircraft. And the way that they impact how you might think about your operation.

This past couple of days, we have been away on a trip which was the first time to really try out the GPSS (GPS Steering) interface which I have had fitted. This unit reads the data from the ARINC bus out of the GPS – in my case a GNS430, and after executing internal algorithms, generates an analogue pseudo-steering signal which can feed a wide range of autopilots, including Century units. The analogue signal replaces the heading signal from your DG or HSI. A panel mounted indicator/ switch allows you to switch between GPS and HDG mode.

The autopilot is selected to HDG mode for this to work. The vertical modes of the autopilot are unaffected, as are the other horizontal modes such as NAV, APPR and so on. Obviously, the details vary a bit with model of autopilot.

The ARINC bus puts out quite a bit of data – not only where you are, but cross-tracking information, and details of upcoming legs. If you are operating with a flight-plan loaded and active in the GPS – and that is always the preferable mode of operation – turn anticipation occurs, and the aircraft will turn neatly and accurately from one leg to the next without any action by you. It is good practice to align the course selector with the new course, but it has no impact as far as the system is concerned. But it keeps you in the loop. This all occurs even with an approach loaded (and active). It is a great improvement for single pilot IFR operations, and provided your basic autopilot is in good serviceable condition, as it should and can be, gives tremendous capability at modest cost. There are a couple of units out there. I selected the DAC GDC-31 unit, but really can't comment on the relative performance and desirability of the units available. I am pleased with the unit. It is exciting to see how we are now seeing the possibility of retrofitting our aircraft to current and improved capability at reasonable cost. Not just new gear doing old things, but new gear doing new things.

The unit takes up almost no panel space, with a single selector switch, and maybe a day/night switch depending on your situation. The unit itself hides away unseen.

I have also taken the opportunity to upgrade my standby AH to a Dynon D10A EFIS. This unit is not certified, but can be fitted in different ways depending on your regulatory situation. Again this unit looks good. It can have a range of options fitted to give it the ability to substitute for effectively any instrument in the panel (and a few you don't have). With optional two-hour battery backup fitted internally to the unit, it gives good security against both vacuum and electrical failures. With one of these, and a good battery powered GPS preferably linked to it, you will have total redundancy of flight and navigational capability independent of the aircraft and its systems. That is a good thing and undreamt of just a few years back.

The display pages can be customised to suit your operation, including checklists, or other reference data such as power settings and frequencies. With the right options, it also displays density height and TAS, and a wind vector. The E6-B is likely to bind up due to disuse pretty soon.

As I noted last month, the "glass" era is fast approaching in the retrofit market, and fortunately, the stuff is starting to look like it actually should be in an aircraft. The earlier generations of mono-LCDs and the like, to me, always looked like prototypes and unlikely added to the appeal of an aircraft.

This is all good stuff, but let's not forget the basics. A conversation I had recently prompts me to refresh the importance of shoulder seat belts in our aircraft. If your aircraft is not yet fitted with belts, do it now. There are a number of options, and you only need to look in almost any issue of the *Flyer* to find them.

It should be no surprise to anyone anymore that without shoulder belts, even the most minor of incidents can be nonsurvivable or involve unnecessary injury. Fit them and wear them – always. It is a good rule to never even sit in or taxi an aircraft that is not tied to you. I know of an incident here, quite a few years back, where an aircraft was picked up by a whirlwind, and dumped down hard and upside down.

The instructor had undone her seat belt a few minutes earlier to talk with the student while they were sitting in the aircraft. She was out of flying for over six months, and lucky not to be a paraplegic with her injuries. The student still had their belt fastened and was essentially uninjured.

There is a bit of aviation wisdom that has been around for years that states:

Rule 1: It is not worth having an aircraft accident unless you have an original one.

Rule 2: There are no original aircraft accidents.

As sometimes happens, things change, and rules no longer hold. Worldwide there is a new class of accident emerging. It really hasn't got a proper name yet, but has its roots in a "disconnection" between the pilot and the physical environment in which we operate.

Physical hazards like icing, thunderstorms, mountain wave and darkness are no respecters of technology like glass cockpits, XM radio and the like. Ultimately, it's a small airframe and a piston engine, or two, against nature. And the results are predictable.

New technology should be used:

- To fly more safely and to lower workloads in conditions and situations in which you would happily fly without the technology.
- To make better decisions earlier, to identify where you should not be and what you should not do.
- To alert you to hazards earlier, more accurately, which you would not otherwise be aware of.

This is how most pilots are quickly adapting to use it, and are building it into their flight management approaches.

It is apparent that technology should not be used to fly into conditions into which you should not be flying. No little box makes the aircraft invincible, or stronger. This lesson was learned the hard way with the airlines in the early days of weather radar.

GA is still coming to grips with this, and there is unfortunately still a growing list of "disconnection" accidents – where the pilot seems disconnected from the reality, and seduced by or overreliant on technical aids. This is arguably exacerbated by the tendency for lowerexperienced pilots to take on more ambitious operations on the back of comforting technology. So in some ways, technology is an impediment to the acquisition (and retention) of skills and defences.

To be fair, the net balance is probably positive – but it does create a new risk exposure, and one for which we all need to have defences. I am sure you have in your own kit of local folklore, stories about (other people's) GPS approaches gone wrong, descents at the wrong point, or simply imprudent decisions.

These are worth thinking about, and considering as part of your own personal development and recurrency.

The other aspect of high technology cockpits is that they can change the operating environment to more resemble a computer game, than a physical situation.

Unfortunately, there is no "Ctrl-Alt-Del" for flight situations, so risk management strategies have to be quite different for the computer and flight environments. This is not always achieved, and the transfer of risk management approaches is emerging as a factor especially impacting younger and more recent pilots who came to computers before aircraft.

While you can bungle your way through most end-user software while on a learning curve, aircraft are not so forgiving – so formal training and or study are non-negotiable.

For the majority of our members who are in the Northern Hemisphere, the flying season will be at its peak as you read this. I trust you are having an enjoyable, rewarding and safe season.

See you at Tacoma.

Lawrence

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.

Send to:

Kim Blonigen, Managing Editor at kblonigen@cox.net

Articles and photos may also be sent via U.S. Mail to:

Kim Blonigen

2031 South Beech

Wichita, KS 67207

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.

Cover Story: Comanche Spirit



Four Decades Almost as Ma

by Kim Blonigen

ave and Marcia Gitelman have both been flying for 40 years and have owned their 1961 PA-24 for 38 of those years. They purchased their Comanche out of a recommendation from their Flight Instructor and are happy they did. Dave says, "The Comanche is a very stable aircraft and is easy to fly. It doesn't have any nasty traits and is incredibly reliable."

Used for business and pleasure, the Gitelmans currently fly about 120 hours a year. Their flights are mostly on the East coast, as they spend the winter months in Florida away from the frigid weather that hovers down on Rochester, N.Y. during that time. However, over the years of owning the airplane, they have flown to most of the lower 48 states,



Comanche Year & Model:	1961 PA-24	Years Owned: 38		
Airport Home Base:	KROC in Rochester, N.Y. (summer) 7FL6 in Port Orange, Fla. (winter)			
Year License Attained:	Dave: 1967 Marcia: 1967			
Total Hours:	Dave: 3,500 Marcia: 1,900			
Comanche Hours:	Dave: 3,300 Marcia: 1,500			
Ratings:	Dave: Commercial, Marcia: Commercial currently working of			

of Flying and ny in a Comanche

as well to Canada and the Bahamas. They have also made several back-and-forth journeys to the West coast. In addition, their trips have included numerous regional and out-of-region fly-ins, and ICS Annual Meetings in Rockland, Maine; Quebec City, Canada; St. Louis, Mo.; Portland, Ore.; Boyne Mountain, Mich.; Harrisburg, Va., Denver, Colo. and Washington, D.C.

Dave and Marcia's PA-24 has had some upgrades. A Garmin 530W and a new Garmin audio panel have just been added. This is in addition to the KX-155 with glideslope, DME, autopilot with altitude hold, JPI analyzer, Stormscope, and Garmin 396 with XM weather. The airframe mods include gap seals, wing root fairings, slippers and spats, and dual exhaust and single fork landing gear.

Dave and Marcia both enjoy associating with other Comanche owners through ICS and have made many lasting friendships throughout the years. Dave currently serves as one of the Technical Directors for ICS and likes that through ICS, ideas can be exchanged to make the airplane even better.





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GOVERNORS

Letters to the Editor

Dear Editor:

I have read the articles about our horn cracking and I'm not convinced the horn is the problem. One mechanic has said, "If you heat the horn to about 200 degrees, the tube will just slide out. Could the heat crack the horn? What methods are the mechanics using to remove the tube?

Denny Haskins, [the author] said the tube was pressed into the horn at the factory for a very close tolerance fit. After 50 years of being mated, maybe they shouldn't be parted. Denny also says the cracks are not visible from the outside and must be disassembled to see the cracks on the inside. I would suggest that disassembly of these mated parts may be a bad idea as there are no visible cracks on the outside surface to justify disassembly.

Other mechanics I have spoke with feel that the part is cracked by the mechanics who are using extreme pressure to separate them or possibly those who heat and pound on the tube cause the cracking. It's not rocket science.

Let's get other experts to weigh in before you tear your tail apart to fix what's not broke.

Steve Wilson, ICS #7613

In response to Mr. Steve Wilson's letter:

The stabilator torque tube horn, PN 20397-00, is common to all Comanche (180, 250, 260, 400, 30 and 39) models. However, stabilator installation details differ significantly. To date, with meager data to support any firm conclusions, the 180/250/260 singles have been identified as having the potential for stabilator balance horn cracking.

If the trim tab free play exceeds specifications, the stabilator is out of balance, and/or the control cables are loose, a > 3,800-hour airplane has a very good chance of having a cracked horn.

Heating the horn to 200 degrees Fahrenheit will ease the removal of the horn from the torque tube. Aluminum will not lose its heat treatment unless heated above 730 degrees Fahrenheit for an extended period of time. The press fit of the counterbalance tube into the horn is necessary to preclude flutter over the lifetime of the airframe. It is not necessary to remove the counterbalance tube from the horn to perform a visual dye penetrant inspection.

The cracks form on the inside of the horn due to the combination of stress concentration at the bore intersections, and long-term vibratory oscillation from slipstream buffeting.

Crack propagation begins slowly at first and progresses rapidly once the critical crack length has been exceeded. When the cracks are visible on the exterior of the horn, the airplane's remaining time in the air is very short.

Hans Neubert ICS Director of Continuing Airworthiness

I just received the May 2007 *Flyer* and read the article [A Day That Shall Live in Infamy] about one of our association member's mishap, and I could not believe what I read. And I do not mean the description of the inadvertent spin, but [the author's] cynical, arrogant comments accompanying it.

Here is a pilot who does what we always preach, he goes out and instead of going for a \$300 hamburger, he actually goes out and practices maneuvers in his airplane. He winds up in a terrible situation and lives to tell about it, agrees to have it published so that we can all learn from it, and all [the author] can come up with is wisecrack remarks? I sure hope this is not all his military career taught [him]!

I have been instructing for 16,000 hours from Cessna 150s to DC-3s, although lately most of my work is in a widebody Airbus, but neither my colleagues nor myself would ever stoop so low as to ridicule someone that made a mistake the way [the author] did in this article.

[He has] done a big disservice to the association and the CFF and should apologize in the next issue.

Regards, Dr. Helmut Kunz, ICS #12604

Dear Sirs-

I receive many e-mails and copies of others from many sources within the ICS, and this is the first time I have been moved to reply to any that were not specifically directed at myself.

