

Comanche

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Flyer



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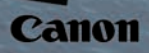
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International Comanche Society
 P.O. Box 1810
 Traverse City, MI 49685-1810
 U.S.: 888-300-0082
 Other: 231-946-3712
 Fax: 231-946-6180
 Email: ICS@villagepress.com

www.comancheflyer.com

ICS President

Dave Fitzgerald
 (330) 484-4609

E-mail: aaviator@neo.rr.com

Managing Editor

Kim Blonigen

E-mail: kblonigen@cox.net

Display Advertising Manager

John Shoemaker

(800) 773-7798

Fax: (231) 946-9588

E-mail: johns@villagepress.com

Trading Post & Classified Advertising

Nancy A. Whitten

(800) 773-7798

Fax: (231) 946-9588

E-mail: nancy@villagepress.com

Graphic Design

Koren Herriman

E-mail: kherriman@villagepress.com

Printer

Village Press

2779 Aero Park Drive

Traverse City, MI 49685-0629

www.villagepress.com

ICS Technical Directors

Bill Creech

Tel: (915) 581-3401 (9:00 a.m.-9:00 p.m. MST)

Fax: (915) 581-4176

E-mail: BJC1946@aol.com

Dave Gitelman

Tel: (585) 381-4785 (9:00 a.m.-9:00 p.m. EST)

Cell: (585) 317-8446

E-mail: gitelman@att.net

ICS Tool Loan Program

Matt Kurke

10340 Regent Circle

Naples, FL 34109

Ph: (239) 593-6944

mkurke@comanhegear.com

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Joe Noah's 1967 PA-24-260B
 over Merifield Lake

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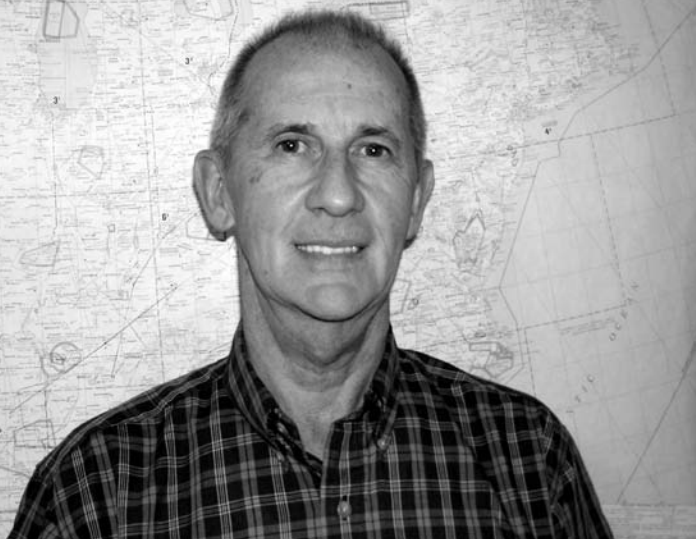
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Letter From The President



Have you ever wondered what possesses us to propel a 3,000-plus-pound vehicle through the air at altitudes few birds would dare to venture? From time to time this question enters my mind. I am not sure I know the answer but the affection, or should I say infection, for things that fly has been with me from my earliest years. When I was still in the single-digit age bracket I remember hearing stories about, and seeing pictures of, planes like the P40 Warhawk with its large shark-like teeth, or the Corsair making a difficult landing on an aircraft carrier. And then the many movies that followed about B17s, 24s, 29s, and P51s, to mention a few. As with many of you, these pilots and planes became my role models and were probably what started me down the path to “pilot”. I have often wondered if aviation is a genetic thing or just a bug that bit me while looking at the clouds daydreaming.

I probably shouldn't have been surprised to see my grandson, when he was just under two years, totally infatuated with airplanes. He would point at every plane, (large or small) flying over and say, “Airpane, Grampa.” Even when I was standing right beside him, he would seem to think that I fly every airplane in the sky. Now at two-and-a-half years old, he's taken over the right seat. The photo (below) was taken on his way home from Myrtle Beach last January where he enjoyed some time in the Lazy River swimming pool at the hotel. The next step will be to teach him to change the transponder and radios. This has been my wife's official duty for some time now and I must admit she rarely misses a call. Don't have a clock or timer in your plane? Not to worry! Just run one of the tanks empty a few times while your wife is sleeping and after a long and loud lecture, you can bet that won't happen again. Even while napping, Linda's built-in clock can tell you to the minute at when to change the fuel selector. Now all I have to do is teach her to hold altitude while I'm trying to find the next fix center amended to my clearance and I won't have worry about buying a new autopilot that will actually hold altitude.

As I am writing this, the Tacoma convention is still two weeks away. The Oshkosh Air Venture fly-in is the last aviation event on my mind. Zach Grant, our North Central Tribe Chief, arranged a very successful mass arrival with 31 planes making



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**

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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.

it safely to the three rows, which we were allotted in the vintage parking area. Zach is in the process of writing an article about the arrival and our success at the Type Tent this year. So I will stop here and leave the interesting details for Zach.

I think the thing that impresses me most at shows like Oshkosh, Sun n' Fun and AOPA Expo is to be able to see the tremendous advancements in navigation equipment. The GPS is without a doubt the single biggest improvement in navigation since the compass. We now have a number of moving maps to chose from that tell you everything you could possibly want to know. You have your choice of flying over many different maps, a sectional, low and high en route charts, digital maps, topographical maps showing terrain, and with some of the software your plane even shows up on the approach plate on your moving map! For a few more shillings, a weather radio receiver can be added that can tell you everything from the cloud tops to the best altitude to fly for speed and economy.

The Year Ahead

Looking at the coming year, I believe we have a Board of Directors committed to make membership in the ICS more of a necessity for the Comanche owner, as opposed to just being an option. This will apply especially in the areas of training and maintenance.

Our past president Lawrence Paratz, along with the entire Board, has been working on ways to streamline the operation of the ICS. To put this in very basic terms, the Board of Directors (BOD) needs to be able to direct its officers with certain tasks and give them the authority to carry them out. Every officer or committee head will then answer to the BOD, who represents the interest and desires of the ICS members. The key here is

everyone ultimately answers to the membership through each tribe's representative who, in most cases, is your Tribe Chief. Therefore it is important for members to communicate their ideas and views with their tribe representative. This can be accomplished by attending local fly-ins, logging on to the ICS Member's Governance discussion area on our website, e-mail or in some cases even a simple phone conversion.

In the past, some members felt the board was too secretive or not communicating well with its members. Everyone on the Board is sincere and dedicated to making the ICS the best Type Club out there. All Officers and Board members are VOLUNTEERS giving of their time and resources to make our society a worthwhile organization. What is really needed is more involvement from the membership by way of communication with the tribe representatives. Our Secretary posts the minutes of all meetings and the Treasurer posts the Treasurer's report in the member's section of our website. This usually happens within 30 days of the meeting.

Another issue the Board has been considering, and will hopefully address this year, is to increase the term of the Officers, Tribe Representatives, and Tribe Chiefs to two-year terms. Of the past Presidents and Officers I have discussed this with, the general consensus seems to be that this is a good idea. All agree that just about the time you become acclimated to the job and understand what really needs to be done, your term ends. Remember these are just issues we will be discussing. No decisions have been made yet. Your tribe reps will be looking forward to your input.

Until next month, "Happy and Safe Flying."

Dave Fitzgerald

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COMANCHE

Cover Story: Comanche Spirit

ICS Veteran Joe Noah Utilized His Prized Comanche

by Kim Blonigen

A 31-year member of the International Comanche Society, Joe Noah has flown his 1967 PA-24-260B Comanche over 3,600 hours. Those hours in the Comanche took Joe and his wife, Betty, on several trips from Virginia to California and many places in between. Since Joe is now 80 years old and the Comanche is 40 years old, he no longer takes passengers with him when he flies, which is mainly to take aerial photos for local real estate agents.

Besides the many trips Joe and Betty took for pleasure, Joe used 43P in business as well. And boy, did he fly it! He had a consulting business which required him to visit military

installations. He had a license to land at Air Force and Navy bases, but had to get permission to land at each Army base 30 days in advance. In the late 1970s, he had a contract with the FAA to inspect GA airports in Iowa, Kansas, Missouri, Colorado, Wyoming, New Mexico and Oklahoma. He flew to the airports when most FAA inspectors drove to them.

When asked about what he enjoyed most about flying his Comanche, Joe said, "The freedom to come and go when I desire. I have been very fortunate to have my own hangar at a nice airport which I pass daily when I go to and from town."



Winston Air Show

Spirit

ah Has Thoroughly Comanche

One of the most memorable trips taken in 43P was to Detroit Lakes, which was made memorable by the poor weather which caused them to make an unplanned stop. The storm was so severe that ATC warned them not to penetrate. Joe says, "One warning was sufficient!"

But, by far, the absolute most memorable trip was one that was written about in the October 2005 issue of the *Flyer*, as *Catastrophic Engine Failure*. On a trip planned from Chase City, Va. (CXE) to Goldsboro, N.C. (GWW), after takeoff and climb to 3,500 feet, he heard a loud noise, the airplane shook and smoke filled the cockpit.

When he was asked what he most enjoyed about his ICS membership, Joe's answer was one I was happy to receive. He said, "Without a doubt, I enjoy *Comanche Flyer* the most!" (And that was without any arm-twisting!)

Joe says he purchased his Comanche 30-plus years ago because he liked its look and performance. Since then, he has upgraded the radios and VORs and added a Loran and GPS. He has no other plans for upgrades, as he says, "It flies like a top!" ✈️

ICS Member Profile: Joe Noah, #1925

Comanche year & model: 1967 PA-24-260B

Years owned: 31

Airport home base: W63 in Clarksville, Va.

