

Comanche

MARCH 2006 VOLUME 33, NO. 3

Flyer



The Official Membership Publication of
**The International
Comanche Society**

Speed - Safety - Performance



PA-30/39 Speed Props



Radar Nose Conversion

PA-30/39 Models



Cowl Nose Bowl Conversion

PA-30/39 Models



Arapaho 1 pc. Windshield Conversion.

PA-24/30/39 Models



Wing Fillet Kit

PA-24/30/39 Models



HID Landing Lights

PA-24/30/39 Models



Arapaho Wing Tips

Pa-24/30/39 Models



Knots 2U, Ltd.
703 Airport Road
Burlington, WI 53105
262 763-5100 Phone
262 763-5125 Fax

www.knots2u.com



Quality Since 1981

FAA Certified Fiberglass Repair Station No. K2UR235X

The Comanche Flyer

is the official monthly member
publication of the

International Comanche Society

5604 Phillip J. Rhoads Avenue
Hangar 3, Suite 4 • Bethany, OK 73008
Tel: (405) 491-0321
Fax: (405) 491-0325

www.comancheflyer.com

ICS President

Karl Hipp

Tel: (970) 963-3755

E-mail: khipp@rof.net

Managing Editor

Kim Blonigen

E-mail: kblonigen@cox.net

Advertising Manager

John Shoemaker

800-773-7798

Fax: (231) 946-9588

E-mail: johns@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 Director

Dan Claycomb

(814) 793-2164

ICS Tool Loan Program

Matt Kurke

10340 Regent Circle
Naples, FL 34109
Tel: (239) 593-6944

Office Manager

Gaynor Ekman

Tel: (405) 491-0321

Fax: (405) 491-0325

E-mail: iesadmin@sbcglobal.net

The *Comanche Flyer* is available to members; the \$25 annual subscription rate is included in the Society's Annual Membership dues in US funds below.

USA, Canada & Mexico

\$64 First Year, \$60 per year
thereafter

UK, Europe, Asia & Africa

\$85 First Year, \$82 per year
thereafter

All other Countries incl. Australia

\$80 First Year, \$75 per year
thereafter

Cover Photo

1966 B model Twin Comanche
owned by the Groner family.

Copyright Notice

The act of making a submission for publication is an express warranty that such contribution does not infringe on the rights or copyright of others. Nothing appearing in the *Comanche Flyer* shall be reproduced or distributed without the express permission of the publisher.

Postmaster

Send address changes to the above address.
Periodical postage paid at Bethany, OK 73008 and
at additional mailing office.

ISSN 08994223

Comanche Flyer

Volume 33, No. 3 • March 2006

www.comancheflyer.com

Published By the International Comanche Society, Inc.

CONTENTS

- 2 Letter From The President
Procrastination *Karl Hipp*
- Cover Story: Comanche Spirit*
- 4 Father and Son Share
Love for Flying and Comanche *Kim Blonigen*
- 6 2005-2006 ICS Board of Directors
& Tribe Representatives
- 6 2005-2006 ICS Standing
Committees & Chairpersons
- 6 ICS 2006 Nominating Committee
- 6 ICS Announces New Technical Director
- 7 Call for Nominees
- Technically Speaking*
- 9 Online Intelligence —
How to Replace D-style
Yokes with Rams Horn Yokes
- Pilot Pointers*
- 12 It Should Not Happen To You —
Comanche Accidents for
December 2005 and a Case *Omri Talmon*
- 16 CFF-Approved CFIs
- From the Logbook*
- 17 Seattle to Tampa Cross Country *Howard Wolkington*
- 2006 ICS Convention – Australia*
- 25 Australia 2006 Convention Update
Hamilton Island, Australia
The Center of the Reef and the World
Center of Action for Comanches this August *Lawrence Paratz*
- 25 Australian Tribe Makes Official Airstrip
Opening at Fellow Member's Vinyard
- Feature*
- 28 Air Racing: Oshkosh Made Easy *Pat Keefer*
- 30 *From the Tribe Chiefs*
- 38 New Manager of ICS Tool Lending Program
- 40 Headquarter Items for Sale
- Featured Fly-In*
- 41 Southeast Tribe Brings in New Year
With Warm Weather and Friendships *Ken Rivard*
- Fly-In Report*
- 42 Southwest Tribe Takes in Brunch
With a Beautiful Backdrop of Death Valley *Peggy Harmon*
- 44 Shoulder Harness Program
- 46 Comanche Classified
- 47 Advertiser's Index
- 48 *Last Laugh*



Letter From The President



Procrastination

It is often thought of as a character flaw. But sometimes it can be a really good thing. I had been looking at cockpit satellite info weather displays for the past year. My first exposure to the system was the installation in the Twin Comanche owned by my friend

John van Bladeren. John has a Multi-Function Display (MFD.) It's an MX20 Apollo, which since became UPS Technologies and has now become Garmin AT. Whichever name this box has on it; the cost installed is approximately \$6,000. It can cost a lot more if you add some bells and whistles. The GDL969, which is the FAA-approved satellite uplink receiver, mounts on the rear avionics rack, and costs an additional \$4,000 installed.

All very nice, and all very expensive. For about \$10,000, and after subscribing to the XM weather data, you will get a weather display on the MX20 screen showing NEXRAD radar information that is only minutes old, at most, along with other screens that can be brought up to display winds aloft and METARs and TAFs at any airport in the United States that advertises that sort of information.

I had installed the King KMD150 in my Twin Comanche in 2002. The King representative at Oshkosh that year had told me how the data card also contained the operating system, and that Honeywell/King had plans to add features to future data cards that would upgrade the operating system to be able to allow the unit to display real time weather. The KMD150 is a very useful VFR box with GPS receiver included. The cost was about \$2,800 – quite a savings over the MX20. I already had a Garmin GNC300XL which is an IFR enroute and approach box, so I really didn't need another IFR box.

Unfortunately, this promise of WX display on the KMD150 turned out to be “salesman talk”, otherwise known as B.S. King, as of today, doesn't make any units capable of satellite uplink weather information. They have several units that use the King ground based weather data transmission system. The salesman at the King booth at Oshkosh this past summer tried to sell me on trading in the KMD150 for one of their other (much more expensive) units capable of receiving information via the King ground based WX info system. The sales pitch on the King weather info system is that it works in 95 percent of the United States, if you are 5,000 feet AGL. So let's see, the XM satellite system works everywhere, even on the ground. The King system works 95 percent of the time if you are above 5,000 feet. Seems like a no-brainer. With the XM system, I can look at the WX along my proposed route while still on the ground before takeoff. With the King system, I need to climb up into the clouds to find out what the weather along the route is.

So I began thinking about buying a tablet computer and hooking it up to a portable XM satellite receiver. This would all be uninstalled, non FAA-approved, portable stuff run off batteries or a cigarette lighter plug. It's kind of bulky, has lots of wires and is not inexpensive – probably \$3,000 or more for the tablet and receiver. The tablet would double as my traveling computer to keep up with e-mails and such. Not as handy as a laptop for the e-mail, document creation,

and Internet stuff when traveling, but a possible, acceptable compromise – but still not the most desirable setup. So this is where I put the procrastination into overdrive. I couldn't make up my mind;

New panel unit – or computer tablet and non-certified XM receiver?

Procrastinate, procrastinate.

And a good thing it turned out that I couldn't decide. By procrastinating hard and long enough, along comes the Garmin 396 – so much good stuff in one small box. And for about \$2,500, you not only get a portable GPS receiver with a worldwide database of airports and nav aids, you get the XM weather capability!

The 396 also has terrain warning information and an aircraft instrument panel display. Rich Bullock says that he has flown an approach under a hood with a safety pilot using only the instrument display page on the 396. I can attest to the accuracy of the simulated panel display. It keeps right up with the more expensive instruments in the panel!

One other really worthwhile feature is TFRs – Temporary Flight Restrictions. Since the 396 is being updated every few seconds, when George Dubb'ya decides to hop in his B747 for a joyride to Turkey Ridge, S.D. and the Secret Service tells the FAA about his plans, the FAA slaps up a TFR for 30 miles around Turkey Ridge. The 396 almost immediately paints the TFR on the map and gives you a special use airspace warning if you get near Turkey Ridge. I'll bet the guy that busted the Washington ADIZ last summer in his C152 wishes he had a little box like this to warn him of the ADIZ. This unit fits neatly within the Comanche yoke, with the yoke tube clamp that Garmin provides. During the promotion period this past summer, I also was able to get the automobile database along with all the hardware for using the 396 in the car. This GPS device – in terms of pushing the right buttons – is not quite as user-friendly as the King KMD150. I have actually had to consult the owner's manual more than once to learn some of the functions! Very upsetting.

“THE CRASH SITE IS A DIRECT RESULT OF THE FLIGHT PLAN.”

The first time I heard that statement it was made by a CFII friend of mine, Dick Morton. Dick is a Mooney guy and used to write for their magazine. He has quite a few years flying experience, and when he made the statement, I thought, “What does he mean by that?”

Dick explained it, and it's rather simple. If you plan your flight to follow the major highways or mountain valleys and you have an engine failure, the crash site will be in relatively friendly country – roads, maybe even an airport. If the flight plan takes you over the jagged high mountain peaks, or the uninhabited backcountry, or large bodies of water, the chance of finding a suitable crash site is slim-to-none. There are almost no airports in the jagged mountain peaks. And the few roads are narrow, steep, and full of switchbacks. Uninhabited backcountry has no handy roads or airports. And unless there is an item called “floats” on your aircraft equipment list, the water landing will result in an aircraft loss.

What does all of that have to do with the Garmin 396, you may ask?

Well, the Garmin 396, or any other really good moving map display that has terrain features, will help keep you and your airplane in areas with good crash sites, as opposed to bad crash sites. I guess we would never think of a crash site as “good”. But walking away and surviving is a good thing. So it

follows that there are “good” crash sites and “bad” crash sites.

If you have ever had difficulty getting Flight watch to come up on frequency, or had to wait your turn on 122.2 to get an updated weather briefing while enroute; or if 1-800-WX-BRIEF is busy, you can get all the weather information you need from the 396. One other advantage, since the unit is portable, you can throw the 396 and the satellite antenna in your luggage when leaving the airport. From your home or hotel room, if you place the satellite WX antenna in a Southeast-facing window, you can check out the weather in order to make your flight decisions. All this without a phone call or getting online.

This might sound like an advertisement for the Garmin 396. I really don't mean this article to be that, but Garmin just happens to be the first manufacturer to the market with an affordable, handheld GPS solution to cockpit weather. I am sure that the other avionics builders will take a hint and get on the handheld WX bandwagon before long. John's MX20 setup mentioned earlier does the same job. Dave Fitzgerald and Bill Harris both use laptop computers or tablets with the portable receivers I mentioned. It all works. But the 396 is the cheapest and easiest way to go. Having been a member of ICS for almost 15 years, and having met hundreds of ICS members from the United States, Canada, Europe, Australia and Africa, I find we all have one thing in common – we are cheap!

And the 396 is cheap (compared to the alternatives). So this article is really about promoting safety. For about \$2,500, you can get weather information you need in the air so you are able to make enroute decisions that result in a safe flight. If you were thinking of buying a VFR moving map GPS for your Comanche, even if you were thinking of a panel-installed version, I would advise to rethink the plan! Put the 396 in your thought process.

I was talking to a Cessna 182 VFR friend a few days ago. I was telling him about the 396. He stated, “I only fly VFR, so I don't need all that weather information”. I was stunned! I explained to him that in order to remain VFR, he needed to AVOID certain weather. By having the knowledge on enroute

and destination weather while still hundreds of miles away, an informed decision can be made to remain VFR! Part of being cheapskates like we are, is getting the best bang for the buck when having to part with our dollars.

With the 396, you get more bang for the buck than about anything else you can put in your cockpit.

Exhaust system update:

I received back from Acorn Welding in Calgary, Alberta Canada the exhaust system pipes and waste gates for my Miller converted turbo Twin Comanche. What a surprise! This stuff goes beyond good workmanship. These guys are truly artists. Not only that, since the Miller Conversion doesn't use a stock Twin Comanche exhaust system, they had to make fixtures in order to fabricate the pipes. And since the miscommunication was on their end, I received no extra charge. Don Hrabec, who is the owner, found that the slip joint alignment of the crossover pipes from #2 and #4 cylinders into the wyes' was not exactly parallel. I had sent him several photos of the system while still on the aircraft so they could determine the areas where clearances are critical. The crossover slip joints are the one place where there are not critical clearances. So he fabricated the new pipes so expansion and contraction can actually occur during heating and cooling. Perhaps he has found the cause of some of the stress cracking I had been experiencing.

And the waste gates are some of the best work I have seen. The prices were also better than the bids I had gotten in the States. I highly recommend these guys. Everything has bolted up just fine with the exception of some misalignment between the waste gates and turbos. Some shimmiing of the turbo mounts solved that issue. Don has offered to rework the pipe terminations so the shimmiing is not necessary, but I consider the problem solved.

Karl Hipp
ICS #10241
khipp@rof.net
(970) 963-3755

Comanche Flyer Submission Guidelines

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

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

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

Send to:

Kim Blonigen, Managing Editor at kblonigen@cox.net

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

**Kim Blonigen
2031 South Beech • Wichita, KS 67207**

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

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

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

Cover Story: Comanche Spirit



ICS Member Profile: Pat Groner, #1311

Comanche year & model:

1966 Twin, B model

Pilot's license attained:

While attending Baylor University, from which he graduated in 1940

Total Flight Hours:

15,000 with 4,500+ in Comanche

Ratings:

Commercial, Multi, Instrument

Other aircraft owned:

Single Comanche, Cessna 182, Stinson



ICS Member Profile: Chip Groner, #7112

Comanche year & model:

1966 Twin, B model

Airport home base:

JKA, Gulf Shores, Ala.

Age when pilot's license attained:

Age 17

Total Flight Hours:

17,000 with 1,500+ in Comanche

Ratings:

ATP, Instructor-Instrument & Multi-Engine

Other aircraft owned:

Piper Lance, Taylorcraft, Cessna 140 & 170





Father and Son Share Love for Flying and Comanche

by Kim Blonigen

Forty years ago this month, ICS Member Pat Groner and his son Chip picked up his brand-new Twin Comanche N837PG, and it has remained in the family ever since. Having flown C-46's for the Marine Corp in World War II, DC-3's for Colonial Airlines and P47's in the National Guard following the war, he wanted to find a reliable twin-engine airplane he could depend on for IFR and night flying. He found that in his 1966 B model Twin Comanche.

Pat later became CEO of Baptist Hospital in Pensacola, Fla., and attributed a large part of his successful career to his airplane. At 85-years-old, he has many memories of flying N837PG throughout the United States, Mexico, Canada and the Caribbean.

Growing up in an aviation family and being there with his father to pickup the Comanche, Chip caught the flying bug early. In 1969, he obtained his pilot's license at age 17 – the earliest age possible. He has made a career out of flying and has been with Federal Express for over 27 years. He now flies N837PG, mostly for pleasure trips and enjoys its speed, range, economy and reliability.

Over the years, the Comanche has had some upgrades and modifications including the Lupresti and Knots 2 U mods, as well as tip tanks and radar nose dome. The panel has been upgraded with the Garmin 430, KMD 250 MFD, WX 500 Stormscope and S-Tec 55 autopilot.

N837PG has played a big part in the Groner family. Pat has even written a book about the airplane and the role it has played in both he and his son's career. There are probably many more

hours left to fly the Comanche, more memories it will make and at least a couple more milestones it will hit – all while taking part in another generation of the Groner family. 

A fork in the road can be confusing...



Choosing the best engine analyzer is easy!



EI's UBG-16
FAA STC'd & PMA'd

- Divert Problems - Accurate automated leaning w/TRUE Peak EGT Detection.
- Elevated Confidence - A clear window into your engine's operation with Automatic Engine Analysis.
- Perfect Balance - A balance between power and easy-to-use features.
- Proven Reliability - Superior quality, design and service since 1979.
- Fast Response - Fastest, most reliable ungrounded probes in general aviation.

The Best Engine Analyzer there is!



Electronics International Inc. 

Phone: (541) 318-6060 Fax: (541) 318-7575 Email: Sales@Buy-Ei.com
www.Buy-EI.com

2005-2006 ICS BOARD OF DIRECTORS & TRIBE REPRESENTATIVES

President:

Karl Hipp, ICS #10241, MS Tribe
131 Beaver Lane
Redstone, CO 81623-8763
Phn: (970) 963-3755 Cell (970) 948-5776
Email: khipp@sopris.net

Vice President:

Lawrence Paratz, ICS #12475, AU Tribe
11 Wrixon St., Kew
Melbourne, VIC 3101
Australia
Phns: 03-9817-1222 03-9817-2088
Email: LParatz@bigpond.com

Treasurer:

Charlie Tripp, ICS #7191, SE Tribe
PO Box 527
Brownsville, TN 38012
Phn: (901) 772-2130 Cell
Email: charlie@countryhams.com

Secretary:

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

Past President:

Skip Dykema, ICS #3062, SE Tribe
5720 SW 38TH St.
Davie, FL 33314
Phn: (954) 584-6558 Cell (954) 661-1454
Email: skipsouthernsky@bellsouth.net

CFF President: (non-voting)

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

TRIBE REPRESENTATIVES & CHIEFS:

South East:

Tribe Chief Ken Rivard, ICS #13465
230 Malaga Ct.
Merritt Island, FL 32953
Phn: (321) 453-6700 Cell
Email: silkiel@bellsouth.net

North East:

Tribe Chief Bill Harris, ICS #13820
4069 Shadowland Dr.
Radford, VA
Hm: (540) 633-2567 Cell (540) 818-3540
Wrk: (540) 731-4772 Fax (540) 731-0543
Email: bill@motioncontrol.org

North Central:

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

Mid States:

Tribe Rep/A.TC Mark Pfeifer, ICS #14817
PO Box 342 B
Marshall, MN 56258
Phn: (507) 532-0439 Cell (507) 829-5889
Email: mpfeifer@i2roam.com

Tribe Chief Dale McCaslin, ICS #15639
2300 NE Barry Rd.
Kansas City, KS 64155
Phn: (816) 436-0272 Fax (816) 436-0003
Email: dmccaslin@sbcglobal.net

South Central:

Tribe Chief Dick Brown, ICS #12179
7015 Roundrock Rd.
Dallas, TX 75248
Phn: (972) 661-3923 Cell
Email: dbrown8527@sbcglobal.net

South West:

Tribe Chief Craig Varga, ICS #12906
4451 W. Folley Pl.
Chandler, AZ 85226
Phn: (480) 598-5583 Cell
Email: cvarga1@cox.net

North West:

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

Tribe Chief Jay Hulbert, ICS #15334

54967 East Kirkwood Dr.
Sandy, OR 97055
Phn: (503) 702-6403
Email: jayhulbert@ipco.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) 823-0574
Email: c-flvh@telus.net

E. Canada:

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

Europe:

ICS Rep Monica Rehkopf, ICS #14462
85570 Siggenghofen; Germany
Hm: 49-8121-229333 Fax 49-8121 229 332
Email: mrehkopf@omnijet.de

Tribe Chief Avril Stadie, ICS #13280

Bay House 4 Yeomans,
Eversley, Hampshire, RG27 0QD, UK
Phn: +44 (0) 78-76-65-32-77
Fax: +44 (0) 78-76-65-90-44
Email: avrilstadie@aol.com

S. Africa:

Tribe Chief Fred Morrison, ICS #15438
PO Box 3912, Midrand Gauteng
1685 South Africa
Hm: 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
Hm: 61-3-5881 6000
Mbl: 61-427 694008
Email: jjmacknight@bigpond.com

2005-06 ICS Standing Committees & Chairpersons:

Historical: None

Communications – Chair:
Mark Pfeifer, MS

Technical – Overall Chair:
John vanBladeren, NW

Maintenance – Chair:
Karl Hipp, MS

Operations – Chair:
Bill Harris, NE

Finance & Budget – Chair:
Charlie Tripp, SE

Parts: None

Bylaws, Standing & Special Rules – Chair:
Don Nelson, NW

Nominating – Chair:
Skip Dykema, SE

Flagship: None

Elections – Chair:
Harley McGatha, SE

Long Range Planning – Chair:
Lawrence Paratz, AU

Marketing – Chair:
David Pyle, SC

ICS 2006 Nominating Committee

Chair:

Skip Dykema, ICS #3062, SE Tribe
5720 SW 38TH St. • Davie, FL 33314
Phn: (954) 584-6558 Cell (954) 661-1454
Email: skipsouthernsky@bellsouth.net

Members & Tribes:

John van Bladeren, ICS #1282, NW Tribe
2007 SE Ash St. • Portland, OR 97214
Phn: (503) 329-8512
Email: johnv@spiretech.com

Nancy Harris, ICS #14957, NE Tribe
4069 Shadowland Dr. • Radford, VA 24141
Phn: (540) 633-2567
Email: nancy@motioncontrol.org

Shell Bresin, ICS #4570, SW Tribe
6 Blacksmith Circle
Phillips Ranch, CA 91766-4804
Phn: (909) 629-2626
Email: shellflycfii@verizon.net

Hank Spellman, ICS #5847, NC Tribe
111 Park Place • Lincoln, IL 62656-1529
Phn: (217) 732-8425
Email: hank@abelink.com

ICS Announces New Technical Director

Dan Claycomb has been named the new Technical Director for ICS. Since the retirement of Maurice Taylor, Dan has been the manager of Penn-Air, Inc. at the Altoona-Blair County Airport in Altoona, Penn. Dan was brought along under the tutelage of Maurice and is probably as close in technical knowledge and maintenance philosophy of Comanches that exists today. Dan can be reached, by telephone at (814) 793-2164.