I believe that the article written by Bill Creech for the *Flyer*, with the permission of the author, can serve only one purpose. That is to enforce the realisation that everyone learns from their mistakes, but wise people learn from the mistakes of others. Such disclosures by the pilot involved in this incident, and the publication of same in our magazine can potentially save lives, and I applaud the inclusion in the *Flyer*.

My interpretation of the "editor's notes" is totally different to that of Dr. Kunz. Had there been any indication whatsoever as to the location or identity of the pilot concerned, I would have been horrified by what could then have been considered personal ridicule, and as such totally unacceptable. However, I see no such situation. One or two light-hearted comments ought to be acceptable to anyone with a flexible sense of humour, and to see them as "cynical, arrogant comments" and "wisecrack remarks" might be considered a little single-minded.

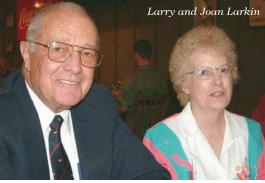
My apologies to both [Bill and Dr. Kunz] for this interjection, should either consider it inappropriate, but this world is full of negativity and criticism, so if there is any way at all to help one person without harming any other – let's just do it!!

Kind regards, David Sheppard, European Tribe Chief.

Editor's Note: There has been a lot of discussion on the forum regarding the above referenced article. Please be assured that the intention of the article was not to ridicule the member who shared this experience. An apology was given to the pilot in the event that it was taken that way.







Larry Larkin for ICS Honorary Lifetime Member

Recently seeing Larry at Sun 'n Fun brought several people there to the realization that considering Larry's past service to ICS, he is very much deserving of an Honorary Membership in the Society. With Dave Fitzgerald and myself in agreement, I moved that the ICS Board recommend to the membership in the 2007 Annual Voting of Members, an Honorary Lifetime Membership #233 in the International Comanche Society for Larry Larkin. The motion was seconded by Dave.

For those of you who may not know Larry or have only heard about him, he recently retired from flying, but has spent several years as a truly knowledgeable resource to ICS members. He is respected by all who meet him and many who have attended his seminars, came away knowing something they didn't already know.

Regarding the nomination, below are some of the comments posted on the ICS Forum from Board members and others:

I went to a seminar Larry put on out here in Washington a few years ago and it was a treat to meet, listen and talk to this man. I learned more about Comanches in two hours than ever before or will since. There wasn't [many] question[s] asked that he couldn't answer, [if there were] he promised to find the answer and inform the person asking the question at a later date. I wish he would come back this way and do another seminar. My only regret is that I didn't have insurance, [because] I would have paid him double to ride with me so that I could have learned some of the tricks he has passed on to others concerning engine out procedures, turns back to the runway on loss of an engine, etc. Yes for Honorary Membership.

-John Rabourn

Larry Larkin, immediate Past President at the 1981 Convention in Everett, Wash., was the first person to welcome my family and myself to our first Comanche function. Eleven years later, in Calgary AB, he amazed all of us by teaching us things we never knew we could do with a Comanche. [He is] a natural born teacher and a true gentleman. If he doesn't qualify for Honorary Membership, then who does? My vote is YES!!

-Don Ostergard, Western Canada

I agree most definitely. Larry won't be back, but the legacy of his work will be.

-Zach Grant

Even though we had a '100 Aviation Hero for the First Century of Flight', Marion Jayne, as our instructor, we still thought we could learn from Larry. We took his course in 1993, attended another of his seminars and still refer to his course material.

-Pat & Ken Keefer

I was actually surprised at Sun 'n Fun to find out that Larry was not an Honorary Lifetime Member. Larry has been an asset to all Comanche owners for many years and we sincerely hope there are many years to come. He is a personal friend and has made many Comanche drivers better pilots and/or instructors.

-Harley McGatha

In my opinion, Larry knows more about proper flying of Comanches than any other person alive. I know I used to have differing opinions from Larry before I flew with him. They all vanished once I was able to see his perspective. The only sad thing is that more people didn't take advantage of coming to listen or fly with Larry before his retirement. They missed a fantastic resource, and the chance to meet a great gentleman. I studied his seminars for five years, and substituted for him twice, which I considered a great honor, and one which I was never worthy of. Many times at fly-ins there were as few as 15 people present for the sessions. Larry always did the same job regardless. A truly great individual! We should honor him!

-Bill Harris

The voting by the Board on the Forum was unanimous in favor of presenting the Honorary Lifetime Membership #233 for Larry Larkin to the Annual Voting of Members in 2007, as provided in our Bylaws. The question will be issue #3 on the ballots, included in this issue of the *Flyer*.

Having personally attended several of Larry's seminars, and had him fly with me, I know him to be deserving of this membership. I trust the voting of the membership will also be overwhelming in its favor.

NOTICE - 2007 ICS Annual General Meeting

All ICS members are invited to attend the General Meeting of the International Comanche Society on Saturday, August 18, 2007, during the 2007 ICS Convention. The meeting is scheduled for 8:00 a.m. in Tacoma Rooms 3 and 4 at the Sheraton Hotel, Tacoma, Washington. Dorothy Meadows, ICS Secretary

ominations for ICS Officers in the 2007 Elections closed in April. The Nominating Committee, chaired by Karl Hipp, presents the following slate of Officers for the 2007 Elections:

President

Dave Fitzgerald, ICS #10297

Vice President

Sheldon Bresin, ICS #04570 Bernie Mazurek, ICS #07947

Secretary

Dorothy Meadows, ICS #06723

Treasurer

Don Nelson, ICS #00118

The annual voting of members will take place during July with the ballots in the July *Flyer* mailings. Ballots need to be returned by August 14 to be counted. Since some ICS members may not know all of the nominees, below is more information about each one.

Dave Fitzgerald



Dave was born in 1940 in Canton, Ohio and has lived there most of his life. The desire to be a pilot has been with him since childhood. He took his first lesson in 1964 and between family obligations and traveling as a structural iron worker, he finally obtained his private in 1973.

Through the years he has owned three Cessnas, a 120, 150 and 175. In 1992, he drove to Virginia to look at a Piper Arrow, but when he arrived it had been sold. However, there was a real salesman there who said, "I have just the plane for you – a Comanche." Dave's reply was, "What's a Comanche?" You know the rest of the story, a not-so-shiny and less-than-perfect 1963 PA30 turbo arrived at his local airport a few days later. Now all he had to do is get a multi-engine rating and pay for the first \$25,000 annual (which was more than what he had paid for any airplane he previously owned!).

In 1996, Dave purchased his current Comanche – a 1971 PA39 turbo, which he and Harley McGatha flew to the 1999 Convention in Cambridge, England. Dave enjoys long-distance flying, with the Bahamas and Carribean being among his favorites.

Dave says his wife Linda has been very tolerant of his aviation interest through the years and occasionally even gets up the nerve to fly with him. Also, he feels that the ICS has been a tremendous help for him from the beginning with an abundance of technical information and social camaraderie.

"I have had the privilege of serving as North Central Tribe Chief for the two years and as Vice President this year," Dave says. "If elected President, I plan to work with the Board of Directors to increase our membership and make the ICS a strong Type Club able to provide the services needed to keep the Comanche a safe and valued aircraft long into the future. I believe the BOD needs to have open lines of communication with its members and make decisions based on that input."

Sheldon Bresin



As Vice President of ICS, Shell says he will support and a c t i v e l y participate in the functions of the ICS Board to accomplish the necessary changits obeging

es to ICS as it adapts to its changing size, and economic and operational environments.

Because of the advancing age of the Comanche fleet, their diminishing number, increasing difficulty in obtaining parts, and less than desired Comanche owner membership in ICS, Shell believes it is necessary to continue and enhance emphasis on improving ICS's recognition in the aviation community as the best source for Comanche operational and maintenance expertise and resources. He proposes to work with the Comanche Flyer Foundation to find additional ways it can further aid in mitigating the foregoing concerns within the constraints of its non-profit status.

2007 ICS Officer Nominations

Shell has been a member of the Southwest Tribe for many years, attended many fly-ins and conventions, organized and conducted a few fly-ins and served as Assistant Southwest Tribe Chief. As a designated Comanche Flight Instructor for singles and twins, he works with individual Comanche pilots to enhance their piloting skills and operational safety. He has also provided flying companion ground courses to groups of Comanche pilot companions at fly-ins and conventions.

Shell started flying lessons without parental approval and financed them by part-time employment. He legally soloed on his 16th birthday and obtained his private license on his 17th birthday. He and a friend purchased a wrecked 1929 Barnard New Standard D-29A biplane after high school graduation, rebuilt it, and flew it from New York to Florida to continue working for Pan American as a mechanic. He left Florida to attend college in Indiana, which he financed by working nights, and earned a B.S. in Aero Engineering in 1951. Shell then went to work in the aerospace industry doing aerodynamic design and analysis for airplanes such as the Temco TT-1 and T-38/F-5. His 38year career in the aerospace industry was completed in 1989 as Manager of Systems Engineering on the B-2.

Continued on Page 11



2007 ICS Officer Nominations

Continued from Page 9

Throughout the foregoing time period, Shell continued flying and earned Commercial, Instrument, Flight Instructor, Airline Transport Pilot and Ground Instructor licensees. His first Comanche flights were in a PA-24 180 in 1964 and he earned his twin rating in a Twin Comanche the next year. Shell owned a PA-24 250 for 14 years and used it for daily commuting to work, as well as for flights throughout the country; including Alaska. He has owned his "turbo'd" Twin Comanche for 23 vears and has flown it extensively, including a round trip to Britain. Shell has over 12,250 hours of flight time, with more than 2,500 hours in single and 3,000 hours in twin Comanche airplanes. Shell concludes with saying, "The Comanche airplanes provide excellent performance and value. My desire is to aid the ICS in preserving and enhancing the use, value and longevity of the Comanche fleet."

Bernie Mazurek



A 73-year-old retired Automotive Mechanical Engineer and past North Central Tribe Chief two times, Bernie has chaired and cochaired many fly-ins including the 2001 ICS Convention. He started flying in 1958 and received his private pilot's

license in August 1959. He obtained his advanced and instrument ground instructor ratings in 1967 and taught ground school for 14 years in the Adult Education Program in Taylor, Mich. Bernie went on to obtain his instrument rating, commercial license, CFIAI ratings and multiengine rating in 1975. He has accumulated 4,239 total hours in Tri-Pacers; Cherokees; Cessna 140s, 150s, 172s, and 310s; and of which 1,702 hours are in Comanche 250, 260B and 260C.

Bernie joined ICS in 1987 after buying into a 1969 260C Comanche (N9369P) and has flown it to many conventions including Portland, Harrisburg, Kansas City, Orlando, and Tampa where 69P won Flagship. He also attended the 1994 Australia, San Diego, Galveston, and Manassas ICS conventions. As North Central Tribe Chief and Assistant Tribe Chief, he has attended many ICS Board Meetings. And has also been a member of, and chaired, the ICS Nominating Committee. Bernie says he would like the opportunity to serve ICS and its members in developing the future role of ICS in general aviation and the preservation of Comanche aircraft. He states, "ICS and its members are facing many challenges that include the ageing fleet, government restrictions, operating expenses, and membership loss. Certainly, we will not find all the answers to these questions in the foreseeable future, but with sincere guidance, and a lot of effort, this goal is attainable."

Dorothy Meadows

Dorothy feels that time flies faster each year for her, as this year marks 40 years of flying airplanes and 21 years of owning her Comanche 260B, 669P. She and husband Gene have had some great times flying in 669P all over the country – on vacations, to fly-ins and conventions.