Pilot's license attained: 1944, at age 16

Total hours: 4,612

Total Comanche hours: 3,867

Ratings: Commercial, Instrument

Other aircraft owned: PA-28-180

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Dave Fitzgerald, ICS #10297, NC Tribe
5393 Hillsboro Ave. SE
Canton, OH 44707-1167
Ph: (330) 484-4609 Cell: (330) 936-7979
Email: aaviator@neo.rr.com

Vice President:

Not Known at Press Time

Secretary:

Dorothy Meadows, ICS #6723, NC Tribe
1500 Odette
Hartland, MI 48353
Ph: (810) 632-9588
Email: dotmeadows@comcast.net

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Don Nelson, ICS #118, NW Tribe
925 Ludwick Ave.
Blaine, WA 98230-5109
Ph/Fax: (360) 332-2743 Cell: (360) 305-0286
Email: nelsblgd@msn.com

Past President:

Lawrence Paratz, ICS #12475, AU Tribe
11 Wrixon St., Kew
Melbourne, VIC 3101
Australia
Ph: +61-3-9817-1222 Fax: +61-3-9817-2088
Email: LParatz@bigpond.com

CFF President: (non-voting)

Harley McGatha, ICS #11687, SE Tribe
50 Country Rd. 537
Centre, AL 35960
Ph: (256) 927-5044 Cell: (256) 484-1738
Email: comanche@tds.net

TRIBE REPRESENTATIVES AND CHIEFS

South East:

Tribe Chief Charles Littwin, ICS# 14089
108 Amelia Lane
Mooresville, NC 28117-8457
Ph: (704) 799-2989 Wrk: (704) 528-1131
Fax: (704) 528-1131 Cell: (704) 658-7901
Email: chas4949@adelphia.net

North East Tribe

Tribe Chief Bill Weaver, ICS #4064
840 Hughey Road
Brookville, PA 15825
Ph: (814) 849-2516 Fax: (814) 849-5522
Email: wjweaver@penn.com
or wjweaver@gmail.com

North Central:

Tribe Chief Zachary Grant, ICS #15515
6736 Chapel Hill Rd.
Indianapolis, IN 46214
Ph: (317) 243-3079 Cell: (317) 201-4293
Email: L1011jock@sbcglobal.net

Mid States:

Tribe Chief Larry Degner, ICS #784
14701 Pioneer Trail
Eden Prairie, MN 55347
Ph: (952) 941-1111
Email: flydegner@msn.com

South Central:

Tribe Chief Bruce Thumann, ICS #14028
6618 Avenel Drive
Pasadena, TX 77505
Home: (281) 487-5782 Work: (713) 649-8588
Cell: (713) 875-3056 Fax: (713) 649-8151
Email: bruce@contractbuilderssupply.com

South West:

Tribe Chief Lorne Harmon, ICS #12436
1491 Northridge Drive
Prescott, AZ 86301
Ph: (928) 717-2630
Email: flying@cablone.net

North West:

Tribe Rep/Sec Shirley Nelson, ICS #14897
925 Ludwick Ave
Blaine, WA 98230
Ph: (360) 671-7388 Cell: (360) 305-0287
Email: sanelson7@comcast.net

Tribe Chief Jay Hulbert, ICS #15334
54967 East Kirkwood Dr.
Sandy, OR 97055
Ph: (503) 702-6403
Email: jhulbert@igpco.com

W. Canada:

Tribe Chief Don Ostergard, ICS #3263
Box 2550
Drumheller AB T0J 0Y0 Canada
Wrk: (403) 823-9326 Fax: (403) 823-9183
Hm: (403) 823-8813 Cell: (403) 823-0405
Email: c-flhv@telus.net

E. Canada:

Tribe Chief Bruce MacRitchie, ICS #10998
PO Box 244
Welland ONT K0A 1L0 Canada
Ph: (905) 295-4968, (905) 735-7773
Email: wacctr@iaw.on.ca

Europe:

ICS Rep Monica Rehkopf, ICS #14462
85570 Sigenhofen, Germany
Hm: 49-8121-229 333 Fax: 49-8121 229 332
Email: mrehkopf@omnijet.de

Tribe Chief David Sheppard, ICS #14629
Lipstone Cottage, Cansey Lane Wix
Wssex Co11 2rj United Kingdom
Ph: 012-5587-0061 Wrk/Fax: 012-0685-2900
Email: david@sheppardracing.freereserve.co.uk

S. Africa:

Tribe Chief Fred Morrison, ICS #15438
PO Box 3912, Midrand Gauteng
1685 South Africa
Ph: 27-11-314-8181 Fax: 27-11-314-8182
email: fjm@telkomsa.net

Australia:

Tribe Chief John Macknight, ICS #596
PO Box 356
Deniliquin NSW 2710; Australia
Ph: 61-3-5881 6000
Cell: 61-4-27 694008
Email: jjmacknight@bigpond.com

ICS TOOL LOAN PROGRAM

Matt Kurke

10340 Regent Circle
Naples, FL 34109
Ph: (239) 593-6944
mkurke@comanchegear.com

ICS TECHNICAL DIRECTORS

Bill Creech

Tel: (915) 581-3401
Fax: (915) 581-4176
E-mail: BJC1946@aol.com

Dave Gitelman

Tel: (585) 381-4785 (home)
Cell: (585) 317-8446
E-mail: gitelman@att.net

*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.

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Historical: None

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Pete Anderson – TX
Single, (817) 279-1627
peterk48@msn.com

Samuel Appavoo – Canada
Twin, (519) 524-7301
appavoo@cabletv.ca

James Bates – AZ
Single, (480) 837-3836
jbates747@msn.com

Kevin C. Baun – OH
Twin, (740) 881-9878
kbaun@columbus.rr.com

Sheldon Bresin – CA
Single & Twin, (909) 629-2626
shellflycfii@verizon.net

Orlando Brown – OK
Single, (405) 376-4056
c172@worldnet.att.net

Dennis Carew – WI
Twin & Single
(262) 250-3136 / (920) 749-9558
dcarew@enerconmail.com

Charles Classen – IL
Single, (815) 269-2552
classaero@illicom.net

Linda Dowdy – MN
Twin, (763) 753-1571
lindowdy@visi.com

William Harris – VA
Single & Twin, (540) 731-4772
bill@motioncontrol.org

Ira Menin – IA
Single, (712) 239-5142
iracomman@aol.com

Eric Schlanser – MI
Single, (616) 382-3709
eschlanser@yahoo.com

Dave Stewart – IN
Single, (219) 462-0182
comanchedave@ATTB1.com

Roger Wentowski – AL
Single, (205) 290-8401
rwentowski@btsal.com

Larry J. Whitbeck – IL
Single, (217) 732-9704
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Technically Speaking

Gear Up Landings

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 CFF-approved 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.

Dale,

It seems that there is a lot of gear ups, not collapses in the evenings after sundown. Any ideas??

Dwight E. Lambert, ICS #4473, Albany, Oregon

In the Comanche, when you turn on the navigation lights, the landing gear lights are automatically dimmed. I suspect you could build a case for

this being a contributing factor under certain light conditions.

Dale

Matt (Comanche Gear) has a nice little wiring kit that replaces the landing gear lights with push to test lights, amber one with brightness adjustable irises, and removes the automatic dimming. The green light needs no dimming. The lights are sweet for twilight and night operations.

DonV

Hi Dale,

A very good argument for installing the Comanche Gear light kit which takes the gear indicator lights off the dimmer circuit so that they retain their brightness. The yellow up light is a self dimmer while the green is not. It is not distracting at night.

I will say that the stock lights are plenty visible at night even when dimmed. I think a simple rule of NEVER using the flaps without the gear down would prevent many gear ups in the Comanche assuming that all systems are working properly and the pilot flies final at close to 1.3 vs0. Of course if he or she can't hear the gear horn, that is another matter.

Regards,
Don

Or if you want more info in front of you, get the K2U flap/gear warning system. More than one notch of flaps with no green light (or more aptly, no nose gear down and over center, because that is the switch that governs the gear horn) gives you another red warning light and sounds the gear horn! I highly recommend it.

As far as a reason for forgetting gear at night or at dusk, I think that a simple human factor argument could be made. For many, this is outside their comfort zone as they may not fly much at night. It could be the urgency to return, the

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additional stress of approaching their limits, and task overload of the old brain computer, or many other issues. I have found that the Comanche dimming system is much less aggressive than that of the Cherokee series aircraft with retractable gear. Turn the nav lights or panel lights on depending how it's wired and try to even see the lights on a Arrow, Toga or even a Malibu. They don't seem to have the same issues. I think one of the biggest is the big red light that comes on in front of your face saying gear unsafe, in conjunction with the gear horn/buzzer. I'd bet most of the gear horns out there on the accident aircraft were not in working order or could not be heard on these airplanes.

-Zach

Zach or anyone-

I am now curious, regarding no flap landings. I was taught - reduce flaps use as a function of amount of crosswind expected. So, when they publish the max crosswind component during certification, is that figure based on full flaps? If it is, does that mean with no flaps the crosswinds can be higher, and if so how much higher?

I have landed in crosswinds high enough to touch down with controls nearly fully crossed and with flaps on full to reduce speed to the minimum and gone around if I couldn't get comfortable with how well or not the approach seemed stabilized.

Tom,

That is right, only the nose gear controls the horn.

Steve

This is an old topic here. I use full flaps for almost every landing. I feel that the lower speed that you can fly at, and the increased drag they afford, makes crosswind landings a bit safer. The transition from no weight on the wheels to all the weight on the wheels is hastened. Weight on the wheels is an aid to stability.

Did you read the posting about the turbo 400 that had an off runway excursion? Apparently the pilot used no flaps and flew the approach at a higher than normal speed due to a crosswind. After he touched down he lost control. The higher your airspeed the greater the lift you develop. That lift takes weight

off the wheels and leaves the airplane in a situation that makes it more affected by the crosswind for a longer time (until you slow it down).

You may want to consider that when landing with a crosswind: If your flaps are up, lowering the nose to reduce the AOA at touchdown will quickly remove most of the lift, if not all, whereas doing the same with flaps fully deployed will not be as effective. Thus the impact of a crosswind in proportion to the weight on the wheels (read: traction) will be much lower if the flaps are up.

The faster you land (as with flaps in the up position) the crosswind component will be proportionately lower when compared to the airspeed. The crab angle (or slip) required to compensate for the crosswind will thus be lower and reduce the impact of the crosswind.

Under normal conditions we prefer to land with flaps because the lower speed reduces wear and tear on tires, landing gear and other components. However, the wear and tear from a landing LOC event far outweighs the impact of landing at higher speeds with flaps up under high crosswind conditions.

Blue skies and safe flying,
Francois

I have read your message. I can't say I agree with it. If you are comfortable with your technique far be it from me to question it.

I was instructed by a 25,000 hour airline pilot [who] was working for Eastern airlines as a sim instructor. I had an open mind and tried that technique. I was pleasantly surprised that it made crosswinds a non event for me. Like most pilots I was trained to lessen flaps to prevent weather vaneing. I found it hard at first to change. But I did, and I feel it was a change for the better.

I think no matter what your angle of attack is, it is speed that can cause problems. If you transition from flying to driving rapidly your exposure to the hazards of crosswinds is lessened, the faster you slow down. Full flaps helps you do that.

Lowering your nose at a high speed can lead to wheel barreling as well. That is a real hazardous position to be in a crosswind. I can only say to you, try it, have an open mind, you might find, as I did, that it works.

With all due respect to everyone: Killough's excellent book for the '65 260, in the APPROACH AND LANDING checklist, notes: If crosswind component is above 12 knots, use partial or no flaps and above normal approach speed.

Whatever technique works for you all, go for it. I use half flaps for any light airplane I currently fly in a gusting crosswind. Key word: Gusting. With full flaps, even my TC-310Q might be back in the air with a 20-knot gust if I don't get the full flaps up immediately after touch down.

Sorry for the above opinion, given the fact that I'm not a CFI.

Rich, Bear River Flyers,
ICS Member

Don't ever be sorry for giving an opinion. What makes you think that a CFI is the final authority on flying? I have a lot of 310 time. In crosswinds, I always got it as slow as possible just to avoid that problem of inadvertent "lift off". Touching down at stall is as safe a technique as any in my opinion. As I said before, try it, have an open mind. It works for me. I have handled some heavy crosswinds.