Call for Nominees

Nominations for office in the ICS 2006 Annual Voting of Members are now open. The Nominations Committee is named in this issue (page 6) and may be contacted with suggestions for candidates including one's own desire to run for Office. The Offices open are President, Vice President, Secretary, and Treasurer. The terms of Office are for one year beginning with the close of the Annual General Meeting, this year to be held in Australia in mid-August. Nominations will close on April 2, and the Annual Voting by mail will begin with delivery of the ballots in the July *Flyer*. Candidates are not required to be present at the meeting in Australia, where the winners will be announced.

Please contact the Chair, any member of the nominating committee, or myself for further information.
Don Nelson, ICS Secretary

ICS BYLAWS - ARTICLE VIII NOMINATIONS AND VOTING

Section 1. On all questions brought before the Members of the Society, each member in good standing as of the closing date of the membership rolls for that vote shall be entitled to one vote. A member in good standing is a member whose dues are currently paid. The membership rolls shall close on the 21st day of the month immediately preceding the beginning of the voting period.

Section 2. Within 90 days following each AGM, the Board shall select a Nominating Committee (NomCom) of three or more persons to nominate candidates for officers to be voted upon at the next Annual Voting of Members. Not more than one member of the NomCom shall be a member of the Board, and the President may not appoint to nor serve on the NomCom. No Board member may nominate more than one person to the NomCom, and no Tribe shall be represented on the committee by more than one tribe member.

The NomCom is to nominate one or more members in good standing for each office, and no member of the NomCom may be nominated by the committee for any of the offices, to be filled at the succeeding election.

Section 3. The names and contact information for the Chairperson and members of the NomCom, and a call for nominations, shall be published in the Comanche Flyer in each issue not past deadline from the appointment of the committee until nominations are closed.

Section 4. In addition to candidates proposed by the NomCom, any member in good standing of the Society shall be a candidate if he or she submits to the Chairperson of the NomCom a letter agreeing to serve if elected and letters from three other members in good standing, not more than one of whom is from the same tribe as the potential candidate, nominating the potential candidate and attesting to the potential candidate's fitness for the position sought. The Chairperson shall immediately acknowledge each communication received from a member wishing to be a candidate or nominating and attesting to another member's fitness to serve.

Section 5. Nominations for the election of officers and the closing time for placing on the ballot for all questions to be brought before the membership in a Voting of Members shall end no sooner than 5 PM at the Society office 90 days prior to the beginning of the voting period.

PROPELLERS

- ♦ HARTZELL
- ♦ MCCAULEY
- ♦ DOWTY
- ♦ SENSENICH
- ♦ RAPCO DISTRIBUTOR
- ♦ WOODWARD
- ♦ PISTON ♦ PT6A

- ♦ LARGE INVENTORY
- ♦ SAME DAY SHIPPING
- ♦ UNCOMPROMISED QUALITY
- ♦ COMPETITIVE PRICES
- ♦ WORLD CLASS WARRANTY
- ♦ FACTORY TRAINED TECHNICIANS

800-462-7605

<http://www.rockyprop.com>
e-mail: rockyprop@rockyprop.com



**ROCKY MOUNTAIN
PROPELLERS, INC.**

2865 AIRPORT DRIVE ♦ ERIE, CO 80516
FAX: 303-665-7164
FAA/JAA CRS FR6R545N

GOVERNORS

This is a "must read for all ICS members."



This is an account of the 31 year career of a USAF Fighter Pilot. It deals with flying over 300 combat missions in fighters during three wars, WWII, Korea, and Viet Nam. He was shot down twice during WWII, flew F-86's during Korea, and went on to command a F-100 squadron in the Viet Nam era. It also deals with some of the frustrations of bureaucracy and in retirement, his experiences as President of the ICS as well as owning and maintaining a Comanche for 2700 hours.

For info, call Bill at 915-581-3401 or order (\$20.00 plus S&H) at www.the3rdgreatestfighterpilot.com, or www.authorhouse.com, or 1-800-839-8640

AIRCRAFT SPRUCE

Everything For Airplanes!



www.aircraftspruce.com

• Super Day Shipping!

Order Our FREE 670-page 2005-2006 Parts Catalog!

• Commercial Lowest Prices!

• Premium Quality Products!

AIRCRAFT SPRUCE WEST
225 Airport Circle
Corona, CA 92680
Ph: (951) 372-0555
Fax: (951) 372-0555

AIRCRAFT SPRUCE EAST
452 Dividend Drive
Peachtree City, GA 30289
Ph: (770) 487-2310

info@aircraftspruce.com



FREE Full Color Pilot Shop Catalog!

1-877-4-SPRUCE

NOW OPEN!

Paul Bowen

- 1 Meet Paul Bowen
- 2 Stock & Assignments
- 3 Gallery
- 4 Techniques
- 5 Store



Featured Five

Prints available at a special rate for a limited time!



Available Now



Paul Bowen's latest calendar:
Air To Air Warbirds 2006

Now featuring:

Meet Paul Bowen
Learn about the man behind the camera and his favorite photo platform—the B-25 Mitchell!

Stock & Assignments
Find out how you can license a Paul Bowen image!

Gallery
Over 225 images to view!

Techniques
A few tips from the expert!

Store
Order books, posters, note cards, prints and calendars, including our "featured five"—prints available at a special rate for a limited time!

www.airtoair.net

Technically Speaking

How to Replace D-style Yokes with Rams Horn Yokes

One of the more popular upgrades to Comanches is replacing the old D-style yokes with the more modern Rams Horn yokes. The new yokes accommodate push-to-talk switches, autopilot switches, trim switches, etc. This discussion is one of "how to do".

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.

I am installing rams horn yokes on my PA 30B in place of the original yokes. The rams horn yokes were recently purchased from a parted out PA30B. Any suggestions or hints as to removal of the old yokes and installation of the new yokes? The existing yokes appear to be very tightly fit on the control shafts with a drift pin. Of the two replacement yokes, one is still on the original shaft. Both will need to be powder coated first. Thanks in advance for any tips or advice.
Jack

Jack,

We installed new yokes about six or so years ago. The roll pins were a big concern when the TC was at the radio shop. I spoke to one of the IA's over at the service center next door. He came over with a tap, a bolt and a slide hammer.

He then threaded the inside of the roll pin and after threading a bolt into

the tapped hole, had both roll pins out with the slide hammer. He was done in less than 10 minutes. Everyone at the radio shop (including myself) was in awe over the performance...

Regards - Clark

I will mention that methodology to my mechanic. That sounds like a great procedure and avoids damaging the control shaft.

Thanks, Jack.

Have done that job a few times. The yoke is retained on the control shaft by the roll pin, and will slide off and on easily once the pin is removed. I removed the roll pin by first removing the medallion on the front of the yoke. Then you can grasp the roll pin with a small pair of vice grips. Tap the vice grips with a small hammer, or simply pull up on the handles of the pliers to force the pin out through the hole in the bottom of the yoke. Once you get a little of the roll pin protruding, you can grasp it on the outside and pull it out.

Removing the pin with a slide hammer also sounds like a neat idea if you have the stuff handy. Why didn't I think of that?

Grady Perkins

Grady:

Thanks for the suggestion as well. This forum is so helpful. Take care.

Jack

Jack,

An even easier way to remove the roll pin is to grip it through the hole in the shaft with a pair of diagonal cutters. You can then simply lever the cutters up and down within the hole and the pin will come out in short order. Your problem then is to remove the wheel from the shaft. If you're lucky, it'll come off easily. Otherwise you'll be severely tested in removing the wheel from the shaft. I've had good luck with having a friend hold one of the wheels while I twist and pull on the other. This

is the hardest part in my estimation. Good luck.

Cheers,
Bill Creech #3423

Bill, your method of removing the roll pin is the one I use. It works well. I've had some controls that I had to warm up with drop light while cooling the shaft with dry ice (now available at most Wal-Marts) and have someone hold the other one. Actually, I have had more that were difficult than not.

Boyd Cable 915BC, ICS #12738

Bill,

Pins removed successfully!! Thank you all for your advice.

Is there any trick to holding the shaft in one position while removing the yoke, so as not to damage it or stress it? My mechanic is trying not to torque the shaft while twisting off the yokes. We have tried some heat, but did not want to burn the old yokes. Any helpful suggestions? We have not yet tried dry ice.

Jack

Unfortunately, when I did my yoke-to-shaft removals, they were resistant to a propane torch (and heat gun) on the yoke and dry ice plunked in the shaft via the Piper emblem being removed. I finally twisted and pulled the yokes and used a strap wrench in the opposite direction to minimize force transmitted to the sprocket and supports, but within a year, I had to replace the bolts that connect the shaft to the sprocket on both sides because of free play; that process takes about eight hours each yoke, and you have to grind a 12-point socket very thin to get in there. Be careful, but in the end it was worth it. Good luck!

Ron C Jones

A little "penetrating oil" applied to the yoke/shaft interface the day before you attempt the removal may be helpful.

Dale



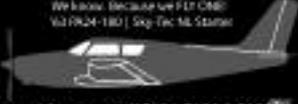
#1 Selling Lycoming Starter



NL Model
9.4 LBS
Available from **\$515**

Only Sky-Tec Lycoming starters feature Bendix-free drives, durable all-steel ball bearings, rugged precision machined cases, integrated lock-back protection and efficient wound field motors in a patented, easy to fit inline design. Aggressive gear reduction and efficient wound-field motor designs give Sky-Tec starters unmatched performance - even on older Piper electrical systems. All Sky-Tec Lycoming starters are PMA certified to replace your Comanche starter with NO ADDITIONAL FAA PAPERWORK TO FILE!

We know because we FIT COMB!
V3 PA24-180 | Sky-Tec NL Starter



Approved for use on all PA24, PA30 & PA38 Aircraft



www.skytecair.com
800-476-7896

Aviation electrical power generation just came out of the dark ages



Introducing:
Plane-Power
Lightweight Alternators

All New Advanced Designs
Higher Output | Lower Torque | Longer Life

FAA PMA Certified
No STC Paperwork | Simple Bolt-On Kit

Designed for Aviation
Replaces Alternators on Most Popular Aircraft
Including Intrepid Generator Conversions

877-934-5700
www.plane-power.com

Dale,
That's what I was going to suggest also. I have discovered a great product called Aerokroil that has got to be the best penetrate I've ever used. My FBO stocks it.

Dave Shaver, N8842P

From: COMANCHE GEAR
RAMS HORN YOKES INSTALLATION
The Swap is Simple, Here's How it's Done:

After removing the medallion, try using a large pair of side cutters to pinch the roll pin that secures the old yoke to the column tube and lever it out toward the bottom. If that doesn't work, use a long #40 bit to drill completely up through the center of the roll pin. Enlarge that hole from the top with a long 3/16-inch bit until you just touch the pin. Now get some spare lumber, one piece across the seat rails, another from that piece to the column for support. With a long punch, drive the roll pin down and out of the grip. Squirt a short burst of some WD-40 or PB-blaster to the center area to help with removal. Next apply a heat gun to that same area and leave it there for a couple minutes. I haven't tried a hair drier for this, but I fear it would be inadequate. The heat gun I use is suggested for heat shrink tubing, \$40 or so. The heat will not hurt a powder-coated yoke, it will the plastic finish on the original. The long drill bits are necessary for the drill chuck to clear the top of the Comanche yoke.

This next sounds a bit crude but it works for the removal phase, so far you have just been getting ready. Using a piece of heavy lumber a foot-and-a-half long (I use a yellow pine 2x4 but not light-weight white pine) have your helper, who will probably be sitting on the wing out of your way or at the stabilator, position the columns almost fully aft but not quite against the stop. Lay the aforementioned crude implement on top of and in constant contact with the column, sharply sliding it from forward to rear which will impart sufficient energy to the grip to remove it. It will take several sharp blows to remove the yoke; you most likely won't get it off by twisting and pulling action.

Compare the distance [hole-to-end-of-the-tube] between the new yoke and the old tube before you start the installation, your column tube may need to be shortened. The installation is to heat the yoke after applying some of the chosen spray stuff to the yoke bore and column. A helper can hold

the opposite grip while one quickly installs the new yoke with a twisting motion, aligning the pin holes. Drive the roll pin upward into the aligned holes, but use some inertia-absorbing mass on top of the column so as to avoid transferring that shock load to the airframe. I use a 25-pound shot bag which hangs there nicely by itself.

Possible Problems to Watch for:

While removing Navajo yokes from their tubes I have seen Loc-tite used by Piper which suggests that some may again need this. If you discover you have a less-than tight fit, use the Loc-tite but clean the shaft and bore and leave out the WD-40 stuff. You'll have to be swift with the pin-to-hole alignment!...[Message truncated]

Matt:

Thank you very much. The yokes were removed without much effort. The new yokes will now be stripped and powder coated. Any suggestions or comments?

Jack

Hi Jack:

Advise; don't pay too much for the powder coating. Comments, I use a 1-5/8 inch pipe to fit inside the yoke which acts like a masking element, secure it with a roll pin that's one hint. Make sure the 2-56 holes for the thumb covers are okay and put screws there and the 6-32 on the side to mask also. Strip the yokes with paint remover, clean very well, acid treat and alodine. Before you hand this cleaned and ready yoke to your powder-coater, put them in the oven and bake a couple hours at 350 degrees Fahrenheit, turn off the oven and let them cool. The reason for that, if you don't you'll end up with nasty bubbles in the finish and then you start over. Put them in a fresh plastic bag to keep them clean and off to the shop. If you need repairs to the 2-56 holes, I can either Heli-Coil or weld them and re-tap.

Matt

Hi Matt:

Thank you, again, for all the helpful suggestions.

Jack

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>.



The Brewer Family
TSUNIAH LAKE
Lodge *The Flying Fisherman's Paradise*

- 4000 ft. PRIVATE AIRSTRIP
- EXCELLENT RAINBOW TROUT FISHING
- AIRPORT AF4
- AMERICAN PLAN

P.O. Box 4685, Williams Lake, B.C. Canada V2G 2V7
 Phone: (250) 392-5612 • Fax: (250) 392-4959
 www.imagehouse.com/tsuniah



Aircraft Specialties Services

QSP

Quality Service and Price

We supply Quality workmanship with a quick turnaround for a price you'll like.

- CRANKSHAFT GRINDING • CAMSHAFT GRINDING • CONNECTING RODS • ROCKER ARMS
- TAPPET BODIES • COUNTERWEIGHTS • CRANKSHAFT BALANCING • MAGNAFLUXING
- STARTER ADAPTERS • ULTRASONIC INSPECTIONS • CUSTOM MACHINING • PLATING

At Aircraft Specialties Services QSP is the goal. The first part of QSP is the quality which is the watch word; every part is re-machined to the tightest Original Equipment Manufacturers specifications. Our quality control continually tests repairs and certifies new repairs to keep the cost of aircraft engine maintenance down. The quality really does go in each re-machined part before the yellow tag goes on.

Service is the second leg of the triad. Expert personnel with years of experience and the very latest in equipment assures you more than just a serviceable part. We provide you parts in like new condition in a timely manner, with fast turn around to

keep your plane or a customer's plane in the air not on the ground.

Last and by no means least is price. We work hard to provide as many safe certified repairs as possible. We see thousands of engines and parts each year so we are constantly working on new repairs to save you money.

Our repairs cost you a fraction of the price of a new part. Keeping general aviation alive and well is important to us, and the best way to do that is safe, reliable and airworthy repairs at a price you can afford. You get this and more only from Aircraft Specialties Services.

Now The Exclusive Distributor for 

1-800-826-9252 www.aircraft-specialties.com

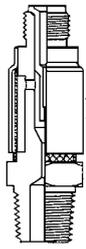
AIRCRAFT SPECIALTIES SERVICES

2800 N. Sheridan Road, Tulsa, OK 74115 Phone: 918-636-6872 Fax: 918-636-4419

★ **IT'S LIKE BUYING FUEL AT A DISCOUNT NO MATTER WHERE YOU GO !!!**

NEW!

NOZZLES NOW AVAILABLE FOR MOST: CONTINENTAL AND LYCOMING ENGINES!



GAMIjectors™

— And —

turboGAMIjectors™

Performance Fuel Injection

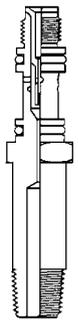
★ ★ ★ ★ ★

— **BALANCED** —
FUEL/AIR RATIOS
YOUR ENGINE
WILL SIMPLY RUN
 — **BETTER** —

FOR INFO CALL TOLL-FREE
888-FLY-GAMI
 (888-359-4264)

PHONE: 580-436-4833
 FAX: 580-436-6622

OR VISIT US ON THE WEB:
WWW.GAMI.COM ★



Aircraft Interiors

Standard & Custom Designs

LEATHER NAUGAHYDE • FABRIC

Seats • Headliners • Seat Belts

Carpet • Window Trims

• *Sound Proof • Side Panels*

Glare Shields • Windows

Headrests • Visors • Curtains

Call Mike Roney

402-572-8788

ICS #4102

MIKE'S UPHOLSTERY INC.

12303 N. 72nd, North Omaha Airport
 Omaha, NE 68122

Aircraft Upholstery

At Same Location Since 1968

It Should Not Happen to You

Comanche Accidents for December 2005 and a Case

by Omri Talmon - ICS #7949

Comanche Accidents, December 2005

12.1

Make/Model: PA30

Date: 12/01/2005

Location: Raymond, MS

Description: Aft lost control on departure. Three POB, all fatally injured.

Damage: Destroyed

12.2

Make/Model: PA24

Date: 12/26/2005

Location: Lantana, FL

Description: Aft on landing, gear collapsed. Two POB, no injuries.

Damage: Unknown

A Case

Accident occurred Sunday,

August 22, 2004 in Auburn, CA.

Aircraft: Piper PA-30.

Injuries: Two uninjured.

The airplane experienced a landing gear collapse while on the landing roll. After a normal touchdown, the airplane rolled down about one-third the runway length and the left main landing gear collapsed, followed by the right main landing gear; the nose gear collapsed when the airplane came to rest. An airplane mechanic stated that during a post-accident inspection of the airplane he found no defects or faults that could have resulted in a landing gear failure. He further noted that the squat switch was intact and operated normally. A Federal Aviation Administration (FAA) inspector examined the airplane and stated that the main landing gear doors were crushed outward; an indication that the landing gear were extended when the collapse occurred.

The National Transportation Safety Board determines the probable cause(s) of this accident as follows:

A collapse of the landing gear for undetermined reasons.

Full Narrative

On August 22, 2004, about 1000 Pacific Daylight Time, a Piper PA-30 experienced a landing gear collapse while on the landing roll at the Auburn Municipal Airport, Auburn, California. The pilot was operating the airplane under the provisions of 14 CFR Part 91. The commercial pilot and one passenger were not injured; the airplane sustained substantial damage. The personal cross-country flight originated from Ralph Wenz Field Airport, Pinedale, Wyoming, about 0700, with a planned destination of Auburn. Visual meteorological conditions prevailed, and no flight plan had been filed.

In a written statement, the pilot reported that while entering the proximity of the airport, he extended the landing gear, noting that the landing gear indicator lights did not illuminate green. As the airplane continued on the downwind leg for runway 07, the landing gear indicator lights finally illuminated, indicating that the landing gear were in the extended position. After a normal touchdown, the airplane rolled down about one-third the runway length and the landing gear collapsed. During the collapse, the airplane rotated about 120 degrees before coming to rest.

An Auburn Police Department sergeant was on the airport making a routine check of the field. He stated that he heard the sound of grinding metal and saw the airplane crash onto the runway. In his report, the sergeant said that he talked to the pilot immediately after the accident. The pilot informed him that prior to touchdown, he had mistakenly moved the control lever for the wing flaps, rather than the control lever for the landing gear, which resulted in the airplane making a gear-up landing.