This past year there were many adjustments made with the closing of Headquarters in Oklahoma, and the transitioning to Village Press. Dorothy says she and other members of the Board of Directors received many messages from members about their concerns on aging aircraft, the website, membership, the pathfinder and other issues which were thoroughly discussed at the Spring Board Meeting last April.

She goes on to say, "My year as Secretary on the ICS Board of Directors should be completed in August at the Convention in Tucoma, Wash. I feel I need another year as ICS Secretary, to be involved and follow through on the many positive things happening within ICS."

Don Nelson

As ICS Treasurer this past year, ICS Secretary the prior two years, and North West Tribe Chief for the two years before that, Don has served on the ICS Board for five years. He is married to Shirley, who helps him with ICS bookkeeping. Together they have three children, seven grandchildren and nine great grandchildren. He is 69 years old and a retired building contractor residing in Bellingham, Wash.

A licensed pilot since 1967, Don holds commercial and instrument ratings, SEL, MEL, SES. He currently has logged 4,650 hours, 1,400 of which are in Comanches. A member of ICS since 1973, he is flying his second 250 Comanche, N7836P, based at Blaine (4W6).

Don states that his first Comanche flight time was in 1968 in a 250 for his commercial complex time. He liked N671A so much that he bought it in 1970 and joined the newly formed ICS in 1973. Although he needed a bigger aircraft to service his construction projects, he had to sell that 250 in 1974 but he somehow knew he would one day return to a Comanche. It took 25 years, but he always kept his ICS membership current and finally purchased his second Comanche 250 in 1999. He has extensively upgraded 36P for comfortable, eross-country IFR flying.

Don and Shirley have attended the last seven ICS conventions – five of them (Galveston, Detroit, Reno, Tampa, and Kansas City) in N7836P. The Manassas and Australia conventions were by airline. They have also attended most of the North West Tribe fly-ins, along with many in the Southeast, Southwest and western Canada.

Don is dedicated to serving ICS and hopes for your support for another year.



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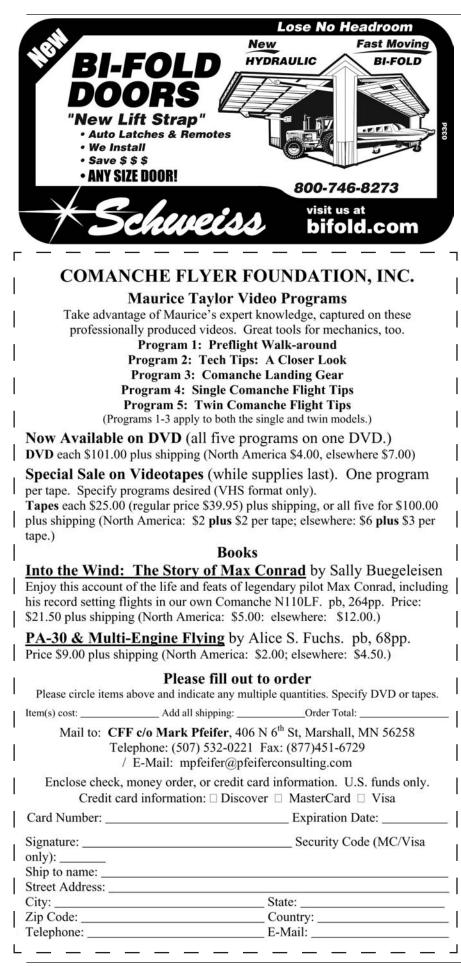
International Comanche Society 2008 Budget - Proposed

The Treasurer's budget for 2008 was approved by your ICS Board of Directors at the Spring Board Meeting, to be submitted to the 2007 Annual Voting of Members.

40100-Membership Income	10.000	COOO Tribe Dues Debate	F 000
40101-New Members	19,200	60200-Tribe Dues Rebate	5,200
40102-Renewals	122,880	00050 OFF Marchae Departies	1.000
40103-Tribe Dues Rebates	5,000	60250-CFF Member Donation	1,200
40104-CFF Member Donations	1,200		10.00
40000 4 1 1 1 1	148,280	60075-Website Expense	12,000
40200-Advertising Income			
40201-Display Ad	105,000	62000-Bank Charges	
40202-Classified Ad	3,000	62003-Service Charges	100
	108,000		
		63000-Insurance & Bonds	
40300-Inventory Sales	2,300	63001-Treasurer Bond	17(
40600-Interest Income		63002-D & O Insurance	
40601-FifthThird Money Mkt	700		2,070
		63500-Special Expense	
41000-Special Projects	2,000	63501-Awards	500
		63502-Board Mtg. Expense	200
Total Income	261,280	63503-Event Promotion	250
		63504-Ballot Printing	
50000-Cost of Goods Sold			1,950
GROSS PROFIT	259,450	63600-Tech Support Proj.	
		63601-Aging Aircraft	2,000
EXPENSE		63602-Tips	500
60000-Village Press			2,500
60001-Flyer Editor	30,000	64000-Professional Expense	
60002-Design & Print	103,200	64001-Accountant	1,200
60003-Domestic Postage	12,000	64002-Legal Fees	500
60004-Canadian Postage	1,400		1,700
60005-International Postage	8,000		
60006-Adv. Commission	16,000	65000-Depreciation Expense	100
60007-Manage Classified	1,100		
60009-Invoicing/Postage	4,000	68000-Bad Debts	4,000
60011-Freight	1,000		
60012-Other Printing	500	69000-Other Business Expense	
	177,200	69001-Miscellaneous	500
60050-Member Expense		69002-Telephone	600
60051-Pay Pal Fees	2,500		1,100
60052-Credit Card Fees			
	4,000	Total Expense	246,120
60100-Village Press Management			
60101-Monthly Management	30,000	Net Income	13,330
60102-Marketing	3,000		
	33,000		

Don Nelson, Treasurer





CFF-Trained CFIs

Certified flight instructors who have completed the CFF Larry Larkin Seminar

The International Comanche Society, Inc. (ICS) publishes this list in the spirit of open discussion and the opinions, statements and claims made by the instructors are their own and not of the Society (ICS). The listed CFIs have undergone an extensive training program specialized in the Comanches. ICS assumes no responsibility for any actions between its members and the listed CFIs.

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*No calls before 9:00 a.m. or after 9:00 p.m. For Bill in Mountain Standard Time and Dave in Eastern Standard Time.

2006-07 ICS Standing Committees & Chairpersons:

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Maintenance – Chair: Karl Hipp, MS

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ONLINE INTELLIGENCE

Two- or Three-Blade Props?

The following is from a series of online postings from the Comanche's Owner's Forum. 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 the advice from an experienced, trusted source, such as your A&P or CFFapproved CFI, before applying any of the techniques or recommendations presented in these postings.

The postings are printed as they appeared in the Forum. Due to space considerations, we are publishing only selected posts I need your opinion for the two-blade or three-blade – the plus and minus. My two-blade prop is no longer to tolerance, [and I] need to purchase a new option.

David (260 model)

The statement I have heard is two blades for GO, three blades for SHOW. Generally, two blades give better cruise performance than three blades. The difference is probably small, but when you see what some people spend on speed mods for very small gains, the difference in the props will obviously count a lot for some people.

Some will tell you that they gained performance with their new three-blade prop over their old two-blade prop. This is probably quite true, my take on this is



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6702 McNeil Drive Austin, Texas 78729 512.331.5323 VOICE 512.331.4516 FAX 800.527.2531 U.S. dacinfo@dacint.com that their old prop was very worn and not producing the same performance as an equivalent prop with new blades would do. They are not comparing apples with apples.

If you do go the three-blade way, you need to be sure that you get new engine mount rubbers that are the correct ones for the three-blade prop, otherwise you risk vibration problems.

Alan Breen

Alan, you bring up a good point on the engine mounts. And I have also heard that you give up a few mph. I'm faced with a dollars problem as well. I have located a three-blade prop with 47 hours for approximately \$6,000. What to do? What to do?

Thanks, David

With a three-blade prop, you may well be out of forward CG with full fuel and one or two persons on board. Check your CG limits before purchasing. Hansmeister

I agree with your "go and/or show" comments. As someone who frequents grass strips, I would much rather risk dinging two blades rather than three blades if the nose wheel drops into an unseen hole when I am taxiing. A. H. Powers, ICS #2978

Three-bladed props for the same aircraft type generally have less overall diameter than the two blades. Although I am a two-blade pilot myself, for runways other than hard surface I might go for the three blades.

Miller, 45P, ICS

My buddy has a 250 three-blade, I have a 250 two-blade. His really pulls out of the hole! I can feel it. [I have] no idea on speed, etc. Three blades sure have "curb appeal"; they make it look like a serious plane! Howard I would agree with earlier posts, however, with a three-blade you generally:

- 1. Get a slightly higher static and climb thrust.
- 2. Have a smaller blade disc, which results in slower tip speeds and generally less noise.

These conclusions vary a bit; some of the performance increases (or claims) come from better manufacturing techniques and not necessarily from a revolution in design.

When competing against a two-blade, the three-blade manufacturer will generally try to get his efficiency/performance curve to cross at the same cruse airspeed as the two-blade. If he gets it right, the cruise speeds should be the same with a slight bias in favor of the three-blade in the climb.

All things being equal, if the two-blade manufacturer puts the same effort into his prop, it should be able to outrun its three-blade cousin. Of course it (in my opinion) will never look as good as the three-blade.

Regards – Clark

I went through the same decision a few months ago. I ended up with a threeblade McCauley. Unfortunately I don't have any before comparisons with the two blade since I tore into the plane right after purchase (the engine was 300 over TBO and the plane out of annual). I can only say [that] for me, the decision was easy since I needed a new governor and rubber engine mounts and the McCauley came with all of those (as opposed to other props that only come with prop spinner and back plate).

I can also say that the plane gets up and goes and then climbs like a bat out of heck. I am cruising at about 165 knots true (at density alt of about 8,500). Some of this might be due to the fact that I also have a Lycoming factory reman and dual exhaust in the plane, so not sure how much of the performance numbers can be credited to the prop. Z

To all-

I posted the prop question yesterday. and I can see that everyone concurs similar information and advice. I will ponder my options over the next couple of days. I want to thank everyone for your advice. Once I decide on two or three blades, I will post what I did in the end.

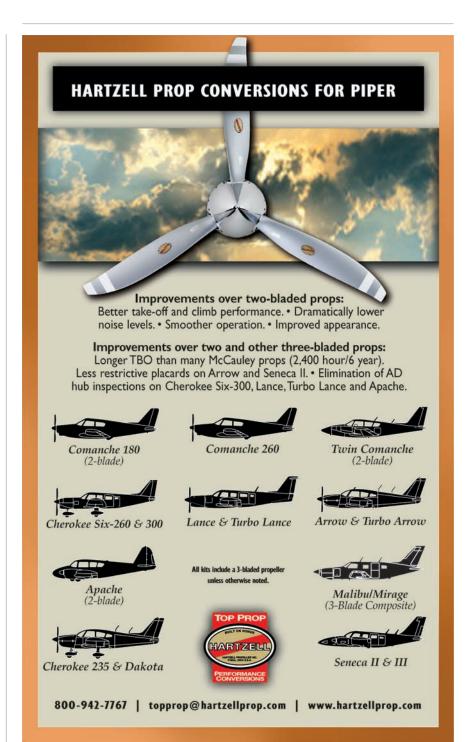
David

The consensus always seems to be the same when this issue comes up – better looks, greater static and climb thrust, smoother running with less noise, less maintenance, quicker deceleration, and less glide ratio. The loss or gain in cruise speed is always the most ambiguous answer. Most say three blades are two to three knots slower.