Did you read the post on the 400 turbo Comanche thread about the damage history of that plane? Search it out if you haven't. The high-time pilot landed no flaps and fast, because of a gusting variable crosswind ... ended up off the runway.

As I remember, like in the Comanche, full flaps on the 310 creates more drag than lift. Anything over 15 degrees is more drag than lift on both planes.

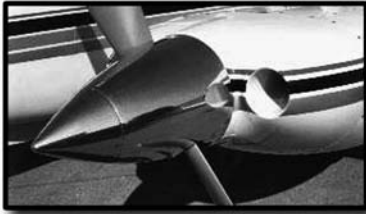
Anything longer than 3,500 feet, no flap. Shorter, then full flap. I'm no hero if the crosswind is greater than ~15 knots as reported months ago in another thread.

BTW, I think VG's saved my life last weekend. I used a no flap setting at gross on a 3,100-foot runway with obstacles at each end (trees). She flew, but it was closer to the trees that I ever want to be again. Sure would have been embarrassing to be a statistic. Lesson: Read the POH and look at the performance curves (I have them in Killough's book).

Brian, PA30

Continued on Page 11

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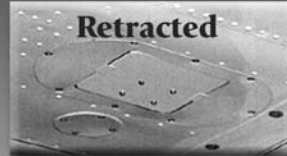
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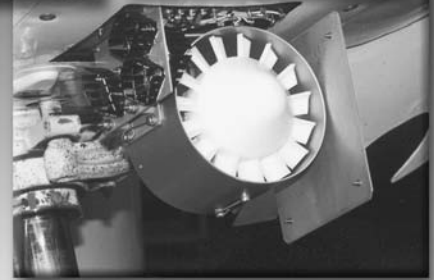
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Tom,

I pretty much agree with you. Higher speed touchdowns and loading the nose wheel make no sense to me. I would never rent or loan an aircraft to a pilot who used the high speed technique. I land full flap slowest speed possible and immediately raise the flaps continuing to hold the stick back. When a pilot makes a high speed landing, he is in the crosswind and gust effect longer. The sooner slowed the better. Loading the nose wheel has often produced wheel barrowing, nose gear, prop, firewall and other damage. Somewhere in this high speed landing process the aircraft has to be slowed to tie down, hangar or park. If the crosswind is so severe that a crosswind landing cannot be safely accomplished, than perhaps an airstrip with more favorable runways or less wind should be thought about. I frequently, on my turf strip, plan my touchdown at a wider point in the runway and use most of the extra width to help compensate at touchdown, flaps quickly up, slow and straighten plane towards center line. My personal thinking is that use of the nose wheel, high speed touchdowns and excessive brake use are verboten, dangerous and often require some airplane work before the next flight, as exemplified by the post accident. Let's all slow 'em down and hopefully keep our birds in one piece.

I probably should not admit but at a few uncontrolled and no traffic airports, I have used a favorable taxiway. One memorable time was a 7 AC champ 80+ mph bird with unforecasted crosswinds of 40 and gusting higher. Ground help to tie down and boy did it feel good to have it secured. Whatever the pilot's choice, good luck and CAVU to all.

Dwight E. Lambert, ICS #4473,
Albany, Oregon

Tom,

I have an open mind, and a good deal of experience. Here is what I would like to point out. First, you are much more likely to wheelbarrow with the flaps down than up, this is a function of the effective angle of attack which is the imaginary line drawn from the center of the leading edge of the wing to the center of the trailing edge of the wing. With flaps down and the aircraft on terra firma, it becomes obvious that the effective angle of attack is greater, thus most people have a tendency to push forward letting the mains "get loose" and then when the drift starts, they step on the rudder and forget about ailerons. The ensuing problem is a severe side load at best and at

worst a ride through the ditch. The solution is to firmly pin the upwind landing gear and de rotate the aircraft, which means if your nose is already on the ground, the only thing you have left in your bag of tricks is to retract the flaps.

Now before someone flames me for retracting flaps on the runway in a retract, I will submit that I do not advocate this unless it is a planned short field and briefed as such, but if you never had flaps in the first place, then you get all of the benefits. (The same reason we retract the flaps on the short field to get max braking is the same theory, we want weight on the mains.) Read Francois post, it is spot-on for theory.

My personal choice is all or nothing when it comes to flaps on the Comanche.

The only ones that you truly know what your intermediate setting is the manual flap singles, all the rest are anyone's guess at where you stop the motor. I advocate no flaps in heavy crosswinds AND when learning how to land your Comanche. From there on out, I use all or nothing as I see fit (my technique). Carry a bit more speed with no flaps, but not too much. Funny thing is, I teach people to use full nose up trim for landing, partly because aerodynamically it helps nose heavy aircraft like the turbo twins, but also because it controls speed. Full nose up trim works with flaps or without. You won't touch down too fast, but when you do, the nose won't come crashing down either.

Continued on Page 13

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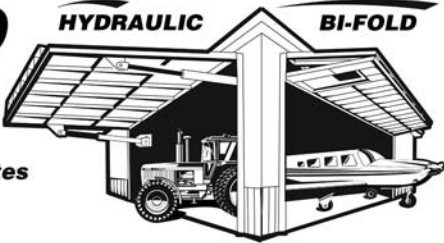
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Back to the issue at hand from the previous postings. Now, as to the gear horn issue! If you have the flap horn interconnect, you will not gain benefit from it if you don't use flaps! But your gear horn still works, doesn't it? Don't know? Well maybe you should check it. I always pull my power to idle at some point after the gear is down and make sure no horn, AND as I cross the numbers I look at the green light, the gear handle position (and mirror if so equipped) and say OUT LOUD, "Green light cleared to land." If not, I go around for either account.

I am lucky in that I get to fly both a 180 and a turbo twin regularly, and I have time in all of the other models. It works! A Comanche is a Comanche. They all have the same short gear and laminar flow wing, and they all sit nose high naturally on the ground. Whatever technique you develop is okay as long as it is safe. The problem is that people often times get away with something for so long they think they have it nailed, until the time the dog bites. Then it's too late to modify your technique.

-Zach

I agree. Like I said in my original posting ... this is a "hot" topic. When I was first exposed to this type of landing, I was a bit skeptical myself. But after watching my instructor's example, I came to the conclusion that it was far safer to use flaps in all landings then not. As he said, "Watch the big boys ... they all land full flaps, all the time."

I don't see how the flaps would give you more of a possibility of wheel barrelling. Speed and a desire to put the nose gear on the ground before the wing stops creating lift, would be more likely to do that. Next time you are in a crosswind situation, try using flaps and see what happens. Then let me know how you find that technique. Okay? Until you try it a few times you really can't judge it fairly.

Were you landing? If you felt that you had a problem with 3,100 feet landing or taking off, I would investigate it. I think that 3,100 feet is more than sufficient for either a landing or takeoff. What was your density altitude?

I really don't see any disadvantage to using flaps on landing, so I don't see why you would alter your landing technique for different length runways. The purpose of landing is to stop flying. As it is one of the most "dangerous" parts of a flight, why

would you not want to complete it as rapidly as possible? I use 15 degrees of flap for all take offs. It gets the airplane off the ground in a shorter distance and a slower speed. The aircraft accelerates better (read more rapidly) in the air then on the ground. This gets you to best rate or best angle of climb speed faster, no? Best rate or best angle speed is my target on takeoff, depending on the particular need at that time. Why not do whatever it takes to get you there sooner? i.e. use flaps.

If you don't use flaps, you must have a reason. What do you think is the negative effect of using flaps for take off on any runway?

Tom,

Yes, I have tried using full flaps in a crosswind, and it works to a point, but for strong and gusty winds it does not work well for me, and I have 15,000+ hours. It has not worked well for any of my students either, even with much less time and experience to add negative learning.

Continued on Page 15

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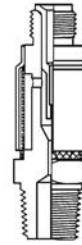


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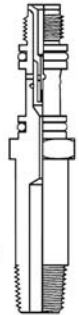
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Trust me when I say the potential for a wheelbarrow is greater with the flaps down than up as you can't effectively get the lift off the wing because of the high effective angle of attack (and unlike a tail dragger, even if you stall it on, which in and of itself is going to cause much control problems in a stiff crosswind, you put the nose on the ground thus reducing the angle of attack below critical and the wing starts to fly again). You must reduce the wings angle of attack even further so as to create less lift, and to do this, most push forward subconsciously, and then hammer the brakes, which in turn flat spots a tire that doesn't have any weight on it anyway, etc. and the outcome is a bad day. In most of the singles, getting any sort of effective braking is only possible below about 60 mph anyway because of this. Pull the flaps up and the speed goes to 70 mph. That's why we do retract flaps on a short field.

Now I will address the big boys. Yes we use flaps all the time, except in an emergency. A no flap landing in pretty much all transport category jets means an approach speed of over 220 knots, and a runway landing distance of over 10,000 feet. We do however use different landing flaps settings as well as different setting for takeoff, whatever is best for the conditions. One thing that your instructor, who told you about the big boys, didn't mention is that all big jets have between 50 and 70 percent of their wingspan covered in spoilers that automatically deploy on landing, reducing the lift created by the wing and keeping you positively on the ground. Most jets also sit in a nose low attitude on the ground, or they have a very low angle of incidence. This is obvious if you pay attention to the flight attitude. Even in cruise, jets fly in a nose up attitude. Also, crosswinds and gusts are a percentage game. Even with approach speeds in the 140+ range for transport jets, we add all of the gust and half of the steady to our approach speed, ie., wind 260 at 10G20 would give us Ref plus 15 for our approach speed (half the steady=5 and all of the gust=10). Ref is 1.3 times the stall speed at the weight and configuration for the landing, and normally we add 5 knots for our approach speed. In this case Ref would be 135 for a 140 calm approach, but we would add 15 for 150 approach speed in this case. Try making a Comanche land with that additive! Like a Comanche though, you can add too much to your speed, and we are limited to an additive of not more than Ref +20,

because it negates the affectivity of our runway performance. We will use more runway than the book says.

Also a 20 knot crosswind is only 14 percent of a touchdown speed of 140, it's 29 percent of a touchdown of 70 knots and skyrockets to 33 percent, one third of the speed, if you hold it off to 60. If as you suggest, using a full stall landing, you will be touching down at average landing weights at about 50 knots. Do you see the problem here? Comparing a Comanche to an L1011

or even a 737 is okay as long as you realize the similarities stop with the fact they are both airplanes.