In a telephone interview, an airplane mechanic reported that he conducted an inspection of the airplane after the accident occurred. He stated that from looking at the propeller slash marks on

the runway, it was apparent that the left main landing gear collapsed first, followed by the right main landing gear several seconds later; the nose gear appeared to collapse when the airplane came to rest. The airplane was hoisted by a truck and the mechanic manually extended the landing gear to a down and locked position. After looking inside the cockpit, he observed that the landing gear control lever was in the down, extended position, and the wing flap control lever was in the up, retracted position. During his inspection, he found no defects or faults that could have resulted in a landing gear failure. He further noted that the squat switch was intact and operated normally.

This accident was upgraded from an incident on September 21, 2004, based on a damage assessment by the Federal Aviation Administration (FAA). The airplane incurred damage to the left wing, fuselage, and landing gear doors. The FAA inspector who examined the airplane after the accident, stated that the main landing gear doors were crushed outward; an indication that the landing gear were extended when the collapse occurred.

Discussion

This is one of those reports which raises more questions than gives answers.

The Comanche's three landing wheels are mechanically connected (as opposed to hydraulically actuated gears). Therefore, unless there is a mechanical breakage of some sort, all three gears will simultaneously extend (or collapse). In a landing system without defects or faults, the main wheels cannot collapse while leaving the front wheel extended, just to collapse later. There are tolerances and some elasticity in the system, which can cause some differential collapse, but not to the above extent.

Another discrepancy exists between the pilot's verbal report to the police officer at the scene (gear up landing) and his later written statement (gear collapse). His written report was corroborated by the findings on site. →

An affordable fix for those old Comanche Sun Visors!



As an optometrist and Comanche-owner (ICS #13091), I wanted better sun visors for my Comanche 400, so I obtained field approval for these. The parts are aircraft-grade black powder-coated aluminum and bronze tinted acrylic to provide maximum protection from disabling glare. I used physiological optics technology to ensure the tint is the best density and spectrum to block direct sunlight and minimize adaptation time to dusk light conditions. These utilize your existing mounts.

\$10.00*, includes plans and 337 Field-Approval paperwork. A PERFECT SAMPLE PAIR FOR YOUR USE AS A PATTERN TO MAKE YOUR OWN IS AVAILABLE FOR A \$139.00* DEPOSIT, refundable IF returned within 15 days. No returns accepted after 15 days. Call and leave a message or fax or email me with mailing address and credit card information.

*s/h: \$1.00 for plans/337; \$9.95 for "SAMPLE PAIR"; outside US extra

Dr. Steven A. DeGross

150 Forest Park Drive • Berne, IN 46711

1-866-FLY-2020 • fax: 260-589-2911

email: c2020@drdegross.com

www.degrossaviation.com

Providing Quality Service Since 1980

**McCauley
Black Mac STC**

**Hartzell
Top Prop STC**



Authorized McCauley Service Center

BEECHCRAFT - DOWTY ROTOL - HAMILTON STANDARD

HARTZELL - McCAULEY - SENSENICH - WOODWARD

**Full Propeller
Sales & Service**

**Props &
Prop Governors**



Authorized Distributor

- Rapco
 - Sensenich
 - BF Goodrich
 - MT Propeller
- FAA Repair
Sta. #FG6R534N

Toll Free 1-800-643-8379

208-344-5161 • FAX 208-344-9503

preprop@direcway.com

4777 Aeronca St., Boise, ID 83705

THE EAGLE XP COWLING IS INDIVIDUALLY HAND-CRAFTED TO YOUR COMANCHE.

STC/PMA-Approved for the PA24-180/250 and 260 Comanche.

- Wide upper engine doors on each side of the cowl provide easy access to the engine compartment for maintenance and service. The cowl separates into three pieces for easy removal and installation.
- The full-length nose gear doors completely close the lower cowl to greatly reduce drag. The augmentors ramped on the lower cowl improve the engine exit air flow, reduce engine cooling drag, improve engine cooling in all angles of attack, eliminate shock cooling and require no additional cowl flaps or gear door motor.
- All new Stainless Steel Dual Exhaust System (PA24-180/250), made of 331 Stainless, improves engine performance, reduces firewall cabin heat and cabin noise. Less maintenance, lighter weight and no AD's.
- Naca scoops on either side of the lower cowl (PA24-180/250) improve cabin-cooling air and reduces cabin noise.
- Made of Flame Retardant Resins and Fiberglass Cloth, the cowl is easily repairable if damaged, thus reducing the future maintenance costs of your Comanche.
- Experience an average 5 - 10% increase in overall performance, and more uniformed cooling and improved cylinder head temperatures. Fred Lasby's 260B Comanche with our cowl installed completed an around-the-world trip in 168 hours with an average True Airspeed of 175 Knots.

Your Cost for the NEW Eagle XP Cowling
(Does not include painting)

| | |
|--------------|--------------------|
| Comanche 250 | \$12,500 Installed |
| Comanche 180 | \$12,500 Installed |
| Comanche 260 | \$ 9,500 Installed |

The New
Comanche
Eagle
XP Cowling



New Eagle XP Cowling

Financing Available
for the Cowling and
Propeller Installation

**AVIATION PERFORMANCE
PRODUCTS, INC.**

975 Aurora Road • Melbourne, FL 32935

Ph: 321/254-2880 Ph: 813/633-1315

www.aviationperformanceproducts.com

For more information, contact David Pratt or Bob Meiers

The NTSB report relates to the “squat switch”. A reminder: The squat switch is mounted on the left main gear. Its purpose is to interrupt the electrical circuit of the gear motor as long as the gear strut is not fully extended. This is a safety precaution against a gear retraction while the aircraft is on the ground. However, a bump, or a “kangaroo hop”, can cause the switch to activate the circuit and if, at the same time, the gear control handle is in the UP position, the gear will start a retraction.

Another point worth mentioning in the pilot’s report is that the gear was “lazy” to lock and it took a while before the green light came ON. The pilot did not mention any special action he took before the green light was finally illuminated, or after. He just continued his normal approach. As to the switches – the mechanic reported that the gear switch (“lever”) was in the DOWN position, while the flap switch was in the UP position, where it should not be during a normal landing while the

aircraft is still on the runway.

We do not know where the aircraft touched down on the 3,700 foot runway, nor where it came to a stop.

What happened? There is no way to know by the details provided in the report, some of which appear contradictory. If the story of the gear-up landing as told to the policeman is ruled out, there are several other scenarios that can be considered. None of the ones I can think of correlates with all the details as shown in the report. Consequently, there is no clear lesson to learn as to the maintenance and operation of the Comanche gear system. Without it, the report is quite meaningless as a tool for improving flight safety, which is the prime reason why these reports are prepared and published.

Why do I bring this accident if the report is (to say the least) so fuzzy? It has been shown that gear accidents/incidents are, by far, the most common type of accident in our fleet (and other retractable aircraft, as well). Yet, it is the least investigated. Most are not investigated at all, and when an investigation is conducted, as in this case, it can hardly – or not at all – qualify as complete and professional.

It may be suggested that the ICS should do something about it for the benefit of its members. An example: When such an accident/incident happens not far from the base of a technically knowledgeable member (the list can be established in advance), said member will either participate in the investigation or, with the consent of the owner, will conduct an investigation of his own, from a Comanche point of view. The purpose would be to hopefully produce some good lessons which will enhance our knowledge base and assist in preventing such accidents from happening in the future. If there are any expenses involved, it would be a well-justified project(s) for the CFF.

Lessons

None directly related.

Proverb

A minute for safety is better than a month for repairs.



COMANCHE PARTS

• SHOULDER HARNESS KITS

FAA STC/PMA
Inertia Reel and Strap Models
Complete Kit with Installation Instructions
PA-24, -30, -39

• ENGINE MOUNTS

Repair yours or Buy from Stock
Repaired – Yellow Tagged
White Tag for Exports

• NOSE GEAR HOUSINGS

Repaired Cracked or
Worn Nose Gear Housings
FAA Approved (P/N 21715)

– FREE CATALOG –

800-4KOSOLA (456-7652)

CELEBRATING 30 YEARS OF SERVICE

FAA APPROVED REPAIR STATION HE4R229M



KOSOLA AND ASSOCIATES, INC.

5601 Newton Road
Albany, GA 31701 USA
229-435-4119 FAX 229-888-5766
kosola@att.net • www.kosola.com

This course will pay for itself
in reduced maintenance costs
— every year.



Don't be left behind!

Piston Engine Management for the Serious Pilot

"You'll see and learn things about aircraft engines that you'll find nowhere else. The seminar is highly recommended."

Paul Bertorelli, editor
Aviation Consumer

Limited enrollment!
See our website
for seminar dates

FAA
WINGS Credit
LA Annual Renewal

Advanced Pilot Seminars

Walter Atkinson • George Braly • John Deakin

(225) 925-2096 <www.advancedpilot.com>



FAA REPAIR STATION YYBR664L

CUSTOM ENGINE OVERHAULS

(and exchange)

"A TOP RATED SHOP"

- April 2005 *Aviation Consumer*

New limit standards, new cylinder options, O.E.M. fuel systems, each engine balanced and test run.

*** T.B.O. WARRANTY ***

Cylinder & Accessory Service

(800) 397-8181

www.poplargroveairmotive.com

E-mail: dallen@poplargroveairmotive.com

11619 Rt. 76 Poplar Grove, IL 61065

Air-Parts of LOCK HAVEN

QK1R429K



Cluster Gauges
S.W., AC, Rochester
Overhauled



Fuel Senders
Overhauled



STC SHIMMY DAMPER KIT
ALH-001 & ALH-002
APPROVED FOR PIPER
MODELS PA24, 30, & 39 SER.

WE OVERHAUL ALL INSTRUMENTS



Altimeters

Airspeed Indicator

Tachometers

VSI

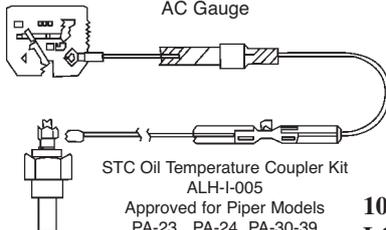
WE STILL DO AEROMARINE INSTRUMENTS

LIKE AIRSPEED FUEL FLOW

Oil Temp Conversion Kits

"The ONLY STC approved kit on the market"

Use the New Rochester Probe with your
AC Gauge



STC Oil Temperature Coupler Kit
ALH-I-005

Approved for Piper Models
PA-23 PA-24 PA-30-39



OVERHAUL YOUR
HOT PLATE



Heater Overhauls

WE OVERHAUL P/N 21286-000
GEAR MOTOR AND OTHER
GEAR AND FLAP MOTORS FOR
OTHER AIRCRAFT

1-800-443-3117

1-570-748-0823

FAX: 1-570-748-1786

1084 EAST WATER STREET
LOCK HAVEN, PA 17745

E-MAIL: gmckinney@airpartsoflockhaven.com

WEB SITE: www.airpartsoflockhaven.com

Lose No Headroom

New

BI-FOLD DOORS

"New Lift Strap"

- Auto Latches & Remotes
- We Install
- Save \$\$\$
- ANY SIZE DOOR!

800-746-8273

visit us at **bifold.com**

Schweiss

COMANCHE FLYER FOUNDATION, INC.

Maurice Taylor Video Programs

Take advantage of Maurice's expert knowledge, captured on these professionally produced videos. Great tools for mechanics, too.

- Program 1: Preflight Walk-around**
- Program 2: Tech Tips: A Closer Look**
- Program 3: Comanche Landing Gear**
- Program 4: Single Comanche Flight Tips**
- Program 5: Twin Comanche Flight Tips**

(Programs 1-3 apply to both the single and twin models.)

Now Available on DVD (all five programs on one DVD.)

DVD each \$101.00 plus shipping (North America \$4.00, elsewhere \$7.00)

Special Sale on Videotapes (while supplies last). One program per tape.

Specify programs desired and VHS or PAL tape format.

Tapes each \$25.00 (regular price \$39.95) plus shipping,

or all five for \$100.00 plus shipping (North America: \$2.00 plus \$2.00 per tape; elsewhere: \$6.00 plus \$3.00 per tape.)

Books

Into the Wind: The Story of Max Conrad by Sally Buegeleisen

Enjoy this account of the life and feats of legendary pilot Max Conrad, including his record setting flights in our own Comanche N110LF. pb, 264pp.

Price: \$21.50 plus shipping (North America: \$5.00; elsewhere: \$12.00.)

PA-30 & Multi-Engine Flying by Alice S. Fuchs. pb, 68pp.

Price \$9.00 plus shipping (North America: \$2.00; elsewhere: \$4.50.)

Please fill out to order

Please circle items above and indicate any multiple quantities. Be certain to specify DVD or tapes, and format (VHS or PAL) and programs desired for tape orders.

Item(s) cost: _____ Add all shipping: _____ Order Total: _____

Mail to: **CFF c/o Henry A. Spellman**, 111 Park Place, Lincoln, IL 62656-1529

Telephone & Fax: (217) 732-8425 / E-Mail: hank@abelink.com

Enclose check, money order, or credit card information. U.S. funds only.

Credit card information: Discover MasterCard Visa

Card Number: _____ Expiration Date: _____

Signature: _____ V Code (Visa only): _____

Ship to name: _____

Street Address: _____

City: _____ State: _____

Zip Code: _____ Country: _____

Telephone: _____ E-Mail: _____

CFF-Approved CFIs

Certified flight instructors who have completed the CFF Larry Larkin Seminar

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

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@msn.com

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
lwhitbeck@abelink.com

Steve Zaboji – VA

Single & Twin, (703) 471-1764
SZaboji@aol.com

From The Logbook

Seattle to Tampa Cross – Country



◀ N6087P, ready for the trip.

By Howard Wolvington - ICS #13866



▲ Southwest of Ellensburg and clear of the soup.

I have owned my 1959 Comanche 250, N6087P since 1999 and have taken several cross country trips in the airplane. It has been from the West Coast to the East Coast several times. However, its longest trip has been from Renton, Wash. to Tampa, Fla. for the 2005 AOPA EXPO. This flight received the AOPA recognition for the longest cross-country flight to the EXPO.

When I purchased the airplane, it had been refurbished by the former owner (a Northwest Captain and A&P). The aircraft has the Osborne Tip Tank STC, so it has four fuel tanks that have 86 gallons of usable fuel, and is certified for IFR flight with a published service ceiling of 20,000 feet. I have a portable oxygen tank that I use for any extended period above 11,000 feet. At optimal altitude on a standard day, it cruises at 157 knots, and burns 14.5 gph. The



▲ Cold front to the east of Independence, Kan.



▲ *VFR-on-top over Rawlings, Wyo.*

airplane has no protection from ice, so I avoid potential icing conditions even though the POH does not include a prohibition against flight into known icing.

It has comfortable leather seats and many other modifications, including a standard six-pack panel and one-piece, one-quarter inch windshield, upper door latch, etc. After suffering five voltage regulator failures over the last four years, I replaced the generator with an alternator system two weeks before the trip. Over the last five years of my ownership, I upgraded the avionics to include a JPI engine monitor, a JPI fuel flow meter, an S-Tec S50 autopilot, and a Garmin 480 GPS/NAV/COM. This is a WAAS (Wide Area Augmentation System) GPS with vertical guidance. It supports the new LPV (localizer-like precision vertical guidance) approaches that have minimums as low as 250 feet AGL. It generates advisory vertical guidance on legacy GPS approaches, allowing the pilot to fly a GPS approach the same way that he would fly an ILS approach. The airplane also has a Garmin 330 transponder with the Traffic

Information System. Nearby traffic is thus displayed on the GPS moving map, and there is an audio alert if anyone gets too close. The second NAV/COM is a KX155 with glide slope. Both the GPS and the transponder have an audio interface with verbal messages.

The GPS couples to the S-Tec with a GPSS (GPS Steering) interface, so that the GPS directly tells the autopilot what heading to fly rather than using CDI deviation errors to provide course guidance by trial and error. The autopilot has altitude hold, so in cruise it is totally hands-off flying. I get to do a little bit of flying in climbs and descents, and I get to push lots of buttons to make the GPS and autopilot take me where I want to go.

This summer I replaced my backup Garmin 296 GPS with the new 396, and subscribed to XM weather and music. Thus, in addition to terrain warnings (visual and audio “pull up”), I have NEXRAD radar, TFRs, freezing levels, winds aloft, TAFs and METARs at all reporting stations, lightning, storm cell tops and movement, and many

other weather displays all just a few minutes old, as well as 150 channels of commercial free satellite programs.

Other preparation for the trip included obtaining “all available information” as required by the regulations, including charts. I loaded the current 28-day IFR GPS database in the GNS480 and in the Garmin 396 over the internet from Jeppesen. I ordered a set of IFR low-altitude paper charts, and also got a complete set of paper WAC charts in case something should break and I had to fly VFR.

I also use a subscription to electronic approach plates to print charts prior to flight for planned destinations and alternates, and my laptop can display these charts in flight, provided I am below 9,000 feet pressure altitude. For use above 9,000 feet, I loaded the 1GB SD card on an HP iPAQ 4705 with software and charts that are kept current over the Internet, and also provide coverage for the country. The screen is small, but is usable if it were necessary to divert in-flight to an unplanned airport.

For planning flights, I use the "Destination Direct" flight planning software. It interfaces with DUATs, incorporates winds aloft, and will electronically file the completed flight plan. It prints a nice flight plan page that contains a navigation log that can be completed in-flight with actual leg times, and also prints the flight plan form as filed with the FAA. Prior to the flights, I planned all of the legs, considering terrain, leg lengths, and fuel prices. I also made motel reservations, and arranged shuttle transportation, courtesy cars, or rental cars as necessary.

The trip, by great circle from KRNT to KVDF, is 2,193 nm and would normally take 15 hours in my aircraft. The original plan was to leave Renton on Monday morning, October 31, fly two three-hour legs on Monday and Tuesday, and arrive Wednesday about noon, one day before the AOPA EXPO was to begin.

I had intended to leave Renton and fly to Scottsbluff Neb., with a fuel stop in Helena, Mont. However, the forecast did not look good for crossing the Cascades without ice, so when a window opened, I departed at 2:00 p.m. on Sunday and went to Ellensburg, Wash. VFR under the clouds. From there it was clear to Twin Falls, Idaho (KTWF), where I stopped for the night. The NEXRAD radar on the 396 showed a band of strong storms approaching Renton from the Northwest, and by the time that I got to KTWF, it showed KRNT in the cold soup. It remained that way for days.

On Monday morning, I awoke in KTWF to high overcast skies to the west and clear to the east. I departed for Sydney, Neb. going VFR-on-top on an IFR flight plan. At 11,500 feet, it was perfectly clear and smooth with a great tailwind. I also got some ATC shortcuts, including Direct Sydney, more than 300 miles ahead. I averaged 172 knots ground speed, including climb and approach on the three-hour leg.

I finished the day with a flight to Independence, Kan. (KIDP). The tail wind continued and the second leg only took two-and-a-half hours. The NEXRAD showed a cold front just to the east of Independence with strong cells, and the runway at KIDP was still wet, so it was a good time to stop for the night.

At 11:30 a.m. Tuesday, I departed KIDP for my planned overnight stop in Meridian, Miss. (KMEI). The tail wind prevailed and I arrived mid-afternoon. The cold front had moved just east of

Meridian and I flew a GPS approach through a couple thousand feet of rainy clouds to high ceilings and a circle to land.

Early Wednesday morning, I filled the aircraft tanks with self-service fuel and taxied to the maintenance facility to get some nitrogen for the main struts. Just after 9:00 a.m., I picked up my IFR clearance from Meridian ground. It was not as filed, so I had to find the route on my charts and reload the GPS flight plan. At 9:10 a.m., ground said that I had a 9:12 ATC "flow control" departure window and asked if I would be ready for takeoff by then! I said, "No," and they got me a new time at 9:37 a.m. After run-up, I waited at runway four

and at 9:31 they cleared me for takeoff.

The flight to Tampa had several changes of clearance due to active MOAs and restricted areas. Near the coast, ATC asked that I descend to 5,000 feet for traffic, and that put me through about five minutes of bumpy cumulus clouds. I was in the clear again after they cleared me back up to 7,000 feet over the ocean. Next, there were a lot of vectors and a descent through some more clouds to an uneventful visual approach at Tampa Vandenburg.

As flown, the route from Renton to Tampa took 14.2 hours and covered 2,314 nm, just 6 percent longer than the great circle route, at an average ground speed of 162 knots.