In truth, it really depends on several factors – which model Comanche, prop model, altitude flown, and power setting

all make a difference. For what it's worth, U.S. propeller pilots found that the new McCauley three-blade was actually a couple of knots faster at maximumpower level flight than the two-blade on the 260 Comanche.

Our thanks to Dale Vandever for compiling this text. You can view these messages in the context of the entire discussion by going to: http://forums. delphiforums.com/comancheflyer.



Feature

The Infamous Cracked Main Landing Gear

by Charles Littwin, ICS #14089, ICS SE Tribe Chief

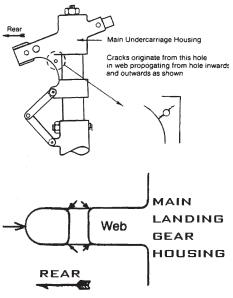
Sometimes one's misfortune can help others if they share. One of the first major repairs on my Comanche after purchasing it in December 1999 was repair of a cracked strut housing. It seems Piper decided to drill a hole in the strut housing to hold a clamp bracket. The technical description of the 3/16-inch hole is the bolt location for the girdle clamp assembly that holds the gear assist spring.

The parts catalog specifically names the clamp assembly parts (items 28 & 29) as a "strap, main gear spring attachment" and "bracket assembly, main gear spring attachment."

In time, either from hard landings or forward-to-rear flexing of the housing, a slight crack will develop at this hole under the clamp band. I understand from several ICS members, including Matt Kurke of Comanche Gear, that there is a preventative-maintenance procedure to assist in preventing this crack from occurring.

First, let me start with the scenario I experienced seven years ago on the right main, and again in January 2007 on the left side. The fluid started seeping out from the crack located behind the clamp band. If you find this problem, do not fly your airplane until it is repaired. The reasons are many – you could





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cause much more damage to your aircraft, the FAA tells you not to fly with a known deficiency, your insurance won't cover you and if the crack gets too large it cannot be repaired.

There is only one shop in the United States authorized to repair the crack - S & B Industries in Murray, Utah (telephone number (801) 261-4076). The maximum allowable crack size is 5/8-inch on each side of the hole or 11/4-inch total for the repair to be allowed. Bruce, the owner, charges \$800 to repair the right side and \$900 to repair the left side. In my opinion, repair is the best option. Although replacement from a salvage yard will get you going again (and much quicker than repair), the flawed design will still remain. Not only does S & B repair the crack, they beef up the webbing to prevent the crack from reoccurring and paint the strut housing.

Another option is Australia Tribe member, Roy Sneesby, who manufactures a new housing, but even though we have reciprocal agreements with their FAA agency, we still do not have U.S. approval on this part, as of yet.

Crack Prevention Procedure

Hopefully those reading this haven't gotten a crack yet and will be interested in the technique to assist in preventing it. The technique involves rounding the hole in the strut housing where the clamp goes. Having a right angle, as typical in drilling a hole through metal, creates a stress point and eventually ... you get a crack. My neighbor, who is a sheet metal mechanic for a major airline, told me it is metallurgy 101 to round a hole's edges. This distributes the stress point at the hole and helps prevent the crack from occurring.

The procedure is to improve the surface finish on the backside of the web where the hole is located. The strut is a cast piece and the casting is "deburred" but the surface finish is too prone

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to crack propagation. The procedure will improve the surface finish with

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ing wheel or Craytex abrasive impreg-

nated polishing wheel. This is more

important than the chamfer of the hole



Glareshield Price List:

Giaresniela Price Lisi:
Piper PA 24/30 Comanche STC \$275
Piper PA 38 Tomahawk\$275
Piper PA 28 Cherokee Series \$275
Piper Cherokee 6, PA32, 34, Ex \$275
Beech 33, 35 & Baron (1962-1970). \$350
Beech 33, 35 & Baron (1971-1983). \$450
Cessna 120/150/140\$275
Cessna 170/172/175\$275
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Cessna 210/206\$275
Cessna 337 Skymaster\$275
Mooney 201 & up\$275
Optional FAA approved lights \$130
Glareshield shipping lower 48 UPS ground .\$ 35







d Moore (Southwest Tribe member) and his good friend, Woody Mummery gave me permission to write an article on something so unique that I couldn't wait to put my fingers to the keyboard.

Ed and Woody are members of a San Bernardino Remote Control (R/C) club called "MARKS" (Miniature Aircraft Radio Kontrol Society). Someone gave the president of their club a partially finished P-51 Mustang model kit. The president didn't want to finish it, so he passed it on to Woody who already had a model of the P-51, so he put it aside. Woody flies quite a bit with Ed and Sandy Moore in their 250 Comanche (N226M). On one of their trips, Woody took note of the fact that the Comanche wing looks a lot like the P-51 wing. Retired and filling his time with model airplanes, it was only natural that the wing comparison grew into an "idea": Why not convert the Mustang to a Comanche? Further, why not make it a Comanche N226M?

With styrofoam, Woody built up the Mustang fuselage to the width of the Comanche and covered it with balsa. Sheet balsa allowed him to change the shape of the tail feathers. He used pictures on the ICS website and of 226M as his guide.

Woody's model has retractable gear, brakes and LED running lights in the wing and tail cone; is powered by a .91 c.i. Magnum 4-stroke engine; and weighs 10 pounds and has a 63-inch wing span. As of this writing, it hadn't flown yet since it was just recently finished.

Now, honestly, wouldn't everyone in ICS give their eye teeth for a matching model to their prized Comanche? Woody is a retired electrician/sign painter and is 69 years old. Way to go, Woody!

manche"





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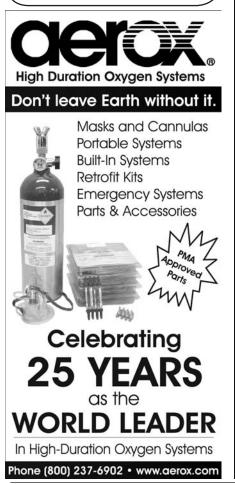
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SINCE 1973 // Products are FAA-PMA approved, unless otherwise noted. // Scratch protected // Most Windshields & windows can ship UPS/Fed-EX // C.O.D. Orders are shipped UPS & Fed-EX only and a re subject to a COD Fee // Michigan residents add 6% sales tax // Add S&H (varies based upon weight, size and destination) // not responsible for typos // Prices may change without notice // Serial Number will determine applicability for all parts // All windshields and windows are made from Acrylic sheet conforming applicable portions of ASTM D-4802, LP-391 or MIL-P-5425-D Stop the exhaust skin damage in the exhaust trough area by installing FAA approved stack extensions. Trouble free heat protection for the life of your aircraft.

ATTENTION All PA30-39 Non-Turbo Owners

Kit includes: STC Certificate 4 exhaust stack extensions with nuts & bolts, and installation instructions

GULF COAST STACKS P.O. BOX 817 Foley, AL 36536 251-943-3653 -Sara (Terri) Painter Bauer





Q: In aviation insurance, when is a deal not a deal?

A: Where do we start...

If your loss isn't covered, it's not a deal. If there are hidden deductibles for things like gear-up landings, it's not a deal. If you can't get answers to your questions, it's not a deal. The list goes on and on. That's why Avemco, the only direct provider of aviation insurance, offers consistent rates, coverage you can count on, and service that doesn't waste your valuable time.

Aviation insurance direct from the source.





An Amusing Airplane Story

David Sheppard, European Tribe Chief, sent in this true story that recently happened to him.

He took a friend flying for his first trip in a light aircraft, and afterwards asked how he had enjoyed it. His friend said that it was great, and he actually enjoyed every minute.

However, with reference to noticing David reading through his checklists, he pointed out that he had initially been a little anxious when he saw him "reading the instructions on how things work."



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<section-header>

Aircraft Engine Machining Reduces Engine Overhaul Costs

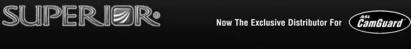
- CRANKSHAFT GRINDING
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Every part is re-machined to the tightest Original Equipment Manufacturers specifications. Our quality control continually tests repairs and certifies new repairs to keep the cost of aircraft engine maintenance down. The quality really does go in each re-machined part before the yellow tag goes on.





Tacoma, Washington USA

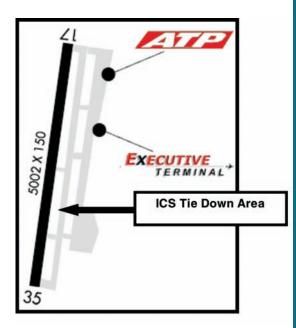
International Comanche Society Convention

CONVENTION NEWS

Tacoma 2007 Flight Briefing

A little local knowledge will make for a smooth and scenic arrival

by Jay Hulbert, ICS #15334



Tacoma Narrows Airport (KTIW) Key Information

1 05 (ASOS when tower is closed)

rreq	luencies	•
	ATIS:	12

	(253) 858-6507
Tower/CTAF:	118.5 (Tower open 0800-2000 local)
Ground:	121.8
Unicom:	122.95
FSS:	Seattle Flight Service
	Local phone: (206) 658-6609

Runways: 17/35 – 5,002 x 150 feet in good condition. Medium intensity runway lights. Runway 17 has MALSR approach lights with a 4 light PAPI on the right. Runway 35 has a 4 box VASI. Expect right traffic for Runway 17, left traffic for Runway 35.

Instrument Approaches: ILS Runway 17, GPS Runway 17, GPS Runway 35, NDB Runway 35.

FBOs: Executive Terminal. Phone 866-724-8514, Unicom 122.95 PAVCO Flight Center. Phone 253-851-5577

Restaurant: Convention Chair:	Narrows Landing John Van Bladeren	(253) 853-4114 (503) 329-8512
NW Tribe Chief:	Jay Hulbert	(503) 702-6403
Transportation Chair:	Bob Johnson	(206) 419-2323
Tacoma Sheraton Hot	(253) 572-3200	

Information from AirNav.com. Please check for NOTAMS and updates prior to departure.

t's July, and the long-awaited Pacific Northwest summer has finally arrived. Good flying weather and a lot to do. As you get ready for your flight to the Tacoma convention, I'd like to take a few minutes and recap the airport, airspace and arrival procedures at KTIW.

Weather should be excellent for the convention, but in the event of clouds, for those who prefer to fly VFR and need to cross the Cascade Mountains, the best route is via the Columbia River Gorge. The eastern entrance to the Gorge is at The Dalles (LTJ VOR, 112.3) and you'll fly out at Portland Troutdale (KTTD) airport. Stay to the right side of the Gorge as you fly through. Even if the weather is perfect, the Gorge is a favorite route. Your passengers will enjoy spectacular scenery as you fly between Mount Hood and Mount Adams, passing by Bonneville Dam and Multnomah Falls. (Look for the falls on the south side of the river after you fly past the dam.)

As you approach the western end of the Gorge, contact Troutdale tower on 120.9. They are used to traffic transiting via the Gorge, and they'll clear you through their airspace on the north



bank of the Columbia River, most likely asking you to stay below 1,500 feet. If necessary they'll hand you off to Portland Tower (KPDX) and Portland approach (both of which are very GA friendly) as you fly through, before turning north to Olympia and KTIW.

Just about everyone has a GPS, of course, but as you fly into Tacoma, navigation by pilotage in Washington is a snap. In the Tacoma area vou'll have the Cascade Mountains on one side, with Mount Rainer dominating the area, the Olympic Mountains on the other, and the waters of Puget Sound down the middle. You'll want to have your camera ready; this is some of the most photogenic countryside vou'll ever see.