If you stay below the max demonstrated crosswind of the aircraft, you may stay safe using your method, however, one knot over and you may not! Max demonstrated is a certification demonstration, not a limit and it is simply a requirement that you can land in a direct crosswind at 20 percent of the gross weight stall speed in the landing

Continued on Page 17

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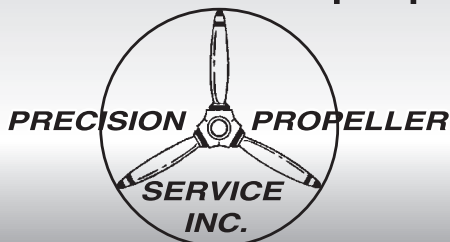
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configuration, without immediate damage to the airframe (however the repeated effects are not considered). The manufacturer can demonstrate more, but that is the requirement. Most planes can't safely, smoothly and without protest, go beyond this number without some adjustment, and the best adjustment is to keep the percentage somewhat close to the demonstrated 20 percent by increasing your speed for control, and decreasing your net effective lift when you are on the ground. How you arrive at that, is up to you. As your instructor says, that's how the big boys do it.

-Zach

Tom,

I will address another of your statements about the airplane accelerating quicker in the air than on the ground ... what? Unless you have dragging brakes or you fly from a soft field with tall grass, this is just false. By getting the airplane into the air at the lowest speed, you have high induced drag, flaps and gear hanging in the breeze at a high angle of attack exposing the gear bays to the relative wind ... what part of low drag does that sound like to you? Also flaps may get you off quicker, but they hurt you in climb rate and could cause you to not clear an obstacle. Why would you not use Vx EVERY time for your initial climb, especially in a single. That and getting the airplane as clean as you can, as quickly as you can, could save your life in an emergency such as an engine failure on takeoff. With the case of a twin, all bets are off until reaching Vyse (best rate single engine), so unless obstacles are of more concern than an engine failure, it is advantageous to get to blue line as quickly as possible. Flaps don't help you do that in a twin, and neither does getting the plane airborne at the lowest speed. In fact, you try to keep the thing on the runway to at least Vmc and then accelerate quickly to Vyse and know all the while that in between, if you pop one, you are better suited to pull the other one off and fly it as a single with two throttles, and land straight ahead with power off.

I do not doubt your instructors over the years, but I would encourage you to have more of these "conversations" with others either privately or on a forum such as this. I think you will be better served armed with some "other perspective" knowledge. I am not really sure where you got some of the ideas you are presenting, but they are interesting to say the least. Thanks for


participating and please take the time to read, talk and learn from other's mistakes. None of us will live long enough to make them all ourselves.

-Zach


CFI's are another discussion, Tom. Zach addresses "heavy iron" difference issues well, I think. Spoilers, deployed on touchdown, virtually assure no more flying. Crosswind component as a smaller percentage of approach speed is another big factor. IMHO, crosswind landings

should minimize side loads on the landing gear. Whatever that takes, including "flying" the airplane throughout the landing rollout, i.e., maintaining aileron deflection ...

Rich, Bear River Flyers,
ICS Member










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>. 

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When Do You Stop?

by Bill Creech, ICS #3423

Flying, that is! Yeah, you heard me right. Have you ever thought of the criteria that is appropriate to answer this question? I'd like to bounce a few thoughts off you that I've been forced to face, personally, within the past few years. These are important to you and all your loved ones and can ONLY be truthfully answered by the pilot himself.

First, some background to introduce the basic question. Most of us fly for entirely different reasons. Many Comanche pilots fly for fun only. There's that annual vacation, or visit to the relatives who just happen to live two states away. Having a beautiful Comanche in

the hangar makes such a trip not only fun but also entirely practical; at least until the TOTAL cost is computed.

The norm also includes learning to fly well after adulthood, even in many cases after the family has been started and is well on its way. It is also important to accept that many people fly because it sets them apart from most of their daily business associates and friends. After all, not everyone can fly his own airplane! There are many other reasons to fly, but I think these are examples of what is probably representative of the majority. The others fly for a living, in one of the multitude of examples of professional flying. One factor that is

very much in common to all of us is a rather basic love for airplanes and flying them. There's no question that it permeates one's sole in all respects.

"I don't look back but I do have a treasure cove of great memories of my sixty-four years of flying."

My case is a bit different from the norm. Flying for me became a very serious lifelong activity when I was 15 years old. The flying "bug" bit me and would not release me from its tenacious grasp for an entire lifetime. I was very fortunate to stay on "flying status" for nearly my entire 31-year Air Force career. During this total period, I never suffered a recheck on any flight check or any suggestion of inability to fly to very strenuous Air Force standards. This record stands for 14 different fighters and a total of 33 different Air Force and civilian types for nearly 9,000 hours. I hasten to add that these statistics are mentioned only to emphasize my lifelong devotion to aviation. My love for aviation was more in line with "worship" than just love. I simply think that God placed me upon this earth for the express purpose of flying airplanes.

During this entire period, I've always passed my physical examinations each year with "flying colors" in the Air Force and every three years, afterwards, for my class 3 FAA physical. During my seventh decade, however, things started to change, physically, in a very slow and insidious manner.

It started after I installed a Horizon digital tachometer into my beautiful 180 Comanche. I found early on that it

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was difficult to read, unless the lighting was perfect, with its black on gray lettering. This lettering scheme is, of course, typical of any liquid crystal display. I blamed it on everything I could think of, but finally was forced to admit that my eyes were failing. Almost simultaneously, my hearing took a dive as well, although this was more of a nuisance than anything, since I always wore a headset. Then it was the prostate, and then came my sense of balance. All were taking a dive and refusing to level off. Naturally, all this started to disturb me greatly but I continued to maintain and fly my beautiful Comanche. It also goes without saying that I continued to pass my class 3 physicals with "flying colors". The problem was that I was learning much more about myself, and my physical condition, than was the aviation medical examiner, and I didn't like some of the things I was learning. The big decision was staring at me and I didn't like it.

Early into my eighth decade, I had a good talk with myself. I knew that I had a hard decision to make and I needed to decide on the best timing. My airplane was in perfect condition except that the engine was nearing TBO. A delay would have meant a large expenditure for an overhaul. In addition, I had a hangar neighbor who was literally "chomping at the bit" to buy my very-well-equipped hangar. I knew that this would simply mean coming to a decision on a price and it was definitely a seller's market. I must admit that my "talk" with myself was short and to the point. I made a single call to an acquaintance on the east coast about my for-sale aircraft. In less time than it takes to tell it, I had a call from a friend of his who just HAD to have my beloved 81 Pop. I asked for and got top dollar even with the high-time engine. I sold my Comanche on reputation, over the phone, literally sight unseen. I then had a "hangar sale" of my equipment and many tools, handed the hangar keys to my friend, the new owner, and walked away.

I recount this story, not as advice, but simply to pass along my experiences to those of you ICS members who are nearing this point of maturity. I think the only advice that I'd offer is to do it when the time comes, on YOUR terms and not at someone else's leisure, especially the FAA's. Keep the ball in your court and under your personal control. As for me, I don't look back but I do have a treasure cove of great memories of my sixty-four years of flying. 

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Panel Re

by Patricia Jayne (Pat) Keefer, ICS #08899

Thirty-seven years of sins and good work were hiding behind our PA-39 Twin Comanche panel. We knew it was a challenge to get avionics work done because when the audio panel needed to be changed in 2005 so we could free up some space, it took twice the allotted time and five trips to get everything back to working order. Then the poorly placed JPI EDM 760 installation pushed up the right side of the glare shield. Because we'd had such difficulty on the last two panel changes, I was not looking forward to renovating the center stack. Some folks may recall that I wrote an article when we overhauled both engines. Like most airplane projects, we saw this one coming and had some budget numbers in mind with some key new functions we wanted. This is the second most expensive elective expenditure for our plane. In

March the only fast flying I saw was the money leaving the checking account – but it is truly worth it! Here is my/our experience.

The owners

The “we” is my husband of 32 years, Ken, and me. We make decisions as a team – sometimes this is more interesting than others – and divide the work to our strengths. Ken enjoys doing the research, I do the execution and between the two of us, we anticipate most of the issues. Our Valentine's gift to each other for 2007 – and maybe for years to come – was the new center stack and a 496.

Why Now?

The avionics were beginning to talk to us. Two things happened – last fall we'd planned to go to Port Aransas, Texas for an informal ICS Saturday

lunch fly-in. We needed to file IFR and we realized we couldn't because we didn't have a certified GPS approach. The impetus to change came when the 295 antenna connection failed. We'd bought it for our 25th wedding anniversary. It was as much to repair as it was to buy an overhauled one. Coincidentally the 530 became WAAS capable. We looked at each other and said, “Yup, now is the time to renovate the center stack.”

Choosing an Avionics Shop

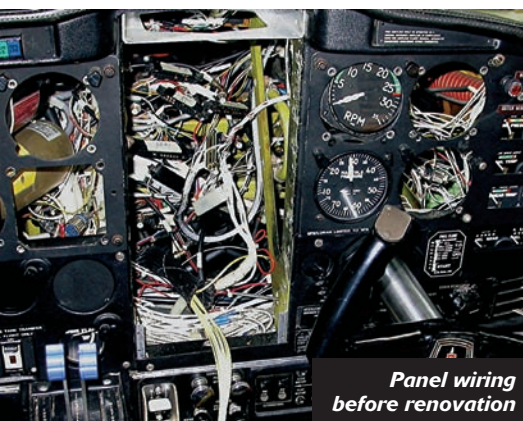
When you live just north of Fort Worth, there are a number of avionics shop choices. I chose to fly an hour west and frequently drive about five-and-a-half hours round trip. As an aircraft owner, panel renovation like overhauling an engine, isn't something you do every day. So how do you know who would do the best job? I had enough experience with shops that had done our IFR static checks over the years to know I needed to do more research. A reference from Twin and 260 owner and former Tribe Leader Carolyn Moody led me to Abilene Aero. I had some minor work done by them about six months ago and was impressed with the organization of the shop. While I was there, I spoke with other owners that were there for service. All pointed to an excellent, professionally-managed company.

I was very pleased with their work. Starting with the quote process, Stuart Douglas asked me to e-mail a photo of the panel and then we spent about 30 minutes on the phone discussing options to accomplish our goals for the panel. His advice on what was best to buy new and what was fine as used was helpful



Panel before renovation

novation



Panel wiring before renovation

to keep the costs down. After my husband and I looked at everything again, I called with more questions. Stuart was patient, knowledgeable and provided all the answers.

It got even better once I brought the plane in. Bobby Faulks sat in the plane and we walked through the planned work. Line item by line item we discussed each of the 27 elements of change and Bobby made two great suggestions we had not considered. I made several and my husband made a few trips during the two-to-three-week project. I used the down time to wash and wax the plane while peeking inside whenever I wasn't



Bobby at work

in the way of the work. We could see huge improvements in the quality of work that lives behind the panel. Problems that we didn't even know we had such as bad grounds were handled with expertise honed by experience. I was delighted to see blue plastic 'drapes' in the high traffic area to protect the paint. When parts were removed, the associated screws were put in a section of a box and the section was labeled. I like that process.

Not only do they have bench checking ability but also a GPS repeater and portable radar to check the transponder in the aircraft. It was fascinating to see items checkout in the hangar and then have several things not perform correctly on the first test flight. We had a faulty new Garmin power cable, a bad ground, a transponder failure and we needed to have the GPSS wiring fine tuned. The problems were fixed quickly with a very positive attitude and an apology for the delay.