The World's Leader in
Comanche
Support
& Parts
Supply

Webco Aircraft

1134 N. Oliver Road Hangar G* Newton, KS 67114 USA
Tel: 316-283-7929 / Fax: 316-283-4702 / E-Mail: webcoair.com
www.webcoaircraft.com

Comanche Specialists



▲ *Final sunset on the last leg home.*

DUATs was showing very strong returns. In fact, it was this system that spawned the F3 tornado that hit Evansville, Ind. with 200 mph winds just a few hours later and made the national news.

However, when I did the final check the next morning, things did not look too bad. There was some weather to get through, but Florida had no problems and the balance of the weather was dissipating. I launched and flew through the tail of the front near Atlanta. I got bounced around for a bit until I requested a climb, and got back up in clear air. I teach my instrument students to plan to fly over the weather whenever possible rather than through it, and I got to practice what I preach.

The winds were very high at Shelbyville and I flew the GPS RWY 36 approach to get down through a thousand feet of broken clouds. I had an approximate 15-knot crosswind for the single runway and the landing was uneventful. When I got to the counter, I found that the expected rental car,

▲ *At 5,000 feet per ATC, about to have a bumpy ride.*

After dinner on Saturday night, I got on the computer to check the weather and plan the first return leg for Sunday. The objective was to get to Shelbyville, Tenn. to visit with my son and his family.

In fact, I had been told that the oldest grandson needed his first airplane ride. The prospects did not look good. There was a strong front extending from Miss. through Ohio and the radar picture on

which I had requested a couple weeks prior through the airport manager, was not there. They were very embarrassed about this and gave me the courtesy car for the night. It was not a great vehicle, "day VFR only", but I did not get a ticket for the right headlight that was out, and it ran Okay. I did visit with my family, but we did not fly, as my son had an upset stomach and was not up to a flight. The grand children did get to sit in the airplane and pretend to fly it. They had a great time and are clearly future pilots in the making.

On Monday, I departed for my planned fuel stop in St. Joseph, Mo. The weather looked good with nothing on the NEXRAD, but I did spend about an hour in benign IMC through eastern Missouri. I had a 20 knot or better headwind for the entire flight, and could only average 138 knots ground speed. It was clear but windy for the landing at St. Joseph, but there is a very nice FBO and a café at the base of the tower with a great burger.

The second leg was to Alliance, Neb. The headwind continued, but the flight was uneventful. On Monday night, the prospects for crossing the Rockies and the Cascades on Tuesday did not look very good. I considered two possible routes, one through Twin Falls and Boise Idaho, and the other through Helena, Mont. There was a front to be crossed on each route. The winds aloft forecast for the route to Twin Falls included 56-knot head winds at 12,000 feet and the freezing level around 9,000 feet for some of it. The route to Helena also looked like a problem with freezing levels, with even colder temperatures at the more northern locations.

The good news was that the route to Twin Falls appeared to have fairly high ceilings, so I went to bed thinking that I might start on an IFR flight plan but be in below the clouds in the clear, and be prepared to go VFR below the clouds into Idaho, using as much altitude as necessary to deal with the turbulence, and as little altitude as I could stand to deal with the headwind. The average ground speed might be as low as 115 knots, and the leg might take four-and-a-half hours, but I had at least seven hours of fuel in the tanks. My departure was to be at 8:00 a.m. and the TAF for Scottsbluff was SCT080 at departure, and enroute Rawlings was forecast to be SCT040, BKN080; Rock Springs was to be SCT045, OVC060; and Twin Falls SCT080.

When I awoke on Tuesday, the plan looked pretty good. It was clear at Alliance, with calm winds and 4 degrees Celsius at the airport. I headed west IFR at the published MEA of 8,000 feet, and quickly found from the E6B function on the GPS that while my true airspeed was 158 knots, the winds aloft were on my nose at 50 knots. My ground speed was only 114 knots. Crossing the Medicine Bow VOR, the MEA rose to 10,000 feet, my TAS went down to 149 knots at the higher cruise altitude and

my ground speed went down to 106 mph. I then got into some mountain wave, with the indicated airspeed varying by 10 knots as the autopilot held altitude. This was followed by turbulence, mostly light, but occasionally moderate.

Approaching Rawlings Wyo., Denver Center asked that I climb to 11,000 feet for other inbound IFR traffic, but then cancelled the request when I got to 10,500. However, it was relatively smooth there, so I asked for VFR-on-top to stay at that altitude.



WINDSHIELDS AND WINDOWS Piper Comanche

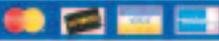


**Great Lakes Aero
Products, Inc**

GREAT LAKES AERO PRODUCTS
915 REARSDLEY PARK BLVD.
FLINT, MI 48503

www.glapinc.com

888-826-2759
(810) 235-1402
FAX: (810) 235-5260



The G.L.A.P. Difference



Our tighter thickness tolerances are for better optics and safer flying

Pay Less \$\$\$
Since 1973 we have been manufacturing our own parts. Buy Direct with no middle man markup.

**Best Fit Available.
Low or No Sealing (if any)
Lowest Cost From the Aircraft*

*Note: Parts are trimmed as close as aircraft variation allows to keep customer trimming to a minimum

We offer a complete line of windshields, windows and landing light lens' for your Piper Comanche.

SINCE 1973 - Products are FAA-PMA approved, unless otherwise noted. - Sealed/protected. - Most Windshields & windows can ship UPS Fed-EX - C.O.D. Orders are shipped UPS & Fed-EX only and are subject to a COD Fee - Michigan residents add 6% sales tax - Add \$4H (varies based upon weight, size and destination) - not responsible for types - Prices may change without notice - Serial Number will determine applicability for all parts - All windshields and windows are made from Acrylic sheet conforming applicable portions of ASTM D-4902, LP-341 or MIL-P-3425-D



▲ *Airport office and courtesy car at Kemmerer.*

Approaching western Mont., the weather for Twin Falls did not look good. At 1700z, the METAR was 250@18G25, FEW012, OVC042, with temperature of 1 degree Celsius and dew-point minus 2 degrees Celsius. Thus, an approach would probably be required, and it would be in freezing temperatures – a very unwise thing to attempt. I changed my alternate to Logan, Utah (KLGU), just east of the front, and decided to proceed as far as VFR-on-top under the overcast clouds would allow. Just West of Kemmerer, Wyo. (KEMM), I could tell that VFR-on-top would not be possible very much longer, and a climb would put me in freezing clouds. I had been flying for four hours and was tired of the turbulence and also hungry, so I requested a clearance back to KEMM for a visual approach.

KEMM is owned by the City (population 2,900) and has three runways. I selected 22 (only 2,850 feet long) as the winds were 240 at 27 gusting 35 mph. The altitude of the airport is 7,285 feet. I landed, and knowing absolutely nothing in advance about the airport, taxied to what appeared to be self-service fuel pumps. The pump controls were in a small building that was more like a shack, but it also had a bathroom, some heat, a couch, a pay phone, and a weather computer.

As I prepared to fuel the airplane, a local pilot came over to help and said that there was a courtesy car that should be available from the airport manager. The manager was nowhere to be found, so the local pilot got on the phone. After a bit, the local golf course manager (also a city employee), came out and helped me to find the courtesy car and complete the required paperwork. I

drove into town in an almost new Ford Windstar and got a burger and then came back to the deserted airport feeling much better.

The winds at KEMM had subsided to 240@15G22 with OVC042, and both KLGU and KTWF were showing VFR, so I prepared a new flight plan to Yakima via KLGU and KTWF. I leaned the engine for best power for the high density altitude takeoff, and launched at 2153z. I picked up flight following with Denver Center and was about 15 miles to the west when I spotted a huge hole in the overcast with sunshine and blue skies above. The ground speed was slow, the ceilings lower than I wanted, and the turbulence was bothersome, so I told ATC that I was going to climb in a circle up through the hole. I put on the oxygen and started up.

I finished the VFR climb to above the overcast at 16,700 feet. Since 16,500 is the highest available westbound VFR altitude, I then asked ATC for an IFR clearance to KYKM at 17,000 feet. This was granted, and I was given direct Boise, direct Yakima. A few minutes later as I was proceeding toward Boise, I ran through the top of a cloud and immediately picked up a trace of rime ice. I reported this to ATC and asked for FL 180. I was cleared up, and coaxed the Comanche to this altitude. This took careful management of carb heat and leaning with the engine monitor, but the airplane gave me about 300 fpm on the VSI.

A few minutes later, I could see clouds ahead that I still would enter, so I asked for and was given FL 190. At this altitude with full MP and prop, the indicated airspeed was 103 knots with an OAT of minus 14 degrees Celsius

and a density altitude of 19,474 feet. This worked out to a true airspeed of 139 knots, but the winds, measured at 255 degrees at 50 knots reduced my ground speed to 93 mph. A bit later, I saw less than 90 knots ground speed.

This poor speed was okay, as I was in smooth air without any danger of icing, collision with the ground, or getting caught in freezing rain or reduced ceilings, provided that the trusty Lycoming engine kept going. Further, I could see from the XM weather that the clouds would only last to Boise, and then it was going to be clear.

About 200 nm from Yakima, I looked at the possibility of continued flight to Renton. Down at 12,000 feet, the ground speed had come back up to around 140 knots. The Renton weather was good, with only a few clouds at 7,000 feet, so I was not concerned with icing over the Cascades. Further, from Yakima to Renton was less than an additional hour and the fuel computer indicated that even with this additional time that I would still land with one hour and 20 minutes fuel. Thus, I asked ATC for a revised clearance to Renton and was given 10,000 feet from Baker City and landed at Renton at 0303z.

When I landed in Renton, I found that, as predicted, there was 20 gallons of fuel still in the tanks. The westbound trip from Tampa to Renton was complete, with five legs over two-and-a-half days. The return trip distance was only 13nm longer than the eastbound legs to Tampa, but required 18.7 hours of flight time, at an average ground speed of 124 knots and 253 gallons of 100L.

The total trip required 33 flight hours to cover 4,641 nm, at an average ground speed of 141 knots. The airplane used 451 gallons of fuel, at an average rate of 13.7 gallons per hour.

I am glad that I made the trip, and am thankful to all of the people that helped me enroute. The AOPA EXPO is a great event, and I look forward to the next one. AOPA alternates East Coast and West Coast each year, so AOPA 2006 will be in Palm Springs, Calif. November 9-11. While such a trip would not be as long as the trip to Tampa this year, it could be filled with its own set of weather challenges. That, in part, makes the planning and execution so interesting.

Additional photos of the trip are available on the web at http://www.befa.org/pub/2005_hw_AOPA_Expo_Pictures.pdf. 

WHITE INDUSTRIES, INC.
1013 NORTH OUTER ROAD BATES CITY, MO 64011



If you are having trouble finding a part for that flying love-of-your-life give us a call. There are over 2,600 aircraft in our inventory. It makes us smile when we can help you solve your aircraft parts needs. View our website at www.whiteindustries.com

(12) Comanche PA-30
(10) Comanche PA24-180
(7) Comanche PA24-250

The Largest Selection of Quality Aircraft Salvage Toll-Free: 800-621-7733
Over 2,600 Aircraft in Inventory Local: 816-690-8800
Complete History, Logs, Traceability Fax: 816-625-6458 (Parts)
sales@whiteindustries.com Fax: 816-625-7800 (Purchasing & AC Sales)

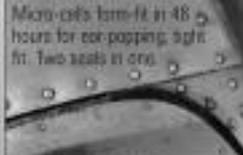
GOT, Seal Problem?
We have (5) Door-Seal Solutions:



No Leaks Ever
3 min. install
(old seal stays)
← Gap-Seal on door



Like inflatable
two cost 6
pushing out
the door
→ Air-Chamber



Micro-cuts form-fit in 48
hours for re-popping, tight
fit. Two seals in one.
← Squeeze-Out
fills the gaps

All FAA-PMA-STC-Approved, for YERL, since 1982
Five Seals in all to choose from. One is the BEST for you.
Why? No two Doors are the same. From \$39
All Our Seals ... install on your door
Never getting stepped-on and Taw

www.Aero-Pma-Parts.com
Flag/Aeron Gap-Seal, More
Pilot Lights Halogen 2/525; HD, StdBy Elect
253-813-1455

Linda Lou

Incorporated

P.O. BOX 18255 • MEMPHIS, TN 38181-0255

901-365-6611 • FAX: 901-365-9524 • TOLL FREE: 1-800-824-9912

SPARK PLUGS

| | CHAMPION | UNISON |
|--------|----------|---------|
| REM38E | \$19.25 | \$15.95 |
| REM40E | \$19.25 | \$15.95 |
| RHM38E | \$19.25 | \$15.95 |
| RHM40E | \$19.25 | \$15.95 |
| REM38S | \$63.25 | |
| RHM38S | \$63.25 | |

REBUILT VACUUM PUMP

| | |
|-----------------------|----------|
| RA211CC EXCH | \$255.00 |
| RA212CW EXCH | \$255.00 |
| (100.00 CORE DEPOSIT) | |

NEW VACUUM PUMP

| | |
|--------------------|----------|
| RA215CC | \$375.00 |
| RA216CW | \$375.00 |
| (OUTRIGHT NO CORE) | |

LAMPS & BULBS

| | |
|----------------------|---------|
| 330 INSTR. BULB | \$1.12 |
| 1940 BEACON BULB | \$13.50 |
| 4509 LANDING LIGHT | \$15.00 |
| Q4509 HALOGEN BULB | \$33.00 |
| 7512-12 NAV BULB | \$13.00 |
| 1284G GREEN NAV LENS | \$17.25 |
| 1284R RED NAV LENS | \$17.25 |

CHAMPION OIL FILTERS

| | |
|---------------------|---------|
| CFO-100-1 Cartridge | \$15.45 |
| CH48110-1 Spin On | \$16.50 |

BRAKE LININGS & DISKS

| | |
|-------------------|----------|
| 66-10600 ORGANIC | \$8.70 |
| 105-00200 RIVET | \$0.25 |
| 66-06200 METALLIC | \$16.75 |
| 66-06500 METALLIC | \$19.80 |
| 159-00104 PLAIN | \$168.00 |
| 164-00900 PLAIN | \$108.00 |
| 164-01000 PLAIN | \$132.00 |
| 164-01900 PLAIN | \$105.00 |
| 164-02201 PLAIN | \$120.00 |
| 164-10900 CHROME | \$199.50 |
| 164-11900 CHROME | \$193.50 |
| RA825 RIVERT TOOL | \$26.00 |

SHOCK CORDS (BUNGEE)

| | |
|------------------|---------|
| 8097 (PAIR ONLY) | \$34.00 |
|------------------|---------|

LORD ENGINE MOUNTS

| | |
|----------|----------|
| J3804-20 | \$94.00 |
| J7402-5 | \$112.00 |
| J9613-19 | \$97.00 |

TIRES & TUBES

| | GDYR | AIRHAWK | CONDOR |
|------------------|---------------|---------|---------|
| 600-6-6 | \$120.00 | \$47.95 | \$49.95 |
| 15-600-6-6 | \$104.00 | | \$71.00 |
| 600-6 & 15-600-6 | MICHELIN TUBE | | \$36.95 |

MISC. ITEMS

| | |
|--|---------|
| SS SCREW KIT PA24 | \$26.84 |
| SS SCREW KIT PA30/39 | \$61.54 |
| DOOR SEAL 1/4 ROUND (25' PACK HOLLOW) | \$50.00 |
| CHAPE SEAL 1" X 15' | \$23.95 |
| BAFFLE SEAL | |
| RED SILICONE 3" X 9' | \$31.60 |
| REINF. SILICONE | \$57.00 |
| BLK NEOPRENE 3" X 9' | \$38.25 |
| CCA1700 DRAIN VALVE | \$16.50 |
| .032 SAFETY WIRE | \$8.50 |

WHEEL BEARINGS

| | |
|------------|---------|
| 13836 CUP | \$16.50 |
| 13889 CONE | \$32.94 |

BATTERY

| | |
|------------|----------|
| G35 W/ACID | \$116.95 |
|------------|----------|

BRACKET AIR FILTER ELEMENTS

| | |
|-------------------------------|---------|
| BA3 (PA24-180-250-260) | \$10.00 |
| BA10 (PA30-160/PA39) | \$16.15 |
| BA27 (PA30 W/RAYJAYTURBO) | \$10.00 |
| BA3205 (PA24-250 TO S/N 1477) | \$11.40 |
| BA4505 (PA24-260C) | \$9.75 |
| BA7305 (PA24-180 TO S/N 1477) | \$9.95 |

CALL FOR QUONE ON COMPLETE ASSY!!!

| | |
|---|---------|
| 638873 PUROLATOR PAPER FILTER (PA24-180/250 S/N 1477 AND UP) | \$45.75 |
|---|---------|

COMANCHE WINDSHIELDS & WINDOWS

| | |
|--|-----------|
| LP999 ONE PIECE CLEAR WINDSHIELD | \$316.00 |
| LP999 ONE PIECE TINTED | \$379.50 |
| COMPLETE SET 6 PLACE .250 TINTED | \$1260.50 |
| COMPLETE SET 6 PLACE .250 CLEAR | \$1061.50 |
| COMPLETE SET 4 PLACE .250 TINTED | \$988.50 |
| COMPLETE SET 4 PLACE .250 CLEAR | \$834.50 |
| (SET INCLUDES ONE PIECE WINDSHIELD & FRAMELESS VENT ON PILOT WINDOW) | |
| LP064 LH LANDING LIGHT LENS | \$36.00 |
| LP065 RH LANDING LIGHT LENS | \$36.00 |

Please call for individual window pricing. Freight is FOB factory.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

THE PILOT'S RING



Crafted by the same artist who produce many of the NFL Superbowl rings and other championship rings. These custom designed rings for pilots are for the special few who challenge the last frontier. Choose 10K, 14K or 18K yellow or white gold or a fine white jeweler's alloy to carry the symbol of flight and your personal rating. A variety of precious or semi-precious stones are available to create the most personally significant jewelry you will wear in your lifetime.

JOSTENS PILOT RINGS

2850 SW CEDAR HILLS BLVD. #12
BEAVERTON, OR 97005-1393

PHONE: (503) 645-5952

FAX: (503) 533-9613

www.pilotrings.com

93-878

International Comanche Society Convention

Hamilton Island
Great Barrier Reef, Australia

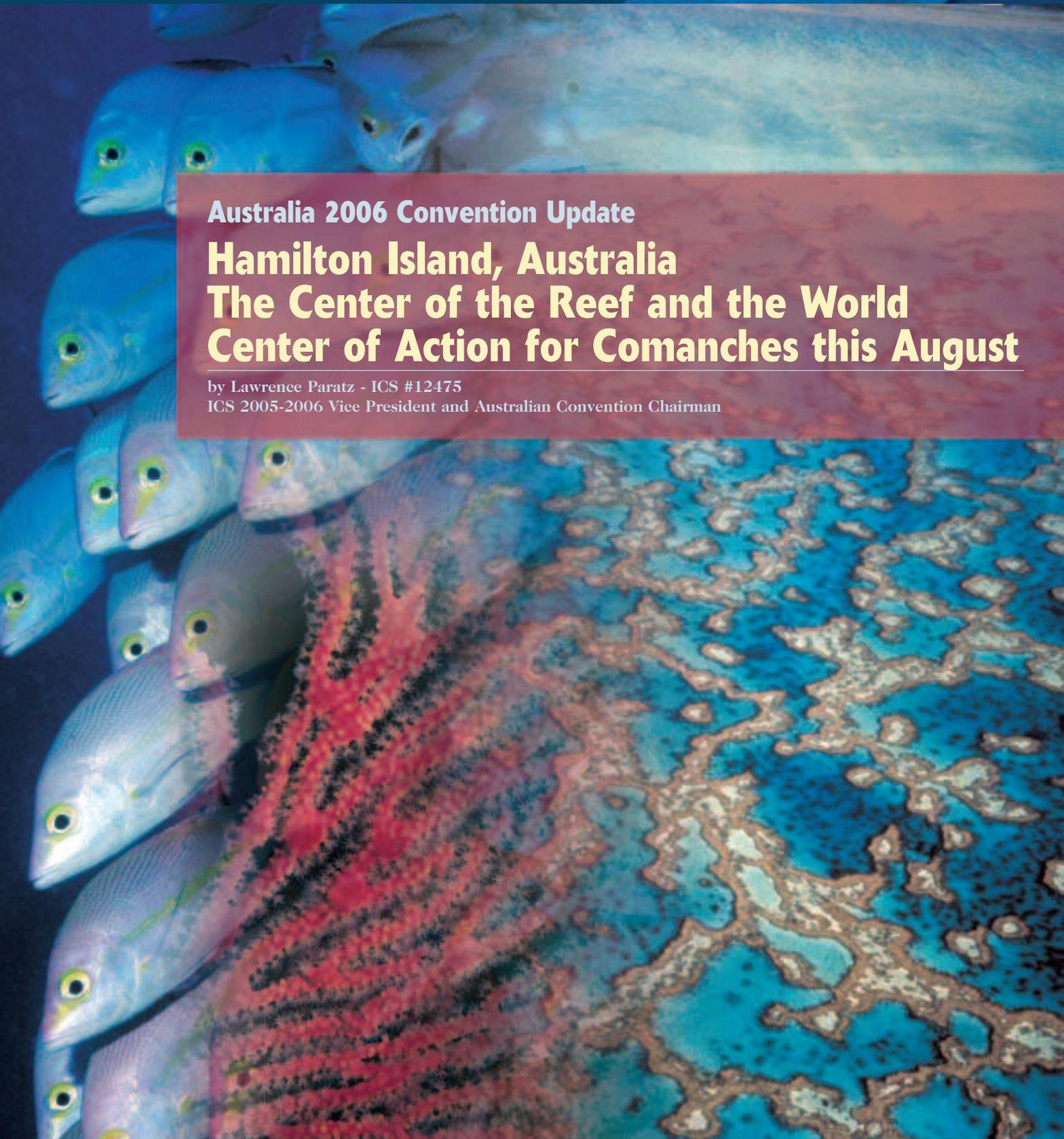


Australia 2006 Convention Update

Hamilton Island, Australia The Center of the Reef and the World Center of Action for Comanches this August

by Lawrence Paratz - ICS #12475

ICS 2005-2006 Vice President and Australian Convention Chairman





Last month I was able to report on the fantastic number of registrations we had already received with all fees paid. Thank you to all of you who have registered in this way. It has really helped your Convention committee in a couple of ways. First, we are now able to focus on the content of the convention with assurance that we will have a good number of attendees.