Like many areas around the country, we do have some airspace to cope with. To the south of Tacoma lies McCord Air Force base and the Army's Fort Lewis. Restricted areas R6703 are frequently hot and should be avoided. Well to the north of Tacoma is P-51, the Prohibited Area covering the U.S. Navy's Bangor Trident Submarine base. You should also be aware of the National Security areas near Bremerton, Everett and Jefferson County airports. If you stay above 3,000 feet and below 5,000 (to avoid the Seattle Class B outer rings) vou won't have any problems. Check with Flight Service on the status of these areas before departure.

Those coming from the south should have an excellent view of Mount Saint Helens and its lava dome. The mountain is quite active, with the new dome in the crater building at the rate of a dump truck load every 15 seconds. Be aware of the TFR for volcanic activity that covers St. Helens. This TFR can be expanded in the event the mountain "belches," which happens periodically, and is designed to keep aircraft away from any volcanic ash plume. Because of the TFR, it is a good idea to talk to Seattle Center on the appropriate frequency as you approach the mountain.

Continued on Page 28

Hands-on Seminars a "Don't Miss" Item on Tacoma Agenda

on't forget, Saturday, Aug. 18, is Airport Day providing a venue for three distinct, Comanche-specific, hands-on seminars. Each of our speakers will give his talk three times, allowing each participant a chance to rotate roundrobin style through every seminar.

The talks will be in a hangar with a Comanche on display, so speakers may relate the discussion to the specific areas of the airplane being addressed.

Hans Neubert will join us to address the 1,000-hour gear inspection. Hans' popular DVD on the subject will also be available for sale.

Put Putman, a Comanche mechanic from Michigan with 50 years of experience will also share his expertise.

Cliff Wilewski from Rockford, Ill., will discuss Comanche maintenance. Cliff owns Heritage Aero Inc. at Chicago-Rockford International Airport. A graduate of the Lewis University Aviation Maintenance Technology program, Cliff is an A&P mechanic with inspection authorization, and an aircraft owner working in general aviation for more than 25 years. Cliff, an instrument-rated private pilot, specializes in the Comanche and is an active speaker for various aircraft groups on the inspection and maintenance of aging aircraft.





Cliff Wilewski of Heritage Aero specializes in maintaining and repairing aging aircraft.

Hotel and Tribe Night Reservation

If you haven't acted yet, please make your Convention lodging reservation as soon as possible with the Tacoma Sheraton Hotel, (253) 572-3200.

A limited number of rooms are available at the ICS rate and, as stated on the Convention registration form, those rates are not applicable after July 25, 2007.

Also, don't delay in making your dinner reservations for Tribe Night, Friday, Aug. 17. Refer to the guide published in the May *Flyer* restaurant suggestions.

The Northwest Tribe looks forward to seeing you in Tacoma.

INTERNATIONAL COMANCHE SOCIETY, INC. ANNUAL MEETING & CONVENTION

Return by July 1 to: Shirley Nelson 925 Ludwick Ave. Blaine, WA 98230-5109

AUGUST 14-19, 2007 TACOMA, WASHINGTON

Host Airport: Tacoma Narrows (KTIW)

Make Check Payable to: Northwest Tribe

Personal Information							
Name:	Your ICS #:	Your ICS #:					
Spouse:	Spouse Memb	Spouse Member ICS #:					
Other:	Number Addit	ional:					
Address:		Phone No.:					
Arrival Information							
By Comanche at (KTIW)	Arrival Time	Registration #	Туре	🗌 Enter Fla		lagship	
By Commercial Airline (KSEA)	Arrival Time	Flight No.	Date		Airline		
Note: Transportation will be provided fro Airport (SeaTac) via commercial airliner						ational	
Hotel Information							
Make reservations directly with the Ta ICS group rate (below). <u>THESE RATE</u>	S WILL NOT BE HONO	DRED AFTER JULY 25	<u>, 2007.</u> Please no	ote: H	lotel prices		
changed from previous registration s ROOM TYPE	SINGLE	DOUBLE	EACH ADD'L F			US TAX	
KING	\$106.00	\$106.00	\$10.00		13.5%	13.5%	
DOUBLE DOUBLE	\$106.00	\$106.00	\$10.00		13.5%		
DELUXE KING	\$126.00	\$126.00	\$10.00	\$10.00		13.5%	
Convention Registration							
Registration fee includes: welcome rece luncheon; seminars; tours & Airport Day		, pastries, coffee, juice i	n Hospitality Roor	n eac	h day; mixer;	banquet;	
				#	PRICE	TOTAL	
CONVENTION REGISTRATION	ICS MEMBER				\$495.00		
PLEASE LIST GUESTS NAMES	GUESTS/ SPO	USE			\$495.00		
	CHILDREN AG	E 10 & UNDER			\$230.00		
Tuesday	Welcome Rece	ption			Included		
Wednesday	Hosted Lunche	on, Seminars			Included		
Wednesday	Mixer (cocktails) Dinner on your ov	vn				
Thursday	Museum of Flig	ht & Tillicum Village	Tour		Included		
Thursday	Pike Place Mar	ket & Tillicum Villag	e Tour		Included		
Friday	Fly Out to Boeir	ng 747 Plant tour			Included		
Saturday	Airport Day Lun	hch & Seminars			Included		
Saturday	Banquet						
Saturday	Muffins, Pastrie	Muffins, Pastries, Coffee & Juice at Hospitality					
Each Registration by May 31, 200	7 DISCOUNT REC	GISTRATION RATE			\$460.00		
MENS SHIRTS	AMOUNT ORDE	AMOUNT ORDERED ON ATTACHED PAGE					
WOMENS SHIRTS	AMOUNT ORDE	RED ON ATTACHED	PAGE		1	1	
YOUTH SHIRTS	TS AMOUNT ORDERED ON ATTACHED PAGE						
TOTAL ENCLOSED							
		N	D REFUNDS				
Information: Shirley Nelson (360)	671-7388/Email: sar	nelson7@comcast.n	et i		•	•	



Men's sizes: Small to XL Blue (larger sizes are available by request. Men's shirts have a pocket) Color: Royal Women's sizes: Small to XL Color: Light Blue (larger sizes are available by request. Women's Shirt will be sized & designed for women) Youth sizes: 4/5 to 14/16 Custom Orders have Name and Airplane N#. These must be pre-ordered. Not available at convention.

REGULAR SHIRT ORDER FORM

MEN'S SHIRT	SIZE	соѕт	NUMBER OF SHIRTS	TOTAL
		\$30.00		
		\$30.00		
WOMEN'S SHIRT	SIZE	соѕт	NUMBER OF SHIRTS	TOTAL
		\$30.00		
		\$30.00		
YOUTH SHIRT	SIZE	соѕт	NUMBER OF SHIRTS	TOTAL
		\$20.00		
		\$20.00		
		TOTAL ORDERED		

CUSTOM SHIRT ORDER FORM

MEN'S SHIRT	SIZE	NAME	N -NUMBER	COST	# OF SHIRTS	TOTAL
				\$35.00		
				\$35.00		
LADIES SHIRT	SIZE	NAME	N-NUMBER	COST		TOTAL
				\$35.00		
				\$35.00		
YOUTH SHIRT	SIZE	NAME	N-NUMBER	COST		TOTAL
				\$25.00		
				\$25.00		
			TOTAL ORDERED			

If ordering separate from the registration sheet, please make your check payable to NW Tribe and send to Shirley Nelson, 925 Ludwick Ave., Blaine, WA 98230-5109.

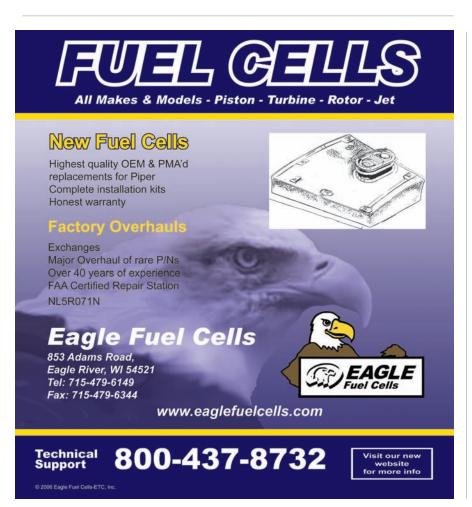


A good route into KTIW from the south is to fly over Olympia VOR (OLM, 113.4), then direct to KTIW. Over OLM you can talk to Seattle Approach on 126.50, who will hand you off to Tacoma Narrows Tower. Coming from the north, a good route is along the western side of the sound, roughly following V287. As you approach from the north, contact Whidbey Approach on 118.20 or 120.70, and they'll hand you off to Seattle.

Flying in over the Cascade Mountains from the east, you'll want to be talking to Seattle Center. As always you should check your charts or your GPS database for up-to-date frequency information. I should note that forest fires in the mountains are not at all unusual during the dry summer months, and always involve TFRs to protect the helicopters and water bombers fighting the fires. Small planes are frequently the first to spot the blazes. If you see smoke, you can pass the location to Seattle Center, which will forward it to the Forest Service.

On your arrival at KTIW, we'll be listening for Comanches on the tower frequency and you'll be directed by ground control to tie-down areas where our convention volunteers will park your airplane. Our Comanches will be parked along the western edge of the ramp, where we'll push each bird back onto the firm grass surface between the ramp and taxiway Alpha. This will keep your airplane well clear of ground traffic for the duration of the convention. Weather in Tacoma at this time of year is going to be benign, but if you want to tie your airplane down you'll need to bring your own tie downs, and you should definitely bring your own chocks.

We'll have a van on the ramp to pick up you and your passengers and shuttle you to our airport headquarters, where complimentary beverages and snacks will be available in case you have a short wait for the bus to the Tacoma Sheraton Hotel. While you wait, you may make arrangements for any fuel or maintenance needs you may have with Executive Terminal, our convention FBO. At press time, we can't predict fuel prices, but Executive Terminal will be providing a discount to ICS conventioneers.



Some key phone numbers for you to make note of:

For general convention questions, call Convention Chairman John Van Bladeren on his cell: (503) 329-8512, or NW Tribe Chief Jay Hulbert on his cell: (503) 702-6403.

For ground transportation questions throughout the convention, call Bob Johnson on his cell: (206) 419-2323.

Executive Terminal at KTIW is (253) 853-7742/Unicom 122.95.

The "local" number for Seattle Flight Service Station is (206) 658-6609.

If you arrive early and would like to have breakfast or lunch, we can give the Narrows Landing Restaurant and Bar a hearty recommendation. Their bar area has been the convention planning committee's headquarters for almost a year now. The food is very good and they've been wonderful hosts. They'll be catering our lunch on Airport Day, so you'll have ample opportunity to try 'em out.

Early arrivals are also welcome to join us at the airport and enjoy snacks and beverages while we watch Comanches fly in, score landings and enjoy some Puget Sound sunshine.

Flagship Airplanes

By the way, we'll be voting for three "Flagship" airplanes. Each convention attendee will be voting for the best single (all PA24 models) and the best twin (all PA30/39 models). The top vote getters will be awarded "Best Single" and "Best Twin" at our banquet. From those two airplanes our committee will select the best overall airplane to be our 2007 Convention Flagship.

The Northwest Tribe is excited to host you. We have a beautiful part of the country to show off, lots of fun and interesting activities and a great convention hotel.

Welcome to Tacoma!





JULY 2007



My Comanche Travel Tool Kit

by Dave Clark, ICS #08592

iper Comanches are an extremely well designed and dependable group of airplanes, but after flying a PA-30 for 18 years I have experienced several of the things that can go wrong with the airplane. I have had at least six breakdowns on the road. Luckily only one happened in the air when I lost an engine due to an exhaust valve breaking off, forcing me to land with one engine. More than once I found myself in a position where my airplane was broken at a remote or semi-isolated field, and there was nobody to fix it except me. This prompted me to take the advice of my mechanics and get my A & P license.