Another advantage of Abilene Aero was that I could get the oil changed and the 50-hour fuel screen AD done at the same time. The mechanical side of this shop asked us to bring our Comanche Maintenance Manual so they could make sure they did the items correctly. All went without a hitch and the fuel screens continue to be noticeably cleaner since I had the main and aux tanks vacuumed.

New Stuff and Changes

The new 530W sits just below our audio panel and vintage transponder. We had great advice to have it as high as possible in the stack and this is as high as it would fit in our aircraft due

to depth issues. We went with a 530W because of the WAAS capability and the extra screen real estate that allowed Garmin to put more function in it. I suspect one of our favorite extra features might be the automatic station identification instead of the old method of listening to the Morse code. We heard so much about the learning curve on being able to use this new stuff effectively, that while I was in Abilene with the plane, Ken ordered and took the King 430/530 course. Even though the course used the 430 most of the time and hadn't been updated for WAAS capabilities, he still found it helpful to take the course and use the Garmin simulator to become familiar with the 530W before ever getting in the plane. Since we live in Texas, we added a cooling fan especially for the 530W.

In Ken's research he found the advantages of GPS Roll Steering for our Century 2000 autopilot, so we bought it too. When this is combined with the 530W and all is programmed correctly, it will correctly enter and fly a hold for you (too cool), fly a DME arc, fly a procedure turn for you and in general, reduce the workload of flying IFR.

Our primary navigation will now be the 530W with the Century NDS360 HSI. Should it fail or be out of the plane for service, our backup is the "new-to-us" used KX-155 with a new King 209 Indicator with glideslope. Should we have a full electrical failure (and we did once in IMC when both alternators failed for different reasons – but that's another story), we will have the 496 as backup.

Continued on Page 24



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Panel Renovation

Continued from Page 21

Once we took out the VFR-only Trimble GPS, we lost the very handy Shadin fuel computer function of displaying the fuel remaining at destination being automatically calculated and displayed for us, so we bought a new one. This will be good in the future because when our fairly expensive fuel flow transducers fail (cross your fingers, they've been good for 14 years now), we can tune the new Shadin to accept less expensive transducers with a different K factor because the newer Shadin Digflo L has upgradeable software and tunable K factors. A new STC was not required by Osborne.

The JPI EDM-760 fits well now in its new home which is just to the left of the center stack and it helps keep the engine information in the pilot's scan. For those of us who wear tri-focal glasses, it also lowers eye fatigue because your eye doesn't have to keep re-focusing to different distances. Our Hobbs meter used to hang at the bottom of the stack and whack the container we use for our charts and it is now higher and adjacent to the temp gauge. Also, we effectively raised our stack by an inch which guaranteed control cable clearance.

Another workload reduction was gained with a switch being added to toggle the

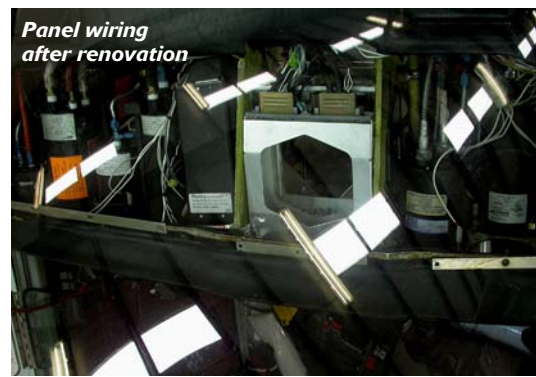
DME between the 530W and the King Nav. We can still manually enter a frequency to ascertain another DME distance. We moved our second Attitude Indicator one hole to the left which makes the scan easier should the primary Attitude Indicator fail.

The circuit breakers were suspect so we spent some money to have all the breakers tested and validate that their labeling was correct. One circuit breaker had to be replaced.

Beyond the equipment, there were huge changes in the quality of wiring from two perspectives. Apparently, standards for avionics wiring have changed over the years and we now know that much of our panel needed to be changed from unshielded to shielded wiring. The audio panel cable bundle was in excess of two feet long so it was shortened to more easily fit in our space efficient plane. The blind encoder had been waving in the wind and it is now securely fastened in the nose compartment. Bobby also fabricated a nice platform for the two 496 antennas that can Velero to the glare shield.

What We Didn't Do

We had planned on replacing the ancient ammeter with the EI indicator. This turned out to be harder than we thought because the shunts in the



ammeter circuit were hard to find. They were on the backside of the panel of fuses that live under the floor access panel immediately below the power quadrant. And then, once we found them, their value was not printed on them so we gave up and left the ammeter alone. We had also planned on adjusting the voltage regulator so it outputted 14V instead of our typical 13.3V. It had been dialed down due to an over-voltage problem years ago. The advice we received was, unless we were having electrical problems to just leave it alone, so that's what we did.

Thank You(s) to other ICS members


I want to publicly recognize those ICS members that really helped us achieve the successful panel renovation. Carolyn Moody was key in her recommendation of Abilene Aero. They had done a good job on her panel. When I authored a solicitation for any advice and counsel on our proposed panel on the Comanche Owners Delphi Forum hosted by Dale Vandever, I received a lot of excellent comments. The most memorable were the concrete suggestions by John Van Bladeren about cooling, spacing and stack height. Dave Gitelman kindly sent photos of how he creatively mounted his portable GPS on the co-pilot yoke. Thanks to everyone for their input. This is what makes owning a 37-year-old airplane a bit easier.

Selling On e-Bay

Abilene Aero offered to sell the removed items on e-Bay but since I had a whole three transactions to my credit, I thought I'd give it a go myself. Key parts of success were the en route photos during the flight to Abilene so I could have dated material that showed the units in operation. A great job of careful removal of the units, trays, connectors, wiring and antennas was



The Airplane's History

We are the second generation to own this famous functional family heirloom. As Twin Comanche PA39, serial #10, my parents took possession on their anniversary date in 1970. They had learned to fly at Tufts-Edgecumbe, a Piper dealer and distributor, located in Elgin, Ill. They'd flown all the single-engine Pipers of the day and decided the "new" counter-rotated Twin Comanche would be the perfect business tool for their equestrian company-related travel. Dad died later that year and it was Mom who made the plane famous. For her many aviation accomplishments, Mom (Marion Jayne) was named as one of the 100 Aviation Heroes at the 2003 Centennial of Flight Kitty Hawk Celebration along with aviation luminaries such as the Wright brothers, John Glenn, Amelia Earhart and Eileen Collins (see www.firstflightcentennial.org). This plane has been in cross country air races since 1970 and the last significant panel work was done in preparation for the 1994 Round the World Air Race. 

done. Also remember aviation is an international industry so expect overseas buyers. From e-Bay sales, the VFR Trimble GPS, 2 Narco Navcoms with 1 indicator, ADF system and Shadin brought back about 13 percent of the total cost of the panel renovation.

The Results

The work took just over two-and-a-half weeks and we are having a great time checking out all the new functions. Communications and the intercom are incredibly clear. It is a good thing Ken studied. We're checking how the stuff works when properly programmed and what happens when mistakes are made. Parts of it are just pure magic!



New panel in flight

We asked that any superfluous wiring be taken out. All the wiring that supported any removed equipment was discarded and we gained 10.5 pounds of useful load.

Hindsight is 20/20 and if I could do this project again, I would do nearly everything the same. I would definitely choose to work with Abilene Aero again. I might try harder to find a place for the ADF. I miss the ADF flight time function and handy 360 card for assessing landing crosswinds. I would also look for a glideslope indicator to work with the Nacro 12D+ because I miss the 10 stored frequency function. These are very small things compared to all the new capabilities and past-sins that got fixed. Next on our list is a new paint job. 🛩️

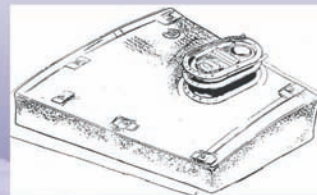
Author Pat Keefer holds the FAI Gold Medal for the longest race in history with her mother, Marion Jayne. Past articles include: Time to Overhaul, Long Range Flying, Angel or Speed Demon & Racing for Gold: 24 Days Around the World. She is President of the U.S. Air Race, Inc www.us-airrace.org and RTW (Round the World), A Motivational Company & can be reached at pjkeefer@gmail.com

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TRIBE NEWS

WHAT'S HAPPENING WITH THE **NORTH CENTRAL** TRIBE



Proof that “WE” is better than “I”

Exploring the safety difference between GA and the Airlines

by Zachary Grant, ICS NC Tribe Chief/Flight Operations Chair

As I watch the Pacific Ocean pass quietly below me, I can't help but think what an amazing thing it is that we can safely travel all over the globe in high speed aluminum tubes, yet we lose airplanes every day to simple, some would say stupid, reasons. What makes the airlines safety record so different from that of general aviation (GA) we enjoy? Why do the airlines have a much better safety record than general aviation? Many reasons come to mind, but I would like to point out a few. Hopefully we can eliminate some of the “stupid” from our repertoire by learning from the airlines playbook.

Let's start with the obvious. Every accident has a chain that was followed to get to the end result. Each chain has many links, that if broken would prevent the end result. There is a very big difference between GA and the airlines and that is the theory that more brains is better than one. Every airline flight that gets pushed out is a collaboration of many trained professionals. These include the mechanics and inspectors that did the work, the dispatchers that did the flight planning,

load control to get the payload correct, the crew that is operating the plane and double-checking everyone else while double-checking themselves, and the air traffic controllers that handle the airplane. If something goes wrong, there is always Maintenance Control and Dispatch to help decide the best course of action. Oftentimes airliners in trouble can even get a phone patch to the aircraft manufacturer if things go really badly. How many of these checks and balances do you have every time you fly your Comanche? My guess is that all but a few of us, when flying GA aircraft, only have about two of these in our back pocket.

We start the chain with perhaps just one mechanic, no inspector. Oftentimes we as PIC are the inspector. It is up to us to make sure nothing was missed, but without the proper training, what are we really looking at? Flight planning, well we do that too, and we always get it precisely correct, right? Now we go load the airplane, we know exactly how much stuff is on the airplane, how much it weighs and specifically where it is, and we are sure the plane will fly with the current conditions,

runway and loading, right? Let's hope so because once again no one is going to check our work until the Monday morning quarterbacks take over at the NTSB hearing.

My guess is that if we get this far, we will be okay, and successfully hit the sky once more. But what about the other things that can go wrong – both large and small? The big stuff is obvious, but the little stuff just kicks you in the ankles until you forget something really important like, oh say, the landing gear. That's right; you don't have a copilot running a checklist to remind you. This is just another situation where the entire safety of flight relies on one link in the chain. Face it; this one is also up to you.

We as GA pilots sure do have a big load of responsibility, don't we? Every one of these different tasks is a link in an accident chain, or a link in a successful flight. We hold the keys to the chain of success or the chain of failure, very few other factors even come into play. With all of these critical components and decisions, it is not hard to understand why the GA accident rate is so dismal compared to the airlines.