Secondly, and even better, is that this is allowing us to confidently build even more into the Convention program – making the event even more attractive and an even better value. Of course we hope that if you haven't yet decided, that you will still make the call – there's plenty of time to decide to join us in this landmark convention and experience our Australian hospitality.

And don't forget that many of our delegates are coordinating trip of a lifetime experiences before and after the Convention – and Jodie, our organizer, and the team can assist you there.

Continued on Page 26

▼ Great Barrier Reef



Australian Tribe Makes Official Airstrip Opening at Fellow Member's Vineyard



▲ Some of the Comanches which flew into John Ward's Bulga Estate property near Swan Hill in Victoria's Mallee district.

Many Australian Comanche owners have airstrips on their own farming properties. Another one was added to the list in January, with the official opening of John Ward's "Ward International Airport" by ICS vice president, Lawrence Paratz, during a mini fly-in attended by 12 Comanches.

The Australian Tribe normally conducts two fly-ins each year, usually alternating between northern and southern destinations. But with the International Convention in August, we decided to suspend the program this year and hold some small local gatherings instead.

The first of these was at John's Bulga Vineyard near Swan Hill in Victoria's Mallee district. The Mallee, named after

an indigenous eucalypt, is dry, sandy and very hot in summer. Traditional farming activities revolve around cereal production.

John's property has been in the Ward family for over 100 years, and like his father and grandfather before him, he has battled through hot and dusty harvests for longer than he cares to remember. All that changed a few years ago, when irrigation water became available and he set about establishing a model vineyard.

He now has over 200 acres of vines, and right in the centre is a green grassy oasis where Comanche members from Victoria and southern New South Wales gathered for some delightful hospitality under the shady trees. John doesn't

Continued on Page 26

► Owner of "Ward International", John Ward (left) with ICS vice president, Lawrence Paratz, who officially opened the new runway.



Australia 2006 Convention Update – continued...

You can get all necessary information, and even register and pay online at www.comancheflyer.com.au.

This month I thought I'd tell you a little about the Great Barrier Reef. The Reef is the setting for the whole area, and the reef trip will be a real highlight of the Convention – something you will remember for the rest of your life.

You might think that a reef is a reef. Well the Great Barrier Reef is a reef like the Grand Canyon is a river bed and Buckingham Palace is somewhere to live. We mostly just call it, "The Reef", in our typical understated Australian manner, but it is unique on world scale. In fact, it is recognized as a world heritage area.

The Great Barrier Reef is undisputed as one of the world's most important natural assets. It is the largest natural feature on earth stretching more than 2,300 kilometers along the northeast coast of Australia, from the northern tip of Queensland to just north of Bundaberg. It extends from close inshore, to the edge of the continental shelf, far to sea.

This reef is actually constructed by living organisms, as opposed to being a geological feature. The Great Barrier Reef is the largest thing built by living things on the planet. It provides a home for countless species, and new discoveries are being made all the time. The number of fish species alone is approaching 2,000 and likely to keep rising – as well as the estimates of 4,000 molluscs and at least 350 hard or reef-building corals. Researchers counted more than 250 types of shrimp on the reefs just around Heron Island, near the Great Barrier's southern end. One volleyball-size coral chunk there yielded 1,441 worms from 103 species.

But as well as being prolific and diverse, it is simply stunningly beautiful and grand. And amazingly, it is readily accessible, at the same time as being well protected from damage and human impact.

You will be able to really experience the reef, regardless of age, skill or fitness. You can fly over it, swim and snorkel over it, dive on it, or explore it in a glass-bottomed boat or submarine. Nobody coming to Hamilton Island should miss an up-close and personal reef encounter.

But here I am getting carried away with the reef. What about the Comanches

and the flying? Well first up, the island has its own jet standard airstrip, which is just under 6,000 feet long. Whether you fly in commercially, or fly in by Comanche, you'll be landing there. And all our Comanches will be on display together in a special area.

Comanches of all types – Singles, Twins, Millers, Robertsons, 400s, etc., will be coming from all over Australia, as well as from various parts of the world.

And already I know of plans being made to sightsee around the country, including seeing the Outback, both before and after the Convention. Even if you don't have a Comanche available here in Australia, you can still do this. Nigel Wettenhall is arranging things, with possible alternate flying adventures to Northern Australia, including "the Cape" – tropical Cape York, or to the beautiful Flinders Ranges in Southern Central Australia. You can contact Nigel at +61 3 5881 2504 for details.

Plans are already underway for the Flagship competition too, and we hope many of you will participate whether you have your own aircraft here, or not. The Flagship competition will be judged by voting by delegates after a special aircraft inspection time at the airstrip. Each of you will have a chance to help us define what makes a Comanche Flagship material.

While it is great to hear how many people from all over the world have already made the decision to join us at Hamilton Island for a truly memorable ICS Convention, August 6-11 is really only a few months away now. So if you haven't done so, now is the time to make the decision to join in, register, and book your travel.

Registration is easy. Just go to www.comancheflyer.com.au and follow the links to the Convention and online registration. And Jodie is always available by phone to discuss your plans – details are on the website and in the brochure you received a while back in your *Flyer*.

Remember this is the Convention where your whole family can join you in your aviation activities and at the same time have the holiday of a lifetime, regardless of their age – maybe even the grandkids. And, build in some tourism before or after the Convention.

Here in Australia, the Tribe is still keeping its regular activity going as well. Last week we had a fabulous fly-in

weekend to ICS member John Ward's new airstrip at his winery at Woorinen, near Swan Hill in North West Victoria. In fact I had the honor of officially opening his airstrip! But an important task was to select the wines for the Convention, and this took more time and more experimentation than we, or at least John, had anticipated. Nonetheless, a more than acceptable selection was made, and we look forward to sharing it with you at Hamilton Island.

See you in Australia. ✈️

Australian Tribe Makes Official Airstrip Opening At Fellow Member's Vineyard – continued...

do things by halves. The entertainment area boasts kitchen facilities, toilets, industrial-sized barbecues and even a wood fired pizza oven.

Some members arrived on Saturday and stayed overnight with a few camping at the oasis, while others flew in on Sunday morning.

John has had a strip beside his farm sheds in the past, but this 2,300 foot runway is the real thing. It's been laser levelled and nicely marked with white tyres. Trees guard the northern approach with power lines some distance off the southern threshold, but our highly efficient Comanches had no problem, generally using less than two-thirds of the distance available.

When it came to the official opening by Lawrence, current Tribe Chief John Macknight had a surprise in store. He produced the ceremonial headdress which Lawrence had managed to avoid wearing throughout his term as Tribe Chief! Plenty of cameras caught the moment.

Most of John's grape production is sold to large wineries but some wine is made under the Bulga Estate label. He will be at our Hamilton Island Convention in August and if you ask nicely he may even offer you a taste!



Registration Form

First Name: _____ **Surname:** _____

Postal Address: _____

City: _____ **State:** _____ **Post (Zip) Code:** _____

COUNTRY: _____ **Ph:** _____ **Fax:** _____ **Mobile:** _____

E-mail address: _____

ICS member number: _____

Any special requirements (dietary requirements, non smoking room, wheelchair access, etc):

Accompanying Person: (For additional accompanying persons, add names on seperate sheet)

Full Name: _____ **Preferred Name:** _____

Any special requirements (dietary requirements, non smoking room, wheelchair access, etc):

Twin Share or Double Accommodation for the nights of Sunday 6 August, 2006 – Friday 10 August 2006 is included in your registration fee. Any additional night's accommodation will be charged by Hamilton Island at a rate of \$210 AUD per room per night (rate valid for the three days previous to and following the conference).

Please Select: Reef View Hotel Whitsunday Apartments

Arrival Date: ___/___/___ **Departure Date:** ___/___/___

Any special requirements: _____

Mode of Transport: _____

Are you:

Self Flying? Reg: _____ **Date:** ___/___/___ **Estimated time of arrival:** _____

Flying Commercial? Flight Number: _____ **Date** ___/___/___ **Time:** _____

Registration includes: twin share or double bed and breakfast in the Reef View Hotel or the Whitsunday Apartments for the nights of Sunday 6 August, 2006 to Friday 10 August, 2006. It also includes access to all Presentations, as well as the following functions: Welcome Cocktail Party on Sunday 6 August, Poolside Buffet on the evening of Monday 7 August, Great Barrier Reef Trip on Tuesday 8 August, Conference Gala Dinner on Wednesday 9 August, Whitehaven Beach Trip on Thursday, 10 August, Daytime catering on Monday 7 August and Wednesday 9 August.

| | | |
|--|----------------|-----------|
| Registration (per person \$AUD): | \$1980 | |
| Single Supplement: If you would prefer to have your own room at the conference, please add \$300 to your registration fee. | + \$300 | |
| Sub Total: Less Earlybird Discount (if paid in full before 15 December 2005): | - \$198 | |
| Early Departure (Thursday 10 August) | - \$250 | |
| TOTAL: | | \$ |

Payment Options:

Cheque (for Australian Residents Only – made out to the International Comanche Society).

Bankcard

Mastercard

Visa

AMEX

Diners

Card Number:

Expiry Date: ___/___

Signature: _____

Please note that Iceberg Events will appear on your credit card statement.

Please also note that all prices shown are in Australian Dollars. When paying by credit card, your card provider will convert the currency, and your bill will be shown in your home currency. The conversion rate will depend on the rate on the day of processing, and on the policy of your card provider.

Please return your form with payment to: Iceberg Events, PO Box 780, MT OMMANEY QLD 4074, Australia

Or fax to +61 7 3715 8275 or e-mail jodie@icebergevents.com.au

Currency converter available on line: www.xe.com

Air Racing: Oshkosh Made Easy

by Pat Keefer - ICS #08899
President, U.S. Air Race, Inc.

As the first bits of spring are showing, it's time to plan for some more fun flying. At least flying more is the only New Year's resolution I haven't broken yet. You did make a resolution to fly more, didn't you? Here is your invitation to join us for the U.S. Air Race 2006 events. Our theme this year is "Air Racing: Where it's all about the Pilots". Okay, there are gorgeous airplanes too and fabulous scenery and... well, you get the idea. Comanche pilots have done very well in these competitions. So far, a team flying a 260 and another team flying a 400 have placed first in two of the 20 races. Since I fly a Twin Comanche, I might be biased as to which airplanes are the sharpest looking planes, but hey we are all entitled to our opinions. We have a lot of fun and this year, we could call this "Oshkosh made easy" as well.

Here is why.

The Cessna Owners Organization and the Pipers Owners Society (in alphabetical order) have a Convention and Fly-in that dovetails with EAA's AirVenture at Oshkosh, Wis. The race teams will arrive in time to enjoy that event and take advantage of their excellent and easy transportation to AirVenture. So, if you were planning on going to Oshkosh anyway, here is a great chance to have a huge amount of fun in getting there. By the way, we have been assured that pilots of all aircraft types will be welcome. Beech Bonanza owner and 2005 Marion Jayne Perpetual Trophy winner, Marv Guthrie, plans to join the fun.

We hope that you'll join with us too and enjoy the fabulous camaraderie that develops with shared flying adventures.

You can fly one, two or all three of our races: the exciting cross country 1,800-mile Marion Jayne Air Race from Hutchinson, Kan. to Wisconsin, the Hutchinson 300-mile Air Race in Kansas and/or the Wisconsin 300-mile Air Race in Wisconsin. A cruise at your own speed division is also available. These fabulous flying events will be held July 16-23, 2006. Participants will receive custom trophies, cash, completion plaques, prizes and the all-important bragging rights. The entry kit is on the web site at www.us-airrace.org.

Teams may compete in cruise or speed divisions in the 1,800-mile Marion Jayne Air Race. Custom divisions (such as, turbo or all RVs) are possible for five or more teams. The events are open to all qualified pilots and airplanes. Flying will be done under Federal



Aviation Regulations in daylight, VFR conditions of 1,000 feet and three miles or better. Race planes are individually handicapped which makes each event a test of flying skills. Our goals are to promote the sport of General Aviation and the events' proceeds will benefit aviation endeavors. As always, participants have the opportunity to dedicate an aviation scholarship. Scholarships will be distributed evenly among men and women and awarded by drawings in Kansas and Wisconsin.

We are excited to bring you a projected route abounding in scenic splendor and clear of nearly all special use air space. The route begins in Hutchinson located in the middle of Kansas on the Arkansas River. You'll follow the river valley towards the eastern plains of Colorado and then fly north in the shadow of the Rocky Mountains to the scenic Badlands and the edge of the Black Hills in South Dakota's Rapid City, where teams may remain overnight and see the fabulous Mount Rushmore evening presentation. Then it is off to Montana and the Missouri River. Turning east, you'll follow the Missouri River a bit until it is joined by the Yellowstone River to create beautiful Lake Sakakawea. Still heading east, you'll cross North Dakota and Minnesota just south of the boundary waters and then turn south-east and fly just over the tip of lake Superior and finish in mid-Wisconsin. As in the past, legs are about 300 sm and with an easy two-legs-a-day strategy, you'll land in time for all the fun on the ground. The free entry kit is at www.us-airrace.org and has more details.

The renaissance-style 300-mile races are where pilotage and precise flying reign supreme as teams compete with only a compass and sectional charts for navigational aids across a mystery route. The Marion Jayne Air Race is where the full panel is used with weather and aircraft knowledge being added to the competitive equation. After three days and 1,800 miles of cross-country flying, teams will be honored awards. The results of the three national races will be combined to determine the winner of the stunning Marion Jayne Perpetual Trophy.

The U.S. Air Race, Inc. is a non-profit, charitable, all-volunteer organization that was founded by famed race pilot Marion Jayne. Jayne is the only United States pilot to have raced twice around the world (in her Twin Comanche). She placed second in the 1992 race and won the FAI Gold Medal in 1994.

Marion has been honored as one of the century's 100 Aviation Heroes along with the Wrights, John Glenn, Eileen Collins and others at the 2003 Centennial Celebration. Her personal success, her two races around the world, her life before flying were cited as well as her entrepreneurial spirit in founding four air races - three of which are still run annually. The 2006 National Air Races honor her memory and contributions.

Our 'Safe, Fair and Fun' catch phrase was coined at the 1995 inaugural event

and characterizes how we work together as organizers and participants to have successful flights. Our teams have flown over 480,145 miles with a perfect safety record. For first-time participants, a special briefing is held and new teams are given an experienced event buddy to make their rookie experience go smoothly. Come join us for the fun flying, the camaraderie, the cruising and/or competition. You'll have hangar flying stories for years to come! 🛩️

HARTZELL PROP CONVERSIONS FOR PIPER

Improvements over two-bladed props:
 Better take-off and climb performance. • Dramatically lower noise levels. • Smoother operation. • Improved appearance.

Improvements over two and other three-bladed props:
 Longer TBO than many McCauley props (2,400 hour/6 year).
 Less restrictive placards on Arrow and Seneca II. • Elimination of AD hub inspections on Cherokee Six-300, Lance, Turbo Lance and Apache.

Comanche 180 (2-blade) Comanche 260 Twin Comanche (2-blade)

Cherokee Six-260 & 300 Lance & Turbo Lance Arrow & Turbo Arrow

Apache (2-blade) All kits include a 3-bladed propeller unless otherwise noted. Malibu/Mirage (3-Blade Composite)

Cherokee 235 & Dakota HARTZELL Seneca II & III

800-942-7767 | topprop@hartzellprop.com | www.hartzellprop.com

From the Tribe Chiefs

EUROPEAN TRIBE

25th Anniversary Fly-In Le Touquet, France (LFAT) April 8-10

The itinerary for the ICS Europe 25th Anniversary Fly-In, is as follows:
Saturday, 8th April

Arrive at Le Touquet (LFAT) airport. Transfer to Hotel Bristol and spend the rest of the day in Le Touquet. Shopping is good, perhaps a stroll on the beach or a visit to one of the many bars for a refreshment. A coach will take us from the hotel early in the evening (time to be confirmed) to Monteavrel for the main event. Our anniversary dinner will be hosted at Chateau du Fief d'Herambault.

Sunday, 9th April

Following a morning of leisure, a coach will take us from the hotel to the restaurant, Les Hauts de Montreuil. There will be time during the afternoon to stroll around the walled town of Montreuil, before heading back to Le Touquet.

Monday, 10th April

Depart at your leisure.

For further details contact Lesley Richardson at jgn@ricson.freeserve.co.uk

Fly-in Gdansk, Poland June 29-July 3

The following is a proposed itinerary for a fly-in to Gdansk, Poland.

Thursday, 29th June

Arrival at the Gdansk Airport at approximately 3:00 p.m.

The V.I.P. lounge will be made available for us with refreshments until all have assembled, or until 5:00 p.m., when transport will take us to our hotel, 15 kilometers away.

From the Tribe Chiefs

| Date | Tribe | Event/Location | Info Source/Host |
|--------------------|--------|---|--|
| Mar 31- Apr 2 | MS/SC | Joint Fly-In Hutchinson, Kan. (HUT) | Contact Pat Keefer at pkeefer@charter.net |
| Apr 8-10 | Europe | 25th Anniversary Fly-In Le Tourquet, France (LFAT) | Contact Lesley Richardson at jgn@ricson.freeserve.co.uk |
| Apr 28-30 | SE | Fly-In Lake Norman Airpark, Mooresville, N.C. (14A) | Charlie and Patti Littwin at (704) 799-2989 and Bruce and Chris Ladrie at (919) 427-8987. |
| May 19-21 | MS | Sunburst Ranch Canoe Trip (MU48) Gainesville, Mo. | Jim Guglielmino and Janice McIntyre (913) 722-2800. |
| June 23-25 | MS/NC | House on the Rock Spring Green, Wis. | Rich and Barb Beil (715) 754-2423 or e-mail: pa24@frontiernet.net |
| June 29- July 3 | Europe | Gdansk, Poland | David Sheppard at david@sheppardracing.freeserve.co.uk |
| Sep 22-24 | MS | Fly-In Omaha/Fremont, Neb. | George and Cathy Richmond, (402) 894-2917. More information to follow. |
| Oct 20-22 | MS/SC | Joint Fly-In Eureka Springs, Ark. | Tina and Bruce Thumann, (281) 487-5782 and Sarah and Mac McKinley, (816) 320-3462. More information to follow. |

The Hotel Posejdon is positioned 100 metres from the sea, and has its own indoor swimming pool, dry and steam saunas, fitness room, massage salon, bar and restaurant. The rooms are equipped with satellite television, coffee making facilities, internet connections, etc.

After settling in to our hotel, transport will take us to one of the most exclusive restaurants in Gdansk with 400 years of tradition, the "Pod Lososiem." The time of the meal is yet to be confirmed, but we will have four courses, with wine and a glass of 'Goldwasser' – this being the famous Polish vodka, locally taken as a refreshing long drink with apple juice.

Friday, 30th June

Throughout the visit, our guide will be Ms Katarzyna Czaykowska – hereafter known as 'Kate'! This day a coach will take us to the Cashubian Lake District. In the beautiful landscape of the region, we will meet with the

Cashubian people and relax with a boat trip on one of the lakes. We will enjoy regional cuisine with a folk show at the Strzecha Kaszubsia. We then have a choice of places to visit in the afternoon should we wish – the Cathedral at Kartuzy, the Cashubian Museum, the Necel Pottery, and there are many spectacular panoramic views of the area to enjoy. Our schedule for this tour will remain flexible and relaxing, and we will return to our hotel to refresh before evening transport to Sopot for dinner at the restaurant Zloty Ul. – one of the most highly regarded venues in the area.