Over the years I have gradually built what I call my "travel tool kit", the contents of which are deeply influenced by my experiences. I must tell you that I have flown all over the United States, Canada, Central America, Alaska, the Caribbean, and have flown the North Atlantic en route to Europe. Many places advertise that they have repair facilities, but when the truth is told, they don't have many of the parts or tools you will need to repair your airplane. The logistics of repairs on the road can be daunting.

I think there are a number of tools and a few parts that you might want to consider taking with you in your Comanche. Even if you are not an A & P, it would greatly advance your cause if you had the things needed to repair your airplane on a strange field. In the past while I was on the road, I have had to replace a cylinder due to a broken exhaust valve, replace a cracked exhaust manifold, ream the guide in a stuck exhaust valve, replace spark plugs, and troubleshoot anomalies that might potentially ground the plane. When I had the stuck valve last fall in Colorado, I was in a town that was a three-hour drive, one way, to the nearest source of tools to fix it. (According to Lycoming and Continental, stuck valves are a pretty common problem in light planes. I thought I was doing everything that I could to avoid one, and I still had a valve stick on an engine with 450 hours since overhaul.) Luckily I was able to get a friend who is a mechanic to fly me the tools to fix it. Paying his way to Colorado was cheaper than the alternatives.

I have always carried a few tools with me as well as a few spare parts, but this new experience prompted me to rethink what I would need to handle most of the common breakdowns that were repairable without a shop. Many of the items on my lists are self-explanatory. I have tried to be a minimalist in my choices in terms of both bulk and weight. And since my travel tool kit weighs about 14 pounds, it is not as heavy as a life raft and may save you some grief one day.

There are a few items I have left out that I am reasonably sure I can obtain locally or borrow from somebody on the field.



Travel Tool Kit & Accessories

Basic Tools:

- **1.** Combination wrenches, various sizes
- **2.** ¹/₄-inch drive sockets
- **3.** ¹/₄-inch drive socket wrench
- **4.** Two ¹/₄-inch drive extensions, three-inch and six-inch
- **5.** Two ³/₈-inch drive extensions, three-inch and six-inch
- **6.** ³/₈-inch drive socket wrench
- **7.** Spark plug socket ³/₈ drive
- ¹/₂-inch size deep well (¹/₄-inch drive) socket for removing fuel injector nozzle
- **9.** ³/₈- to ¹/₂-inch socket drive converter
- **10.** Stubby blade screwdriver
- **11.** Ratchet type
- convertible screwdriver 12. Stubby short Phillips screwdriver
- **13.** Medium-sized channel lock pliers
- **14.** Needle nose pliers
- **15.** ¹/₂-inch flexible socket (¹/₄-inch drive) for exhaust manifold nuts
- 16. Voltmeter (small)
- **17.** Mirror with flexible handle
- **18.** Hemostat (surgical instrument)
- **19.** Pocket knife
- **20.** Scissors (telephone lineman type)
- **21.** Mill file
- **22.** Long Allen head wrench for removing King radios from rack
- 23. Canvas tool bag

Tool Kit Accessories:

- **1.** Prop seal
- 2. Brake O-Rings
- 3. Oil line hose
- 4. Hose clamps

- **5.** Strut seals (landing gear strut rebuild kit)
- **6.** Two extra spark plugs
- Extra valve keepers and end caps
 Small can of screws, nuts, washers, cotter keys
- **9.** Small amount of safety wire
- **10.** Cylinder replacement gasket kit, exhaust & intake gaskets, push rod tube seals (not pictured)
- **11.** Tie wraps
- **12.** Miniature spray can of WD-40
- 13. Spare mirror for engine nacelle (to see if gear is down)
- **14.** Piece of Scotch-Brite to polish valve stems
- Nylon bristle to clean out fuel injector nozzle, if solvent doesn't work.

Travel Accessories Box:

- **1.** Two quart bottles of engine oil
- 2. Small bottle of windshield cleaner
- 3. Small can of grease
- **4.** Flashlight (light weight)
- 5. Roll of paper towels
- **6.** Plastic oil bottle filler spout and on/off valve
- **7.** Wide-mouth plastic bottle with good sealing lid to hold oily filler spout after use
- 8. Jumper cables (Piper type adaptor)
- **9.** Prop chain (mine is a heavy duty bicycle locking cable with warning flag attached)
- **10.** Fuel tank dipstick
- **11.** Extra key to airplane and prop lock (hidden somewhere in plane)
- **12.** Spare alternator belt
- 13. Kennon heat shields
- **14.** Light-weight plastic chocks with bungee cord
- **15.** Plastic box to hold everything

Beside the basic tools, there are also two subsets of tools. One is for reaming the guide in a stuck valve, and the other is for actually changing a cylinder. "Swapping a jug" can be done on the flight line in four to five hours. The tools required are surprisingly small and light.

Continued on Page 32

NEW STAINLESS STEEL DUAL EXHAUST SYSTEM

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COMANCHE 180: \$3595.00 PLUS INSTALLATION

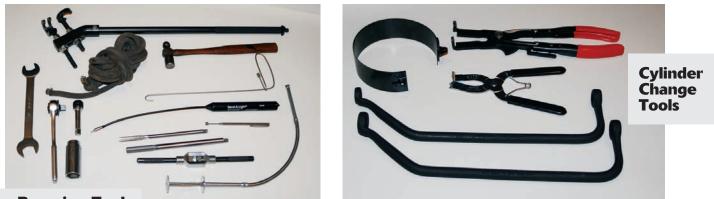
COMANCHE 250/260: \$3995.00 PLUS INSTALLATION

AVIATION PERFORMANCE PRODUCTS, INC.

975 Aurora Road Melbourne, FL 32935 Phone: **321/254-2880** Fax: **321/254-9115**

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JULY 2007



Valve Reaming Tools

Note: In an upcoming issue of the Flyer, look for an article on the diagnosis and treatment of a sticky valve that will explain exactly how to use the tools listed below.

Valve Reaming Tools:

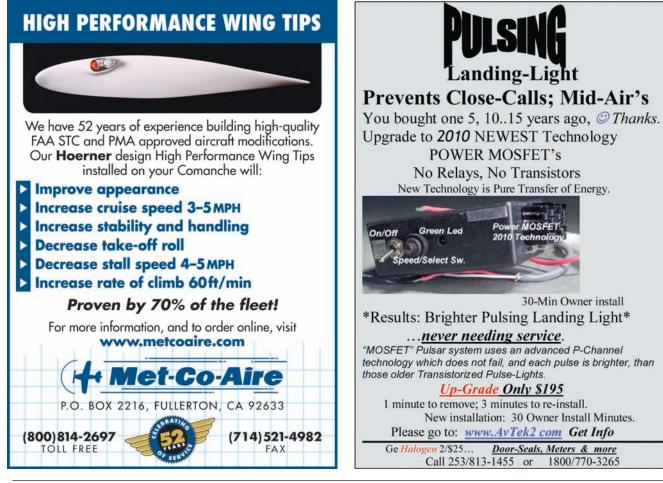
- **1.** Hammer (small ball peen type)
- 2. Reamer wrench
- **3.** Two valve guide reamers (one for exhaust, one for intake guide)
- **4.** Valve spring compression tool
- **5.** 10 feet of rope (for cylinder rope trick)

- **6.** Mechanical fingers (sturdy Snap-On two prong flexible type)
- **7.** Flexible flashlight (long spaghetti type to go in cylinder)
- **8.** Strong pencil type magnet
- **9.** Wire hook for supporting valve in cylinder
- 10. Spark plug socket and ³/₈-inch socket wrench, extension, and ³/₄-inch open end wrench for removing spark plug (Note: these are part of the basic tool set)

11. Brass punch

Cylinder Change Tools:

- 1. Ring compressor kit (pliers and band size for your engine)
- 2. Ring expander tool
- **3.** Two cylinder base wrenches (the sizes for your engine)
- **4.** Thread chaser kit, small set to touch up exhaust studs or cylinder studs (not pictured)
- Various tools from basic tool set as needed.



From the Tribe Chiefs

MID STATES TRIBE

Fly-In Kearney, Neb. (EAR) September 21-23

All Tribes Welcome.

The Mid States Tribe will host a fly-in in the beautiful plains of Nebraska, with the fall trees and grasses turning to hues of gold, brown and red. Kearney, Nebraska's first travelers of the 19th century rolled through in covered wagons. The Great Platte River Road Archway Monument, spanning Interstate 80 at Kearney, is a must-see stop. You will experience adventures of the Oregon Trail through 12 unique "you are there" immersive exhibit environments.

We will be traveling to Minden, Neb., and on the way see old Fort Kearney (a way west outpost). In Minden, you will see Nebraska's number one attraction, the Pioneer Village. It contains more than 50,000 items from every field of human endeavor. Harold Warp has collected hangar-size buildings of items. From antique cars, to tractors, to my personal favorite – the building with individual rooms of old kitchens and living rooms dating back from the 1830s through today. You will be amazed. There are 28 buildings on 20 acres of land. This is an incredible museum with something both for men and women.

The next stop will be back to Kearney for shopping in the historic district called The Bricks. There is also "Ten Thousand Villages," shops which contain items crafted by artisans from around the world and a Cabela's for the guys. The Museum of Nebraska Art and Audubon Center is also located in Kearney.

We will be staying at the new Holiday Inn. We have 15 rooms blocked at a group rate of \$79.95 per night. Please call early at (308) 237-5971 for reservations and tell them you are with ICS or the International Comanche Society. The deadline for reservations is August 21. Cancellation policy is 6:00 p.m., the day of the reservation.

At the Kearney Airport (EAR), we will receive discounted gas and no overnight or tie-down fees. Please bring your own

EVENT CALENDAR SUMMARY

Date	Tribe	Event/Location	Info Source/Host
July	Europe	Helsinki, Finland	David Pring, pring@guernsey.net
July 13-15	SW	Fly-In & Maint.	Kristin Winter at (707) 477-4727
		Seminar/Petaluma, Calif.	or e-mail kristin_winter@comcast.net.
Aug 14-19		2007 ICS Convention Tacoma, Wash.	See page 24 for more details.
Aug 17	SE	Annual Meeting during Tribe Night at Convention	Charles Littwin, Tribe Chief.
Sept	Europe	Lucerne, Switzerland	Fred Iseli, info@iselisystems.com
Sept 21-23	MS	Fly-In/Kearney, Neb. (EAR)	Mac and Sarah McKinley, home (816) 320-3462 or by cell, Mac: (816) 729-8583, Sarah: (816) 868-1015; e-mail flyingmacs@aol.com.
Sept 28-Oct 1	NC	Delta Queen Cruise Port: Cincinnati, Ohio	Norm Wright at normwright2@juno.com or (828) 264-6274.
Oct 5-7	MS	Fly-In/ Nebraska City, Neb. (AFK)	Mac and Sarah McKinley, home (816) 320-3462 or by cell, Mac: (816) 729-8583, Sarah: (816) 868-1015; e-mail flyingmacs@aol.com.
Oct 12-14	SC	Fly-In/Pineville, La. (2L0)	Enoch Nicewarner, (318) 452-0919

tie-downs. The airport telephone number is (308) 237-2111. You will be greeted by Mac and Sarah with food, drinks, a lot of conversation, information packets and maps from noon until dinner at the hotel at 6:00 p.m.

Food and Transportation will \$20.00 per person or \$40.00 per couple. Be sure to indicate the name of the fly-in on your check.