Staying Safe


So how do we stay safe without all of the checks and balances that the airlines enjoy? First we need to start with well-maintained aircraft. This is a no brainer. If the machine can't fly, neither can we! Second, we as pilots need to start every flight in top condition. We need to undertake the best training we can find, and we need to do it on a regular basis. Bare minimum is not an area we want to be in when our lives and the lives of our families are at risk. Don't fly alone unless you are trained, current, and comfortable with the conditions and the mission at hand. Make sure you are trained in the task and duties, and you feel comfortable with that training. This all means, you need to be physically AND mentally up to the task. Don't push it; you will miss something. Know the resources available to you, and in a pinch, use everything that you can to help you survive. That is how the airlines stay safe, but even that fails occasionally. It is an imperfect world we live in.

I encourage everyone to get some knowledge at A&P college. Pay attention to your inspections. Spend some time with your mechanics and ask questions or even help out if he lets you. So what if it costs you a little more time and money now, the knowledge you gain about operating your aircraft will pay dividends later both in safety and in costs. Learn from others, you can't make all the mistakes alone. You won't live long enough, or you will go broke trying. The ICS Forum, as well as others available on the Internet, are great ways to trade information. I encourage everyone to not only read, but also actively participate with questions, or if qualified, experiences and answers. If you haven't before, make a concerted effort to attend one of the regional seminars. These cover many maintenance and operational topics, and as the veterans know are well worth the time invested. These will be becoming more frequent and should become

more accessible as time goes on and the ICS infrastructure becomes more developed.

Regular recurrent training IN YOUR AIRCRAFT with someone who knows where the edge of the envelope is, and who can get you to use and be comfortable with the entirety of both your capabilities, as well as those of your airplane, is essential. Many of the type clubs have established excellent training programs, and the ICS through CFF is well on its way to helping you have another valuable resource for training in your Comanche. Without training, we have no check of our proficiency or our procedures until, once again, the NTSB holds a hearing. I cannot overemphasize the importance of training. We have a saying in the airlines, "Train the way you fly, so you can fly the way you train." This is not a chicken or egg thing. Training comes first, period. Practice bad habits and guess what, you just get good at bad habits! I have not met anyone yet with an innate flight instinct that did not need training to be a pilot. As a proficient pilot, you should be comfortable going far beyond the things that you expect to happen on a typical flight, so in the event that all hell breaks loose, you will be able to handle the unexpected. Your proficiency should not be marginal when everything goes right, because that leaves no room for additional tasks when things go south. If your capabilities as a pilot are such that you are not comfortable doing a task that others find routine, that should tell you something, and you should go get some competent help to get comfortable with every aspect of your aircraft and its flight envelope.

Know your available resources. If you have a problem, consult help! Get ATC into the loop. They can coordinate emergency handling, but chances are they have no idea how to help you in flight. For that, you might call a Unicom and get a flight instructor or someone familiar with your plane, such as your mechanic, to help you through the procedures. Get help from your passengers. Get them to read checklists, hold maps, or help with anything else that may take some of the load off of you. This sounds easy, but it takes practice and should be thought of regularly. One of the hardest things for a single pilot type person to learn is the crew concept.

I don't give the airlines or the FAA many kudos, especially when they try to fee us into extinction, or when airline management mismanages the companies into bankruptcy, but one thing they do correctly is keep the general public safe. If we could be as safe as the airlines per flight, that would be great! If we could get to the seat mile safety record of the airlines, we would assure the survival of ourselves, our passengers, and our aircraft type, for the foreseeable future. Do I think it is possible? Not without some very unrealistic changes to the way we do things. We can make some significant changes in our thought process and how we see our responsibilities as the "Jack of All Trades," a.k.a., the PIC. Sure we can, but we must remember that by definition, by being tasked with doing everything adequately, we are still "the Master of None." 



Learning to Fly on Instruments – Again!

by Marcia K. Gitelman, ICS #866

I received my instrument rating in 1970. At that time I had almost 300 hours total time. I was flying our Comanche and thought I had the world by the tail. In those good old days, neither night flying nor ADF approaches were required, and the transponder had been recently introduced into general aviation airplanes. You thought you were pretty well-equipped if you had dual nav-coms of some sort, with glideslope. In my airplane, we had a directional gyro that looked like a compass, a horizon gyro that consisted of a single white line representing the horizon that moved up and down, and made an “airplane” appear tilted as you banked. Oh yes, we had an autopilot that I did not dare turn on because I was not sure that I could turn it off. (It was a push-pull affair that Piper had installed).

I managed to stay current on instruments until 1993. Along the way we changed a few instruments. We moved them around into what was called a standard “T”. The horizon now had blue sky and brown earth. The DG no longer looked like the compass, but like a flat compass card. More radio frequencies were available. We had owned a series of Lorans, which eventually enabled us to fly enroute IFR from point A to point B. Not wanting to make the time commitment required for skilled instrument flying, I decided that one instrument pilot in the family was enough. Dave, my husband, could take over those duties.

By summer 2006, even my VFR flying had dwindled down to less than 25 hours per year. A “been there, done that” attitude had begun to take over. It had

been seven months since I had flown as PIC and 13 years since I had flown on instruments when, due to a health problem, Dave temporarily lost his medical. Hmmm! What are we going to do now? You can’t leave a beautiful airplane sitting in the hangar. Dave could find a friend to sit in the right seat as he flew, but that was not really satisfactory, and at this point neither he nor I could legally file an IFR flight plan.

The Challenges and Solution

Problem #1: Finding a suitable instructor. Insurance companies seem to dictate more than the FAA in this regard. Our restriction read 1,000 hours total time, 500 hours retractable, 10 hours Comanche time. Finding an instructor with Comanche time would prove to be most difficult to solve.

Problem #2: Finding a suitable instructor. Now that I was a 60-something pilot, and not a 20-something pilot, did I want to fly with someone who might qualify as my grandchild? I'll compromise; a pilot who was my son's age (40-something) would be okay.

Problem #3: While checking out VFR would not be difficult, the introduction of the GPS with moving map into IFR procedures would prove to be the most challenging part of becoming current on instruments. Flying with someone who had played more video or computer games in one week than I had played in my lifetime would make things very interesting.

Enter Brad Newbould, Chief Pilot and an owner of Airventure Aviation LLC in Rochester, N.Y. He more than satisfied the requirements outlined above in 1 and 2. He has been flying long enough to know both the old and the new methods of IFR navigation. Now I could get started on the IFR part of this deal.

Getting Started

Incorporating GPS into basic IFR flying is not trivial. Our plane has a Garmin GNS 430 mounted in the center

stack where one of the older radios used to reside. Now I do not consider myself to be technologically challenged for I have been a computer trainer. Computer games however, were not part of the curriculum! For a first lesson we are going to go to a VOR, fly a holding pattern, and then do an ILS approach to an outlying airport (probably because there is not much traffic there).

To do all of this, I have to enter a flight plan into the GPS, then choose a procedure and load it. Now I am ready to leave the ground. The other choice would be to do this while bouncing around in the plane while enroute. No choice really. How many buttons have I pushed? How many times have I turned the knobs, first the large outer knob, then the smaller inner knob? Oops! I made a mistake, how do I clear out this mess? And, I'm supposed to remember this for my next procedure when I will be bouncing around? Give me a break! I feel fortunate that I can still hold altitude and a heading. Do I get any credit for that? I have to learn to look at the GPS, determine if we are in the enroute phase, the terminal phase, or the approach phase. This thing also tries

to tell me how to enter the holding pattern. But I don't like what it is telling me. I want to do a teardrop while the GPS is flashing parallel entry. What is this SUSP mode, when do I use it? Whatever happened to Time, Turn, Twist and Talk?

Well, we muddle through that and start out on a GPS transition to the ILS. Wait, I have to activate the approach. More knob twisting! Does the frequency for the ILS go in automatically? What about the communication frequency? Are we in GPS mode or VLOC mode? If I turn the heading bug does the needle change? In what mode does it change? Do I look at the moving map in the center stack for situational awareness (that is if I remember to look at the center stack) or do I watch for the quickly changing flag on the GPS head in front of me? Then there is the discussion about "north up" versus "track up." While this generally comes down to personal preference, I was totally confused by "track up." To me, that is the video game method. My preference was "north up." North used to stay put when I originally learned.

Continued on Page 30



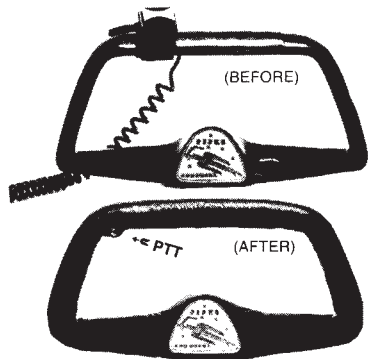
Marcia and her instructor, Brad.

Brad is very patient and calmly tells me what to do. Then he comes up with a zinger, "This airport must have been a dirt strip when you learned how to fly." Wait a minute kid, "I'm not that old!" If I had been a professional pilot, the FAA would have put me out to pasture by now, but I think of myself as part of the new "middle age." I smile and I think to myself, I can laugh at his teasing and just wait for the right moment to get even.

The flight training progresses. I begin to realize that it cannot all be done in the airplane. I also begin to recognize that one cannot learn in seven hours what hubby has been doing for seven years. Fortunately Garmin has put out a program that is a GPS simulator. It is downloadable on the Internet for free. The FAA Eastern region has also put a course on the Internet. It is not interactive, but it is very informative. Every night I am on the computer practicing the approaches for the next lesson. No matter what anyone says, flying the simulator on your desk is not the same as dialing in what you need in a bouncing airplane!

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After the first few hours, I am beginning to feel more comfortable. I am starting to feel the passion that I once had for flying. It is fun, even if it is hard work. Then Brad slips in the comment, "I was seven-years-old when you got your instrument rating." I think to myself, "Just wait Brad, your time will come." One day on the ILS to Runway 4, Brad comments that a tower to the left of our course is for a powerful radio station that we have in Rochester. I respond, "I know." He says, "Most people don't know that." I have been flying out of ROC for 40 years, but if I open my mouth, I am bound to put my foot in it. The next day however, the first thing I do is dial in 1180 on the ADF. "That is so we can find the airport if we get lost," I say with a smile.

Eventually what I need to know to make the GPS a viable source of information for me starts to come together. I'm not perfect, but I am actually starting

to feel good about this. At least I can get a flight plan and a procedure into it, most of the time. And, "yea" I am instrument current once again. Maybe it proves that you can teach a "middle-aged dog new tricks!" Brad certainly has a talent for relaxing his student with humor. Later, when I mention to him that I hadn't heard any age-related comments lately, he smiled and said, "I don't do that anymore." Perhaps that is a victory for me. I have a new friend as well as a flight instructor.

By the way, I have just joined forces with the younger generation. I have just placed my order for a joystick and Microsoft® Flight Simulator.