Saturday, 01st July

Gdansk is one part of the 'Tri-City' region including Sopot and Gdynia. Today Kate and our coach will take us to explore the general region. There are many and varied places of interest available for us to see. The Old City of

Gdansk, Sopot pier, Olivia Cathedral with its famous organs, the harbour with the Dar Pomorza tall ship, and the Blyskawica Destroyer. Our visit will include a break for lunch at Chlopska Chata restaurant – a quaint little typically Polish venue where we can sample local dishes and ‘cheeky’ Polish beer.

Again we will return to our hotel to relax and regroup, before transport to another of the finest restaurants in the region. The Gdanska Restaurant is again highly regarded and has played host to many distinguished guests, including Lech Walesa, the former electrician and President of Poland. As you would expect, the menu is traditionally Polish and includes duck in the classic Gdansk style and delicious country goose. Baltic salmon and flounder are also features and we will have four courses accompanied with wine.

Sunday, 02nd July

Today is reserved for a visit to Malbork Castle – the largest brick-built castle in Europe. There is much to see here, and many interesting aspects to the history of the castle. The construction started in 1274, and later in the 15th century it was the capitol of the Teutonic Knights. Many myths and mysteries surround the area, and our guide will be on hand to help us explore. We will have lunch at the Zamkowa Restaurant, which is located in the historical edifice of Pomeranian Princes’ Palace in Szczecin. The setting is impressive and imposing to say the least, and our three courses will be accompanied by wine and beer, as desired.

We will return to our hotel with free time to spare in order to enjoy our location before dinner in our own restaurant.

Monday, 03rd July

Breakfast will be at our leisure, before transport to the airport at an agreeable time yet to be arranged.

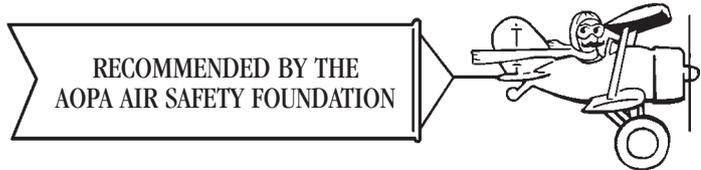
All of the above to be included in the estimated cost of 600 euros (approximately \$703 USD) per person for two sharing a room or 680 euros (approximately \$797 USD) for single occupancy.

Early indication of interest will enable us to confirm numbers at the soonest possible time in order to negotiate the best discounts possible. Please respond to organiser, David Sheppard at david@sheppardracing.freeserve.co.uk if you are interested in attending this fly-in.



ANNOUNCING THE NEW AND IMPROVED SECOND EDITION PILOT’S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL

The Best Just Got Better



Available **EXCLUSIVELY** from **AIRCRAFT PUBLICATIONS** is the upgraded GAMA format POH for the Piper Comanche and Twin Comanche

180-250-260-400-TWIN

ONLY \$45.00

Plus \$6.00 S&H –USA
\$15.00 Canada, Mexico, Western Europe,
and the Pacific Rim. \$20.00 Other
Airmail Worldwide

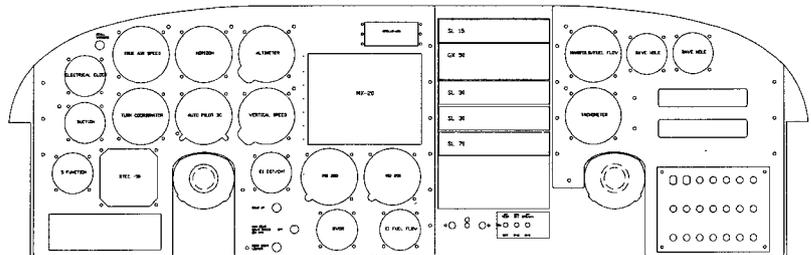
E-Mail: airpubs@onr.com

To order using
VISA or MasterCard call:
(512) 250-9350
Fax: **(512) 250-9063**

Or Mail Your Order To:
DOUG KILLOUGH, ICS #07248
AIRCRAFT PUBLICATIONS
P.O. BOX 201183
AUSTIN, TEXAS 78750-1183

There are SIXTEEN different GAMA format Manuals available for the Comanche and Twin Comanche. Include your aircraft’s Year, Model, and Serial Number with your order. Also note if your airplane is Turbocharged.

Update Your Old Comanche Panel Make Room for a MFD



Update your panel to a standard “T” configuration. Add space for new electronics. All panels computer drawn and laser cut.

‘58-60 Centerstack Conversion \$950.00 (Fully STC’d)

‘61-68 Single or Twin \$825.00 (Fully STC’d)

Recuts left side – \$250 • Recuts right side – \$100. (Prior Panels)

Contact: John Van Bladeren at:

Ron & John’s Comanche Service

2007 SE Ash Street • Portland, OR 97214
(503) 329-8512 (Day or Night) • Fax: (503) 234-0677

**Joint Fly-In
Hutchinson, Kan. (HUT)
March 31-April 2**

We will be joining the South Central Tribe for a wonderful spring fly-in to Hutchinson. See the South Central write-up for details. We always enjoy joining the South Central Tribe and

appreciate their camaraderie and support of our tribe events.

**Sunburst Ranch Canoe Trip
Caulfield, Mo.
May 19-21**

An adventure begins the moment you dip a paddle into one of our Ozark streams. Around the first bend could be a cave, a spring bubbling millions of gallons of fresh, clear water, or a young

deer or duck with babies in tow. In Missouri, renting a canoe can transport one to pure heaven. Good camping, good food, and lots of good fellowship is abundant on the North Fork River at Sunburst Ranch.

The host airport is Sunburst (MU48), which is a 3,500 foot grass strip. For anyone concerned about grass, please know the owner of the airport based an Aero Star, as well as Bonanzas, for years. Alternatively, you may land at West Plains Airport (KUNO), in case of inclement weather or for those who don't do grass.

Friday night, we will be eating at the Stoneridge Bed & Breakfast in Dora, Mo.

There is an option of canoeing one or two days. The Sunburst Airport is adjacent to the canoe base where you will be shuttled up the river to return paddle down the river. If you choose to paddle a second day, you go down river from there and the Sunburst folks will pick you up that afternoon. On Saturday, after the first day of canoeing, dinner will be served at Sunburst.

Car Rental is available from Chariot (888-257-0847) at \$27.50 per day. Lodging options include:

The canoe rental base has two cabins and reservations can be made by calling (417) 284-3443.

Camping at the canoe base, call (417) 284-3443.

The Ramada Inn/West Plains has rooms at \$58.50 a night and includes breakfast. The cancellation date is as late as the afternoon of Friday, May 19. Ask for Linda or Matt and be sure and mention you're with ICS or International Comanche Flyers. The telephone number is (417) 256-8191.

Stoneridge Bed & Breakfast has four rooms, so you may want to hurry and book your room if you'd like to stay there. The rate is \$110 plus tax, per night with all meals included. Call (417) 261-2177.

For further questions on the flyout, call Jim Guglielmino at (913) 722-2800 days or (913) 299-2496.

**House on the Rock
Spring Green, Wis.
June 23-25**

A joint fly-in with the North Central Tribe in beautiful southwestern Wisconsin. See the North Central Tribe section for more details.

The First!



***your best deal on
aircraft financing.***

The First is proud to offer aircraft financing with a distinct advantage. Our banking executives are experienced with both financing and aircraft – as lending professionals, as pilots and as aircraft owners. We've been in your shoes, and flown in them, too, so call us first to get your best deal on aircraft financing.

- Single and Light Twin Financing
- Flexible Terms,
- Competitive Rates
- New and Used Aircraft
- Refinancing
- No Application Fees
- Fast Response
- Upgrades



Aircraft Finance Division

1-888-559-8892

www.aircraft@fnbmidwest.com

P.O. Box 420
Oskaloosa, Iowa 52577

Member FDIC
Equal Opportunity Lender
Equal Housing Lender



Ada Aircraft Painting, Inc.



P.O. Box 2581 . Ada, OK 74821
 PH 800-332-6085
 E-Mail: adapaint@sbcglobal.net
 Web Site: www.adaaircraftpainting.com

- Providing custom repainting for aviation since 1962
- Winners of Oshkosh and EAA Sun & Fun
- Our strength is attention to detail
- We specialize in single engine and light twins
- Factory & Custom Designs
- Located in Ada OK, Ada Airport (ADH)
- CALL TODAY FOR A QUOTE ON YOUR AIRCRAFT

Fiberglass “Glareshield”

One piece hand-laminate with a molded Naugahyde texture, designed to tuck under the windshield from the front, totally covering the top of the instrument panel.



Protects Instruments From Intense Heat

The Glareshield extends approximately three (3) inches past the front of the panel to shade instrument faces. The reinforced “lip” forms a nifty handhold on the Glareshield’s front edge and provides room for mounting optional FAA approved lights for greater visibility.

Glareshield Price List:

| | |
|---|-------|
| Piper PS24/30 Comanche STC | \$275 |
| Piper PA 38 Tomahawk | \$275 |
| Piper PA28 Cherokee Series | \$275 |
| Piper Cherokee 6, PA32, 34, Ex. | \$275 |
| Beech 33, 35 & Baron (1962-1970) .. | \$350 |
| Beech 33, 35 & Baron (1971-1983) .. | \$450 |
| Cessna 120/150/140 | \$275 |
| Cessna 170/172/175 | \$275 |
| Cessna 180/182/185 | \$275 |
| Cessna 210/206 | \$275 |
| Cessna 337 Skymaster | \$275 |
| Mooney 201 & up | \$275 |
| Optional FAA approved lights | \$130 |
| Glareshield shipping lower 48 UPS ground .. | \$ 35 |

“Windlock ” Device

This control “lock” is designed to be used inside the cockpit & attaches to the flight controls. Cannot be forgotten prior to flight!

\$69.00
 (\$6 S&H)



ORDER FROM Dennis Ashby

P.O. Box 6432

Paris, TX 75461

1-800-945-7668

Voice: 903-784-8187

Fax: 903-784-8145



www.aircraftglareshield.com

Stop the exhaust skin damage in the exhaust trough area by installing FAA approved stack extensions. Trouble free heat protection for the life of your aircraft.

ATTENTION All PA30-39 Non-Turbo Owners

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

GULF COAST STACKS
 P.O. Box 817
 FOLEY, AL 36536
 251-943-3653

-SARA (TERRI) PAINTER BAUER

aerox[®] AVIATION OXYGEN SYSTEMS

- **1ST WITH HIGH DURATION OXYGEN SYSTEMS**
- **1ST WITH OXYGEN CONSERVING CANNULAS**
- **1ST WITH LIGHT WEIGHT ALUMINUM CYLINDERS**
- **1ST WITH RETROFIT KIT FOR BUILT IN OR OTHER SYSTEMS**

Please Call or Fax for free brochure

US: 800-237-6902

Tel: 207-637-2331

Fax: 207-637-2329



AEROX
 Aviation Oxygen Systems

NORTH CENTRAL TRIBE

House on the Rock Spring Green, Wis. June 23-25

Come join the North Central and Mid-States Tribes in beautiful south-western Wisconsin. We will be visiting the House on the Rock in Spring Green

(www.thehouseontherock.com) and staying at the House on the Rock Inn Main Lodge, which is a truly unique hotel. The swimming pool has to be appreciated.

Reservations can be made by calling (888) 935-3960. There are 15 rooms being held until May 31. Please refer to the ICS SOCIETY when calling for reservations. The room rate for two nights

will be \$239 + tax which includes two nights and two adult admission tickets to The House on the Rock. Rates for guests staying only one night will be \$149 + tax which includes room for one night and two adult admissions to The House on the Rock. This trip is also ideal for children.

Airplanes will land at the Mineral Point airport (MRJ) and all will be transported by bus to the hotel.

Please let Rich and Barb Beil know that you will be attending by calling (715) 754-2423 or e-mail pa24@frontiernet.net.

SOUTH CENTRAL TRIBE

Joint Fly-In Hutchinson, Kan. (HUT) March 31-April 2

Maintenance Seminar, Famous Cosmosphere and Space Museum, Amish and Antique Shopping, Indoor Water Park

We've arranged an extra hour in this weekend so you can have time for all the fun as Daylight Savings time begins. This is a joint fly-in and all ICS members are welcome.

Friday, March 31

3:00-5:00 p.m. – Registration at Airport Conference Room. Receive your Chamber of Commerce goodie bags and Wells Aircraft hot fresh cookies; and sign-up for "Show and Tell" slots. There will be a nominal registration fee used to cover the cost of the transportation. Best estimate is \$15-20 per person. Saturday Box Lunch during Maintenance Seminar will be an additional charge.

5:00-6:00 p.m. – Ten minute slots for each attendee to stand in front of their airplane and do a "Show and Tell" as a way for everyone to get acquainted. More time can be added if needed.

6:00 p.m. – Dinner at the excellent Airport Steakhouse. Business is so good that the restaurant has been expanded. The food is great and the view of the ramp is wonderful. How cool will it be to have a lovely meal in sight of your airplane!

Saturday, April 1 Maintenance Seminar

9:00-10:00 a.m. – Late Registration at the Maintenance Seminar location.

10:00 a.m. – Maintenance Seminar begins with Bob Weber speaking. Bob spoke at the Manassas convention and

New Product



Tribal Jack

- Raise wheel independently.
- Change a tire in a few minutes.
- Service brakes and bearings.
- Compatible with dog-leg gear.

Look to us for solutions.



BOBERT

Aviation

hogert-av.com

800-627-8088

“FLORIDA”

COMPLETE AIRCRAFT MAINTENANCE FACILITY

Aircraft

Experts in Piper Comanche
Repairs & Maintenance for
Over 28 Years

**Maintenance
is our ONLY
Business**

Factory Trained
Dynamic Propeller Balancing
Many Parts in Stock for
Piper Comanches

“Quality Results, Not Excuses”

AIRCRAFT ENGINEERING, INC.

BARTOW MUNICIPAL AIRPORT

BARTOW, FLORIDA 33830

WILLIAM C. TURLEY - IA AND PRESIDENT

ICS Member #972 Since 1977

Phone: 863-533-1870 or 863-533-6461 Fax: 863-533-8493



Travers & Associates

AVIATION INSURANCE NATIONWIDE

SINCE 1950

Comanche Aircraft Insurance Program

1-800-888-9859

www.traversaviation.com

Now In Our 3rd Generation

Bob Travers 1950 • Glen Travers 1978 • Chris Travers 1999 • John Travers 1999 • Mike Travers 2003

there's always something to learn. Robert Victor from Topeka, Kan. has volunteered his 1965 PA-30 to be on jacks. A bonus will be that we can see his newly finished panel overlay.

11:30 a.m. – Box Lunch

Noon-1:30 p.m. – Bob Weber available for questions.

(Side note from Pat Keefer – it was fascinating to have my plane in Bob's shop. The stabilator AD was signed off, but guess what? It was done for one of four attachment points and two more were loose. That wasn't why the plane was in the shop, but they checked it anyway and I'm so glad they did.)

Saturday, April 1 Kansas Cosmosphere and Space Museum

Open – 9:00 a.m.-9:00 p.m.

1:30-2:00 p.m. – Transportation from the Maintenance Seminar to the Museum.

2:00-5:00 p.m. – Maintenance Seminar attendees may enjoy the museum at their leisure.

Notes: See www.cosmo.org for a discount coupon for each of the three venues of the Museum with the Apollo 13 Command Module, SR-71 and so much more; the IMAX theater with "Mystery of the Nile" and "Magnificent Desolation: Walking on the Moon" showing on alternating hours beginning at 1:00 p.m.; and the Justice Planetarium Theater and Dr Goddard's Lab. I keep coming back because there is so much to see. This is a Smithsonian-quality museum with a rare and wonderful 'let me tell you the story' approach to displaying artifacts. It is fascinating to all age levels. There is a full service café and extensive gift shop.

Saturday, April 1 Other Activities – one van will be available to shuttle to these locations:

20,000 square-foot, indoor space-themed water park adjoining the hotel

150 downtown antique shops near the historic Atchison, Topeka and Santa Fe railroad

Nearby Amish community stores, located about 20 minutes southeast of town that have baked goods and handcrafted products

Contemporary Shopping mall across from the hotel

Saturday, April 1 Dinner at the Blue Duck Bistro (www.blueduckbistro.com)

5:30 p.m. – Meet in the lobby of the hotel for transportation to restaurant

6:00 p.m. – Dinner at the Blue Duck Bistro, where the menu has a wide variety of entrees

Sunday, April 2 Transportation to the airport, 8:00 a.m.-9:00 a.m.

There is commercial air service to Wichita, Kan., if your own airplane is not available. It is about a one-hour drive from Wichita to Hutchinson.

We'll be staying at the recently renovated Grand Prairie Hotel and Convention Center with their Indoor Water Park (www.grandprairiehotel.com). Note that they have the largest Houlihan's on site. Our rate is \$79, plus tax and that includes four passes to the water park. Call (866) KS-SPLASH for reservations and use code word 'Comanche.'

Put this on your calendars now and plan to enjoy the education and fun that always comes with a gathering of ICS members. Contact Pat Keefer at pkeefe@charter.net to be added to the notification list.

Sunburst Ranch Canoe Trip Caulfield, Mo.

May 19-21

A second fly-in is in the offing where we will be joining with the Mid-States Tribe for canoe trip. This fly-in is with flying range for most of our tribe

and is shaping up to be a fun outdoors experience. See the Mid-States Tribe's write-up for the details.

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*.

SOUTH EAST TRIBE

Fly-In to Lake Norman Airport Mooresville, N.C. (14A) April 28-30

The weekend is going to be filled with excitement and fun for everyone!

Friday, April 28 – Arrival from Noon-6:00 p.m. and dinner starting at 6:30 p.m. at a fine local eatery.

Saturday, April 29 – That morning we'll be out to the race track for a full tour of Lowe's Motor Speedway including a behind-the-scenes tour of pit row and a lap around the track in a van to feel the 40° banked turns.

The afternoon includes an aviation seminar with tips and inside information from a professional painter on painting your aircraft. During this time a shopping excursion is planned as well.

That evening, topping off the fun filled day is a dinner cruise aboard the Catawba Queen with fine dining, a cash bar and music as we tour scenic Lake Norman.

Sunday, April 30 – Departure with some quality "check out the Comanche's time", before leaving.

Check the next *Flyer* for complete details, registration and pricing or call hosts Charlie and Patti Littwin at (704) 799-2989 and Bruce and Chris Ladrie at (919) 427-8987.

Premium Aircraft Soundproofing and Insulation Kits



Toll Free 1-888-513-5088
www.soundexproducts.com

Basic Kits: \$425 to \$800
Deluxe Kits: \$625 to \$1,100

SoundEx
Improve Your Quality of Flight



P.O. Box 1490, Southaven, MS 38671 662-428-3589 (Fax) or 901-351-0301 (Mobile)
Email: info@soundexproducts.com



FAA Approved Repair Station #DER765K

39 Years Specializing in:

- ◆ Structural Repair
- ◆ Routine Maintenance ◆ Inspections
- ◆ Modifications ◆ Engine Overhauls

Extensive Comanche Experience since the days of old Bill Piper. Annual Inspections, 100 Hr. Inspections and 1000 Hr. Inspections on All Piper Models.

ILIFF Aircraft Repair & Service Co., Inc.

Hangar 17
Tulsa International Airport
Tulsa, OK 74115
Phone: (918) 835-5554 **Chuck Iliff**
Fax: (918) 835-9572
E-mail: iliff@iliff.com



FUEL CELLS

BUY DIRECT FROM
THE MANUFACTURER
AND RECEIVE
DISCOUNTED
PRICES

Certified F.A.A. Repair
Station AL4R054M

800-842-9387

www.aerotechservicesinc.com

AIRCRAFT COVERS & ENGINE PLUGS

**TOLL FREE:
800.777.6405**

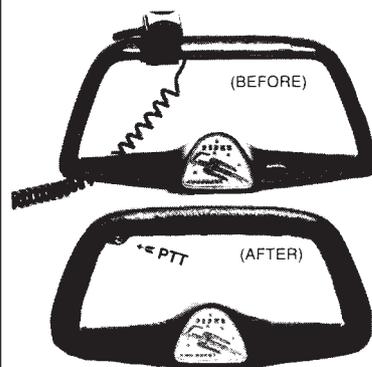


phone: 408.738.3959 fax: 408.738.2729 e-mail: bruce@aircraftcovers.com

WWW.AIRCRAFTCOVERS.COM

Bruce's Custom Covers, 989 E. California Ave. Sunnyvale, CA 94085

**SOFT, SUPPLE
LEATHER COVERS**
FOR YOUR CONTROL YOKE !



These elegant covers, with or without push-to-talks built into the leather are PILOT INSTALLABLE - NO LACING. Velcro "zipper" makes installation fast and easy.