Send checks before September 1 to: Mac and Sarah McKinley 18524 Highway 33 Holt, Missouri 64048

If you have any questions, you can contact Mac and Sarah at home at (816) 320-3462 or by cell, Mac: (816) 729-8583 or Sarah: (816) 868-1015; or you can e-mail them at flyingmacs@aol.com.

We're Going to Have Fun! Build (Plan) it and they will come!

Fly-In

Nebraska City, Neb. (AFK) October 5-7

All Tribes Welcome.

Here we go again! We are flying into Nebraska City, where "Arbor Day" was founded by J. Sterling Morton. The interesting story about this is that his new wife was going to leave and return back to her home state of Michigan because there were no trees in Nebraska and she missed the trees. In order to keep her happy, Mr. Morton ordered thousands of trees to be sent to Nebraska for planting. So what you see in this area of Nebraska is the efforts of a man to please his wife (at any cost). Therefore we now celebrate Arbor Day, the founder J. Sterling Morton (of Morton Salt fame) and also Secretary of Agriculture under President Grover Cleveland.

Nebraska City is steeped in history with 300 historic buildings and a treasure trove of museums. This small town lying along the Missouri River, south of Omaha, has the Arbor Lodge State Park and Arbor Lodge Mansion, where Mr. Morton and his wife lived. The mansion can be toured and has 52 rooms, with one of the first bowling alleys in the basement, especially built for President Grover Cleveland who was a frequent guest. The front vard is full of labeled and marked trees from all parts of the country, along with gardens and fountains. This should be "peak" time for autumn colors in this area. There is an Arbor Day farm and apple orchard including the oversized "Wolf River apple," which is big enough for an entire pie. Apple House Pie Garden (sandwiches and pies) Restaurant and Arbor Trails Winery are located between the Lodge we're staying at and the Arbor Mansion.

Continued on Page 35



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In historic downtown, there are various antiques, coffee shops and several fine outlets, one being the Pendleton Outlet. There is also a small outlet mall just out of town on the way to the airport.

We will be staying at the Lied Lodge and Conference Center (one of the most beautiful lodges, the entry way is an experience). The food is also excellent! The site has views looking over to the Arbor Mansion and apple orchard with hiking trails everywhere, and a golf course.

For Arbor Day Farm Lied Lodge and Conference Center, I was able to block only 14 rooms at a group rate of \$139.00 per night. You will not be disappointed! The telephone number is toll-free (800) 546-5433 or (402) 873-8733. Say you're with ICS or International Comanche Society. Deadline for reservations is August 28. There is a 48-hour cancellation time on rooms.

The airport has waived the overnight fees and has discounted gas for us. Bring tie-downs, please! Their telephone number is (402) 850-7436.

Mac and Sarah will be greeting you at the airport with goodies, drinks and of course information, maps and conversation (especially Mac).

Food and transportation will be \$15 per person or \$30.00 per couple. Be sure to indicate the name of the fly-in on your check.

Send checks before September 15 to: Mac and Sarah McKinley 18524 Highway 33 Holt, Missouri 64048

If you have any questions, you can contact Mac and Sarah at home at (816) 320-3462 or by cell, Mac: (816) 729-8583 or Sarah: (816) 868-1015; or you can e-mail them at flyingmacs@aol.com.

Come join us for the last fly-in of the season in a beautiful area of Nebraska.

NORTH CENTRAL TRIBE

Delta Queen Cruise Cincinnati, Ohio Sept. 28-Oct. 1

All tribes welcome!

The remaining blocked cabins were released back to the Boat at the end of May. Reservations can still be made, if any space is still available, but cabin choice may be severely limited. This will truly be a unique experience aboard a national historic landmark. The Delta Queen is an authentic steampowered, paddlewheel propelled riverboat that has been host to many celebrities and several U.S. presidents. There will be many activities including dancing, floorshows and live music; or find a rocking chair on the deck and watch the shore go by at eight uph. The food is in bundance and included with four fee, bar table the extended on information about the boar and expin layout can be seen at www.maest.camericaline.com.

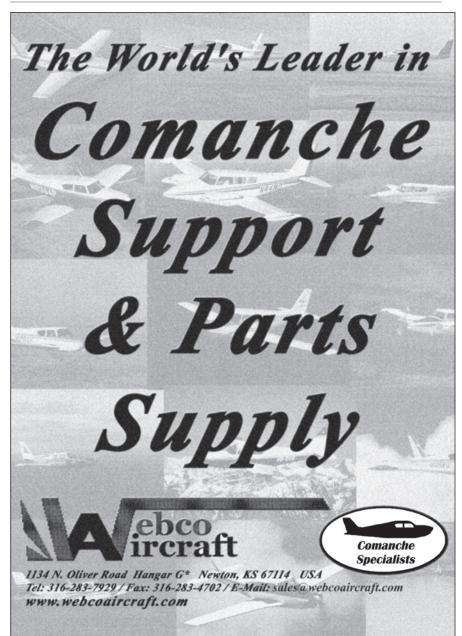
Fy in co Clermont County Airport (I69), on Friday and be shuttled to the boat. There are no ramp fees if you buy fuel, and make sure you check the 50-gallon discount. Early arrivals

will have time to shop at Sporty's Pilot Shop, adjacent to our welcome desk.

The boat departs at 6:00 p.m. for Louisville, Ky., docking Saturday at noon. Enjoy the city or stay on board, the boat will have optional to it's available. We depart at 5:00 p.m. Surday morning finds as at Madison, ind., departing there at 1:00 p.m. Monday at 9:00 a.m., we relicitantly depart the boat to be shuttled back to our Comanches. Arriving by commercial airline to Greater Cincinnati Airport is an option, also drive-ins can be accommodated. Arrive a few days early or stay a few days later and enjoy Cincinnati.

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Continued on Page 37



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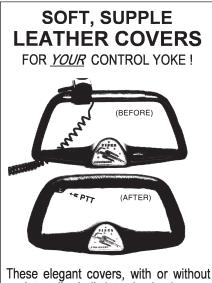
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Tribe E-mail Updates

If you are not receiving the North Central Tribe e-mail update and would like to, please email Zach Grant, North Central Tribe Chief at L1011jock@ sbcglobal.net or Dave Fitzgerald, Assistant Tribe Chief at aaviator@neo.rr.com, and they will make sure to amend the list with your e-mail address.

SOUTH CENTRAL TRIBE

Fly-In Pineville, La. (2L0) October 12-14, 2007

The South Central Tribe is planning a fly-in in conjunction with the annual EAA Chapter 614 Fall Fly-In and Campout at the Pineville Municipal Airport (2L0) located in central Louisiana. This fly-in is part of the Louisiana EAA Fly-In Series and is one of the largest fly-ins in the state of Louisiana. The airport is on Lake Buhlow, with an over-the-water approach to R/W 36. There are usually several amphibian and/or float planes in attendance that operate off the lake. The EAA Chapter will be having Young Eagle flights on Friday afternoon, so be attentive to traffic. There will not be an air show, so the airport will not be closed at anytime during the fly-in. Unicom is 122.8 and Polk Approach Control is 132.05. Alexandria International Airport (AEX) is located six nm west with Tower on 127.35.

Lodging will be at the Sleep Inn in Pineville. The rate will be approximately \$100 per night. Call 1-800-424-6423 for reservations and mention the "Comanche Tribe" when you call.

After you arrive Friday, you can attend the fly-in and/or go to your motel. Friday night we will be dining at either a local restaurant or at the airport (meal by EAA Chapter at the Club House).

Saturday, the women will go on a tour of the Kent Plantation House. Built in 1800 on Spanish Land Grant property, this is central Louisiana's oldest standing structure and depicts plantation life between 1795 and 1855. After the Kent House and lunch, they will tour River Oaks Art Square and several art museums.

The men will tour the Louisiana Maneuvers & Military Museum at Camp Beuregard, then lunch and spend the afternoon at the fly-in and/or other places of interest. The military museum honors the fact that in 1940-1942 central Louisiana participated in "the dress rehearsal" for WWII where over a million young men were trained at five major training camps.

Saturday night we will be dining at a local restaurant famous for Louisiana cuisine. On Sunday, there will be breakfast at the airport and a leisurely departure for home.

There is a registration fee of \$30.00 per person to cover transportation, etc. Checks should be made payable and sent to Enoch Nicewarner, 430 Glen Ellen St., Pineville, LA 71360. Please provide your name, address, phone numbers, e-mail address and whether you plan to arrive Friday or Saturday. Closeout for registration is September 30. If you have any questions, you can call Enoch at (318) 452-0919.

Continued on Page 39

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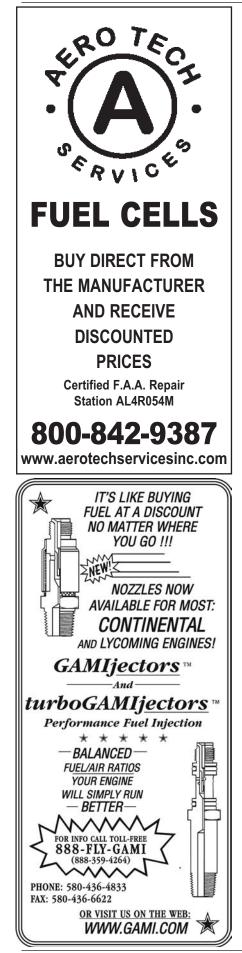
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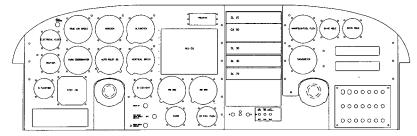


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Saturday Lunch Fly-Ins

If it is difficult for you to make a full weekend fly-in, you may find the Saturday lunch gatherings with Comanche camaraderie, sharing of flying stories, maintenance talk and lunch, to your liking. You should be able to find a schedule of the lunch fly-ins on the South Central Tribe website at http://groups.msn. com/SouthCentralTribeICS/welcome. msnw and in the South Central Tribe newsletter *Smoke Trails*. (If you wish to organize a lunch Fly-In, please contact Pat Andrews at pandrews3@satx.rr.com.)

SOUTHEAST TRIBE

Annual Meeting Tacoma, Wash. August 17

The Southeast Tribe will be having its annual meeting at the ICS convention in Tacoma, Wash. during Tribe Night on Friday, August 17.

SOUTHWEST TRIBE

Fly-In & Maintenance Seminar Petaluma, Calif. (O69) July 13-15

The Southwest Tribe will be hosting a fly-in at the charming town of Petaluma in northern California. Petaluma is located in Sonoma County's wine country just 39 miles north of the Golden Gate Bridge. Not only is it the ideal headquarters for exploring Sonoma County's 140 wineries, but the dramatic Sonoma Coastline, Point Reyes National Seashore and California's redwoods as well.

The Petaluma River is the heart of the city, and surrounding the city are dairy ranches and hayfields providing the much-appreciated open space which rises to hills on both sides of the valley. The historic downtown flanks the river and lends itself to the authentic Victorian charm of the city. Stroll through historic downtown and visit a variety of antique shops, art galleries, specialty stores, bookshops and its thriving restaurant scene. To the east are the city's newer neighborhoods and shopping centers. Petaluma has served as the location for many major films, including American Graffiti, Peggy Sue Got Married, and Basic Instinct, to name a few.

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We will be landing at the Petaluma Municipal Airport (O69), which has a 3,600-foot runway and a popular little restaurant called the "Two-Niner Diner."

Our hotel will be the beautiful Sheraton Sonoma County Petaluma Hotel, right on the river and minutes from downtown. Their phone number is (707) 283-2888 or (707) 283-2898. We have blocked 30 rooms under the "Southwest Comanche Tribe" at a price of \$159, single or double. (Our cut-off date of June 13 for reservations at the \$159 price has expired, so if you haven't made your hotel reservation yet, you may be subject to a higher price.)