Since writing this article, N7204P now has a Garmin 530W and I can say with a smile that I have finally mastered Track UP! 

Reprinted with permission of The 99 News, January/February 2007, Int'l Organization of Women Pilots.



The International Comanche Society Invites You to Join Us

Who Are We?

An organization formed in 1972 with over 3,000 Comanche owners, pilots and others who love these aircraft; both singles and twins.

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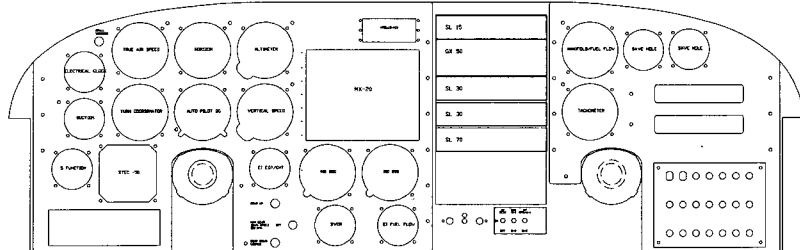
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Southwest Tribe Take and Sights at Sonoma

by Peg Harmon, ICS #15079



s in Seminar Valley Fly-In

On Friday, July 13, just 45 minutes north of San Francisco, 37 beautiful single and twin-engine Comanche airplanes flew into the wine and tourist destination of Sonoma Valley, the birthplace of the California wine industry. In specific, they landed at the Petaluma airport (O69), where most of them either immediately lunched or found iced refreshments at the Two-Niner Diner restaurant right on the field. The weather was beautiful that day, and the views coming in were awesome – vineyards, orchards and palatial homes in the hills.

Kristin Winter, our hostess, chose the beautiful Sheraton Hotel on the Petaluma River, a superb hotel with classy rooms and excellent service. Kristin had a van available to shuttle us to the hotel as we arrived.

That evening we also had use of the van, as well as that of several members' vehicles, to drive to the historic and restored downtown section of Petaluma for dinner. Some folks chose to find their own dining spot, but 30 of us followed a local member's recommendation, and dined at the popular "Graffiti" restaurant. And were we ever happy we did! It was wonderful cuisine!

Saturday found most of the pilots and co-pilots parting company – pilots to the seminar back at the airport, and co-pilots to the historic town square of old Sonoma.

Several additional pilots flew into Petaluma Saturday morning for the seminar, jointly conducted by Hans Neubert and Matt Kurke. This seminar had been featured in the preceding months via articles in the *Flyer*, our *Smoke Signals* newsletter, Forum discussion, as well as postcard invitations to non-ICS members (thanks to funding from the Comanche Flyer Foundation). The subject matter of the seminar was past torque tube problems and the current balance horn issue. Hans gave all attendees detailed information regarding both. Matt then, with the use of a portable remote camera and display on a screen, proceeded to explain and present, in great detail, the functioning of the landing gear and all its idiosyncrasies. Kudos to both Hans and Matt for all of their efforts. There were very many comments on how helpful the information was. The number of members also speaks for its success: 84 attendees.

Continued on Page 37

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Meanwhile, the van had returned from dropping off the pilots at the seminar and picked up the co-pilots for their 9:30 a.m. departure for Sonoma. Local member Isabel Frimmersdorf hosted this trek. At Sonoma, we began with a visit to the Mission San Francisco Solano de Sonoma (Sonoma Mission), founded in 1823. This mission was rescued from disintegration in 1903 by a historic league. Later that same year, it became State property and full restoration finally started in 1911. After the visit to the Mission, we began what was a full exploration of the popular shopping area around Sonoma Plaza, stopping for lunch, more shopping, a stop for refreshments in the beautifully restored Ledson Hotel & Restaurant, and finally heading back to Petaluma.

Both groups had time for freshening up before joining up for cocktails in one of the hotel's meeting rooms prior to dinner. The dinner was also a testament to the fine service at this hotel. About 55 folks were in attendance. Following dinner, Lorne Harmon, Tribe Chief, called the tribe's annual business meeting to order. On the agenda was the election of the officers for the 2007/2008 year. The slate of officers was presented by Bob Shough, the chairman of the

Nominating Committee. Lorne then asked for nominations from the floor, and there being none, called for a vote on the slate presented. The slate was unanimously elected, that being: Ed Wegner, Tribe Chief; Llyn Fulmer, Assistant Tribe Chief; Peggy Harmon, Tribe Scribe; Sandy Moore, Treasurer; John Caton, Trip Chairman; and Sylvan Stenge, Communications Officer.

Sunday found the van shuttling everyone back to the airport on an ongoing basis. I do know of one couple that chose to take advantage of beautiful Northern California and stayed for

another couple of days to go on up the coast. (If my husband had not had Oshkosh on his mind, I would have been tempted to do the same thing.) Even though the rest of us left on a bright sunlit Sunday morning, we'll all be back another time to spend an evening in this beautiful valley called the "Valley of the Moon."

Many thanks to all those who helped make this fly-in successful, specifically, Kristin Winter, Hans Neubert, Matt Kurke, Isabel and Rey Frimmersdorf, Don Dummer, Chuck Parker, Ed Moore and Cindy Pickett. 🍷





First Weekend of Summer Brings Northeast Tribe to New Hampshire

by Pete Morse



The Northeast Tribe gathered in Newport, N.H. on June 23 for a Tribe fly-in. The day felt more like football weather with crisp temperatures and brisk winds from the Northwest, not what you would expect for the first weekend of summer. But then again, this was New Hampshire. Twelve Comanches, ranging from 180s to a 400 and two twins, all flew in to Newport's Parlin Field (2B3). We skipped the spot landing contest as getting in was challenging enough, with many examples of the famous "Comanche Float."

Parlin's FBO hosts, Dean and Maura Stetson, have been hard at work over the past few years making improvements at the airport. There is a new FBO office, recently completed T-hangars, new paving and new runway lights. Parlin is located in the Dartmouth/Sunapee region of New Hampshire with many nearby things to see and do.

The grass parking area was freshly mowed for our arrival. Some people made use of the airports courtesy bicycles to explore the covered bridge over the Sugar River and the picnic and camping area at the far end of the turf runway.

At noon, the 20 of us strolled over to the Lil' Red Baron, a great Mexican restaurant located behind the FBO office. There was an all-you-can-eat taco bar with all the fixings, set up for us along with soft drinks – all for a reasonable price. Everyone enjoyed the food and fellowship, and the ice cream afterwards.



Being this fly-in's coordinator, I passed around a brief questionnaire for feedback and future ideas. Most wrote that they came to visit this unfamiliar airport and to meet other ICS-Northeast Tribe members. About half had not been to many ICS events, even those with long-time ICS membership. Interest was expressed in future workshops on many topics from maintenance, landing gear and painting. The list of "Favorite \$100 Lunch" spots included Columbia County (1B1), Sanford (SFM), Nantucket (ACK), Block Island (BID) and Basin Harbor (B06), with one hour being the comfortable distance to travel.

After some more socializing and casual line inspection, we began to disperse. A few pilots took advantage of the \$4.05 self-serve 100LL, and then we back-taxed in pairs like the old friends we had become.

All in all, it was a great day to fly!

View more photos at: quietcornerbands.org/Flight/ICS-NE/ICS-NE_page

Note: The North East Tribe covers 13 States and the District of Columbia – West Virginia up to Maine. With that type of broad area, we need volunteers to conduct Fly-ins. Recently Pete Morse conducted the above fly-in. Not only did Pete organize the Fly-in and manage the event, he also wrote the above article and took the pictures – "A man for all seasons." Good Job Pete!

Dick Kuszyk, Asst. Tribe Chief NE

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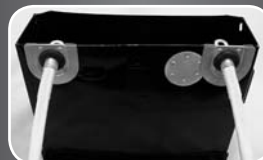
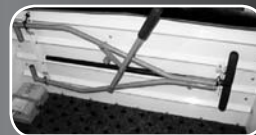
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From the Tribe Chiefs

EASTERN CANADA

Fly-In Welland Airport (CNQ3) September 22

An open house has been scheduled at the Welland Airport, with the assistance of Bruce McRitchie, our Tribe Chief. Local aircraft, as well as aircraft from Warplane Heritage in Hamilton will be on display. More details will follow, as it becomes available.

We are looking for more events to attend this flying season. If you have any ideas, please do not hesitate to advise us and we will get the information out to the organization. We need at least one month's notice to get information into the *Flyer*. Please contact John Hamilton at john@frontdist.com.

MID STATES TRIBE

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

"All Tribes Welcome,"

The Mid States Tribe will host a fly-in, and hold a tribe meeting Friday, September 21, 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

EVENT CALENDAR SUMMARY

Date	Tribe	Event/Location	Info Source/Host
Sept	Europe	Lucerne, Switzerland	Fred Iseli, info@iselisystems.com
Sept 7-9	SE	Fly-In and Piper Tour/ Vero Beach, Fla.	Bill & Donna Weeks at wcweeks70@yahoo.com or (321) 243-0154.
Sept 8	EC	Fly-In/Waterloo Int'l Airport (CYKF)	Please RSVP to sgcampbell@primus.ca or tcam@netrover.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 22	EC	Fly-In/ Welland Airport (CNQ3)	More details to follow, as they become available.
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

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 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 yard 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.

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 flying-macs@aol.com.

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

NORTH CENTRAL TRIBE

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.


Continued on Page 43

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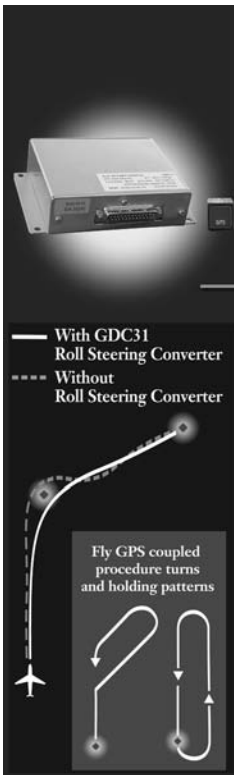
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SOUTH CENTRAL TRIBE

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.

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.)

Continued on Page 48

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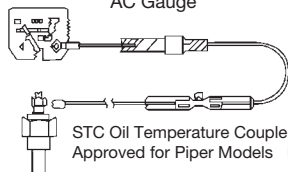
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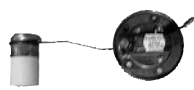
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South Central Tribe Beat the Weather Gods with Fun in Lawton

by Bruce Thumann, SC Tribe Chief, ICS #14028



Once on the ground, we were not surprised to learn that we were the first to arrive. Inside the terminal building, we found refreshments, doughnuts, sandwiches, goodie bags, and Jan even arrived with a huge cake which she had custom designed for our visit. Jan had gone all out and really prepared a red carpet welcome for us.

The next and only other plane to brave the weather was Paul and Sharie Nunn's 250, which arrived about an hour behind us. All of the rest of the participants, a total of 21, arrived by car Friday, and a few more on Saturday.