**FREE INFORMATION
CALL TOLL-FREE**

1-800-634-0094

WARREN GREGOIRE & ASSOCIATES LLC
1933 DAVIS STREET, SUITE 276
SAN LEANDRO, CA 94577
VOICE 510-633-9353, FAX 510-633-9355
WEBSITE www.warrengregoire.com

NEW STAINLESS STEEL DUAL EXHAUST SYSTEM

STC/PMA APPROVED FOR
THE PA24-180/250 AND 260
COMANCHE

COMANCHE 180: \$3295.00
PLUS INSTALLATION

COMANCHE 250/260: \$3695.00
PLUS INSTALLATION

AVIATION PERFORMANCE PRODUCTS, INC.

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

www.aviationperformanceproducts.com

Announcement

New Manager of ICS Tool Lending Program

ICS member, Matt Kurke has volunteered to administer the ICS Tool Lending Program. All tools that were previously loaned out from the ICS main office will now be handled through Matt.

The following tools are available for loan from the program:

- 1 Bungee tool
- 2 Wooden bungee tools with stretcher
- 1 Aluminum bungee tool with stretcher
- 1 Wooden bungee stretcher (with no bungee tool)
- 1 One-piece, gear load tester, for above floor gear handle
- 1 One-piece, gear load tester for below floor gear handle
- 2 sets, Go no go gauges

The Tool Loan Program policy for using the tools is that members can borrow the tools for a two-week time period and pay for the shipping of the tool. Shipping should be through UPS or FedEx, so that a tracking number can be provided. Members are also required to give a credit card number, in the case the tool is not returned, in which they will be charged.

If you would like to borrow a tool, please contact:

Matt Kurke
10340 Regent Circle
Naples, FL 34109
Phone: (239) 593-6944



West Coast Comanche Service

QUALITY MAINTENANCE

Highly Experienced
Comanche Mechanics

ANNUAL INSPECTIONS

Expert Major & Minor Repairs
Mods & Kits • Insurance Work
Award Winning Interiors Too

**We Can Fix Those
Special Problems!**

Redding Aero Enterprises

Redding Municipal Airport
Redding, California

(530) 224-2300

Pick-Up & Delivery Available

Flat Rate Annuals - Structural Repairs - Modifications
Expert Glass Replacement - Engine Overhauls



Professional Complete Aircraft Restorations - Alternator Inop Warning Light Kits
NEW! State of the Art 60 amp Alternator Conversion for PA 24 & PA 30
Aircraft-Only 8.5 lbs. Call for details

Our experienced Licensed Staff takes pride in assuring customer safety and customer satisfaction, with special attention to detail.

In service since 1983

CLIFTON AERO



Clifton Airport P.O. Box 249 Clifton, TX 76634 Tim Talley ICS #09375
30 minute flight SW of Dallas/Ft. Worth

254-675-3771

www.cliftonaero.com • e-mail: cliftonaero@digitex.net

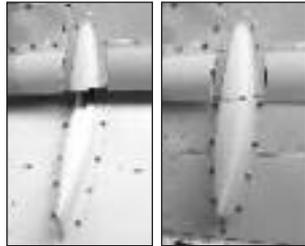
FLY FASTER WITH LOPRESTI MODS



LOPRESTI COWL
Increases Speed 7 MPH



LOPRESTI SPEED SPATS
Increases Speed 5 MPH



SPEED SPLITTERS
Increases Speed 3 MPH



Call 772-562-4757
or 800-859-4757
www.speedmods.com

Gear of the Year!

www.preciseflight.com

AVIATION CONSUMER

nelson oxygen



BEST PORTABLE SYSTEM
Aviation Consumer

THE INDUSTRY PIONEER

**FIRST WITH MECHANICAL
DEMAND CONSERVERS**

CALL TODAY TO GET YOUR
FREE 22-page catalog
1-800-547-2558



ZEPHYR *Aircraft* ENGINES INC.

F.A.A. Certified Repair Station V14R597M

Custom Engine Overhaul

"A top-rated shop"

Aviation Consumer April '02

2-YEAR 500-HOUR WARRANTY

Recommended by Kas Thomas, Editor

TBO Advisor Magazine

Call Charlie or Herman **800-204-0735**
Website: zephyrengines.com • E-mail: zephyrengn@aol.com

ICS 12289 PA-30 N808N

Headquarter Items for Sale



Lapel Pins Single, Twin, Logo



Ball Cap



NEW Polo Shirts (with Pocket)
Small, Medium, Large, XLarge, XXLarge



Polo Shirts (With Pocket) Single or Twin
Small, Medium, Large, XLarge, XXLarge



Denim Shirts (with Pockets) Long or Short Sleeve
Small, Medium, Large, XLarge, XXLarge



Decal

Cloth Patch



Paint Scheme CD's Single or Twin

| <u>Item</u> | <u>Price</u> | <u>Qty</u> | <u>Total</u> |
|---|--------------|------------|--------------|
| Lapel Pins Single Twin Logo | \$7.00 | | |
| Ball Cap (Please circle Denim or Khaki) | \$15.00 | | |
| New Polo Shirts (Please circle Size) Small, Medium, Large, Xlarge XX Large | \$35.00 | | |
| Polo Shirts <i>Limited sizes available</i> (Please circle Single or Twin) Single Twin (Please circle Size) Small, Medium, Large, Xlarge XX Large | \$35.00 | | |
| Denim Shirts (Please circle Sleeve) Long Sleeve Short Sleeve (Please circle Size) Small, Medium, Large, Xlarge, XXLarge | \$40.00 | | |
| Paint Scheme CD's (Please circle Single or Twin) Single or Twin | \$25.00 | | |
| Decal | 2 for \$5.00 | | |
| Cloth Patch | \$5.00 | | |
| TOTAL | | | |

Overseas Members please add \$6.00 postage

Ship Order To:

Name: _____ ICS# _____

Street Address: _____

City: _____ State: _____ Zip _____

Payment: MC ___ Visa ___ Amex ___

Card # _____ Exp. Date _____

Featured Fly-In



Southeast Tribe Brings in New Year With Warm Weather and Friendships

by Ken Rivard, ICS #14929, Southeast Tribe Chief

A belated, but very sincere Happy New Year to all of our Comanche friends. The Southeast Tribe had their annual New Year Fly-In December 30 to January 1 in Titusville, Fla. Over 40 ICS members converged on the Hampton Inn that Friday. There were nine Comanche planes that landed at the Space Coast Air Park (TIX) and several members drove, which helped in moving everyone around.

We had a wonderful dinner at the famous Dixie Crossroads in Titusville, Friday evening. Saturday found us touring the Kennedy Space Center on Merritt Island. The weather was rather warm and very sunny, making the day perfect for walking around the Center. We dined and danced the old year away and greeted the New Year at the Great Outdoors, which was just a half-mile down the road from our hotel.

Whenever possible, everyone met in the hospitality room provided by the hotel. Many stories were shared and we all caught up on the latest news. For those of you who didn't make it, we missed you and hope that maybe next year you can join us. 🛩️



For over 25 years, the Industry Choice!

THE **adlog**™ MAINTENANCE RECORD-KEEPING SYSTEM

FOR VIRTUALLY ALL GENERAL AVIATION FIXED & ROTARY
WING AIRCRAFT *plus* EXPERIMENTAL and HOMEBUILTS

14/15 color coded sections, simplify, organize and centralize all data. Provides lightning-fast retrieval of all maintenance ADs, service bulletins and inspection requirements for your aircraft. Includes AD search, text of applicable ADs, and 1 year AD revision service. Keeps you on top of all required repetitive activity- annuals, 100 hour inspections, transponder/altimeter checks, VOR checks, etc. ORGANIZED FOR LOGICAL, STRAIGHTFORWARD UPKEEP. Because adlog saves your maintenance facility valuable time, you save valuable money. E-Mail: info@adlog.com

1-800-235-6444 FAX: 1-631-765-9359

AEROTECH PUBLICATIONS, INC. P.O. Box 1359, Southold, NY
www.adlog.com

Fuel Wing Tip Tanks

*For Extended Range, Increased Payload - Lower Engine & Airframe Maintenance
Aerodynamic Efficient and more*

- Fifteen (15) U.S. gallons each, utilizing all aluminum construction, with accommodations for Navigation and Strobe Lights, Flush gas well doors and concealed fuel quick drains.
- Osborne Tip Tank Kits are original Piper factory equipment.

ICS Members buy Tip Tank Kits Direct.

Shadin Fuel Flow Meters

Why a Digiflo? Why Microflo?

- Fits standard 3" and 2" instrument hole(s) for easy installation.
- J.L. Osborne is STC'd for replacement of original fuel flow indicator including Twin and Single Engine Aircraft.
- GPS and Airdata compatible.

FAA approved installation kits in stock.

Distributors for WHELEN STROBE LIGHTING - JP INSTRUMENTS
Extended discount pricing for ICS MEMBERS



18173 Osborne Rd, Victorville, CA 92394

Phone: 800-963-8477 (760) 245-8477 • FAX: (760) 245-5735

www.jlosborne.com • E-mail: info@jlosborne.com

Fly-In Report

Southwest Tribe Takes in Brunch with A Beautiful Backdrop of Death Valley

by Peggy Harmon - ICS #12436

On January 22, the Southwest Comanche Tribe's Furnace Creek Fly-In brought twenty-five planes with 55 people; all who flew in to Death Valley to indulge in the resort's top-rated brunch on a beautiful clear Sunday morning. If you've never visited this oasis that sits at -210 feet at the foot of the colorful Funeral Mountains and looks out over the scorched valley to the west, you've missed a real treat. Palm trees and winding paths aside flowing desert springs makes you almost think you're in the movies! Then there's the four-star, adobe, mission-style inn - and the brunch, the brunch, the brunch. It's outstanding!

We were picked up at the airport and shuttled about two miles up to the inn. Once there, most of us lounged around on the front patios enjoying the sunshine and camaraderie, until the dining room opened at 11:00 a.m. After brunch, we took advantage of the beautiful setting for strolls and Comanche-talking before taking the shuttle back to the airport. It is always such a pleasure to get out of the shuttle and view the beautiful Comanche planes in the bright, desert sun. It's even better to watch them fly out.

Same time, next year!



STAINLESS STEEL BRAKE DISCS
 BY FLIGHT LIFE, INC.
 BETTER BRAKING FOR ALL COMANCHES, SINGLES & TWINS



SECOND WIND
 THE AUTOMATIC VACUUM BACK UP SYSTEM
 FOR COMANCHE 250'S

FLIGHT LIFE, INC.
 P.O. Box 429
 Dublin, PA 18914

flightlifeinc.com
 PHONE 215 997-8228
 FAX 215 997-6722

**buying a new Comanche
 or pricing insurance for the one you have?**



PHONE

Call 800-821-7762
 for an immediate quote



WEB

Log on to
www.avemco.com



MAIL

Send your information
 to Avemco

Compare the competition to Avemco's extensive coverage:

- Avemco does not exclude coverage to pilots who are involved in VFR into IMC accidents
- Avemco's policy contains no hidden deductibles for gear up landings
- Avemco allows flexible storage options when you're not flying for extended periods
- Avemco allows mid-term upgrades on pilot flight experience and new ratings

Aviation Insurance for Owners and Renters Since 1961

411 Aviation Way, Frederick, Maryland 21701
 800-821-7762 • Fax: 800-756-7815
www.avemco.com
 Mon. to Fri. 8 - 7:30 ET, Sat. 10 - 6 ET



Engine PreOiler

**Get Oiled
 Before You Start!**

REDUCE ENGINE WEAR!



FAA STC/PMA

Up to 70% of engine wear is caused by insufficient lubrication during start.

Install a Preoiler and

- Lubricate Bearings
- Pressurize Lifters
- Lubricate Cams
- Lubricate Valves

Certified on Comanches and Twin Comanches

Oilmatic Inc

<http://www.oilmatic.com>

P.O. Box 5284 • Englewood, CO 80155
 (303) 770-0175, 1-800-343-7623, FAX (303) 793-0493

**Tired of your stem?...
 Whatta drag!**



OAT
 Outside Air
 Temperature
 gauge



New Model

Replace your present stem thermometer with a new digital read-out

- New features: night light, auto-power shut-off, stand-by battery, push button switches.
- Reads F° or C° in large, easily read numbers.
- Tiny no-drag outside fairing. Go faster!
- Designed by Comanche owner for Comanches.
- Models for Brand X low and high wing planes.
- No wiring. Accurate to 1°; Resolution, 0.1°
- Contains 2 easily replaced 5000 hour batteries.

\$79.98 + 4.95 S&H (CT add 6% tax)

Send check or money order & plane make and model to:
 Questair, Inc. PO Box 1225, Orange CT 06477

Tel: 203-795-0611 Fax: 203-795-3291

FUEL CELLS

All Makes & Models - Piston, Turbine, Rotor & Jet



NEW

- + Original Equipment replacements for Piper, and others
- + PMA'd replacements for most all makes and models
- + Custombuilding for vintage, experimental, kit and warbirds
- + High quality install kits - FREE with new cells
- + Extended warranties

OVERHAULS

- + Free Evaluations
- + Same to 3 day turn time
- + No Nonsense Warranty
- + Exchange Units
- + Repair Station # NL5R071N
- + Over 40 years of experience
- + Fast and friendly service

Stainless Steel Drain Valves

- Piper PA23, Beech 35 - 350 & Cessna 180 - 210
- + Safer sumping at natural low point
- + Simple maintenance



Only facility owned by
M.F. Fuel Cell



"We hold your fuel from top...to bottom!"

New & Overhauled for
Pawnee & Brave
Comanche
Twin Comanche
Apache & Aztec
Seneca
Seminole
Saratoga
Navajo
Cheyenne

800-437-8732

Eagle Fuel Cells-ETC, Inc. 853 Adams Road, Eagle River, WI 54521
Tel: 715-479-6149 Fax: 715-479-6344 E-mail: info@eaglefuelcells.com

Shoulder Harness Program

Due to the tremendous response, P.V. Aero and Kosola have agreed to extend the discount programs on their shoulder harness installation kits to all ICS members indefinitely. If you are not an ICS member, call Gaynor at Headquarters at (405) 491-0321 to sign up so you can get the discounts.

The shoulder harness kits provided by Kosola and P.V. Aero exceed the FAA strength standards by a factor of 1.3 or more.

Have your ICS number and aircraft serial number ready when you ask to speak to the shoulder harness program person. The prices and phone numbers for Kosola and P.V. Aero are as follows:

KOSOLA

Phone: (229) 435-4119

Fax: (229) 888-5766

Contact: John Brim

Front seat: per seat price \$420 to \$440 for strap and \$595 to \$620 for the inertia reel setup. The prices vary according to serial number.

Rear seat: per seat price \$420 for strap and \$595 for the inertia reel

Kosola is offering an ICS member discount of \$50 per seat.

P. V. AERO

Phone: (918) 274-1616

Cell: (816) 210-4829

Contact: Lenny Spall

Both front seats are normally \$475; and both rear seats are normally \$475.

ICS members receive a special, discounted price of \$425 for a seat pair, or \$800 for all four seats.

Are you Baffled by your Baffles?



These engine forward baffles 21138-XX and 21139-XX are fabricated from all new materials with the exception of a small portion from an original baffle which satisfies the FAA "repair" language. Your old baffle must be returned so that a donor piece can be installed onto the next baffle. They are powder coated for improved durability and come complete with the felt at the cooler cutout and the sewn felt strips stapled just as Piper did at the factory. Pricing is \$600 right side; \$500 left side.

Order both and save \$100.00.



www.comanchegear.com
877-593-6944 Toll Free
239-593-6944 Florida



The Original Lightweight Starter

**Imitated—but
Never Equaled.**

The B&C Starter for Lycoming engines remains the benchmark of lightweight starters, featuring a high torque series-wound motor, and the long-term reliability of all-metal gears and heavy-duty ball-bearings. Our top-quality design has no hidden "compromises" that come at the expense of durability—

- No bushings
- No plastic reduction gears
- No troublesome Bendix drive
- No permanent magnet motor requiring high current draw

The B&C Starter has provided reliable service for thousands of satisfied customers for over 15 years now. When uncompromised value and unmatched reliability really matter, isn't it about time for a B&C?

B&C Specialty Products

123 E. 4th Street • P.O. Box B • Newton, KS 67114
Voice: (316) 283-8000 • Toll-Free: (888) 283-8662
Fax: (316) 283-7400 • Web: www.BandC.info



STC-PMA
O-235 to IO-720

Isn't it time you took a
REAL vacation?



www.parkwestair.com

CONTEMPORARY BRONZE LINDY

"Custom Multi Engine"



Will be
featured at
Sun N Fun
2006

Mike Adkins and N4YA

www.altusaircraft.com

888-349-2238

ALTUS AIRCRAFT SERVICES

Comanche Classified

Trading Post is a non-commercial, member to member service provided free of charge, one time per member, per year. (The sale of aircraft is not permitted in the Trading Post.)

Ads must be submitted in writing only (fax or E-mail OK). Free ads may not be placed by phone. First 25 words are free. Extra words are \$0.40 per word. Fax (405) 491-0325 E-mail: icsadmin@sbcglobal.net

For Sale: 1964 Twin Comanche Parts: Fuselage \$5,000.00, Wings (each) \$3,000.00, Left Aileron \$600.00 Rudder \$600.00, Stabilator \$1,200.00, Baggage Door \$300.00, Vertical Stabilizer \$800.00. Package price with logs, clear title and misc. small parts \$18,000.00. Phone 520-299-2641, Fax 520-299-9206 1/2

Classified advertising rate:

(Two issue minimum)

Minimum Ad Charge: \$50.00

Payment must accompany advertisement order.

Extra charge for Photos.

All advertising must be received by the editor in writing (mail, fax, or e-mail) five weeks prior to the desired month of publication. Payment must accompany advertisement order. Renewals may be made by telephone, but initial ad must be in writing.

The publisher makes no warranties as to the veracity or accuracy of the information provided by the advertiser. The publisher is under no obligation to accept any or all advertisements.

International Comanche Society

5604 Phillip J. Rhoads Avenue

Hangar 3, Wiley Post Airport

Bethany, OK 73008

TEL: (405)-491-0321

FAX: (405) 491-0325

E-mail: icsadmin@sbcglobal.net

Shoulder Harnesses

STC, FAA, PMA approved for front and rear seats for comanche aircraft.

\$475 FOR BOTH FRONT SEATS

\$475 FOR BOTH REAR SEATS

\$850 FOR FRONT & REAR

(ICS MEMBERS ONLY)

*Not available for rear seats of three side window (B-C model) A/C.