The July meeting is our annual business meeting, so we will be electing new officers for the 2007/2008 term and discussing any pertinent tribe business.

We are again fortunate to have Hans Neubert, our Tribe Comanche guru, conduct a maintenance seminar. Matt Kurke of Comanche Gear will also be present to describe in detail the landing gear wiring system. It is anticipated that we will have a Twin Comanche in a hangar available as a live aid to learning. Because the situation with the stabilator horn is very fluid at the time this went to press, the emphasis of the seminar may be adjusted to reflect the current situation. We anticipate addressing the issues with the stabilator torque tube and horn, which may involve disassembly of the Twin Comanche's tail. We also hope to address the landing gear and the 1,000-hour inspection. We have jacks available to raise the aircraft and allow Hans to explain the operation and proper inspection techniques. Hans hopes to be able to use a remote micro camera to allow everyone to really see and understand how the system works. We anticipate that this fascinating seminar will run all day, so a BBQ lunch will be provided.

For co-pilots, we will transporting everyone to the charming and historic town of Sonoma, where they will be offered a walking tour, shopping, and lunch before returning to Petaluma for the dinner that evening.

For further information, contact the hostess Kristin Winter at (707) 477-4727 or e-mail kristin_winter@comcast.net.



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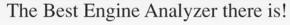
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South East Tribe Finds Fun at Lake Norman

by Charles Littwin, ICS #14089



he South East Tribe had a wonderful Fly-In May 4-6 at Lake Norman, N.C. despite IFR conditions right down to minimums on arrival day. We had ICS members from as far as Ohio, Vermont and Florida fly in for the event. Most folks who lived closer chose the four-wheel mode of transportation.

The excitement began Friday evening when we boarded a three-level 80 foot luxury yacht, exclusively chartered by the Comanche crew for a fourhour evening cruise and scenic tour of Lake Norman. Cocktails were served by the bartender and an abundance of hors d'oeuvres were available for the group's indulgence. We also celebrated two birthdays that evening – my wife, Patti Littwin and my Assistant Tribe Chief, Bruce Ladrie.

On Saturday, we boarded the van for a tour of the control tower and radar room at Greer Approach located at the Greensville Spartanburg Airport in South Carolina. First a thorough briefing was given to us by Lamar, the tower supervisor and Carol, his assistant (who happens to own a PA24-180). We then had ample time to ask all of the questions we always wanted to ask ATC and gather important information to help us in future flights. One interesting thing I saw while in the radar room was an aircraft calling in that it was departing special VFR for parachute jumping. Several of us in my group said, "Parachute jumping ... with a 500 foot ceiling?" Then I heard the controller next to us say, "I can't believe they called in." Everyone enjoyed the opportunity to view aircraft operations from the other side of the perspective at ATC. Of course we made sure the non-pilots had fun during this time. A shopping excursion was conducted concurrently using the second van.



The fly-in was topped off on Saturday evening as we dined at the newest Chinese buffet in town. Everyone was pleased with the abundance of tasty delicacies.

The only sun we saw was on departure day. And as usual, after much rain and then clearing, the wind came in.

My wife Patti did a great job organizing the fly-in and I am very grateful for her efforts in the planning and execution of it. We are often thanked with wonderful compliments like, "That was the most fun we've had in a while ... I'll never miss another fly-in again."



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Featured Fly-In



Southwest and South Central Tribes Enjoy a Joint Fly-In to Carlsbad Caverns National Park

by Peggy Harmon, Southwest Tribe Scribe, ICS #12436



n Friday, April 27, we arrived to a very warm, windy day at Cavern City Airport in Carlsbad, N.M. Our hosts, John and Shari Caton of the Southwest Tribe, along with Bruce Thumann of the South Central Tribe, greeted us and led us into the terminal for cold drinks and cool shelter before the shuttle ride into town. While at the terminal, we were soon meeting and greeting both familiar and new faces arriving in beautiful Comanche aircraft.

We were very pleased with the warm welcome received at the Best Western Stevens Inn. That night, we were on our own for relaxation and dinner. There was quite a variety of restaurants selected by the various small and large groups, and I heard no complaints. Our rather large group chose a local barbeque place recommended by some who arrived on Thursday night and had already "tested the waters" and given it their stamp of approval.

We were all up early Saturday morning for the complimentary breakfast at the Inn so we could board the bus for the trip to the Caverns. Comanche people can make a bus ride so much fun that the length of time on the bus really doesn't matter. However, after traveling through the Chihuahuan Desert for about a half-hour, we all soon began to take note of the tell-tale signs of nearing the Caverns – a right-hand turn off the main highway and rising rocky terrain.

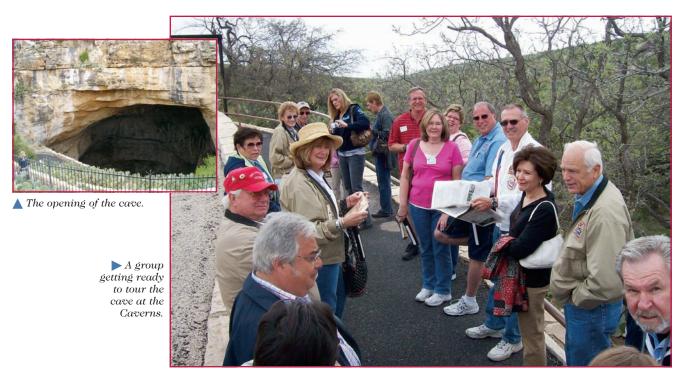
Once there, we first entered the Visitor's Center for the National Park, purchased our tickets (our National Park fees are a bargain!), and followed the trail to where our first stop was a short talk on basic safety rules by a park ranger. Just a short walk from there, I must say nothing prepared me for the opening of the cave! It is a crescent-shaped opening about the size of an outdoor amphitheater ... a gaping hole with swallows circling in the cool air escaping from below. Suddenly you see what you are in for in order to get down to the caverns – an hour hike down a narrow switchback trail into the depths of ... well, you don't know yet.

During the hike down, you descend over 750 feet. Everyone has heard of the bats that sleep in the cave during the day and go out in mass during the evening to hunt and feed. I wouldn't want to stick around for that show (even though many do), but we hikers did get to see a couple of the little creatures stuck on a wall on the hike down. You do not normally see them in the day, as they are back in the dark recesses of the cave.

We then traveled back to the Inn. But, not all of us got all the way back! Certain parties (the pilots) on the bus bribed the driver to drop them at the airport for Comanche tirekicking and talk. Somehow, they did find their way back before our buffet dinner and meeting that evening.

After the wonderful buffet dinner the Best Western put on for our group, Lorne Harmon and Bruce Thumann, Tribe Chiefs for the host tribes, opened the meeting. They asked for introductions around the tables, and it was found that we not only had folks from the host tribes (Calif., Ariz., N.M., Texas and Okla.), but we also had some from Wash., Colo. and Kan. Upcoming fly-ins were announced for both host tribes, and Shirley Nelson was asked to give a presentation on the 2007 International Convention in August at Tacoma, Wash.

The final event of the evening was the raffle for both cash and prizes. The cash prize for the evening totaled \$400, so it was made into two cash prizes of \$200 each. The lucky winners were Dave Blankenbaker and Bruce Thumann. After the meeting, we were all able to continue to leisurely lounge somewhere between the cocktail bar and the Inn's lobby and continue the wonderful camaraderie. I must say, it was a wonderful evening.



Once we reached the bottom, everyone headed for the "Big Room" where the wonders of this underground cave "showed its stuff." To tour the room takes another hour, and it is an hour well spent! It encompasses 14 acres and features not only stalactites and stalagmites, but draperies, pinnacles, chandeliers, fairies, all with such names as Bottomless Pit, Caveman, Temple of the Sun, Hall of Giants, Rock of Ages, Painted Grotto, and too many more to name. Most of us had purchased tickets for the self-guided tour along with hand-held audios which explained the different stops along the way. Some others also chose a ranger-guided tour of another cavern area, and then took in the Big Room. There was even a snack bar "down under" at the 750-foot depth. We all had the pleasure of taking the elevator out of the caverns at the end of the tour, and I don't think very many of us could have done otherwise ... or we would have slept with the bats that evening.

On Sunday, John and Shari made sure we were taken care of in transportation back to the airport. The weather was a factor for most of us, and the pilots were very busy after breakfast on laptops and the Inn's computer, checking and re-checking current conditions. It was actually a very exciting departure for those of us headed west, in that we left in tandem. Those in front would give the plane following an update on the weather. No one took any chances, and we all arrived safely at home.

Without a doubt, this fly-in was not only fun, but being jointly sponsored and attended, made it twice the fun.

Note: If you would like more information on the National wonder of the caverns, you can visit the official website at www.carlsbad.caverns.national-park.com. Be sure to click on "History" and read how it was formed, discovered and finally promoted.

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COMANCHE PA24-180: Late 1961 Pa24-180; SN 24-2862, TTAF - 4685, SMOH - 890, STOH - 86, 798 on 3 - blade McCauley prop, Ashby glare shield, center stack, Garmin 430 GPS & com., coupled to Century IIB autopilot, #2 com. & nav. KX170B (mark 1700 up grade), North Star GPS M3, S-Tee 30 alt. hold, stand by vac, Rams horns yokes, dual push to talk, dual exhaust system, Sky-Tec starter, alternator elec. system, JPI fuel flow gauge, 1- piece windshield 1/4", new side glass 1/4", Bogart battery box, copper cables, reversed brakes on landing gear, small nose wheel, most of the available speed modes, 160 mph on 10 gal. of gas, new head liner with sound proof insulation, Met-Co-Aire wingtips with strobes, Webco upper door latch, Halogen landing light with pulse light mode., interior 9 outside 9, Annual due 5/08, ASKING \$68,500.00. For pix and many more details: e-mail: MasterPlumber10777@comcast.net Call (781) 760-7176. Based at OWD. 2/2

PA24-250

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 SMOH
 by
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 55;
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PA24-260

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1964 PA30: 719OY, 2359 TT, RE 247 SMOH, LE 1573 SMOH, both engines have new Lycoming cylinders, SkyTec starters, two Knots2U speed props 85 hrs TTSN, JAS Wing Tips, paint & int. 9/9, small nose tire, Century #2 AP with Alt. Hold, 2 Narco Com 120's, 2 Nav 122's- GS, King ADF, Terra D Xpndr, All AD's C/W, annualed April 07. Call Ulmer, SD (605) 387-5252. \$72,000. 1/2

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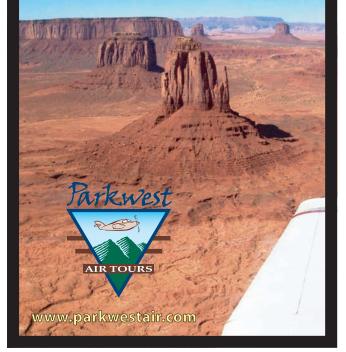
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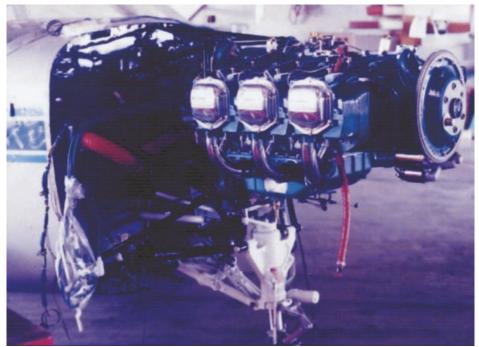
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