The weather gods were not satisfied with just making arrival miserable and or impossible. They did their best to run us completely out of town by flooding some of the highways and the East side of town the rest of Friday afternoon and into the night, making it impossible

In keeping with what seems to be a tradition for South Central Tribe fly-ins these last several months, the Lawton, Okla., fly-in was obviously not properly cleared through the weather gods. It was Jan and Jim Ireland's, along with Craig Hammond's and Chris Pittman's, first attempt at putting together a great mid-summer fly-in for their Comanche friends.

Tina and I arrived with passengers Elmer and Peggy Blum to some of the lowest ceilings I have ever experienced for landing in ILS conditions. Without Elmer's calm demeanor and 60-plus years of flying experience sitting right beside me, I am sure that I would have been much more nervous shooting that ILS to minimums right to the end of the runway, in light rain with fog approaching.



for some of the guests arriving by car to get there until Saturday, and shutting down the power to everything on our side of town until Saturday afternoon. The hotel we were in was naturally on the East side, so we lost power at 10:00 p.m. It never came back on the rest of the night, making for some interesting indoor camping.

We were able to secure other rooms at another hotel Saturday morning, but not without two casualties from Friday night's camping experience. Paul and Sharie really had a rough night with all that was going on, and to their credit, decided it would be best if they returned home. It turns out that in addition to Paul's rough night, Sharie also had a light touch of pneumonia which was aggravated by the adverse weather conditions and she unfortunately spent a short time in the hospital once they arrived back in Pueblo.

As for the rest of us, we made the most out of it and Saturday gave way to some beautiful weather. We were able to do several of the things we had intended to do – visit Medicine Park where the river was still high from Friday's rains, see the wildlife refuge including a buffalo herd, visit the wildlife museum and Passion Play stage, and to top it off literally, a trip up to the top of Mount Scott, the second highest point in the state. The only two main attractions we did not get to see due to the weather were Fort Sill due to wet and soggy grounds and the DC-3 because the FAA will not send it out in heavy rains.

In spite of the weather, we met and made several new friends on this trip and had a great time despite what the weather gods threw at us. Some of these memories will be a little different from the norm, but they will be cherished memories all the same. Those of us who were there, will no doubt reminisce about them every time the subject of fly-in weather comes up! 🗝️



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For Sale: Hartzell HC-A2VK-1, sn J598 as removed from PA24-250 in airworthy condition at the time of removal. ADs not complied with. Contact Tony @ cflyer@sopris.net 1/2

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PA24-260

1970 PA24-260 Turbo: N9443P, Rare factory turbonormalized single, 2000 hr TBO, one of 28 built, TT 3535, SMOH/P 785, Avionics: Bendix BX 2000 Nav/Com/DEM, Collins 351 Nav/251 Comm, Bendix 2000 RNAV (inop), ADF, AT 50A, Transponder, Stormscope 10A, 4-pl intercom, Equipment: Autocontrol III autopilot, built-in oxygen, 90 gallons fuel, Interior: 9+(outstanding leather), shoulder harnesses, Exterior 8 nice, This is a straight, solid, fast IFR machine, 170 kts at 10,000 at 13 GPH. Well maintained, annual completed Apr. 07, \$115,000, MI. PH: (269) 637-3949, or (314) 275-7522, or (269) 382-0633. 1/2

1967 PA24-260B: 3898 TT, 1898 SMOH, IFR, King Center Stack, KX-155 w/glide slope, coupled AP, KX-125, Bendix King audio panel, 3 light marker beacon, DME, ADF, Garmin GPS 100, vertical card compass, GEM egt/cht engine monitor, Shadin fuel flow monitor, Davtron 5 function density altitude indicator, 4 place intercom, co-pilot PTT, electric trim, avionics master switch, 1 piece windshield, fiberglass glare shield, Metco tips, wing filets, locking fuel covers, M-20 oil/air separator. Always hangared. Southern California aircraft. No corrosion. \$78,000. (619) 279-2079 or (619) 261-3660. 1/2



1967 260B - N9115P TTAF 3322, NDH, 900 SMOH, 100 STO. 1 piece windshield, modern panel w/ integral lighting, interior 10, exterior 9. 6 pl intercom, 2 MX 170B, KR 86, AT50ENC, WX900 stormscope, Apollo 360 GPS. Radio master, Century III autopilot. Annual June, 2007. 3 owners since new with good logs. \$88,000. Call 832-860-8987. 1/2



COMANCHE 260C, \$125,000, FOR SALE Excellent first 260C off the line, IFR/GPS, owned by A&P and two airline captains, carefully flown and maintained, midtime engine, lower than average airframe time. All ADs up, new gear bungees last annual, Stormscope, 2-axis AP, pulselite, and more. Send for free fax or email data sheet and photos. Contact VERNON LEWIS, located SPARTA, NJ, USA. Telephone: (973) 903-3134, Fax: (973)729-6742 1/2



PRICED BELOW WHOLESALE! 65 260, 61K IFR Very pretty airplane. 7600 TT 700 SMOH, MX170B MX 11 KT76A Garmin 90. Reedley, CA Dean Castang (559) 285-2232 www.aircraft-mart.com 1/2

1968 260B: TTAF 6200, SMOH 1300, as expected there are lots of extras including GNS430, Strikefinder, LoPresti mods, Slick-start, B&C starter, and "much much more". Go to WWW.N9254P.COM for pictures and other details. \$82,000, 847-577-5843, N9254P@WOWWAY.COM 1/2

1967 Piper PA24-260B, N9198P, TT 3292, 1460 SMOH, Garmin 250XL, Com-KX 155, PMA 6000 audio panel, Piper auto control 3 w/couplers, EGT, 2 softcom headsets, canopy cover, same owner last 25 years, excellent paint and interior, always hangared, annual due 9/6/07. Price \$88,000. PH: (386) 756-0032. 1/2

Advertising Index

1972 PA 24-260C: N9505P #24-5022, one of the very few remaining last year production Comanche singles. 4890 TT, 590 SMOH, 460 SPOH. IFR-equipped. Many modifications, complete OH Gears, NEW main tires + aircraft covers, original interior, paint 8/10. Complete OH prop governor + magnetos + fuel pump. NEW Skytec starter + flyweight assembly, ALL AD's. Owned since 1984. Annual 2/2/2007. \$99,500. Heinz/Uta (650)941-6921/(650)725-8089, hfurt@stanford.edu/uf Francke@stanford.edu 1/2

PA30/PA39

PA30-1952 C Model AF 4200 TT Engines 600 SMOH Props 300 SMOH Seneca V Paint Scheme Most Knots-2-U Mods Arapaho Windshield Nacelle Tanks. David Vornholt (419)236-1345. 2/2

1964 PA30, 4203TT, 456/193 SMOH, 447/0 SPOH. Narco CP136, Comm810, Nav825 W/GS, Escort II, Loran820, AT150. \$64,000. Jim (719)746-3017, perry7366Y@msn.com 2/2

1964 PA30: 7190Y, 2359 TT, RE 247 SMOH, LE 1573 SMOH,241 STOH, 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. 2/2

1963 PA-30, TT 4200, RT 150 SMOH, LT 275 SMOH by Lycoming, over \$100,000, spent in complete refurbishing including new R & J panel, S-Tec 50, Garmin 430, King HSI, WX-10a storm scope, IFR, Shadin fuel computer, new fuel pumps and many other mods and equipment. E-mail and will send a list with pictures. Asking \$129,500.00, OBO. Emil at e-mail comadco@aol.com, phone (941) 360-9282. 1/2

1967 PA-30 Piper Twin Comanche: annual 2/07, all AD's, SB's, hangared, no damage history. 5056 TTAP, SMOH 1100, SPOH 450. New built-in 4-place intercom, Garmin 430 (IFR Approach), #2 GPS Garmin GX-55 (new), #3 Com/Nav Narco MK-12D TSO, Garmin GMA 340 Audio Panel, Collins ADF 640A TSO, Narco 165A Transponder TSO, WX-900 Storm Scope, Autopilot w Altitude Hold, Digital clock/timer. Paint 6/Interior 8. \$112,500. SC (864) 304-2898. mstar@ablecon.com 1/2

1967 PA30B. One owner past 20 years, always hangared. 2869TT, engines 431 SMOH, props 627, six seats, tip tanks, sm nose wheel, one piece w/s, new tinted 1/4 in windows, LoPresti & K2U mods, new heater, lt wt starters, nice paint and interior, CP 136m, MK/12D+, MK 12D, K62A DME, ELT-10, GX55 GPS, Altimatec auto pilot coupled, complete logs, NDH, \$105,000. (760) 873-6249, cell (760) 668-0390. 1/2

1965 Twin Comanche PA-30, TTAF 7,060, 2,100 SMOH R. Eng, 1,885 SMOH L. Eng-Fresh annual, Exterior 7-8, Interior 80% new, avionics; 2-KX-155's, ADF, DME, Century IIB autopilot, \$49,000, Call 320-256-7332, e-mail, holdorf@meltel.net 1/2



PA-30 TURBO: \$139,000. Way above average, IFR, custom panel, Garmin 430, dual ILS, radar, s/scope, Oxy, nice paint, leather/fabric, K2U mods, coupled AP, speedbrakes. Too much to list. For eng/prop times more pics/details contact Martin (403)510-0323, mmerritt@pathcom.ca or Keith (403)686-0529 dempseyk@telus.net. 1/2



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The Southeast Tribe will be hosting a Piper factory tour in beautiful Vero Beach, Fla. A Friday arrival will find you staying at the Dodger Inn (www.dodgertown.com) at \$79 for a regular room and \$99 for a suite. Please make your reservations before August 24 at (866) 656-4900 and mention ICS to get the discount. The hotel has a sports bar lounge only open to guests so it is very private. This is the spring training area for the Dodgers and a snow bird retreat, so make reservations early as the rooms are limited.


The weekend will start off Saturday with a tour of Piper Aircraft Company, followed by lunch sponsored by Lo Presti Speed Merchants. We then depart for a short flight to KTIK for a tour of the famous war bird air museum at TICO (<http://vacwarbirds.org>). For those who do not want to visit the museum, there is local shopping and beach activities. That night we will have dinner at the Ocean Grill (<http://ocean-grill.com/~og/intro.html>) right on the beach with a little time for a walk.

For those staying Sunday, we will have a deep sea fishing trip for the cost of \$600 for one to six people or we can rent a boat if we have 15-30 people interested, for seven hours of off-shore fishing at \$1,900, with everything included. Please contact Bill as soon as possible (contact information below) if you are interested in the fishing trip and the large boat will be rented. If you do not want to try your luck at deep sea fishing, then try it gambling for the day. You can make reservations for a gambling cruise at www.sterlingcasinolines.com.

We will park for free on the Piper ramp and fuel discounts are being worked out. Transportation will be available but if you wish to rent your own car, all the standard choices are available in the area.

This event will be hosted by Bill and Donna Weeks, who can be reached at weweeks70@yahoo.com or (321) 243-0154. Please mail your check for registration of \$30.00 per person, payable to ICS SE Tribe, to:

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