P.V. Aero • Lenny Spall

(918) 274-1616

Cell: (816) 210-4829

PA24-180

1961 PA24-180 SR#24-2861, TT-Acft 3142, SMOH 742, No Damage, all AD's c/w, annualed 5/05, IFR certified 9/05, Audio Panel, Dual Mitchel MX 11 F/flop, Intercom, VOR w/glide slope, Narco AT-150/Encoder, Piper Auto-control, King ADF, Apollo 12 Loran, EGT, 2-D/Gyros, Tow brakes, 1pc windshield, tinted glass, Paint and Interior 9/9. All logs, complete set piper manuals, 3rd owner for 26 years \$51,500 Roy 361-935-4458 cell 361-575-2744 2/2

1960 Comanche PA24-180 6400TT, 866 SFOH by Lycoming. McCauley 3 blade prop. 427 SPOH. Paint (white/blue) and interior 9/9. Great IFR plane. Garmin avionics new in 2005. 430 NAV/COM/GPS, GI-106A CDI with glideslope, GMA 340 Audio Panel, GTX 327 Transponder. Also Narco MK 12D+ with ID824CDI. King ADF. Second AH is electric. Avionics master. Piper Autocontrol with heading select. WX8 Stormscope, 3 strobes, 4 place intercom, Lightweight starter, Wing root fairings and speed spats. Aileron Aerotrim and gap seals. Tanis preheat system. Bogart battery box mod. Glare shield with lights. ARP carb ice detector. Flap actuated gear warning system. One piece windshield. Brackett air filter system. Front shoulder harness. Aircraft cover. Annual 12/05. All ADs complied with. Only 8.5 gal. per hr. \$58,500 Hangared at (KLZU) Lawrenceville, GA 678-357-7417, 770-446-0376 or Dumfl@aol.com 1/2

PA24-250

1962 PIPER COMANCHE PA-24-250, 8005P. Fuel Injected, 6250-TT, 250 SMOH. Only 240 hours since new McCauley three blade prop. Custom Dashboard, Avionics Master Switch, 4 pl Intercom, Ski Tube, 90 gal. fuel, 1-piece windshield, All AD's, Original logs, Always Hangared- Houston Texas. Paint 7, interior 8, \$65,000. August - 2006 annual. Private Seller, ICS Member --- Must sell quickly as being relocated out of USA. Contact Richard Ameen @ (281) 793-5080 or e-mail @ rameen@netapp.com for more detailed specification sheet. 2/2

1960 PA-24-250 4420TT, 1630SMOH, OSPOH, New Interior complete(9.5), custom repaint (7.5), NDH, Complete logs, dry country history, All digital avionics Garmin/King/Narco, including GPS, Dual GS, wing tip tanks, one piece windshield, Fresh annual, Fresh 5yr/500 Prop AD. \$52,900 Price Reduced and ready to GO! (520) 444-6579 2/2

1961 Comanche 250, 3042TT, 745 SMOH, IFR panel/certified, KX155 & KX150B w/ 2 glide slopes, Northstar Loran, ADF, 90 gal. fuel (wing aux tanks), 3-bladed McCauley Prop., 6 cyl. EGT/CHT, 1-piece windshield, Standby vacuum, Custom designed paint (9), Leather Interior (9), Shoulder harness, Remote magnetic compass, 4-place intercom, hangared, annual 4/05, \$73,500 (516) 676-0303, RBHaber@corporatcalm.com 1/2

1960 Comanche 250 Engine and accessories reman by Western Skyways, including new cam, Total Time on engine 113 hours AC 3359 hours, no auto pilot. Aircraft is Hangared. Bogart copper cables, Knots 2-U wing root fairings, Met-co Wing tips and Gap seals, McCauley 3 blade prop New center stack instrument panel by Ron and Johns New 1pc windscreen, all leather interior including oxygen tank carrier, Designer Paint Scheme Narco 150 TSO Transponder, Bendix/King KLX135, Apollo GX55 Narco 12D-TSO PMA 600M-C Audio Panel Localizer/Glide slope Carb Ice Detector Total Time 3276.05 All AD and SB complied with Annual Due May 2006. Much More. \$100,000.00 Phone 501-723-4160. 1/2

1963 Comanche 250. TTAF 2888 SMOH 20 SPO 20, Ron and Johns Panel, King 525 HIS, GX60, SL30, SL10, Apollo annunciator panel, AT50A, MI Loran, Century IIB coupled to HIS, S-tec Altitude hold, Insite GEM, JPI 450 Fuel Flow, AmericaKing ELT, Rosen visor, New tan leather interior, good paint, 3 blade McCauley Prop., 60 Amp alternator conversion. The engine has been modified to 260 specs. Engine had new Titan Jugs, a new cam and lifters, exhaust system and hoses installed during an overhaul by Zephyr, 1 piece windshield, digital OAT. Gear motor recently overhauled. Strobes top and belly, post lamps on panel. All AD's current and no gear up landings in history. Asking \$96,500. For more info and pictures, e-mail Sandy at pa24-250@bellsouth.net or call 770-552-0765 1/2

PA24-260

1969 PA 24-260C: N9379P. SN24-4880, TT2636, 714 SFOH, 203 SPOH. Wing Tip Tanks, 120 gal. Fuel, 5th & 6th Seats, 1pc Windshield, Tinted Side Windows, Skytec Starter. Copper Cables, Aux. Power Recept. KMA24 Audio Panel, Dual Narco MK12D's w/dual Glide Slopes, KN64DME. Narco AT150 Transponder, Auto Control III AP, PM 1000 II 4 Place intercom, 4 David Clark Headsets w/dual

PTT, Horizon Digital Tach w/Mag Monitor/diagnostics, El Volt/Amp Meter, JPI-EGT701 Graphic Engine Monitor, Shadin Digiflo, Electric Trim. Lopresti Speed Mods, Custom Paint in 00. Leather Interior, IFR Certified, All AD's complied with, Complete Logs, Fresh Turley Annual included with Sale, Hangared at Bartow, FL (KBOW) Email: comanchepilot1@msn.com, call 340-774-4537 evenings, \$125,000.00 2/2

1972, PA24-260C SN 24-5015, TTSN 4400, SMOH 520, K170B, Narco 12B ADF, DME, Morrow S20GPS, Garmin 295, Johnson Tips, excellent paint and interior, no damage history, always hangared. \$115,000.00 770-483-3473, email N9497P@bellsouth.net 2/2

1965, PA24-260 SN 24-4107: 3460 TT, 943 SFOH, 503 SPOH: IFR certified, GEM 602 Engine Monitor, Precise Flight Standby Vac & Pulse-Lites, dual KX-170B (1-McCoy digital mod), LOC/GS, KT76A xpdr, KMA 20, Narco 890 DME, Century II-B autopilot, one-piece windshield, 612 Loran, 5-place O2, 4-place intercom, Metco tips, all ADs c/w, OR (541)598-4928 Mark, email: pgt@bendcable.com for Website. \$86,500 2/2

1969 260C - 9342 P Zero time G and N overhauled engine. Zero time Hartzell three blade prop. 3800 TT. Narco Mark 12 dual navcoms, DME and ADF. Two-Axis Auto pilot. Hangared. Owned by two partners for 17 years. Great Paint and Interior. North Carolina TTA. This is a great airplane in great shape. Call Chuck at 919-819-0718 or Carlyle at 919-280-3497. 2/2

1966 Comanche 260B beautiful aircraft, 1pc windshield, 90 gal fuel, 6 seats, TTAF 4830, SMOH 1846, STOHL 1023, dual KX155s, 1 KI209 & 1KI 209A, KLN94 gps, S-TEC 55 auto pilot w/vertical speed and alert, electric trim, KMA24 audio panel, KT 76C transponder, American king AK950L enunciator indicated, JP instrument cht/egt engine monitor, NAT intercom W/Bose headsets (4), IFR cert. Metco Aire Tips W/strobes, glass, ram horn yokes, sound proofed & insulated. Always hangared, 1 owner since 1982, \$102,500 Steve Ca 951-695-5547 Cell 702-682-7811 msdeluz@yahoo.com 2/2

PA30 / PA39

1972 PA-39-140 FACTORY TURBO. 3814 TTAF, 314 L/R engines SFRM, 125 SNP, 314 on factory rebuild of turbos. All logs. King slaved HSI, dual KX155s, Kingdigital ADF, STEC AP w/altitude hold, KLN94 color GPS, KMA24 audio, King digital DME, King KT76 xpdr, Shadin

fuel flow, speed mods, factory tip tanks & oxygen. Good leather, needs paint. \$145,500. CA/(831) 724-4980. Info: <http://www.marigo.net> 2/2

1969 Turbo PA30C SN 1805 Counter Rotating props (PA39) 2897hrs TTSN 357hrs SMOH 368hrs SPOH Full IFR NDH. Robertson STOL. Small nose wheel with light. Knots-2-U Mods, Precise Flight pulse Lights, dual glide slopes. New leather. Excellent poly-paint. Altimatic III. 6 place) 02 and intercom. 6 seats. Much more. All AD's, Hangared E-mail dkkuehn@bendcable.com \$125,000 2/2

1969 Turbo Twin Comanche PA30, Ser# 1833, TT 5790, 670 SMOH (L&R), Props and acc. At same time. Arapaho windshield, Tip Tanks, Oxygen, 4 seat intercom, radio master, ski tube. KLN 89B GPS, KX 155 w/GS, KY 96A ADF, DME, AltimaticIII Hangared in Arizona, same owner last 17 years Annual Oct 2005, Pictures available, \$105,000.00 Call Jack 480-456-5350, 602-826-3012 E-mail purcellj3@cox.net 1/2

1966 PA 30, 3500TTAF, LE 118 SFRM, RE 1550 SMOH, KX155, MK12D, KR87, KN62A, KMA24 audio panel, STEC 50 Autopilot, sigtronics intercom,NDH, one piece windshield, 1/4 inch glass, Knots 2U mods, Bogart cables, small nose wheel, aux. pump mod.,rieff engine heaters, met-co-air tips, brackett air filters, ashby lighted glare shield, EGT, IFR cert due Nov 2007, Annual due Nov 2006, always hanged, exceptionally well maintained aircraft, \$85,000, call 703 674 9270, or email neevesae@hotmail.com 1/2

1967 PA30 TT6088, 661 SMOH LE&RE complete logs since new. King Avionics, GPS IFR certified (enroute & approach) stormscope, altimatic III w/alt hold. Knots 2U speed mods, oxygen, elec.trim, one-piece windshield, shoulder harnesses, strobe light, pulsar landing lights, small nosewheel, Johnson wing tips, new fuel cells, headliner, new Blue Leather upholstery & carpet. One owner last 15 years & last 15 annuals by Bill Turley, Bartow, FL. Exterior9/Interior 9. \$112,000 863-465-5012 or e-mail ticknord1@earthlink.net 1/2

European Center for Comanche Parts

Twins, Comprehensive stock of New & Serviceable S/H Sparewts, Inc., Props, Spinner Back Plates, Engines, Undercarriage Wheels, Wings, CSU's, El Boost Pump, Generators, Alternators, etc. **In fact 90% of all Twin Parts.** PA24's less comprehensive, but try me.

Will Ship World Wide. No List. Tel: or FAX:

UK: 44 116 240 2294
E-Mail: Sales@PiperSpares.com
www.PiperSpares.com

Advertiser's Index

| | |
|--------------------------------------|--------------------|
| Ada Aircraft Painting..... | 33 |
| Advanced Pilot Seminars..... | 15 |
| Aero Tech Services | 37 |
| Aero-PMA-Parts | 23 |
| Aerotech Publications | 42 |
| Aerox | 33 |
| Air Parts of Lock Haven | 15 |
| Aircraft Engineering, Inc. | 35 |
| Aircraft Publications | 31 |
| Aircraft Specialty Services | 11 |
| Aircraft Spruce and Specialty | 8 |
| Altus..... | 45 |
| Avemco | 43 |
| Aviation Performance Products | 13,38 |
| B&C Specialty Products, Inc. | 45 |
| Bogert Aviation | 34 |
| Bruce's Custom Covers | 37 |
| CFF | 16 |
| Clifton Aero | 38 |
| Comanche Gear..... | 44 |
| Degroff Aviation Technologies | 13 |
| Dennis Ashby..... | 33 |
| E-ZHeat | 48 |
| Eagle Fuel Cells | 44 |
| Electronics International..... | 5 |
| First National Bank Midwest | 32 |
| Flight Life | 43 |
| General Aviation Modifications | 11 |
| Great Lakes Aero Products | 21 |
| Gulf Coast Stacks | 33 |
| Hartwig Fuel Cell Repair | 48 |
| Hartzell Propeller, Inc..... | 29 |
| Iliif Aircraft Repair | 37 |
| J.L. Osborne, Inc. | 42 |
| Johnston Aircraft Services | Back Cvr |
| Jostens | 23 |
| Knots 2U | Inside Front Cvr |
| Kosala & Associates | 14 |
| Linda Lou, Inc. | 23 |
| LoPresti Speed Merchants..... | 39 |
| Met-Co-Aire | Inside Back Cvr |
| Mike's Upholstery | 11 |
| Oilamatic, Inc..... | 43 |
| Park West Air Tours..... | 45 |
| Paul Bowen | 8, Inside Back Cvr |
| Poplar Grove Airmotive..... | 15 |
| Precise Flight | 39,48 |
| Precision Propeller | 13 |
| Questair | 43 |
| Redding Aero Enterprises | 38 |
| Rocky Mountain Propellers, Inc. | 7 |
| Ron & John's Comanche Service | 31 |
| Schweiss Bi-Fold Doors | 16 |
| Sky-Tec Partners | 10 |
| Sound Ex Products | 36 |
| Travers & Associates | 35 |
| Tsuniah Lake Lodge | 11 |
| Turton Enterprises..... | Inside Back Cvr |
| Warren Gregoire & Assoc. LLC..... | 37 |
| Webco | 19 |
| White Industries | 23 |
| William Creech | 8 |
| Zephyr Aircraft Engines | 39 |

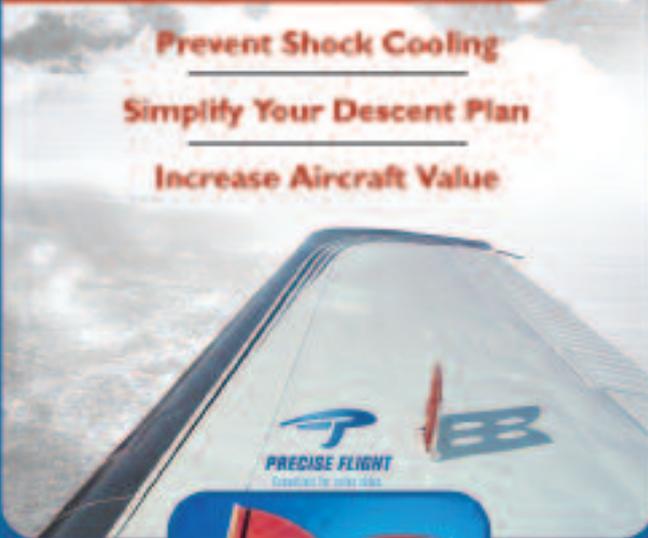
Change Your Approach

www.preciseflight.com speedbrake

Prevent Shock Cooling

Simplify Your Descent Plan

Increase Aircraft Value



PRECISE FLIGHT
Solutions for your pilot



CALL TODAY TO GET YOUR
FREE 22-page catalog
1-800-547-2558



Last Laugh



On arrival at Key West, I pulled my Comanche past the taxi way hold short line and keyed the mic to say hello to ground.

“Ground, we’re going to stop here to clean up a bit.”

Ground replied, “Why? It looked like a great landing from here!” 

HARTWIG
AIRCRAFT FUEL CELL REPAIR

23500 Park Ave • Duluth, WI 54828
11100 Hwy 1 • E. Aurora, IL 61701

Quotes on
Repairs, Remans & New Fuel Cells
Repair & Re-Certify Aluminum Tanks
Technical Information
Or Free Fuel Grade Decals




Toll Free: 1 - 800 - 843 - 8033
Canadian Office Toll Free: 1 - 800 - 665 - 8236
email: info@hartwig-fuelcell.com
www.hartwig-fuelcell.com

Over 40 years in the business makes us ...

THE BEST PLACE IN THE WORLD
TO TAKE A LEAK!



TC REPAIR STATION AWO # 110-90 FAA APPROVED REPAIR STATION # H12R0250
NO QUALITY ASSURANCE PROGRAM 9802 Pending

CONTACT US FOR ALL YOUR FUEL CELL NEEDS

AIRCRAFT ENGINE HEATING MADE EASY!

E-Z HEAT, INC. Since 1984
SPECIALIZING IN ENGINE HEATERS

AIRCRAFT ENGINE PRE-HEATER
End your cold weather starting problems and reduce pre-mature engine wear with PROVEN E-Z Heat Engine Pre-Heater. Heats ENTIRE engine in about 4 hours, through conduction, the safest means of heat transfer available.

- FAA accepted, No STC or 337 form required.
- Easiest to install of any pre-heat system.
- Reduces engine wear. Allows easy flow of engine oil to vital components in extreme sub-zero weather.
- Thermotatically controlled - No danger of oil carbonization.
- Heats 12 quarts of oil from -40°F to +50°F in 1 hour.
- Uses less than 300 watts, compared to many engine heaters that use up to 2500 watts.
- Permanent. Once applied, unit need not be removed.
- Weighs only 9 ozs. 13 year warranty.
- NEW - Double insulated engine blanket & prop covers now available.



\$159⁹⁵



IO-360 with 442

For more information, call or write: **E-Z HEAT, INC.**
779 Lakeview Dr. • Chetek, WI 54728
1-800-468-4459 • Fax: 715-924-4401
www.e-heat.com

11 MODELS - BECAUSE EACH ENGINE IS DIFFERENT!

F.B.O. & Dealer Inquiries Welcome

HIGH PERFORMANCE WING TIPS



We have 52 years of experience building high-quality FAA STC and PMA approved aircraft modifications. Our **Hoerner** design High Performance Wing Tips installed on your Comanche will:

- ▶ **Improve appearance**
- ▶ **Increase cruise speed 3-5 MPH**
- ▶ **Increase stability and handling**
- ▶ **Decrease take-off roll**
- ▶ **Decrease stall speed 4-5 MPH**
- ▶ **Increase rate of climb 60ft/min**

Proven by 70% of the fleet!

For more information, and to order online, visit www.metcoaire.com

Met-Co-Aire

P.O. BOX 2216, FULLERTON, CA 92633

(800) 814-2697
TOLL FREE



(714) 521-4982
FAX

- Efficient & Reliable
- No Radio Interference
- Self-contained & Lightweight
- Starting at \$495

ARCTICAIR

Portable Air Conditioning Systems for General Aviation Aircraft

ARCTICAIRCOOLERS.COM 229-322-8770

AIR TO AIR
VOLUME II

224 Pages · 10"x12"
Over 500 Color Photos

Forewords by
Patty Wagstaff
& Clay Lacy

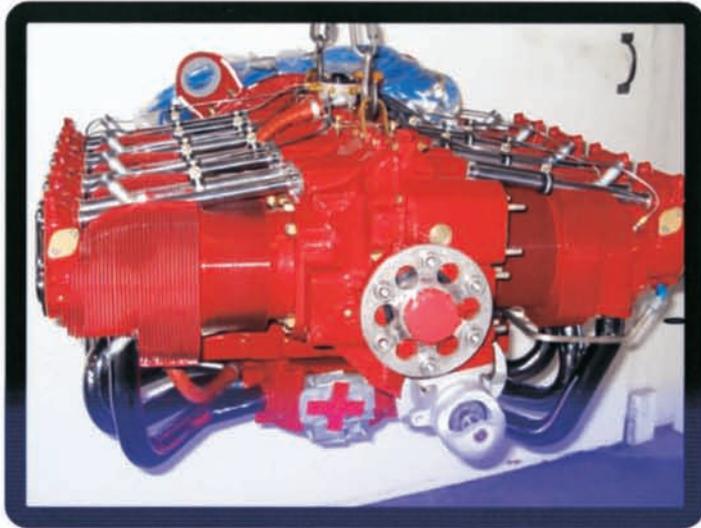
\$70 + S&H (USA)
1-800-697-2580

VISA AMERICAN EXPRESS MasterCard

Paul Bowen
PO Box 3375
Wichita, KS 67201
316-263-5537
www.airtoair.net

Also available thru **sporty's**

QUALITY ENGINE OVERHAULS BY JAS SINCE 1947



IO-720

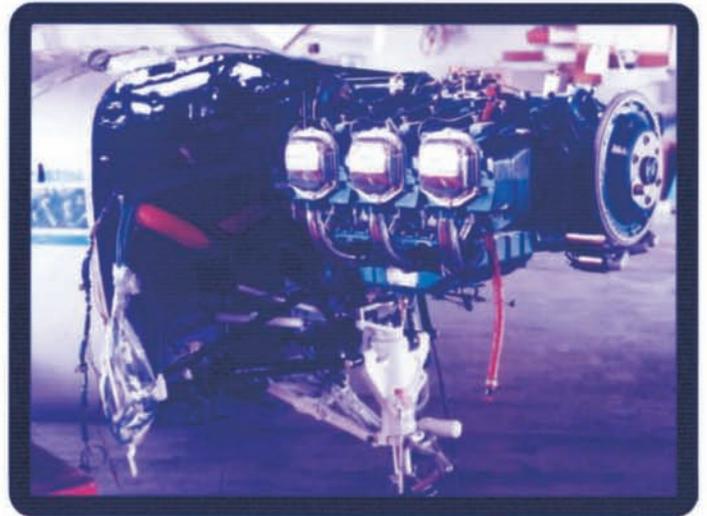
ULTRA!!

For those of you who want to step up to the next level; we offer **ULTRA**. Engines that are blueprinted and balanced with flow matched cylinders and an appearance enhancement package!

New cylinders optional. *



O-360



O / IO-540

*** We use New ECI "TITAN" and Factory Cylinders**

JOHNSTON AIRCRAFT SERVICE, INC.

TELEDYNE CONTINENTAL ENGINE & PARTS DISTRIBUTOR

LYCOMING ENGINE PROFESSIONALS

P.O. BOX 1457 - TULARE, CA 93275 - PHONE: (559) 686-1794 or 686-2161 - FAX: (559) 686-9360

e-mail: info@johnstonaircraft.com - WebSite: www.johnstonaircraft.com